

UNIVERSITY OF MINNESOTA
Research Bulletin
of the
Office of the Dean of Students

Volume 8, Number 1

December 15, 1966

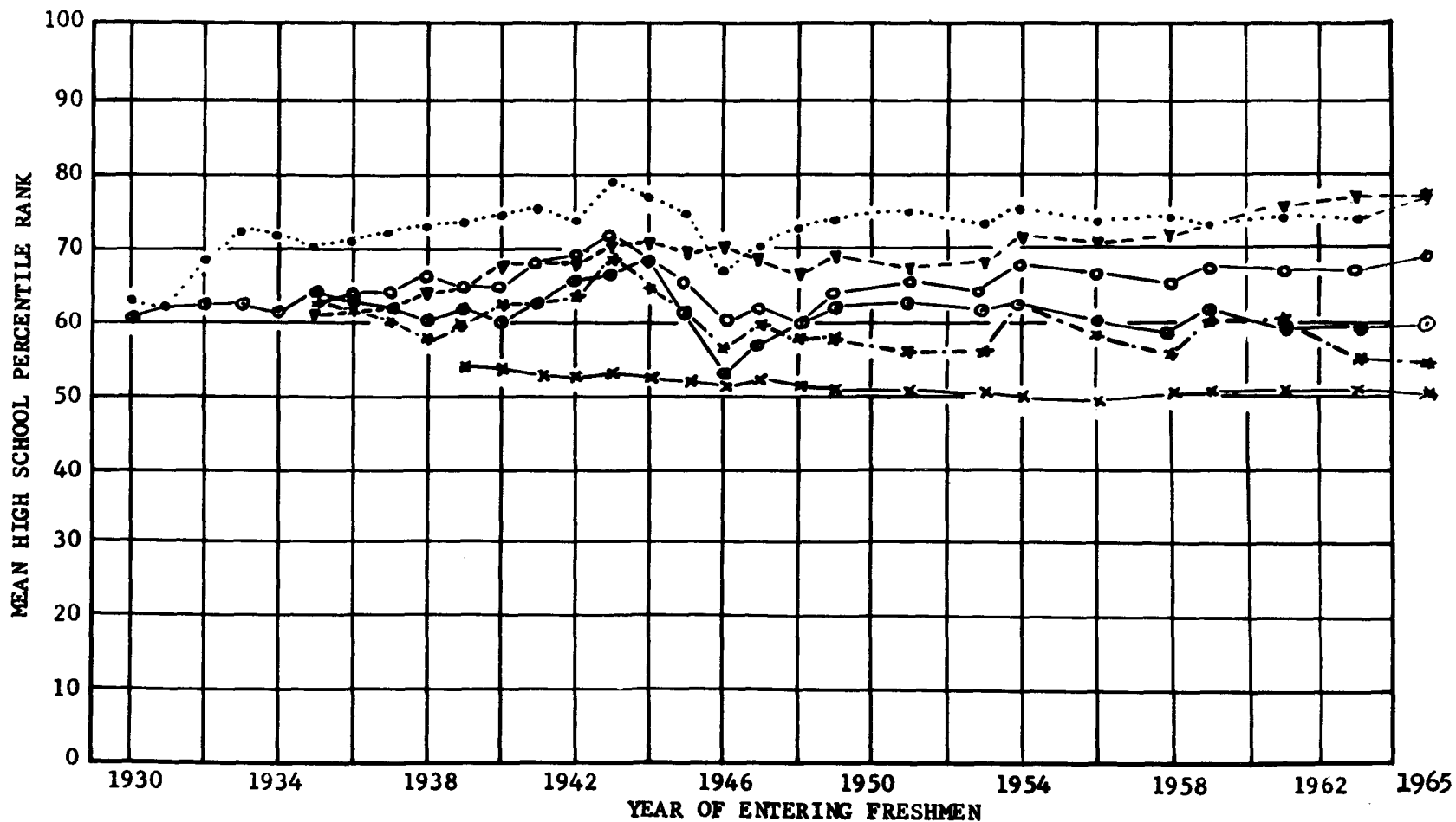
ENTERING FRESHMEN AT THE
UNIVERSITY OF MINNESOTA

by

Ralph F. Berdie
Student Counseling Bureau

High School Academic Achievement of College Freshmen

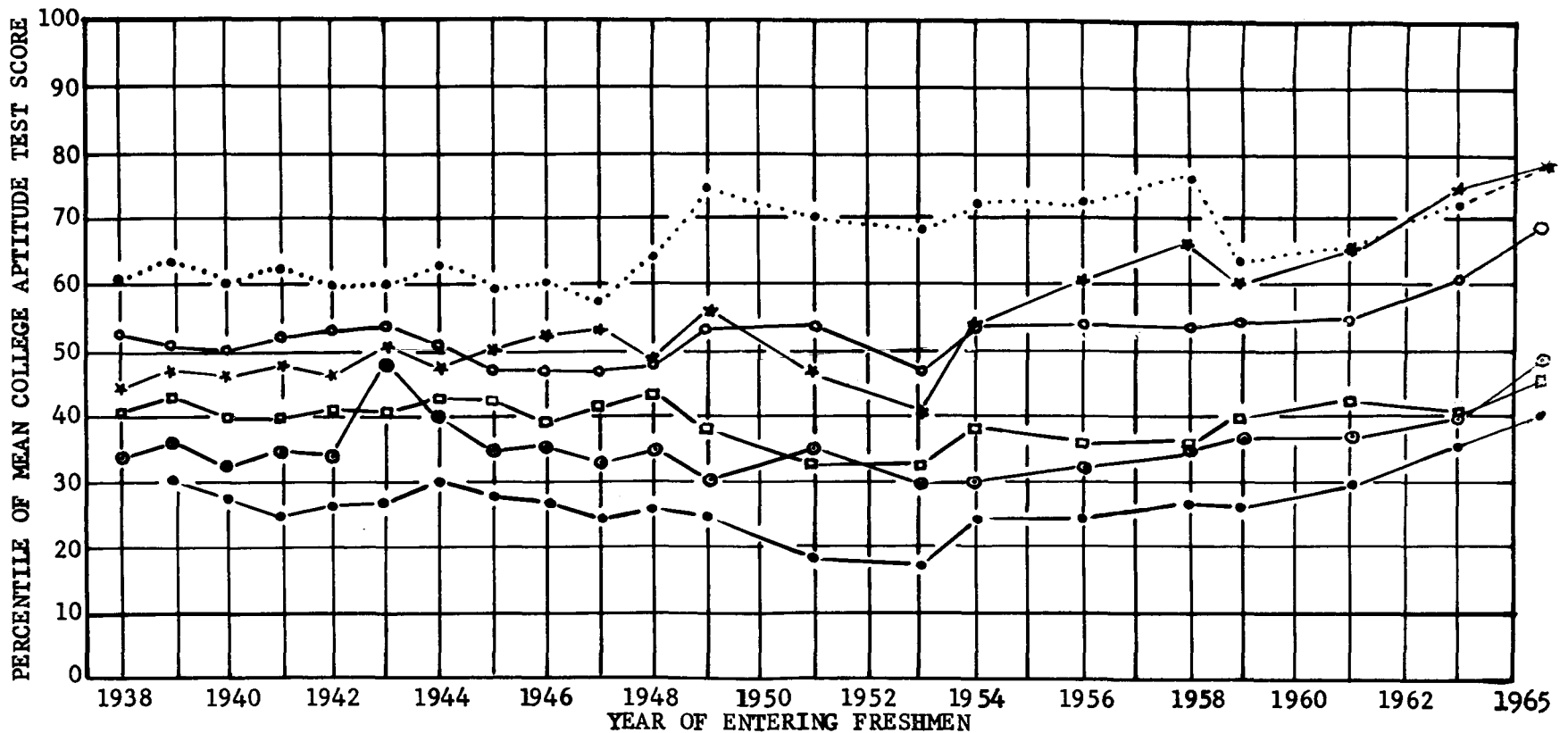
The mean high school percentile rank of college freshmen from 1930 to 1965 has remained remarkably constant in spite of the great increase in both numbers and proportions of high school students attending college. In some colleges current freshmen were considerably better students in high school than were their peers of 35 years ago. In 1930, the average freshman in the University's Arts College had grades that placed him in the upper 37 per cent of his high school class. Today the average student in the Arts College comes from the upper 27 per cent of his high school class. In 1930 the average University of Minnesota freshman had a high school percentile of 60; in 1965 his high school percentile rank was close to 70.



- All State College Freshmen
- ⊙— All University of Minnesota Freshmen (not including UMD or UMM)
- ✕— All Junior College Freshmen
- ▼— All Liberal Arts College Freshmen
- ✕— High School Sample
- CLA Freshmen

College Aptitude of Minnesota High School and College Youth

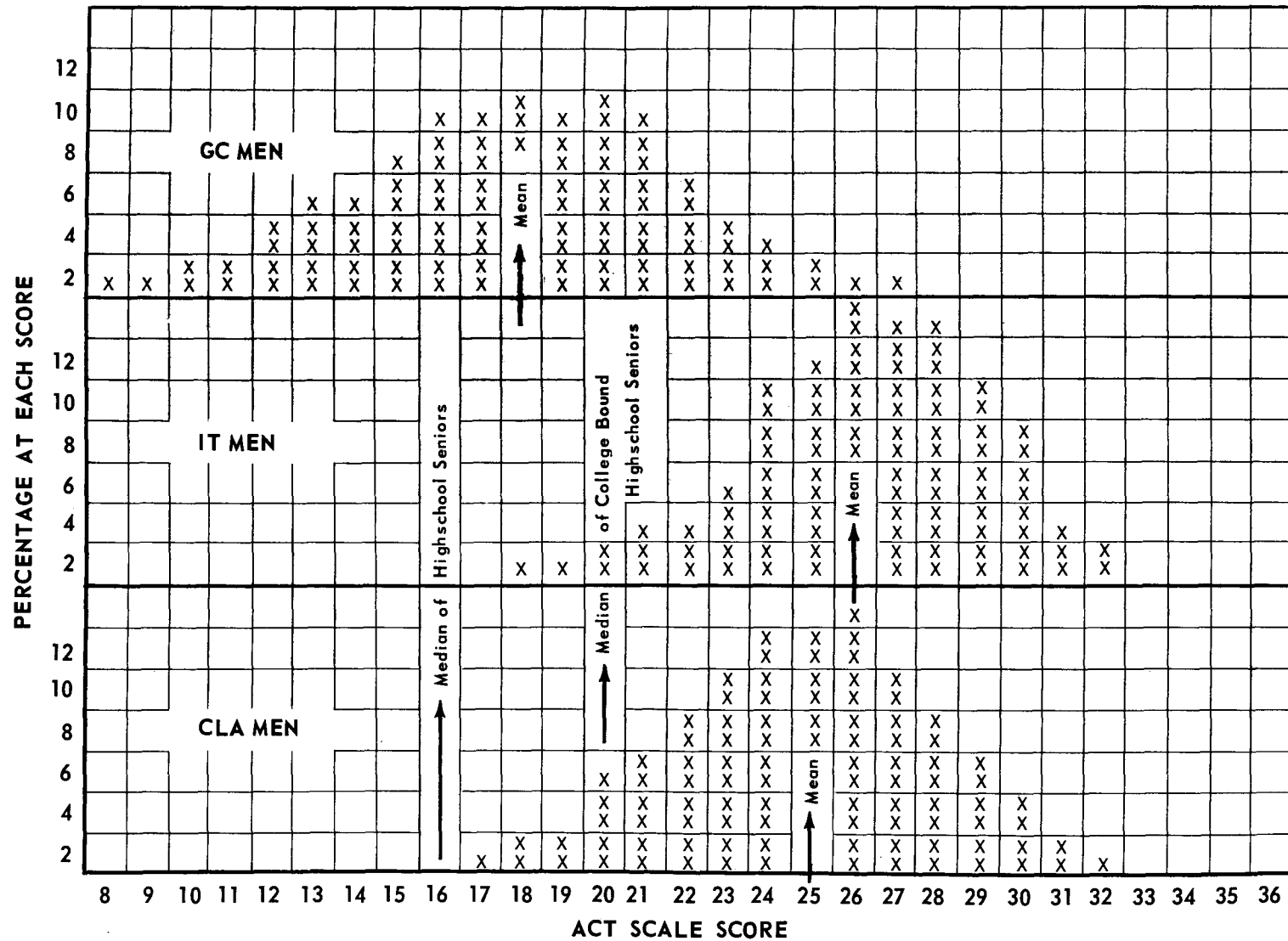
High school and college students in Minnesota have taken college aptitude tests for several years and in spite of year-to-year variations, the average scores of these students have remained remarkably constant from 1938 through 1965. Scores of both high school and college students have tended to increase slightly from 1958 through 1965 and this phenomenon has been noted in testing programs in other parts of the country. In spite of the great increase in the proportion of Minnesota high school graduates attending college since 1938, the average college student appears to be at least as intelligent today as the average student was thirty years ago. The increase in numbers and proportions of students attending college has not been achieved by increasing the proportion of lower ability students.



- — All University of Minnesota Freshmen (not including UMD or UMM)
- * — All Liberal Arts College Freshmen
- — All Junior College Freshmen
- ⊙ — All State College Freshmen
- — High School Sample

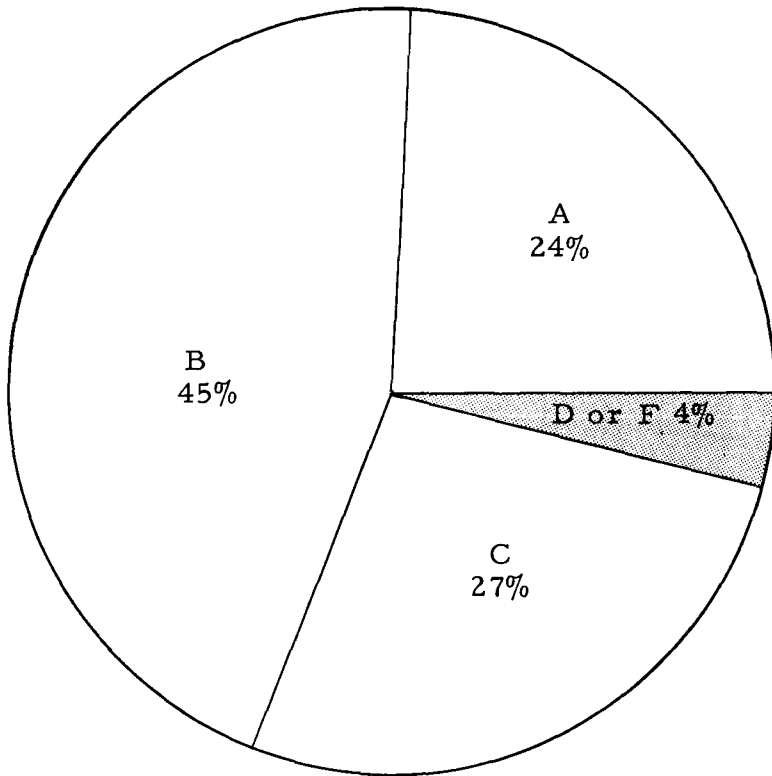
Differences Among University Colleges and College Aptitude

Students with a wide range of ability enroll in each college of the University but the average student in the Institute of Technology gets slightly higher scores on ability tests than does the average student in the Arts College, and in turn, the average Arts College student gets considerably higher scores than the average General College student. In each college are students above and below the mean student in every other college and comparisons of the distributions for three colleges shows considerable overlapping. Students in the Institute of Technology and the Arts College, when compared to high school seniors and all Minnesota seniors coming to college, obtain impressively high scores.

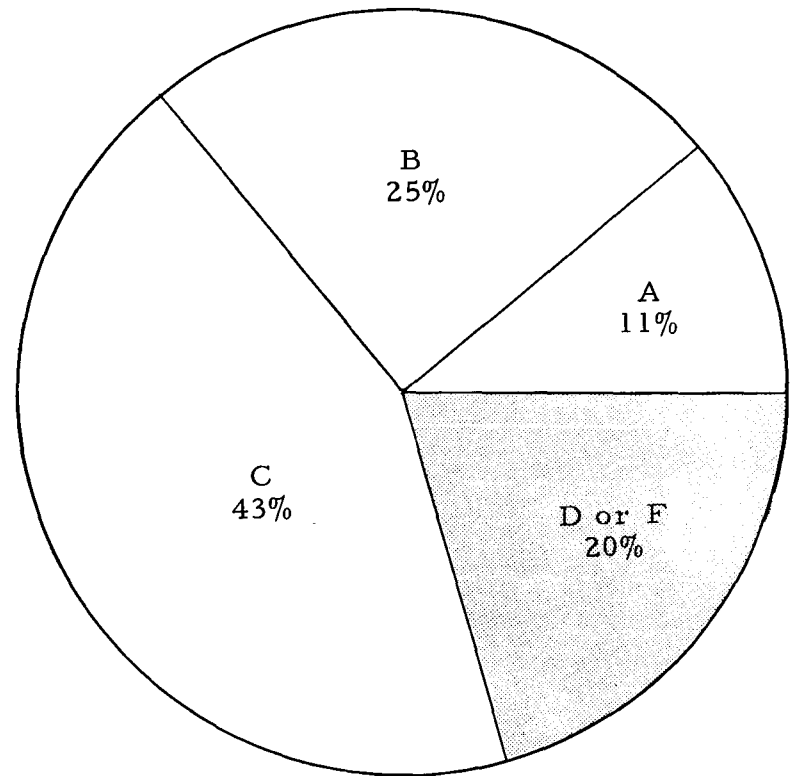


Grades Arts College Freshmen Earned in High School and University

While they were high school students, approximately 69 per cent of the grades earned by Arts College freshmen were A or B and only 4 per cent were D or F. At the end of their first quarter in the University, 36 per cent of their grades were A or B and 20 per cent were D or F. The grade point average in high school was 2.88, in college 2.22. Most Arts College freshmen obtained no unsatisfactory grades while in high school and yet one-fifth of their grades in college were below satisfactory.



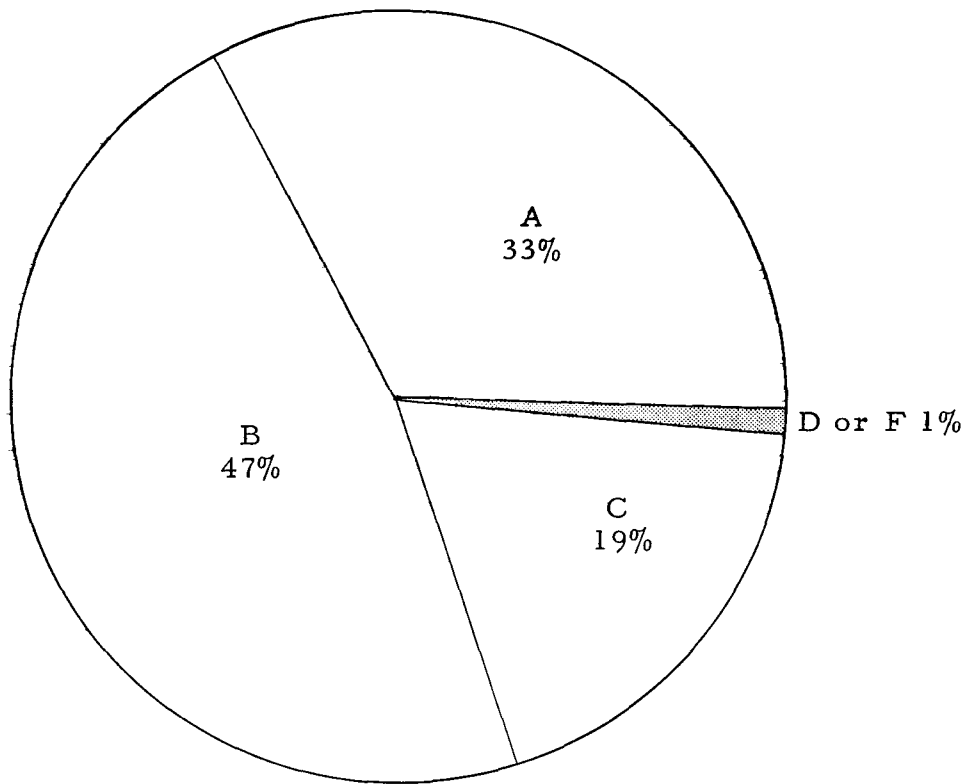
High School Grades
Mean GPA=2.88



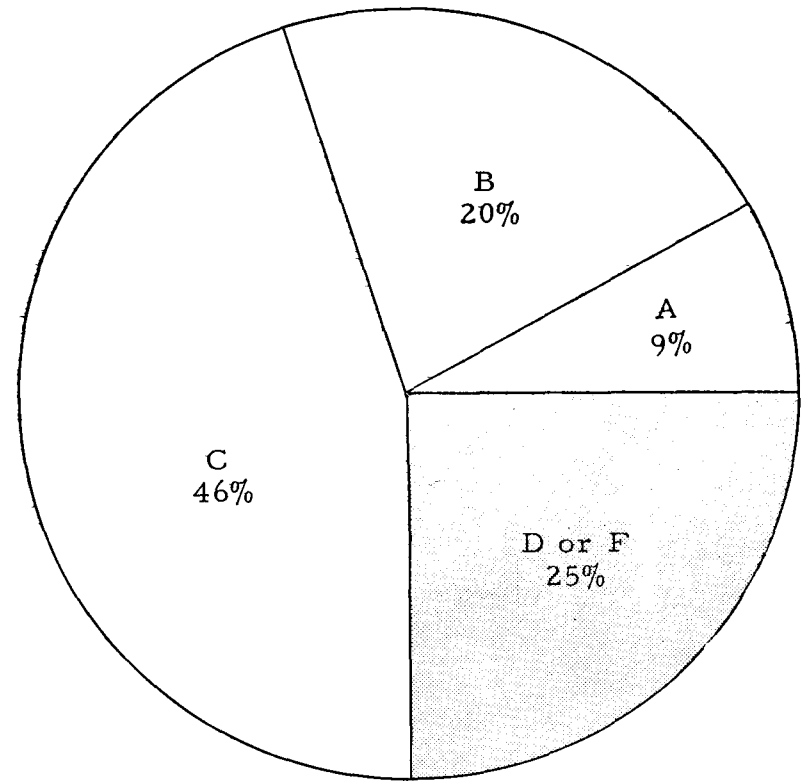
University Grades
Mean GPA=2.22

High School and College Grades of Institute of Technology Freshmen

As University freshmen, one quarter of the grades earned by these students were D or F and only 9 per cent were A, 20 per cent were B. The same students, when in high school, had as A or B, 80 per cent of their grades and fewer than 1 per cent of their grades were D or F. The mean grade point average in high school was 3.11, in college 2.06. Thus, Institute of Technology freshmen were on the average B students in high school, C students in the University.



High School Grades
Mean GPA=3.11



University Grades
Mean GPA=2.06

	CLA MEN	CLA WOMEN	IT MEN	GC MEN	GC WOMEN
	N=1943	N=2012	N=872	N=775	N=362
College, but less than a Bachelor's Degree	4	10	2	20	38
Bachelor's or Equivalent	35	59	39	54	43
One or Two Years Grad. or Prof. Study (MA, MBA)	29	24	45	14	11
Ph.D	7	3	11	2	1
M.D.	11	2	0	3	1
DDS.	5	0	0	1	1
LLB.	7	1	0	3	0
BD.	0	0	0	0	0
Other	1	1	2	3	5

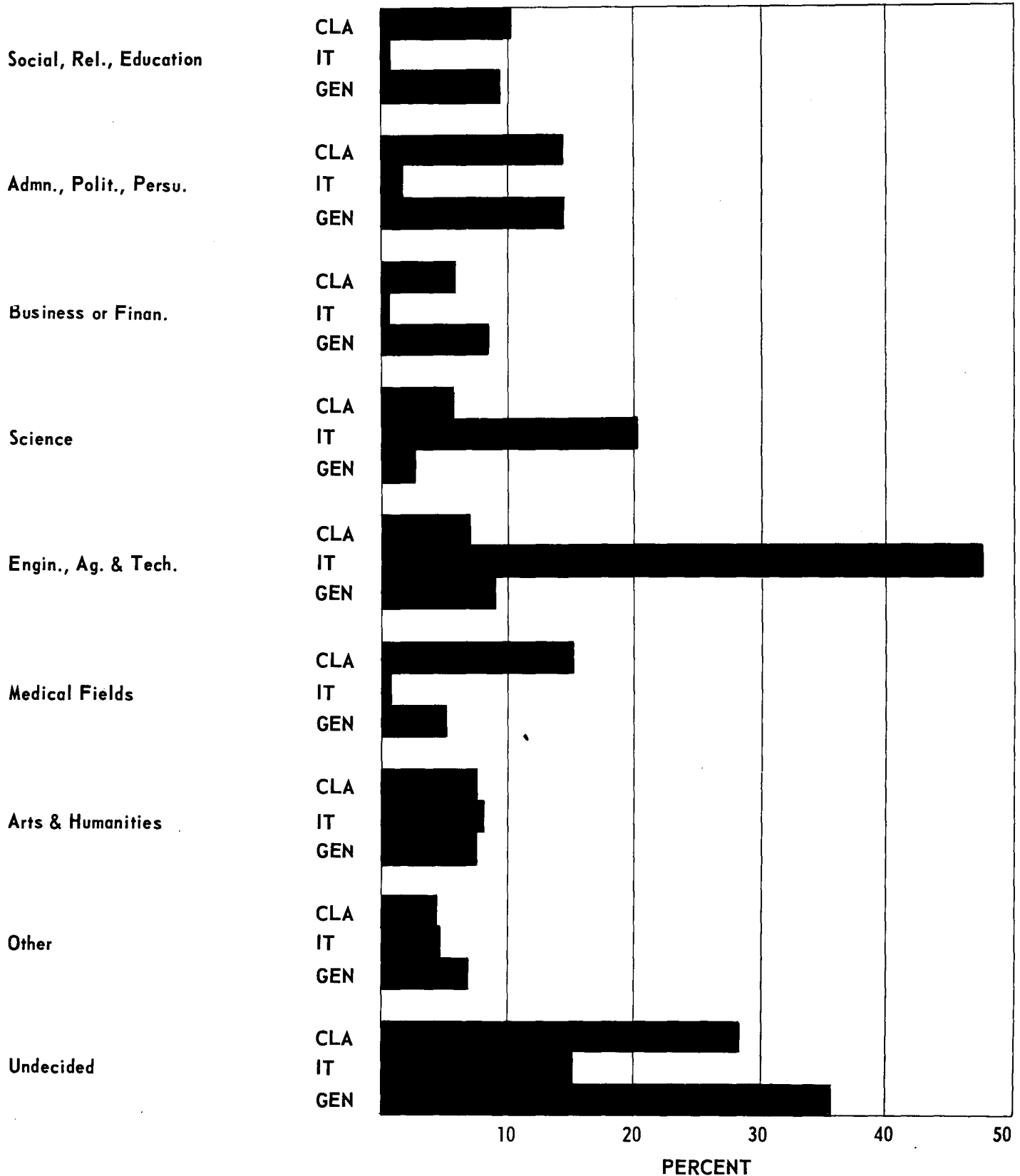
PERCENTAGES

Educational Plans of University Freshmen

Of the 6,000 freshmen entering these three colleges, 43 per cent indicated plans for education beyond the bachelors degree. Sixty-one per cent of Arts College men, 31 per cent of Arts College women, 59 per cent of Institute of Technology students, and 24 per cent of General College students sought degrees beyond the bachelors'. Differences between colleges and between sexes were great. Twelve per cent of Arts College freshmen men seek doctorates. Only 7 per cent of Arts College students, practically all women, do not plan to complete a bachelors degree, and 26 per cent of General College freshmen plan on less than a bachelors degree.

Vocational Choices of University of Minnesota Freshmen Men

The vocational choices of Institute of Technology freshmen are very much different from those of men in the other two colleges, with 68 per cent of the choices in the Institute of Technology related to science, engineering, agriculture, and technology. A significant proportion of Institute freshmen, however, have other vocational choices. The choices of men in the Arts College and the General College are not greatly different although many more men in the Arts College are planning to enter medical fields and somewhat more in the General College are planning to enter business or finance. Over one-third of the General College men were vocationally undecided, over one quarter of the Arts College men were, and about 15 per cent of the Institute men were undecided. About 8 per cent of men, regardless of college, were planning to enter a vocation in the arts or humanities.



Extracurricular Plans

University freshmen, when they are high school seniors, express an intention to participate in far more University activities than they actually engage in. Men and women express different preferences for activities and large differences are found among the three major undergraduate colleges. The largest proportion of students, perhaps four-fifths of them, intend to participate in departmental clubs. Almost two-thirds of the men but only one-fifth of the women plan to participate in intramural athletics. Seventy per cent of Institute of Technology freshmen express an interest in science clubs and projects, as compared to 33 per cent of Arts College men and 25 per cent of General College men. Almost two-fifths of General College men express the intent to participate in intercollegiate athletics as compared to 28 and 22 per cent of Arts College and IT freshmen, respectively. Women more often name music, acting, and student government and writing. Arts College men more often than IT men name writing and debate and acting.

PERCENTAGES

	CLA MEN	CLA WOMEN	IT MEN	GC MEN	GC WOMEN
	N=1931	N=2015	N=879	N=777	N=361
Inter-Collegiate Athletics	28	8	22	39	16
Music	25	42	21	17	40
Writing	34	44	16	21	35
Student Government	39	51	30	27	39
Science Clubs and Projects	33	20	70	25	13
Debate	14	14	9	11	14
Acting	20	37	10	15	41
Departmental Clubs	79	92	86	68	81
Intramural Athletics	67	21	62	63	24

	CLA MEN	CLA WOMEN	IT MEN	GC MEN	GC WOMEN
	N=1944	N=2022	N=879	N=777	N=364
To Learn How to Enjoy Life	1	0	0	1	1
To Develop Mind and Intellectual Abilities	31	44	33	30	39
To Secure Vocational or Professional Training	53	46	56	49	49
To Make a Desirable Marriage	1	0	1	2	1
To Earn a Higher Income	9	1	8	13	4
To Develop Moral Standards	0	0	0	0	0
To Become a Cultured Person	2	3	1	2	3
To Develop My Personality	0	2	0	1	1
To Develop a Satisfying Philosophy	2	3	1	1	1
None of These	2	2	1	2	1

Students Most Important Goals for Attending College

While he was still a high school senior, every University of Minnesota freshman reported on a checklist what he considered to be the most important reason for attending college. About one-half of University freshmen were going to college primarily for vocational or professional preparation and about one-third checked the reason, "to develop mind and intellectual abilities." A very large proportion of those who checked either one of these as the most important reason for attending college, checked the alternate reason as the second most important. About ten per cent checked as the most important reason, "to earn a higher income." Very few students checked any other single reason. Significant differences were found between the sexes and between colleges. Institute of Technology students were slightly more vocationally motivated and General College students more economically motivated. Women expressed more general education motivation than men and Arts College women expressed less vocational motivation. In light of the small proportion indicating they were going to attend college to learn how to enjoy life, the question is pertinent as to how high school seniors interpret this reason. Students do not particularly desire the University to have an impact on their moral standards, personal philosophy, or personality.

FORWARD

Information describing University freshmen and other students is available through the State-Wide Testing Program, the orientation testing programs administered by the Student Counseling Bureau, and from the Office of Admissions and Records. This report supplements a previously published description of University freshmen, "A Picture of New University Freshmen," which appeared in the Student Counseling Bureau Newsletter, January 1966, volume 18, number 2.

If each year freshmen entering the University are becoming more able, better informed, more skillful academically, more concerned with academic and scholarly performance, more involved in issues of social and personal values, less committed to entertainment, less interested in inter-varsity athletics, less concerned over collegiate activities resembling those in which they engaged in high school, and less accepting of the voice of adult authority, then our University must change. Unfortunately, because of the difficulty in assessing the current status of students in respect to many of these dimensions and because of the paucity of bench marks recorded in the past, we can only surmise regarding student status in the past and present and changes over time.

Although comparisons are most difficult between today's and yesterday's students, each of us can take the information we have about today's students and compare this to our own stereotypes in order to determine whether we see students as they probably really are. Faculty members, administrators, and parents form pictures of the student body and these pictures are influenced by personal experiences, characteristics of students from other generations, and popular literature and superstition.

Research done at the University of Minnesota with the College and University Environment Scales suggests that the perceptual patterns of the University reported by new students, experienced students, faculty members, counselors, and parents of new students tend to agree but the perceptions of these different groups are not identical and within each group are persons with many kinds of perceptions.

In general, these groups view the University as a center of intellectual activity, containing interesting and creative personalities, and providing opportunities for interesting cultural and intellectual experiences, and yet requiring much hard work from students. The University also is seen as a place for fun, for games, and for parties, but mainly it is viewed as an institution emphasizing personal, poetic, and political meaning, and concerned with increasing self-understanding, reflection, identification, and search for personal meanings. These groups view the University in terms of intellectual and cognitive functions to a far greater extent than in terms of its social and practical functions. The University is viewed as an intellectually stimulating environment providing rich resources and many opportunities for intellectual and cultural development and students expect to and are expected to enjoy themselves.

These statements describe the entering freshmen and other groups in the University about 1964. Unfortunately, comparable information is not available for earlier or later years and any systematic observation of trends must be based on the 1964 status and extend from there into the future.

The characteristics of a university influence the decisions of students considering attending the school, and the characteristics of the students attending a university in turn influence the curriculum, staff, programs, and services of the school. Institutional decisions and the wishes of

the faculty, administration, and supporting community must take into account the abilities, personalities, interests, objectives, social backgrounds, and expectations of students, and such information must be reviewed periodically not only by those bearing direct responsibility for decisions but also by everyone working with students.

The purpose of this summary is to make available to the University staff and other interested persons what is known about University freshmen. The information reported here describes the freshman class entering the University in the fall of 1965, but comparisons of this and previous analyses suggest that many characteristics of our student body change relatively slowly from year to year and generalizations about freshmen entering last year are quite appropriate for this year's entering class.

Much of what is reported here is derived through the University's participation in the American College Testing Program. The University has participated in this program since 1960 and recently every student applying for admission as a new freshman has been required to take the ACT test and to provide certain personal information at the time he takes the test, usually in November of his senior year in high school.

The information includes five scores on achievement tests. The tests are in English, mathematics, social studies, and natural science and a fifth score is a composite based on all four achievement tests. Each student also is asked to report his most recent high school grades in each of four subjects, English, mathematics, social studies, and natural sciences, and an average high school grade is based on these four self-reported course grades. The grades reported by students have been compared to those appearing on their high school records and the agreement is remarkably high. The self-reported course grades give a good estimate as to the high school's evaluation of the student's academic achievement.

Students also provide information indicating their proposed educational major in college; their vocational choice, that is, whether they plan to enter a vocation in business and finance, science, medicine, etc.; their vocational role preference, that is, whether they wish to be a researcher, a teacher, an administrator, etc.; and their educational plans as shown by the degree sought. From a check list they also are asked to indicate their two most important goals in attending college. They provide information regarding their living plans while in college, plans for traveling to and from the campus, plans regarding part-time work, and an estimate of their family income. They also provide information regarding their extra-curricular plans and reports of their non-academic achievements in the past, that is, particular achievements in science, in art, in writing, in leadership, in music, and in dramatic arts. A check list is completed explaining consideration given to various factors in selecting a college and information is provided concerning age and marital and dating status.

All of this information is available for groups of students separated by college and, when feasible, by sex. Thus, descriptions are available using each of these dimensions for men entering the Arts College, women

entering that college, men entering the General College, women entering that college, and men and women combined (including very few women) in the Institute of Technology. Separate data are available describing students on the St. Paul, Morris, and Duluth campuses.

Thus, considerable information is available concerning academic potentials, goals and aspirations, personal needs, non-academic achievements, college attractions, and demographic variables.

Academic Potential

ACT Scores

The four ACT tests have varying numbers of questions and raw scores on these tests are not directly comparable. Consequently, a scale has been devised to translate raw scores into scaled scores so that a scaled score of 16 is the approximate median or middle score earned by a national sample of first semester high school seniors. The scaled score standard deviation for high school seniors on these tests is approximately 6. A scaled score of 20 is the approximate median score of United States high school seniors bound for college. The median scores for 57,000 Minnesota high school seniors who took the tests from November 1961 to 1964 because they were planning to attend college, usually in Minnesota, was 22. For these Minnesota seniors the median score on the English test was close to 21, on the mathematics test close to 21, on the social studies test close to 23, and on the natural science test about 23.

University of Minnesota Arts College freshmen entering in the fall of 1965 had a mean composite standard score of about 24, the mean for men being 24.7 with a standard deviation of 3.2 and the mean for women 23.7 with a standard deviation of 3.4. Out of 3992 for whom scores were available, only 54, or two per cent, had scores at or below the average for national high school seniors and only 561, or 14 per cent, had scores at or below the median for high school seniors planning to attend college. About 80 per cent of these men and an almost identical proportion of women had scores that were above average for Minnesota high school seniors planning to attend college. When Arts College freshmen are compared to high school seniors and to college-bound students, they are a superior group.

Freshmen entering the Institute of Technology have even higher composite ACT scores and the mean for this group is 26.3 with a standard deviation of 2.9. Of the 893 freshmen in the Institute of Technology for whom scores were available, only two had composite scores at or below the median for high school seniors and only 36 had scores at or below the median for national college-bound high school seniors. Only nine per cent of the Institute of Technology freshmen had scores at or below the average of scores of Minnesota seniors bound for college.

Although the distributions for freshmen entering the Arts College and the Institute of Technology are quite different and the mean difference was

more than two scaled score points, the amount of overlapping between these distributions is considerable. Comparing the men in the Arts College with all freshmen in the Institute of Technology, 25 per cent of the Arts College men had scores that exceeded the mean score of the Institute of Technology men and 30 per cent of the Institute of Technology men had scores below the average score for the Arts College men. If scores of 29 and above are considered extremely high scores, nine per cent of the Arts College men had scores in this range as compared to 18 per cent of the Institute of Technology men.

The mean score for the General College men was 17.8 with a standard deviation of 4, and for women 16.0 with a standard deviation of 3.5. Of the 1195 General College men and women for whom scores were available, 504, or 42 per cent, had scores at or below the median for high school seniors and 950, or 79 per cent, had scores at or below the median for high school seniors planning to attend college. Of the 1195 freshmen in the General College, 93 had composite ACT scores that place them within the upper one-half of Minnesota high school seniors directed toward college.

Again, the mean differences found between these three colleges are large but the overlapping deserves considerable attention. Figure 1 shows the distribution of ACT composite scores for men entering each of these three colleges and although only 11 of 1195 students in the General College had scores exceeding the mean score in the Institute of Technology, in all other comparisons considerable overlapping is found. In the General College were 55 students with higher scores than those obtained by the average Arts College freshmen. In the Arts College were found 31 students with scores lower than the average score of General College men.

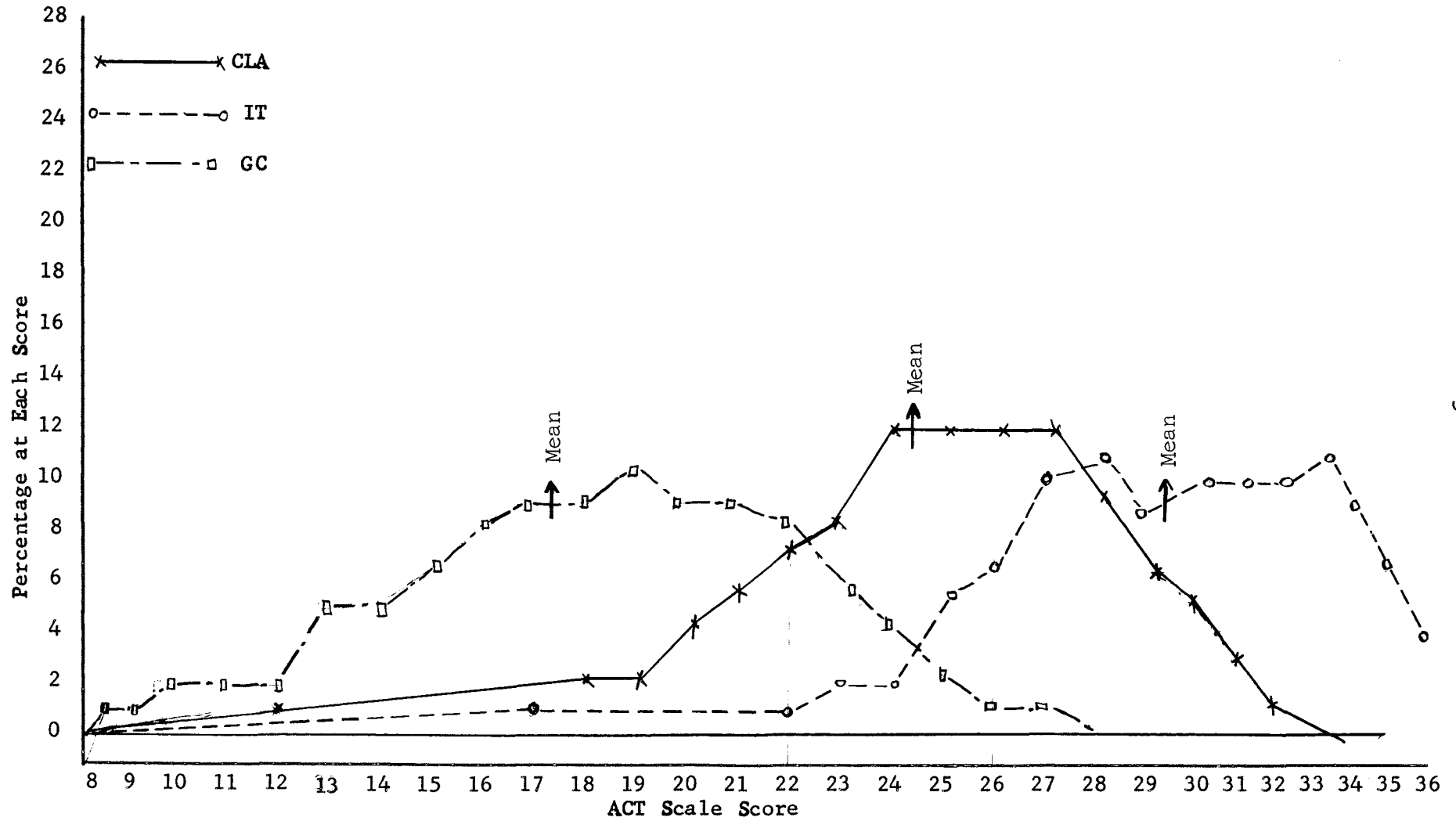
Using this composite score on ACT as a measure of general academic aptitude, we can compare University of Minnesota students to students not in the University, that is, high school seniors and prospective college students, and compare students in one division of the University to those in others. The Arts College and the Institute of Technology are extremely selective, with the Institute of Technology showing greater selectivity than the Arts College, and the General College draws a large proportion of its students from the nether regions of the high school. In each of these colleges, however, are found students who have much academic potential and students who have relatively little and the populations of these colleges do not form discrete groups.

High School and College Grades

Although the ACT tests provide some information regarding the educational information and skills acquired by high school graduates, the high school's evaluation of the student's academic achievement is provided best by grades given in high school. Almost all of the 3832 men and women entering the Arts College reported their grades in English, mathematics, social science, and natural science. A total of 15,207 such grades were reported. The distributions of these grades varied from subject to subject with 31 per cent of grades in social sciences being A as compared to only 19 per cent

Figure 1

Distributions of ACT Composite Scores for Men Entering
University of Minnesota CLA, IT, and GC, Fall 1965



of grades in mathematics and natural sciences. One per cent of the grades in English were D or F, two per cent in the social sciences, five per cent in the natural sciences, and nine per cent in mathematics. Significant sex differences were found in each of the four subjects and more girls obtained A's than boys and fewer obtained D's and F's. Of all of the high school grades, 24 per cent were A's, 45 per cent B's, 27 per cent C's, and only four per cent D's or F's.

The grades these same students earned during the fall quarter of their freshman year provide a startling contrast and suggest a major source of student trauma during the freshman year. These students were registered during the fall quarter for a total of 67,126 credit hours. (The groups were not exactly the same insofar as the summary for grades obtained from the Admissions and Records Office included records for those few students who were not included in the ACT analysis.) Of all of the college grades, 11 per cent were A, 25 per cent B, 43 per cent C, and 20 per cent D or F. Whereas almost 70 per cent of the grades of these students in high school had been A or B, only 36 per cent were in the Arts College, and whereas only four per cent of grades were below satisfactory in high school, 20 per cent of the grades were below satisfactory during the fall quarter. When these college freshmen were in high school the modal, or most frequent, grade was a B. This is not surprising insofar as these people were drawn from the upper regions of their high school classes and in the high schools from which they came the average grade was closer to a C than a B. When these students were in the Arts College, the modal grade was a C. In high school the average grade for these students was 2.9, almost a B average, whereas the first quarter college grade average was 2.2.

Apparently those who distribute grades in high school consider a grade of C as an average grade but those who assign college grades perceive the average grade in college as C. To what extent in high school and in college does the grade of C mean that a student has learned the minimum essentials, to what extent does it mean that the student has learned as much as the average student, to what extent does it mean a student who is a B student in high school should consider himself to be a C student in college, and to what extent does this all mean that the faculties in high schools and colleges have paid sufficient attention to problems of grading and grade distribution?

Of freshmen entering the Institute of Technology, 21 per cent reported that they had high school grades of A in English, 41 per cent in mathematics, 32 per cent in social sciences, and 38 per cent in natural sciences. Corresponding proportions receiving B's were 51, 45, 49, and 42. Fewer than two per cent received D's or F's in any of these subjects. Of all of the high school grades, regardless of subject, reported by Institute of Technology freshmen, 33 per cent were A's, 47 per cent B's, 19 per cent C's, and only one per cent D's or F's. Thus, 80 per cent of the high school grades reported by these students were either A or B. The average grade point average in high school for these students was 3.11, well over a B average. Over 41 per cent of the grades in mathematics earned in high school by these students were A's, with 86 per

cent being either A or B. Freshmen in the Institute of Technology during their fall quarter carried a total of 16,284 credit hours. Of the grades received, nine per cent were A, 20 per cent B, 46 per cent C, and 25 per cent D's or F's. Thus, whereas 80 per cent of the grades in high school received by these students had been A's or B's, only 29 per cent such grades were received in college. Whereas only one per cent of the high school grades received by these students were D or F, 25 per cent were below C in college. Whereas one-fifth of the high school grades were C or below, over 70 per cent of the grades were at this level in college.

Differential Achievement

When one considers the four achievement test scores relevant differences are found among the three colleges and two sexes. On each of the four achievement tests men in the Institute of Technology obtain higher mean scores than do men in the Arts College and, in turn, the means of Arts College men exceed those of General College men. The sizes of the differences vary greatly, however. On the English test the means for the Arts College and the Institute of Technology are almost identical, 21.4 and 21.7. On the social studies test the difference between means is somewhat greater, the means being 25.8 and 26.3. On the natural science test the difference is larger with means of 25.4 and 27.1, and with the mathematics test the differences are quite large with the means being 25.7 and 29.5. Essentially, the men in these two colleges are similar in terms of their tested background in English and the social studies but the men in the Institute of Technology are significantly superior in natural science and particularly in mathematics. When the General College and Arts College men are compared, the mean differences are about the same from test to test. Figure 2 charts the cumulative distributions on the social studies test for men in the three colleges and the similarity of the two groups and the disparity of the third group are obvious. Figure 3 shows the same distributions for the mathematics test and here the differences are easily observed. On the mathematics test a student in the Arts College who is at the median has a score that exceeds the scores of fewer than 15 per cent of the men in the Institute of Technology but one that exceeds the scores of more than 90 per cent of General College freshmen.

When the sexes are compared in both the Arts College and the General College, the mean scores of women exceed those for men on the English test, the means for men are higher on the mathematics and natural science tests, and the means for the two sexes are quite similar in the Arts College on the social studies test but on that test the men in the General College receive a slightly higher score than do women.

When one considers academic accomplishment as reflected by high school grades, the comparisons of men and women in the two colleges in the four subjects consistently show that the women have higher mean grades than do the men. When the men in the Arts College are compared to the men in the Institute of Technology, in each of the four subjects the Institute of Technology men have higher high school grade point averages than do the Arts College men. In each comparison of Arts College and General

Figure 2

Cumulative Percentage of Frequencies of ACT Social Studies Scores
for Men Entering University of Minnesota CLA, IT, and GC, Fall, 1965

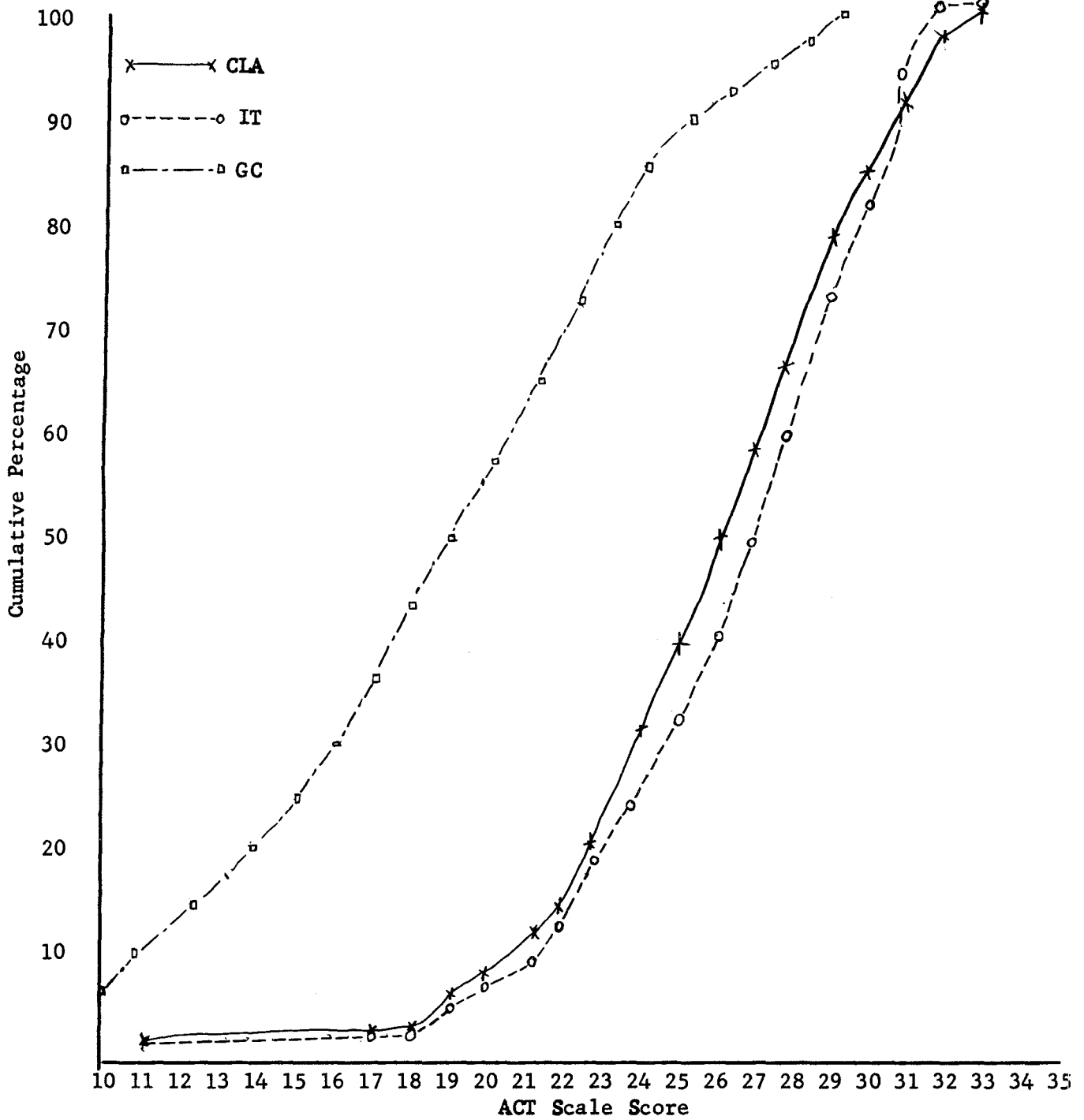
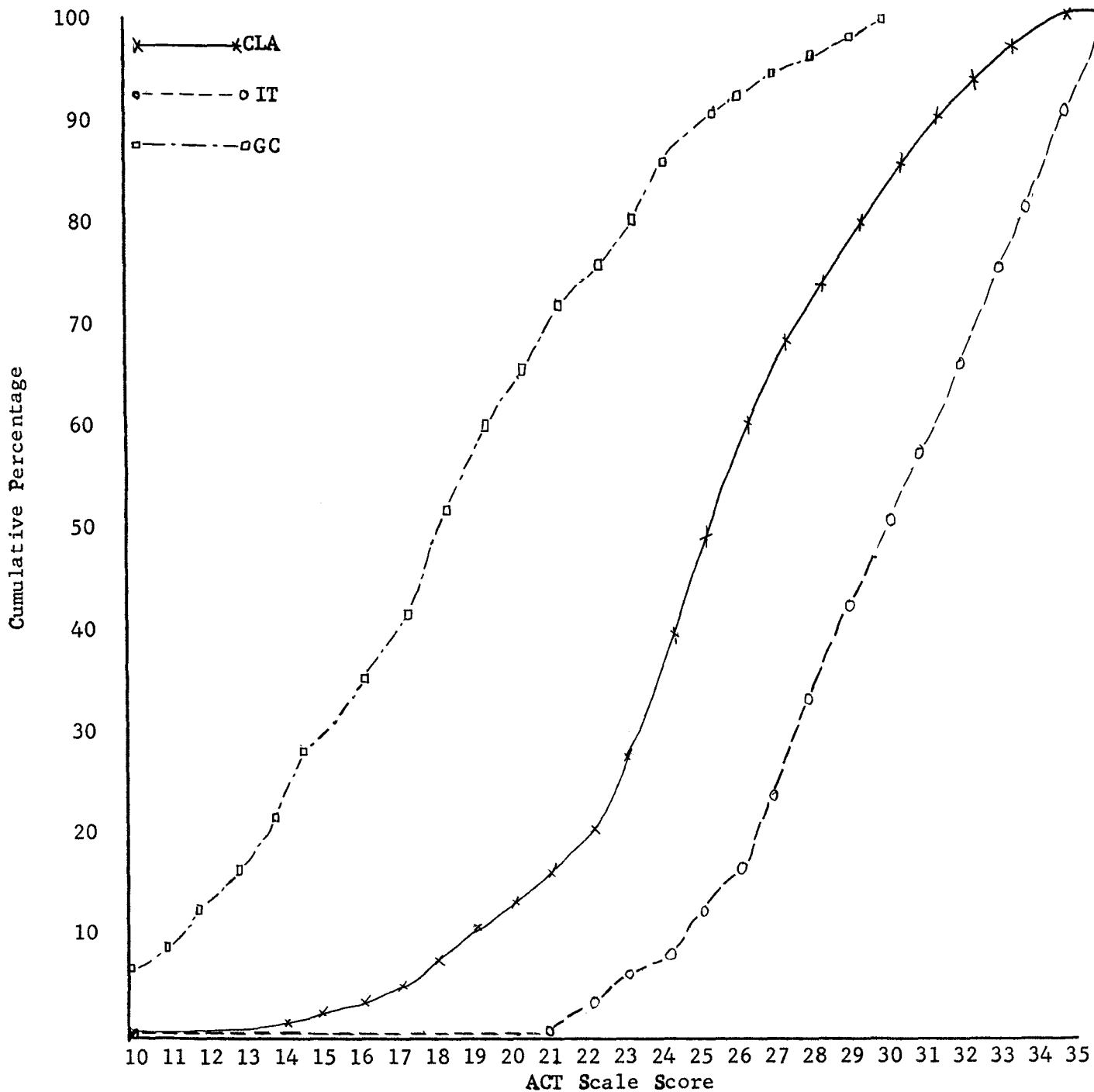


Figure 3

Cumulative Percentage Frequencies of ACT Mathematics Scores
for Men Entering University of Minnesota CLA, IT, and GC, Fall, 1965



College students, the means for the men and the women in the General College are lower than corresponding means in the Arts College.

A question pertaining to the meaning of high school grades is raised when one realizes that the mean mathematics score for the Arts College men is 25.7, for Arts College women 22.3, and yet the mean mathematics grade for men was 2.6, for women 2.76. In the General College the discrepancies were even greater with the test scores for men and women averaging 18.1 and 13.5 and the grades averaging 1.69 and 1.78. Students who know the most as reflected by average test score are not necessarily the ones who obtain the highest average grades.

Educational and Vocational Decisions

Of the approximately 4000 Arts College freshmen, 21 per cent as high school seniors indicated that they had not as yet selected an educational major and 26 per cent reported they had not made a vocational choice. Almost one-third of the women but only about one-tenth of the men had selected an educational major related to social, religious, or educational studies. Eighteen per cent of the men but only five per cent of the women indicated an educational choice related to administration, politics, or persuasion, and an additional six per cent of the men and two per cent of the women planned a major related to business and finance. Eleven per cent of the men and six per cent of the women indicated majors related to science and eight per cent of the men and less than one per cent of the women indicated majors related to engineering, agriculture, and technology. Fifteen per cent of the men and 20 per cent of the women indicated majors related to medicine and 10 per cent of the men and 16 per cent of the women made choices related to the arts and humanities.

The percentages, referring to vocational choices, were quite similar. Students also were asked to indicate their vocational role preference. About 11 per cent of the men and six per cent of the women reported they wished to become investigators or research workers. About 12 per cent of the men and 35 per cent of the women reported they wished to become teachers or therapists. Ten per cent of the men and four per cent of the women reported they wished to become administrators or supervisors. Less than three per cent of the group reported they wished to become salesmen or promoters. About 30 per cent of the men and 21 per cent of the women reported they wished to become practitioners, performers, or producers of services or products. About one-fifth reported they did not know.

As high school seniors four per cent of the men and 10 per cent of the women said they planned to attend college but aimed at less than a bachelor's degree. Thirty-five per cent of the men and 59 per cent of the women reported their goal as a bachelor's degree or its equivalent. Fifty-nine per cent of the men and 30 per cent of the women reported plans to go beyond a bachelor's degree with 11 per cent of the men and two per cent of the women aiming at M.D.'s, seven per cent of the men

and three per cent of the women at Ph.D.'s. Seven per cent of the men hoped for law degrees and five per cent for dentistry degrees.

In the Institute of Technology 51 per cent of the men indicated an educational major directly related to engineering, agriculture, and technology and 31 per cent reported majors labeled scientific. Seven per cent were undecided, seven per cent named something in the arts and humanities. When they named vocational choices, 48 per cent named an occupation in engineering, agriculture, and technology, and 21 per cent in science. Forty-two per cent preferred a vocational role as researcher or investigator, 22 per cent as practitioner, performer, or producer of service or product, and 16 per cent did not know.

Among General College students, approximately one-fourth were undecided regarding an educational major and 36 per cent of the men and 23 per cent of the women were undecided regarding vocational choice. Among the men the most popular educational majors were social, religious, and educational fields (12 per cent), administrative, political, and persuasive fields (18 per cent), and engineering, agriculture, and technology (12 per cent). Among the women they were social, religious, and educational fields (31 per cent), arts and humanities (14 per cent), and medical fields (18 per cent). Over one-fourth of these students were undecided regarding vocational choices, 36 per cent of the men and 23 per cent of the women. The distributions among vocational choices were somewhat similar to those among choices of major.

Vocational role preferences among the General College indicated that 17 per cent of the men hoped to become practitioners, performers, or producers of services or products, 14 per cent administrators or supervisors, and 12 per cent teachers or therapists. Among the women 28 per cent preferred a role as teacher or therapist, 21 per cent as practitioner, performer, or producer of some service or product. Twenty-five per cent of the men and 21 per cent of the women indicated they were unable to designate a vocational role preference. Plans for further education among the General College students indicated that 20 per cent of the men and 38 per cent of the women aimed at less than a bachelor's degree. Fifty-four per cent of the men and 43 per cent of the women were aiming at bachelor's degrees and among the men 23 per cent and among the women 14 per cent planned to do work beyond the bachelor's degree. Two per cent of the men planned on obtaining M.D.'s, three per cent L.L.B.'s, and one per cent D.D.S.'s.

Reasons for Attending College

Each high school senior taking the ACT test is asked to check from among a list what he considers to be his two most important goals in attending college. The list includes:

- To learn how to enjoy life
- To develop mind and intellectual abilities
- To secure vocational or professional training
- To make a desirable marriage

To earn a higher income
To develop moral standards
To become a cultured person
To develop my personality
To develop a satisfying philosophy
None of these

Among the Arts College men, 53 per cent checked in first place "to secure vocational or professional training" and 31 per cent checked in first place "to develop mind and intellectual abilities." No more than nine per cent checked any other one item in first place. Thirty per cent of the men checked in second place "to develop mind and intellectual abilities," 27 per cent "to earn a higher income," and 22 per cent "to secure vocational or professional training." Thus, 60 per cent indicated as of either first or second importance "to develop mind and intellectual abilities" and 75 per cent indicated in either first or second place "to secure vocational or professional training." Thirty-five per cent gave as the first or second reason "to earn a higher income." Among the Arts College women, 74 per cent checked as either first or second most important "to develop mind and intellectual abilities" and the same proportion checked as first or second most important "to secure vocational or professional training." Less than four per cent of the women indicated that the hope of making a desirable marriage was this important and less than one-half of one per cent indicated this was the most important reason. Even fewer men and women indicated they were coming to the University to develop moral standards, although seven per cent of the men and about twelve per cent of the women indicated they were interested in coming here primarily to become a cultured person. Among the women, about 10 per cent indicated they were attending the University in order to develop their personalities, and between five and 10 per cent indicated they were interested in coming to the University mainly to develop a satisfying philosophy. Interestingly enough, the category that encompasses practically all of these items, "to learn how to enjoy life," was checked by only three per cent of the students.

The distribution of these responses for men in the Institute of Technology were so similar to the distribution for men in the Arts College that the same generalizations apply to both colleges. Some differences were found, however, between students in the General College and in the Arts College. Whereas 75 per cent of the Arts College men indicated as a first or second reason "securing vocational or professional training," only 65 per cent of the General College men did so. Only 35 per cent of the Arts College men checked as a reason "to earn a higher income" as compared to 48 per cent of the General College men. Apparently the vocational and professional goals of the Arts College men are more evident as specific incentives; whereas the occupational motivation of the General College students may be considered as more generalized.

Et Cetera

Other miscellaneous information is available about these students.

Slightly fewer than one-quarter of the Arts College students planned to live in college dormitories and slightly under four per cent in fraternities or sororities. About two-thirds planned to live at home. One-half of the men and almost one-half of the women planned to bring a car to campus. Among the General College students, about 12 per cent planned on living in dormitories with about 77 per cent planning to live at homes. Fifty-nine per cent of the General College students planned to bring a car to campus. Among the Institute of Technology students 28 per cent planned to live in dormitories, three per cent in fraternities, and 61 per cent at home. Forty-seven per cent planned to bring cars to the campus. In both the Arts College and the General College the men students planned on more part-time work than did women students and the men in the General College planned on doing slightly more outside work than did the men in the Arts College, although this college difference is not found for the women. Fewer Institute of Technology freshmen planned on part-time jobs than did men in the Arts College. In the Arts College, approximately 83 per cent of the men planned on working 10 hours or more a week and 20 per cent planned on working 20 or more hours a week. In the Institute of Technology 80 per cent planned on working 10 or more hours a week and 18 per cent planned on working 20 or more hours a week.

In the Arts College 28 per cent of the men planned to participate in intercollegiate athletics, 25 per cent in musical activities, 34 per cent in writing activities, 39 per cent in student government, 33 per cent in science clubs and projects, 14 per cent in debate, 20 per cent in acting, 79 per cent in departmental clubs, and 67 per cent in athletics and intramurals. Among Arts College women only eight per cent indicated an interest in intercollegiate athletics whereas 42 per cent planned to participate in music, 44 per cent in writing, 51 per cent in student government, 20 per cent in science clubs and projects, 14 per cent in debate, 37 per cent in acting, 92 per cent in departmental clubs, and 21 per cent in intramural athletics. No definite figures are available concerning the extent to which these students actually participated in extra-curricular activities during their freshman year in the University, but reasonable estimates can be made that actual participation was vastly less than these expectations indicated.

The extra-curricular expectations of Institute of Technology freshmen and Arts College freshmen were quite different and in the expected direction. Whereas 34 per cent of the Arts College men anticipated participating in writing activities, only 16 per cent of the engineering freshmen checked this, whereas 70 per cent of the engineering freshmen anticipated participating in science clubs and projects, as compared to only 33 per cent of the Arts College freshmen. Twenty per cent of the Arts College freshmen anticipated participating in dramatics as compared to 10 per cent of the Institute of Technology freshmen. A few more of the Arts College freshmen planned to participate in athletics, but the differences between the two colleges were not large.

The colleges differ in terms not only of academic achievement, as shown by grades, but also in terms of non-academic achievement, as shown by the number of outstanding achievements in science, art, etc. Forty-nine per

cent of the Institute of Technology students reported outstanding science achievements in high school as compared to 38 per cent of Arts College freshmen. In the Arts College 31 per cent reported outstanding achievements related to art, as compared to 24 per cent in the Institute of Technology. Forty-one per cent of Arts College students reported outstanding achievements in writing, as compared to 31 per cent in the Institute of Technology. The Arts College freshmen reported slightly more leadership achievements than did the Institute of Technology freshmen and considerably more achievements related to dramatics. The groups were quite similar in terms of musical achievements. In terms of these non-academic achievements, the General College students consistently were less active and productive in high school than were the Arts College students.

Students were asked to describe their considerations in making a college choice and a large proportion of University students reported they were influenced greatly by the faculty and the national reputation of the University. Of persons influencing such choices, parents appeared to be the most influential, high school and college counselors the next, and high school teachers the next. A large proportion of students reported they were influenced by the low cost and the location of the University.

Students were asked to describe their marital and dating status. Practically none of the entering freshmen were married and only a small proportion were engaged. Between 15 and 20 per cent were going steady. In the Arts College 16 per cent of the men and 12 per cent of the women reported they did not date at all and in the General College these percentages were 13 and six. One-quarter of the Institute of Technology freshmen reported they did not date at all. This was perhaps one of the largest and most interesting differences found among the colleges.

Students also were asked to make estimates of their family income. Large proportions of students reported either they did not know or they considered this information confidential. In the Arts College, of students who reported this information, 14 per cent reported their family incomes as less than \$5000 a year, 45 per cent reported incomes less than \$7500, 70 per cent reported incomes of less than \$10,000 a year, and 90 per cent reported incomes of less than \$15,000, and about one per cent reported incomes of \$20,000 a year and over. Reported incomes were somewhat less for the Institute of Technology students with about 10 per cent reporting incomes of less than \$5000 per year and 37 per cent reporting incomes of less than \$7500 a year. Incomes of General College students tended to fall within the middle ranges and fewer of these students had incomes at either the lower or upper extremes compared to Arts College students. University students do not come from affluent families.

MKC
85494r

UNIVERSITY OF MINNESOTA
Research Bulletin
of the
Office of the Dean of Students

Volume 9, Number 1

July 15, 1967

PRE-COLLEGE EXPERIENCES OF
UNIVERSITY OF MINNESOTA FRESHMEN

by

Ralph F. Berdie

Student Life Studies

Periodically the Office of the Dean of Students at the University of Minnesota presents information descriptive of the student body to aid in the understanding of the University. Regular observations are made of the college aptitude and high school achievement of entering freshmen and systematic reports have been presented regarding the family backgrounds of students. Some information has been presented concerning the vocational goals and interests and personality characteristics of students and of their educational expectations, perceptions, and values.

Relatively little has been known regarding the experiences of University students prior to matriculation--particularly those experiences not necessarily occurring in the classroom but nevertheless having educational implications. Some information regarding these experiences is now available.

Many programs, particularly some with Federal Government support, are designed to increase the proportion of students coming to college from low income homes. Federal grant programs, NDEA loan programs, and Work-Study programs, all have this purpose. State and University scholarship programs and those of private foundations and individuals share this purpose. Many students, motivated to attend college, who in previous generations could not afford to now find funds available.

Much research done in metropolitan areas at the elementary and secondary levels has revealed a relationship between socioeconomic level and educational achievement. Many children who come from homes severely distressed economically are educationally retarded and to some extent this is due to cultural deprivation in their homes. Conditions related to low economic status are also related to the absence of experiences which in our society are conducive to progress in school.

If University matriculants coming from economically deprived homes also are culturally deprived, special compensatory programs may be necessary. The University of Minnesota was concerned with this problem and research was undertaken to compare the pre-college experiences of students on special financial aid programs with the experiences of the student body in general. The present research has provided information to be included in later reports regarding the characteristics of students receiving financial aid and differences between sexes and colleges.

As part of this research, information was obtained from representative samples of University freshmen and these data add an interesting dimension to the picture we already have of University students. This report presents only these descriptions of University freshmen.

An eight page inventory of pre-college experiences was devised so that students could provide self-descriptions to the University. This inventory asked for, in addition to identifying information, occupation of father, education of parents, availability in the home of thirty-seven

items or possessions, extending all the way from world globes, basketball hoops, and chess games to boats, skiing equipment, and original paintings or drawings. Each student was asked to check from a list of thirty-five magazines those regularly found in his home and also to indicate how many books were in the family home. A list of thirty-five authors was presented and each student was asked to indicate if he had read a book by the author, had heard of him but had never read a book by him or had never heard of him. Similarly, a list of forty artists was presented and each student was asked to indicate if he had seen a work by the artist, had heard of him but never seen a picture, or had never heard of him. Students were also asked to check from a list of fifty-five organizations those to which their parents belonged. Additional questions were asked concerning the possession of a library card, attendance at nursery school or kindergarten, attendance at circuses, art galleries, museums, public libraries, zoos, and baseball games. Questions also were asked concerning travelling, riding on a train, taxicab, or bus, and the number of states and foreign countries visited. Students were asked questions regarding the amount of employment they had experienced, whether they had received music lessons, and the names of books they had read during the past year. They were asked to indicate from a list of twenty youth organizations those to which they had belonged and from a list of twenty-seven children's books, those which they had read. Finally, from a list of thirty-three persons in public life--including athletes, politicians, statesmen, educators, etc.--each student was asked if he knew who the person was, if he had heard of him but could not identify him, or if he had never heard of him.

The responses to the inventory were tabulated separately for each sex and for each college. A sample of 200 persons was drawn at random from the males in the College of Liberal Arts, another sample from the Institute of Technology, a third sample from the males in the General College, and a fourth sample from the males in the College of Agriculture, Forestry, and Home Economics. Similar samples were drawn from women in the College of Liberal Arts, General College, and Agriculture, Forestry, and Home Economics. Differences between colleges and between men and women have been analyzed, but the present report will concern itself mainly with the characteristics of the total freshman class as here observed.

Each freshman entering the University completed the inventory during the late summer or early fall of 1966, as he participated in the orientation and registration program for new students. Students were told that the responses to the inventory would be used for research purposes only and would have no bearing on decisions made about individual students. An attempt was made to check on the validity of responses by including in the lists of names of authors and artists persons who (as far as the writer was concerned) did not exist. For example, the name of Henry Martin was included among the names of authors and only one percent of the students indicated they had read a book by Henry Martin and an additional 13 percent reported they had heard about him but had not read a book by him. Eighty-six percent of the students indicated they had never heard of him. To what extent this reflects deliberate distortion and to what extent distortion results from similarity of names is now known but this evidence suggests that the results obtained through this inventory have some validity, although

They contain error usually contained in similar questionnaires dependent on voluntary participation and recall of events of questionable perceived significance to the individual.

Parental Background

The fathers of 13 percent of entering freshmen were in occupations classified as "professional" and an additional 31 percent of students reported their fathers were in "business" occupations. Thirteen percent owned or managed business, eight percent were in office work, and 10 percent were in sales. Ten percent of the students reported their fathers owned or managed farms, with by far the largest proportion of these students coming from the College of Agriculture, Forestry, and Home Economics. Fourteen percent of students reported fathers who were in the skilled trades, six percent who were factory workers, and the remainder--a rather substantial proportion--indicated that their fathers were in other occupations.

Thus, the largest proportion of entering freshmen come from homes where the fathers are directly involved in business activities, with a surprisingly large proportion coming from homes where the father is in either a skilled trade or a laboring job, and a relatively small proportion come from homes where the father is in a profession.

An analysis of the occupations of fathers of students entering the University in the fall of 1961 showed that 11 percent were in professions, and compared to 13 percent in 1966. At the earlier time, 35 percent were in business occupations, as compared with 31 percent in 1966. Eight percent owned or managed farms in 1961 as compared to 10 percent in 1966. Perhaps some changes have taken place during this six year period in the paternal occupations of students, but the changes are not large.

The modal education of fathers was high school graduation and 28 percent of the students reported that their father had graduated from high school but received no post high school education. Two percent had less than eighth grade education, 12 percent had eighth grade education but no more, 10 percent had attended but not graduated from high school, and 47 percent had education beyond high school, with 22 percent being college graduates. Of the freshmen in 1961, two percent reported their fathers had not completed the eighth grade, 17 percent reported their fathers had completed the eighth grade but gone no further, 12 percent reported their fathers had attended but not graduated from high school, and 26 percent reported fathers who were high school graduates with no further education. Education beyond high school was reported in 1961 for 43 percent of fathers and 19 percent were college graduates. Thus, the figures reported for 1966 as compared to these earlier figures indicate that even during this relatively short period of time upward changes have taken place in the amount of education reported for fathers of entering freshmen. Even in the later year, however, the fathers of 24 percent of freshmen had not graduated from high school and more than one-half of the fathers had not gone beyond high school.

Fewer of the mothers had meager education and also fewer had extensive education, with a far greater proportion of mothers being high school graduates. Eight percent of the mothers had no more than an eighth grade education, 43 percent were high school graduates with no further education, and 61 percent of the mothers had no more than a high school education. Thirteen percent of the mothers had college degrees, and 29 percent had some college experience, whether or not they graduated.

In 1961, 74 percent of the freshmen reported their mother had no more than a high school education as compared to 61 percent in 1966. In the earlier year, 26 percent had some college experience, as compared to the more recent 29 percent.

The educational backgrounds of University freshmen as shown by the number of years their parents attended school are improving at a rate that makes changes discernable over a relatively few years.

In 1966, one-half of the freshmen reported they had at least 100 books in their homes and only 25 percent reported fewer than 50. In 1961, only 41 percent of the freshmen reported more than 100 books, and 29 percent reported fewer than 50. These increases may be related to those reported for parental education.

Unfortunately, for the remainder of the information gathered in 1966, no comparisons can be made with the earlier freshman class insofar as similar data were not then assembled.

Of the thirty-seven family and home possessions, the average students reported twenty-three in his home. The relatively small standard deviation of 5.5 suggests that a large proportion of students come from homes with many of the educationally important accoutrements. Such things as radios, dictionaries, encyclopedias, games, and tools are found in the homes of most University students.

The average student reported between six and seven magazines were regularly in his home and results from earlier analyses suggest that these for the most part include Reader's Digest, Life, Look, Better Homes and Gardens, and for students from farms, farm magazines. Current literature of a sort is coming into the homes of students.

The average student comes from a home where the parents are moderate "joiners." He reported that his parents belong to three to four of the thirty-five organizations listed. The standard deviation here was about two and one-half, and this suggests that many students come from homes where parents belong to no organizations and few parents belong to a great many organizations.

Students have travelled rather extensively. Less than one percent of the students reported they had never been more than 100 miles from home and the average student reported he had been in twelve of the fifty states and in one foreign country--usually Canada. Although no similar figures are available for earlier years, one might speculate that today's freshmen constitute a more cosmopolitan group than did those of earlier years.

Students Read!

The reading histories of freshmen provide relevant information regarding their readiness for college. Eighty-two percent of the freshmen reported they have a public library card and 93 percent reported they had been in a public library other than a school library during the past year. When asked to list the books they had read during the past year, the average freshman named four books. The standard deviation here, also was four, suggesting that large numbers of freshmen have read very few books, and many freshmen have read large numbers of books. Of the twenty-seven children's books, the average freshman reported that he had read eleven, a figure suggesting a rather common background as obtained from popular children's literature.

The names of thirty authors were included in the list to which students were asked to respond, and of these four were of persons not known to exist. The three most frequently read authors were Steinbeck, Hemmingway, and Faulkner, with 87 percent of the students reporting they had read at least one book by Steinbeck, 83 reporting they had read a book by Hemmingway, and 63 percent reporting that they had read a book by Faulkner. Almost the same proportion of students reported that they had read a book by Flemming and 63 percent of the students were apparently personally acquainted with James Bond. Large numbers of students share a common core of literary experience.

No other author had attracted even one-half of these students, although 47 percent reported they had read Salinger, 44 percent Michener, and 33 percent James Baldwin.

A small but substantial portion of students reported they had read books by the authors currently considered to influence college students. Eleven percent reported they had read at least one book by Camus, 13 percent a book by Sartre, 20 percent a book by Voltaire 24 percent a book by Dostoevski, 27 percent a book by Tolstoi, and 11 percent a book by Ayn Rand. Thirty percent had read a book by William Golding, and 19 percent a book by James Joyce.

Some persons may be rather shocked by the numbers of persons reporting they had never heard of certain authors. These figures are: Tolstoi, 24 percent; Dos Passos, 75 percent; Anatole France, 86 percent; DeBalzac, 71 percent; Camus, 75 percent; Henry James, 49 percent; Ionesco, 80 percent; D. H. Lawrence, 62 percent; Sartre, 54 percent; Dostoevski, 46 percent; Kerouac, 88 percent; Henry Miller, 58 percent; James Farrell, 55 percent; Ayn Rand, 68 percent; Rabelais, 80 percent; James Joyce, 43 percent; Lawrence Durrell, 77 percent. Only one percent had not heard of Ian Flemming.

These figures suggest that a substantial proportion of students have at least been introduced to a broad variety of well known authors, but that a large proportion of students have never read anything by and in fact have

not even heard of many of the authors who in the past have produced much of the world's significant literature. College freshmen, by the time they come to the University, have been exposed to books, have had access to books, have read some books, and know something about a small part of the world's literature. Some students have extensive reading backgrounds, are well acquainted with many authors and have read many books. Other students have only made a beginning, if that.

Students and Art

The student's art experiences, as indicated by his report of pictures seen and artists heard of, are more restricted than his literary experiences. Of all the students, 56 reported that they have visited an art gallery during the past year. Experience with this type of question suggests that many of the students really intend to say that at some time they have visited an art gallery. Large proportions of students report they have seen pictures (or reproductions) by Van Gogh, Raphael, and Rembrandt, with 72 percent of the students saying they have seen a picture by Van Gogh, 54 by Raphael, and 86 by Rembrandt. Even then, 12 percent of the students reported they had never heard of Van Gogh, and 15 percent reported that they had never heard of Raphael.

More than one-half of the students reported that they had never heard of Degas, Toulouse-Lautrec, Leslie Granger, Grant Wood, Thomas Benton, J. S. Curry, George Groz, John Marin, John Sloan, Titian, Velasquez, Delecroix, Watteau, Constable, Vermeer, Seurat, Turner, Courbet, Botecelli, Manet, Cassett, Sargent, Bellows, Homer, Warhol, Keen, Cezanne, Rivera, and Jackson Pollack. Even 59 percent of the students said they had never heard of Salvador Dali, perhaps one of the more self-publicized artists of this generation.

The sex difference in the responses to artists is great. In almost every instance, far more women than men report experience with these artists; whereas only 34 percent of the men reported they had ever seen a picture by El Greco, 49 percent of the women report that they have. Fifteen percent of the men report that they have seen a picture by Cezanne, as compared with 37 percent of the women, and whereas 72 percent of the men say they have never heard of Cezanne, at least one-half of the women have heard of him. Women tend to read somewhat more than men and they report far more experiences with art.

The responses to the art items suggest that University freshmen have restricted art experiences prior to coming to the University. The faculty of the University well might look at what it does to students during their years here to extend these experiences.

Other Experiences

Recent programs such as Head Start have called attention to the influence of early educational experiences on later development. Of University

freshmen, 18 percent reported they had attended nursery school as a child and 82 percent reported they had attended kindergarten. Other childhood experiences included the circuses attended by 93 percent of the children, museums visited by 61 percent, and visits to the zoo by 98 percent. More students have attended professional baseball games, 72 percent, than have visited museums. Entering freshmen apparently have greater experiences in music than they do in art, as suggested by the two relevant items on the inventory. Eighty-five percent of the students report they have been to at least one concert and 57 percent report they have had music lessons outside of school. Although items designed to elicit familiarity with composers and other musicians were not included in the inventory, one might speculate as to the range of such knowledge these students would report.

In the list of well-known persons, Bernstein and Piatigorsky were included. Eighty percent of the students reported that they knew who Bernstein was but 65 percent had never heard of Piatigorsky, and only 14 percent were able to identify him. How many of these students were cellists?

Included in the list of names were persons prominent in business, government, sports, church, entertainment, science, and education. The name of the president of the University of Minnesota was known by 80 percent of entering freshmen although 11 percent reported they had never heard of him. The other prominent educator--Conant--did not fare so well. Only 14 percent knew who he was, and 61 percent had never heard of him. Names that could be identified by at least 50 percent of the students were U Thant, MacMillan, Killebrew, Shriver, Unitas, Rusk, Warren, McNamara, Chamberlain, Udall, Tennessee Williams, Bill Cosby, Kosygin, Mao Tse Tung, Van Cliburn, Spencer Tracy, Sandy Keith, Lorne Greene, and Shirley Booth. Prominent persons in business were less well-known with Kappel identified by only seven percent--54 percent said they had never heard of him. Watson was identified by only 17 percent, while 53 percent said they had never heard of him. Edward Land was known only by 12 percent with 72 percent never hearing of him.

Apparently persons in government are reasonably well-known to college freshmen, almost as well known as persons in entertainment. Persons in business and in the church are not known.

Apparently access to a newspaper does not constitute a handicap to large proportions of these students insofar as only five percent reported they did not have access to a daily paper and an additional 15 percent reported they did not read any of the daily paper regularly. Apparently, large proportions of students have some kinds of newspaper reading habits, but these apparently result in selective education.

This picture of University of Minnesota freshmen is encouraging if one selects the data available that allows observations of change over time. If one wishes to make inferences regarding such changes, even when other data are not available, one might also be encouraged. However, perhaps a more realistic view of this information is to perceive it as a challenge

to the University. Students know many things when they come here. The picture we have of the information backgrounds of students as shown by standardized tests in school subjects, English, mathematics, social studies, and science, suggests that our students are well informed regarding the traditional academic content of the elementary and secondary schools. Looking at the liberal arts background of the student reflected in his experiences with literature and art suggests that the University has a large job to do. To what extent do University experiences result in increasing participation on the part of students in that large part of the culture which consists of literature and art?

Our students have had some introduction, some exposure to this part of their world. Does the University build on the experiences students have had and more importantly, does it graduate students whose experiences are such that they will continue to seek and create new ones?

July 1967

UNIVERSITY OF MINNESOTA

Research Bulletin
of the
Office of the Dean of Students

Volume 9, Number 2

November 1, 1967

ARE ECONOMICALLY NEEDY UNIVERSITY

FRESHMEN CULTURALLY DEPRIVED?

by

Ralph F. Berdie

Student Life Studies

Resume

Several financial aid programs are designed to attract to the University students coming from families with severely restricted financial resources. If University students from these homes have not had many educationally relevant experiences prior to college that most students have enjoyed, then the University will have to consider providing compensatory programs to minimize resulting disadvantages.

The purpose of the study reported here was to compare the pre-college experiences reported by University freshmen receiving financial aid and those of students not identified as being on one of the several available financial aid programs. Information was collected through the means of a pre-college experience inventory completed by freshmen in the fall of 1966 at the time of advanced orientation and registration.

Some relevant statistically significant differences were found between the two groups of students and the average student not on financial aid differed from the average student receiving aid in so far as he had traveled more, was more likely to have attended nursery school and kindergarten, had more books and other possessions in his home, and was more likely to have had private music lessons. The reading and artistic experience backgrounds of these students were not different enough to "make a difference."

The small sizes of the observed differences suggest that in terms of pre-college experiences students receiving financial aid and those not receiving such aid have similar backgrounds. Present financial aid programs do not attract to the University significant numbers of students from financially restricted homes characterized by cultural deprivation.

University freshmen differ from one another in terms of their aptitudes, knowledge, skills, values, and experiences. The University's counseling, advising, and student personnel programs are based on this fact. Knowledge that individuals differ from one another, however, is not sufficient and continuing research is needed to demonstrate the extent, origin, and implications of these differences. The present research was designed to reveal relationships between the students' economic backgrounds and their experiences prior to college presumed relevant for their education. Previous research (Berdie, 1966) reported by the Office of the Dean of Students has revealed that University of Minnesota freshmen are drawn from a broad strata of economic backgrounds. Students come from both impoverished and wealthy families. More recent research (Berdie, 1967) has revealed that University freshmen vary greatly in the experiences they have had prior to college. Some students have traveled much, read many books, and enjoyed many group and individual experiences, and other students have been deprived of most of these experiences. A long history of research has recorded what students know and what they can do, as indicated by psychological and educational tests (Berdie, Layton, Hagenah, and Swanson, 1962). The impact of many experiences, however, cannot be assessed through tests, and consequently the reported presence or absence of the experience itself sometimes provides the best indications of a student's sophistication.

In 1965, Hewer reported that University freshmen coming from the homes of men in the professions tended to receive higher grades than freshmen coming from the homes of skilled tradesmen, sales persons, and clerical workers. Differences between occupational groups were greater for men than for women in some instances. She also reported that the effectiveness with which the grades of college students could be predicted varied according to family background. In an unpublished study Hewer reported significant differences

in the mean college aptitude test scores obtained by students with varying paternal occupations. The mean scores for students from professional homes tended to be the highest, and for men the mean scores for those coming from clerical homes were the lowest. Stein, (1966) has reported significant socio-economic differences among Minnesota high school graduates in personality inventory scores. The social and economic group from which a student comes can make a difference in terms of his ability, achievement, and personality.

All of these studies have reported significant differences between means, but in each instance, extensive overlapping has been found and mean differences, although observable and consistent, are not large. Many students scoring low on ability tests come from wealthy homes, and many scoring high come from impoverished homes. Many socially retarded students come from wealthy homes, and many socially facile students come from poor homes. None of the differences found are large enough to warrant inferences regarding any particular student or small groups of students, but the results reported do substantiate the conclusion that some relationships exist between economic status and educationally relevant variables.

The University of Minnesota, along with many other institutions, has accepted some responsibility for identifying and attracting to college students from homes which in the past have contributed relatively few persons to college enrollments. University and state scholarship programs, and participation in federal programs such as the NDEA Loan Program, the Work-Study Program, and the Federal Grant Program, are some of the means by which the University hopes to provide education to financially handicapped persons.

If large numbers of economically deprived students through these programs come to the University, and if they are handicapped because of experiences

quite different from those of most university students, then the University is doing them a disservice unless it also provides compensatory programs which make these students at least as ready for college as are other students.

The purpose of the research reported here was to compare the pre-college experiences of students on special financial aid programs with the experiences of the student body in general.¹

Method

In order to gather information regarding the background of University freshmen, an eight page inventory of pre-college experiences was prepared so that students could provide self-descriptions of their experiences. The inventory asks for, in addition to identifying information, occupation of father, parental education, and availability in the home of 37 items or possessions such as world globes, dictionaries, basketball hoops, boats, original paintings, and drawings. Students were presented with a list of 35 authors and asked to indicate if they had read a book by the author, had heard of him but had never read a book by him, or had never heard of him. A similar list of 40 artists was presented and each student was asked to indicate if he had seen a work by the artist, had heard of him but had never seen a picture by him, or had never heard of him. Students were asked to check from a list of 55 organizations those to which their parents belonged. Additional questions were asked concerning the possession of a library card, attendance at nursery school or kindergarten, and attendance at circuses, art galleries, museums, public libraries, and baseball games. Other questions asked concerned traveling, riding on trains, taxi cabs, buses, or airplanes, and the

¹A description of the pre-college experiences of the total group of new freshmen can be found in "Pre-College Experiences of University of Minnesota Freshmen," Research Bulletin of the Office of the Dean of Students, Vol. 2, No. 1, July 15, 1967.

number of states and foreign countries visited. Students were asked questions regarding the amount of employment they had experienced, whether they had received music lessons, and the names of books they had read during the past year. They were asked to indicate from a list of 20 youth organizations those to which they had belonged and from a list of 27 childrens' books, those they had read. From a list of 33 persons in public life, including athletes, politicians, businessmen, statesmen, and educators--each student was asked if he knew who the person was, if he had heard of him, but could not identify him, or if he had never heard of him.

Almost every freshmen entering the University in the fall of 1966 completed the inventory during the advanced Orientation-Registration program. They were told that the responses to the inventory would be used for research purposes only and would have no bearing on decisions made about individual students.

An attempt was made to check on the validity of responses by including in the lists of names of authors and artists persons who (as far as the writer was concerned) did not exist (Allen, 1966). For example, the name of Henry Martin was included among the names of authors and only one percent of the students indicated that they had read a book by Martin and an additional thirteen percent reported they had heard about him but had not read a book by him. Eighty-six percent of the students indicated that they had never heard of him. To what extent these responses reflect deliberate distortion and to what extent distortion resulting from similarity of names is not known but the evidence does suggest that the results obtained through the inventory have some validity. All such questionnaires contain some error due to deliberate distortion and to confusion related to the recall of events of questionable significance to the individual.

From the Bureau of Loans and Scholarships lists were obtained of names of 872 students participating in various freshman financial aid programs. Of these, data were available for 781. The number of students in each program is shown in Table 1.

Insert Table 1 about here

Educational Opportunity Grants and National Student Defense Loans were approved for freshmen whose predicted grade point average, on the basis of high school grades and test scores, was 1.7, or C-. Financial need was based on information provided through the College Scholarship Service, and no grants were approved for students whose parental contribution to the cost of their freshmen year was higher than \$600.00. Students were appointed to the Work-Study Program if they were in good academic standing, that is, had permission to enroll for the following quarter, and if family income was \$3,200.00 or less per year for the parents and one student dependent. Any family which was receiving or was eligible to receive financial assistance from public or private welfare programs would normally be eligible for this program. After low income students had been assisted, additional students were eligible on the basis of need. Freshmen Scholarships were awarded on the basis of combined high school rank and Minnesota Scholastic Aptitude test score. Applicants were ranked and the students with the highest indices were selected. Students were selected when the parental contribution to the cost of the freshmen year was calculated on the basis of the College Scholarship Service, and found to be less than the necessary expenses for freshmen. Thus, for many students academic promise was considered in the selection, and for all, financial need was one base for selection.

A large proportion of students (62 percent) participated in more than one program. Because of the selection procedures and the criteria used, one can conclude that students on financial aid first represented a group of students coming from homes with fewer financial resources than homes of most students and secondly, that this group of students contained a greater proportion of high ability and high achieving students than did the total freshmen population. Data regarding the first assumption are revealed in this report; data regarding the second assumption are contained in University records but as yet are not available for analysis.

In order to obtain a sample of students not on financial aid, 200 inventories were drawn for men and 200 for women, from the College of Liberal Arts, the College of Agriculture, Forestry, and Home Economics, and the General College. Only 200 men were selected from the Institute of Technology. Included among the inventories for these selected samples were some for students also included in the financial aid groups. These inventories were withdrawn from the sample and the non-financial aid group consisted only of the students whose names did not appear on the financial aid lists. Some students, perhaps including some in the non-aid sample, were receiving financial aid from sources outside of the University and a few persons could have been receiving financial aid from the University although their names did not appear on the lists. Undoubtedly, some of the students in the non-financial aid sample were working on jobs obtained through the University Student Employment Office and thus in a sense were being financially subsidized.

The responses to the inventory were punched on IBM cards and distributions of responses prepared by sex, college, and by financial aid status. The comparisons presented in this report are data descriptive of the total sample excluding students on financial aid, and the total group of students receiving financial aid.

Several scores were computed from the inventories. The number of home possessions was counted and provided one score. The number of magazines in the home provided another score. The number of family organizations provided an additional score. One score consisted of the number of states visited, another score of the number of foreign countries visited, and another score of the number of jobs held. Other scores were based on the number of books read in the past year, the number of youth groups to which the student had belonged, and the number of children's book he had read.

In other instances analysis was based on responses to individual items.

RESULTS

Results of the comparisons of students on financial aid and students not on financial aid are presented in Tables 2 through 9. In each instance, figures are presented separately for men and women. The sex differences are obvious. The groups are not divided according to the college in which the student registered, in spite of the fact that other analyses reveal significant and sometimes large differences among the colleges. The relatively small number of students discouraged analyses by college. Some of the results reported here, however, are influenced by college differences as much as they are influenced by differences in financial status.

Table 2 reports results derived from scores obtained with the inventory. Means and standard deviations for the groups are presented, and the significance of the differences between means is evaluated using "t" tests. In the other tables the figures reported are percentages and the significance of differences is inferred from Chi Square Tests. The Chi Square Tests were calculated using the frequencies on which the percentages were based, not on the percentages. Accompanying each comparison is a probability figure presented as an aid in assessing the statistical significance of differences.

Insert Table 2 about here

Among the men, significant differences were found in 6 of the 9 comparisons of mean scores, and the same number of differences were significant among the women, although one mean difference which was significant for the men was not significant for the women, and similarly a difference significant for the women was not significant for the men. The questionnaire presented 37 possessions frequently found in the home and the average man receiving financial aid reported 20.87 of these in his home as compared to the 23.56 reported by men receiving no financial aid. The size of this difference is equal to about one-half a standard deviation, small enough to lead to the conclusion that the difference is not of great practical significance. Most students, regardless of whether they are on financial aid, come from homes with many amenities and educationally relevant possessions.

The meaning of this difference can be clarified somewhat by referring to the concept of overlap. If we accept an overlap figure which ranges from zero to 100 percent as giving the percent of scores in one distribution that can be matched by scores in another distribution, then when the distributions of the two groups are identical, the overlap is 100 percent. When the separation of two groups is total, the overlap is zero percent. Using tables provided by Tilton (1942) the percentage of overlapping in the distributions of home possessions is 79 percent. If the two distribution curves for these two samples were plotted on the same base line, 79 percent of all of the cases would fall within the area under both curves, 21 percent of the subjects would fall in one of the two areas under only one curve. One might infer from this, and this is an extremely risky inference, that about 10 percent of the financial aid students have fewer possessions in their homes than do practically any of the non-financial aid students, and on the other hand, that about 10 percent of the non-financial aid students have more possessions in their homes than do practically any of the financial aid students. The two groups of men do differ, but not by much. Figures for the women regarding home possessions are remarkably similar to those for men.

For both men and women the magazines available in the home differentiate the financial aid and non-financial aid groups. For this, however, as for the other of the variables which were scored, the differences were not as great in terms of overlapping as they were for the home possessions. In other words, although the financial aid and non-financial aid students

differed in terms of magazines in the home, the mean difference amounted to less than one magazine and most of the financial aid students had as many magazines in their homes as did the large proportion of non-financial aid students.

For the men, the number of organizations to which their parents belong did not differentiate the two groups, although for the women this difference was small but statistically significant. The parents of the average man, regardless of whether he is or is not on financial aid, belonged to about 3 and one-half organizations. For the women, those on financial aid reported their parents on the average belong to about 3 and one-half organizations, but girls not on financial aid reported that their parents belong to slightly over 4 organizations.

The average man on financial aid has been in 9 different states, as compared to the $13\frac{1}{2}$ states reported by men not on financial aid. The figures for women are roughly the same. The average student not on financial aid has been in one country other than the United States whereas far fewer students on financial aid so report.

Among both men and women, the two groups do not differ in terms of the number of jobs held. The similarity is not surprising when one recalls that obtaining work for a youth is substantially related to his socio-economic status. Among impoverished youth the need may be there but the opportunity may be absent.

The groups do differ in terms of the number of books they have read in the past year; the difference is about three quarters of a book for boys and one book for the girls. Contrary to expectations, students on financial

aid have read more books. Among neither boys nor girls are there differences between financial aid and non-financial aid students in the number of youth groups to which they have belonged or the number of children's books they have read.

Table 3 shows the proportion of men and women in the financial aid group reporting various numbers of books in their homes. Practically all of the students have at least 10 books in their homes and almost one-half of the students have more than 100 books, but considerably more of the non-financial aid students have this latter number of books in the home than do the financial aid students. The differences for both sexes are statistically significant, and the differences are large enough to be meaningful.

Insert Table 3 here

Table 4 shows that 74 percent of the men not receiving aid possess library cards as compared to 68 percent of the men receiving aid. Corresponding percentages for women were 91 percent and 85 percent. These differences again attain statistical significance, but are not large, although they do support the conclusion that students on financial aid do not have as much access to books as do other students.

Insert Table 4 here

When students are compared on the basis of the authors they have read, the conclusions for the men are somewhat similar. Most of the comparisons indicate that men not on financial aid have read more authors or are better acquainted with them than are men on financial aid, but even the differences that attain statistical significance are not large. Table 5, for example, shows that 40 percent of the men not receiving financial aid have read Salinger, as compared to 34 percent of those receiving financial aid. Corresponding figures for the women are 53 and 57 percent, an indication that the women receiving financial aid have tended to read Salinger to a greater extent than the women not receiving financial aid. Concerning Dostoevski, again more of the men not receiving financial aid have read him. More of the men not receiving financial aid have read Michener, but for the women the figures are the same for the two groups.

Insert Table 5 about here

Regarding reading backgrounds, one might conclude that among the men, a slight trend was found for students not receiving financial aid to have more frequently read the authors listed when compared to men receiving financial aid. Among the women, the trend was reversed, with more women receiving financial aid reading these authors as compared to women not receiving financial aid. The differences in all cases were small, and the differences between the two women's groups were smaller than those among the two men's groups. Essentially, the reading backgrounds of students receiving and not receiving financial aid tend to be about the same.

When comparisons are made in the artistic experiences of students, as revealed by the inventory, the conclusion is quite the same. For example, Table 6 shows the proportion of each group who have had acquaintance with the work or name of Raphael; 55 percent of the men receiving financial aid have seen a picture of him, and 48 percent of those not receiving financial aid. Among the women, 67 percent of those receiving aid have seen a picture; 65 percent of those not receiving aid.

The differences in terms of the art experience are small. When the men and women on or not on financial aid are compared on the basis of proportions who have seen pictures of each of the artists, in some cases the financial aid students and in some cases the non-aid students report more of these experiences. There is a slight tendency for the students in the financial aid group more often to report seeing pictures than is true of the non-financial aid students, but always the differences are small. On the basis of these data, one cannot conclude that students coming from a more secure financial background have better or more artistic experiences than other students and if anything, the evidence might point a trend slightly in the opposite direction.

Table 4 shows comparisons for some of the other experiences reported. The students on financial aid, both men and women, less often report that they attended nursery school or kindergarten. Fewer of these students report they have ridden in an airplane or in a train. Slightly more than one-half of students not on financial aid have ridden in airplanes, slightly less than one-half of those on financial aid.

The two groups also differ in terms of musical experiences as shown by private music lessons. Only about one-third of the men on financial aid report such lessons as compared to almost one-half not receiving aid. Among the women, the difference is smaller, but still in the same direction, and 60 percent of the women on financial aid report music lessons as compared to 71 percent of the other women.

Students receiving financial aid presumably are selected because of need and ability, and one would expect that indices of economic status would reveal a difference between the groups of students receiving or not receiving aid. Several years ago Warner proposed that the best index of economic status was the occupational level and education of the father of the family. To what extent did these groups with whom we are concerned here differ in terms of parental occupation and education?

Table 7 shows the distributions for paternal occupation for the men and women not receiving and receiving financial aid. For both sexes the difference is statistically significant. Among the men receiving aid, 7 percent reported fathers who were classified as professionals as compared to 13 percent of the men not receiving such aid. Similar proportions for women were 7 and 18. The largest difference observed is found in the farm category where 22 percent of the men receiving and 12 percent of the men not receiving aid reported fathers who owned or managed farms. Proportions for women were 17 and 7 percent.

Insert Table 7 about here

About one fifth of the students who received financial aid in the University of Minnesota come from farms, whereas closer to one tenth of all University students come from farms. The agricultural sector of the state is well represented, in fact well over-represented, among students receiving aid. The differences in occupational level are as would be expected, with the students receiving aid tending to come from families classified in lower level occupations, but the differences are not large, and a surprisingly large proportion of students receiving financial aid come from homes with relatively high occupational classifications,

Table 8 shows the distributions of fathers' education for the groups, and the differences here are in the same direction as those for paternal occupation. About one quarter of the men receiving financial aid reported fathers who had not gone beyond the eighth grade as compared to about 15 percent of the men not receiving such aid. Differences were just as large for the women. At the other educational extreme, 38 percent of the men not receiving educational aid reported fathers with some college experience as compared to 20 percent of men receiving aid. Proportions for women were 44 percent and 28 percent. That most financial aid students do not come from uneducated homes is revealed by the figures showing that 59 percent of the men and 65 percent of the women on financial aid come from homes where the father is at least a high school graduate.

Figures concerning mothers' education are quite similar.

Insert Table 8 about here

Insert Table 9 about here

Again, students receiving financial aid tend to report mothers with less education than do students not receiving such aid and the differences tend to be largest at the extremes. 77 percent of the men and 74 percent of the women on financial aid report mothers who are at least high school graduates and 9 and 8 percent report mothers who are college graduates.

CONCLUSIONS

The differences in backgrounds and pre-college experiences of University students have educational relevance. Because of the selection used in allocating financial aid, students receiving and not receiving such aid differ in terms of economic background and to some extent, in terms of ability. Students receiving financial aid presumably have fewer economic resources and greater academic potential than are found among the total University entering class.

The results here suggest that students coming from economically disadvantaged homes in some ways are slightly handicapped culturally and have had somewhat fewer experiences of educational relevance than other students. As children they had less formal education; they have traveled less; they have fewer books and magazines in their homes, and they have access to fewer home possessions than do other students.

In every instance, however, these differences are small and the amount of overlapping is great when students on and not on financial aid are compared. The evidence suggests that the amount of reading and the art experiences of these students are quite the same and differences found always are small.

One cannot conclude from this that so-called cultural experiences are not related to economic status, but one might conclude that the University, in attracting students from economically limited homes, is tending to attract mainly students who have cultural backgrounds quite typical of most University students. In other words, the University is not attracting or recruiting students from economically impoverished homes which are also culturally impoverished. The type of impoverished students now coming to the University needs programs, both instructional, compensatory, and activities, quite similar to those required by most students. The culturally disadvantaged student is not being attracted to the University in large numbers. Financial aid programs, as they have been operating, are helping students who are motivated and prepared for college to achieve a University education. They perhaps are doing little to attract to the University students from backgrounds atypical of those of students who have come here in the past.

Table 1 - University of Minnesota freshmen of 1966 receiving financial aid, by programs, included in analysis

<u>Program</u>	<u>Men</u>	<u>Women</u>
Freshmen Educational Opportunity Grants	226	221
Work Study Program	29	44
Freshmen Scholarships	160	125
National Defense Student Loans	264	252

Table 2 - Comparison of freshmen entering the University of Minnesota in the fall of 1966 who received financial aid from the University and a random sample of students not receiving such aid.

	<u>MEN</u>						<u>WOMEN</u>							
	Aid		No Aid		t	P	Aid		No aid		t	P		
NUMBER OF	M	SD	M	SD			M	SD	M	SD				
Home possessions	20.87	4.88	23.56	5.18	7.87	<	.01	20.68	5.26	23.28	5.47	6.43	<	.01
Magazines in Home	5.52	3.19	6.19	3.43	2.96	<	.01	5.89	3.36	7.01	3.37	4.43	<	.01
Parents' organizations	3.40	2.55	3.64	1.57	1.63	>	.05	3.46	2.13	4.18	2.24	4.39	<	.01
States visited	9.42	7.71	13.52	9.60	6.99	<	.01	10.28	8.30	13.70	9.53	5.04	<	.01
Countries visited	.60	.79	1.02	1.14	6.48	<	.01	.80	1.79	1.20	2.25	2.58	<	.01
Jobs held	2.65	1.56	2.61	1.36	.40	>	.05	2.20	1.26	2.17	1.18	.34	>	.05
Books read	4.70	4.12	3.92	4.51	2.66	<	.01	7.16	4.78	6.07	5.10	2.91	<	.01
Youth groups	3.40	1.79	3.21	1.62	1.67	>	.05	3.68	1.37	3.60	1.27	.81	>	.05
Children's books read	8.95	4.09	9.15	4.42	.69	>	.05	13.02	4.76	13.11	4.87	.24	>	.05

Table 3 - Number of books in their homes reported by freshmen entering the University of Minnesota receiving and not receiving financial aid from the University.

	N	Men		Women	
		aid 385	no aid 486	aid 396	no aid 316
<u>Number of books in home</u>					
0 - 9		2	0	2	1
10 - 24		11	9	9	3
25 - 49		19	18	19	16
50 - 99		26	20	23	23
100 - up		39	51	45	57
No response		1	1	1	1
		$\bar{x} = 15.31$		$\bar{x} = 12.92$	
		$P < .01$		$P < .05$	

Table 4 - Proportions of freshmen entering the University of Minnesota in the fall of 1966 receiving and not receiving financial aid from the University reporting selected pre-college experiences.

N	Men		Women	
	aid	no aid	aid	no aid
Possessing library card	68	74	85	91
Do not have library card	32	26	15	9
	2		2	
	x = 4.01		x = 5.06	
	P < .05		P < .05	
Attend nursery school	9	16	8	16
Did not attend nursery school	91	84	92	84
	2		2	
	x = 10.37		x = 14.13	
	P < .01		P < .01	
Attend kindergarten	63	82	78	82
Did not attend kindergarten	37	18	22	18
	2		2	
	x = 39.89		x = 1.78	
	P < .01		P > .05	
Ride in an airplane	45	56	45	55
Never rode in airplane	55	44	55	45
	2		2	
	x = 12.23		x = 7.05	
	P < .01		P < .05	
Ride in a train	73	82	80	88
Never rode in a train	27	18	19	12
	2		2	
	x = 9.92		x = 9.11	
	P < .01		P < .01	
Had music lessons	35	48	60	71
Never had music lessons	65	51	40	29
	2		2	
	x = 15.93		x = 11.02	
	P < .01		P < .01	

Table 5 - Comparison of Proportions of freshmen entering the University of Minnesota in the fall of 1966 who received financial aid from the University and those who did not who have read books by selected authors

Author	N	Men		Women	
		Aid 385	No aid 486	Aid 396	No aid 316
<u>Salinger</u>					
Read book		34	40	57	53
Heard of author		57	50	38	43
Never heard of author		9	10	5	4
		2		2	
		x = 4.21		x = 1.42	
		P > .05		P > .05	
<u>Dostoevski</u>					
Read book		21	28	37	28
Heard of author		36	26	35	37
Never heard of author		42	46	28	35
		2		2	
		x = 16.93		x = 7.25	
		P < .01		P < .05	
<u>Michener</u>					
Read book		32	44	46	46
Heard of author		42	37	37	40
Never heard of author		25	19	16	14
		2		2	
		x = 17.21		x = 2.71	

Table 6 - Comparison of Proportions of freshmen entering the University of Minnesota in the fall of 1966 who received and did not receive financial aid from the University acquainted with works of Raphael.

	<u>Men</u>		<u>Women</u>	
	<u>Aid</u>	<u>No aid</u>	<u>Aid</u>	<u>No aid</u>
N	385	486	396	316
Seen a picture by him	55	48	67	65
Heard of him	31	34	27	26
Never heard of him	14	17	6	9
	$\chi^2 = 4.46$		$\chi^2 = 1.38$	
	$P > .05$		$P > .05$	

Table 7 - Paternal occupation for University of Minnesota freshmen receiving and not receiving financial aid from the University.

(Percentages)

<u>Occupation</u>	N	<u>Men</u>		<u>Women</u>	
		<u>Aid</u>	<u>No aid</u>	<u>Aid</u>	<u>No aid</u>
		385	486	396	315
Profession		7	13	7	18
Own or manage business		10	11	10	17
Office Work		7	9	9	7
Sales		8	10	7	11
Own or manage farm		22	12	17	7
Skilled tradesman		14	16	17	8
Factory worker		9	6	8	5
Other		20	21	21	23
No response		5	2	5	3

$$\chi^2 = 36.77$$

$$\chi^2 = 55.93$$

$$P < .01$$

$$P < .01$$

Table 8 - Paternal education for University of Minnesota freshmen receiving and not receiving financial aid from the University. (Percentages)

	<u>Men</u>		<u>Women</u>	
	<u>Aid</u>	<u>No aid</u>	<u>Aid</u>	<u>No aid</u>
N	385	486	396	315
<u>Amount of Education</u>				
Some grade school	3	2	3	0
Completed 8th grade	24	14	21	10
Some high school	11	9	10	11
Graduated high school	32	29	27	25
Business or trade school	7	8	10	9
Some college	11	16	15	15
Graduated college	7	16	10	19
More than one degree	2	6	3	10
No response	1	-	1	1
		² x = 44.10	² x = 48.96	
		P < .01	P < .01	

Table 9 - Maternal education for University of Minnesota freshmen receiving and not receiving financial aid from the University. (Percentages)

	N	<u>Men</u>		<u>Women</u>	
		<u>Aid</u>	<u>No Aid</u>	<u>Aid</u>	<u>No aid</u>
	385	486	396	315	
<u>Amount of Education</u>					
Some grade school	2	1	1	0	
Completed 8th grade	11	8	12	3	
Some high school	10	9	14	9	
Graduated high school	46	45	37	40	
Business or trade school	8	8	10	12	
Some college	14	13	19	23	
Graduated college	8	14	8	10	
More than one degree	1	1	-	3	
No response	-	-	-	1	
		2	2		
		x = 14.37	x = 33.66		
		P < .05	P < .01		

REFERENCES

Allen, I. L. Detecting Respondents who Fake and Confuse Information about Question Areas and Surveys: *Journal of Applied Psychology*. 1966, 50, 523-528.

Berdie, R. F. Pre-college Experience of University of Minnesota Freshmen. Minneapolis: University of Minnesota Research Bulletin of the Office of the Dean of Students. Vol. 9, No. 1, July 15, 1967.

Berdie, R. F. Entering Freshmen at the University of Minnesota. Minneapolis: University of Minnesota Research Bulletin of the Office of the Dean of Students. Vol. 8, No. 1, Dec. 15, 1966.

Berdie, R.F., Layton, W. L., Hagenah, T., and Swanson, E. O. Who Goes to College. Minneapolis: University of Minnesota Press. 1962.

Hewer, V. H. Are tests fair to college students from homes with low socio-economic status? *Personnel and Guidance Journal*. 1965, 44, 764-769.

Stein, J. B. The relation of two personality traits to some measures of socio-economic level and student plans after high school. Minneapolis: University of Minnesota M.A. Thesis. 1966.

Tilton, J.W. The measurement of overlapping. *Journal of Consulting Psychology*, 1942, 6, 95-101.

UNIVERSITY OF MINNESOTA

Research Bulletin
of the
Office of the Dean of Students

Volume 9, Number 3

February 15, 1968

THE UNIVERSITY OF MINNESOTA FRESHMEN CLASS OF 1967

by

Ralph F. Berdie

Student Life Studies

Some Implications

Usually the implications of a report such as this are included at the end. In this instance, however, they are presented as an introduction so that the reader can refer to the implications as he examines and evaluates the evidence and interprets the conclusions.

University freshmen are intellectually a capable group of students, able to progress academically with speed and responsiveness and competent to meet relevant academic challenge. Most of them have the ability to understand abstract concepts, solve difficult problems, and understand and appreciate ideas. Their teachers must not underestimate their potentials.

In light of the intellectual status of entering freshmen, the question of why a large proportion of freshmen fail to graduate is paramount. Much research is needed to learn why almost one half of entering freshmen do not graduate and to discover if this proportion can be reduced. Needing particular study are the implications of the grading systems in the University. If the average grade given by the average instructor is close to a C, inevitably about one half of students will fail to satisfy the University's graduation requirements, and changes in admissions policies, advising and counseling, class size, or instructional methods cannot significantly alter the situation.

University attendance faces most students with financial problems often difficult to solve. Most students do not come from wealthy homes; many come from homes that can provide little or no financial assistance. The University's present financial aids program serves only a small proportion of students, far fewer than come from homes which cannot provide minimum assistance. Expansion of student financial aid programs and greater knowledge of their effectiveness are badly needed.

A large proportion of students come from homes not enriched in terms of literature, art, and intellectual experiences. These students are bright, but many do not have the experiences expected by some of the faculty. The faculty may have more responsibility than it has realized in developing certain tastes and preferences in students if they are to develop into the educated persons the community needs. Some of the activities of the freshmen honors program may have to be extended to many more students. The "Dean's Retreats" of the Office of the Dean of Students provide another model for such efforts.

A large proportion of students have parents with no direct collegiate experience themselves and presumably relatively little information about the University or higher education. The University's limited programs for parents particularly the Parents' Day during Welcome Week, the Dads Association, strongly supported by the Office of the Dean of Students, and other restricted special programs, may have to be expanded, and new programs developed if the families of students are to gain greater appreciation of the experiences, problems, and opportunities now facing University students.

The large number of entering freshmen who are vocationally undecided, even among those entering programs presumedly professional, suggests that a far larger proportion of students need educational and vocational counseling than now receive this service. Educational and vocational counseling and orientation programs perhaps can be better integrated than they are now with programs designed to develop appreciation of liberal education; greater effort and expenditure are called for here.

In the Fall of 1967, 38,245 collegiate students were registered on the Minneapolis and St. Paul campuses of the University. Of these, 8,414 were identified as freshmen in the four principal colleges admitting freshmen: 1,929 in General College, 5,061 in Liberal Arts, 857 in IT, and 567 in Agriculture. Of the forty-seven colleges in Minnesota, four had freshmen classes larger than those in the Institute of Technology or St. Paul Campus. More than 97 percent of University freshmen were residents of Minnesota. Only 230 came from out of the state. Of all first year students, 6,731, or 80 percent, were high school graduates of the past few months and could be considered as new, entering freshmen. This group constitutes about 23 percent of all such freshmen in Minnesota colleges. From the records of the Student Counseling Bureau and the Office of Admissions and Records, information was available about approximately 98 percent of these new freshmen and these data provide the basis for the description presented here.

What a university is and what it can be is determined in large part by the characteristics of its students. Students come to college with well developed knowledge, attitudes, values, skills, and expectations and the goals and programs of the college must be defined in light of these student characteristics. The general purpose of a university is to help students change but if goals are to be realistic and procedures effective, students must be studied.

Major emphasis, of course, must be placed on the characteristics and needs of individual students and each student must be assisted in finding for himself what his goals can and should be and how these can be attained. In evaluating its programs, and in developing new ones, however, the University must consider the information available about groups of students. The purpose of this report is to present such information so that it can be considered when members of the University review recruiting, admissions, classification, curriculum, instruction, advising and counseling, and student activities.

The freshmen who entered the University in the Fall of 1967 were juniors in high school in January 1966 when they participated in the State-Wide Testing Program sponsored by the Association of Minnesota Colleges and administered by the University's Student Counseling Bureau. At that time, over 57,000 high school juniors provided information regarding their backgrounds and educational and vocational plans. Test scores and high school grades were available for these students. Of the high school juniors, 49 percent said they planned to attend college, 54 percent of all of the boys and 44 percent of the girls. Of the students in the metropolitan areas of the state, 57 percent planned to attend college, as compared to 43 percent of students in non-metropolitan areas. Only 39 percent of the girls from the non-metropolitan areas planned to attend college, as compared to 62 percent of the boys from metropolitan areas. In terms of intentions, differences are large between the sexes and between the urban and rural groups.

Of the students who did not plan to attend college, most were planning to obtain some further education; less than ten percent said they had no plans to attend school; and about ten percent indicated that they did not know what their plans were.

Of the high school juniors, approximately 9,700 said they planned to attend the Minneapolis or St. Paul campuses of the University, as compared to the 6,600 who actually did.

Table 1
Ages of Entering Freshmen, 1967 (Fall)
Sexes Combined

Age	Percentages					
	CLA	IT	GC	AGFH	All colleges ¹	U.S. colleges ²
16	1	0	0	0	0	0
17	28	29	24	29	27	5
18	65	67	53	67	64	77
19	3	2	8	2	4	14
20	1	1	4	1	1	2
21	1	0	2	0	1	6
22	1	1	2	1	1	3
23	0	0	2	0	0	1
24	0	0	1	0	0	
25 & up	1	0	2	0	1	
N	4203	764	1121	486	85.14	

¹All campuses

²From ACE study

The attached tables describe the entering freshmen class and in some instances provide comparable data obtained from the broader segment of high school juniors from which this class came. Information descriptive of all college freshmen in the U.S. is included in some tables, although because of

differences in forms of questions and methods of analysis, comparisons of Minnesota and U.S. data must be done cautiously. For example, the differences in the age statistics may result from differences in dates at which age was computed.¹

Table 1 shows the distribution of ages for students in the four principal colleges and also the figures for the total freshmen class in the entire University, including all campuses. Almost two-thirds of the freshmen class are 18 years of age and approximately one quarter of them are 17 years old. Practically no 16 year old students entered the University and fewer than one percent of entering freshmen were older than 24 years of age. The freshmen class is quite homogenous on this basis.

Table 2
Paternal Occupations of Entering Freshmen, 1967 (Fall)
Sexes Combined

Occupation	Percentages						
	CLA	IT	GC	AGFH	All col- leges ¹	All Mn. U.S. Ju. in col- leges ²	
Professional	17	17	10	11	14	8	
Owns or manages business	19	16	20	13	17	12	
Office or clerical	6	5	6	10	7	6	
Sales	11	7	12	7	10	7	
Owns or manages farm	4	11	1	27	8	16	7
Skilled	27	32	32	20	26	19	13
Semi-skilled	6	5	6	5	6	14	8
Unskilled	4	4	5	2	5		4
Other	6	5	8	6	7	19	
N	4174	754	1104	481	8421		

¹All campuses

²From ACE study

The paternal occupation of students shown in Table 2 provides some information regarding both their economic background and the educational backgrounds of their families. Obviously, the relationships between occupation and socio-economic status are limited, but significant.

¹American Council on Education. The freshmen describes himself. The Chronicle of Higher Education. Dec. 21, 1967, vol. II, no. 8, pg. 8.

About 14 percent of entering freshmen have fathers classified in professional occupations, and far more of the students in the Arts College and the Institute of Technology have fathers in profession than do students in other colleges. Of all high school juniors in the state in 1966, only eight percent had fathers classified in professional occupations. A similar discrepancy is found considering fathers who own or manage businesses. Approximately 17 percent of all freshmen have fathers in this job category with more students in the Arts College and the General College having businessmen fathers than is true of other colleges. Only 12 percent of the high school junior class had fathers in this category. Far more college students have fathers in business than is true of the non-college going high school student. Considerably more college students had fathers classified as salesmen, when compared to the non-college going high school junior. Only eight percent of University freshmen had fathers who were farmers, as compared to 16 percent of all Minnesota high school juniors. The differences between colleges also were great here, with 27 percent of freshmen on the St. Paul Campus describing their fathers' occupations as farming as compared to only four percent in the Arts College and one percent in the General College.

A high proportion of students have fathers in the skilled trades. Of University students, 26 percent describe their father's occupation as a skilled trade as compared to only 19 percent of high school juniors. Relatively more of the non-college going students describe their paternal occupation as a semi-skilled or unskilled trade. More Minnesota students than students from all U.S. colleges come from homes of skilled tradesmen.

University freshmen come from a broad range of occupational backgrounds but the largest single group comes from homes of skilled tradesmen and the next largest group comes from the homes of men in business.

Table 3 describes the education of the fathers of entering freshmen. Fourteen percent of entering freshmen report their fathers have had no more than an eighth grade education and 25 percent report fathers who have had less education than a high school diploma. The largest single category consists of fathers who are high school graduates; slightly more than one-third of the students report fathers who were high school graduates with no additional education. Forty percent of students reported fathers with education beyond high school and practically all of these had some college experience, with 22 percent being college graduates. The number of students with fathers who were college graduates is roughly the same as the number having fathers who were not high school graduates. The fathers of Minnesota students tend to have less formal education than do the fathers of college students throughout the U.S. Of Minnesota students, 22 percent have fathers who are college graduates, as compared to 27 percent of all U.S. freshmen.

Table 3
 Paternal Education of Entering Freshmen, 1967 (Fall)
 Sexes Combined

Education	Percentages					
	College					
	<u>CLA</u>	<u>IT</u>	<u>GC</u>	<u>AGFH</u>	<u>All col- leges¹</u>	<u>U.S. col- leges²</u>
Eighth grade or less	11	14	12	18	14	10
Some high school	9	11	11	17	11	16
High school graduate	34	37	40	33	36	29
Business or trade school	1	1	1	1	1	
Some college	19	17	20	15	17	18
College graduate	17	14	11	10	14	17
Professional degree	4	3	2	1	3	
Post graduate work	2	2	1	2	2	10
Graduate degree	3	2	2	3	3	
N	4160	747	1094	479	8403	

¹All campuses

²From ACE study

Table 4

Maternal Education of Entering Freshmen, 1967 (Fall)
Sexes Combined

Education	Percentage					
	<u>CLA</u>	<u>IT</u>	<u>GC</u>	<u>AGFH</u>	All col- leges ¹	U.S. col- leges ²
Eighth grade or less	6	9	7	9	7	6
Some high school	7	9	11	8	9	14
High school graduate	51	49	55	51	51	42
Business or trade school	1	1	1	2	1	
Some college	22	23	20	20	21	20
College graduate	11	8	5	10	9	15
Professional degree	0	0	0	0	0	
Post graduate work	1	1	0	0	1	3
Graduate degree	0	0	0	1	0	
N	4171	750	1107	482	8437	

¹All campuses
²From ACE study

Table 4 describes the education of the mothers. Again the largest single category consists of high school graduates but relatively fewer mothers than fathers had less than high school graduation or more than high school graduation. A somewhat larger proportion of mothers were college dropouts, as compared to fathers, but only about nine percent of the mothers were described as college graduates, as compared to 22 percent of the fathers. The modal parental education of University freshmen is high school graduation, which is close to the mode for the entire adult population in the state.

Of significance is the fact that close to one-half of the University's entering freshmen come from homes where neither parent has had any experience in college or university. These freshmen still are first generation college students, although within the period of the next decade or so, the typical freshmen entering the University will come from a home where either or both parents have had some experience in college.

Table 5
Ability Characteristics of Entering Freshmen, 1967 (Fall)
Sexes Combined

	Median Scores						All col- leges ¹	All Mn. Ju in 1966
	CLA	IT	GC	AGFH	Colleges			
H.S. percentile rank	78	88	33	75			74	50
MSAT percentile	78	85	26	61			69	35
H.S. academic GPA	2.86	3.22	1.81	2.69			2.72	
H.S. over-all GPA	2.88	3.22	1.91	2.74			2.7	
ACT English	<u>M</u> 22	<u>F</u> 24	22	<u>M</u> 17	<u>F</u> 19	<u>M</u> 20	<u>F</u> 22	
Mathematics	27	23	31	19	15	25	22	21
Social Studies	26	26	27	20	18	24	24	22
Natural Science	27	25	30	19	17	27	24	22
Composite	25	24	28	18	17	24	23	21
N (approximate)	4013	716	1025	459			8031	

¹All campuses

The Ability Picture

Table 5 reflects the academic potential of these entering freshmen. The high school percentile rank, an index available for each student, shows the proportion of students in his high school graduation class receiving grade point averages in high school equal to or less than his. Thus, the average student in the Arts College came from the upper 22 percent of his high school class on the basis of his grades. The average high school graduate of course has a high school percentile of 50 so in three of the colleges and in the entire University, the average college freshmen is well above the average student in his high school class. In the General College, the average student does about as well as do one-third of the students in his high school class.

The Minnesota Scholastic Aptitude Test score reflects the college ability of the student, perhaps his general intelligence, and the scores reported here are percentile scores derived from norms based on Minnesota college freshmen. The test is administered to high school juniors so the discrepancy between the percentile score of fifty, which is average for college freshmen, and the mean percentile score for high school juniors reflects the selection which takes place between high school and college. The mean percentile score for high school juniors was 35, as compared to the mean percentile score of 69 for University freshmen. Students with the highest mean score entered the Institute of Technology, closely followed by students in the Arts College. Students in the College of Agriculture, Forestry, and Home Economics obtained somewhat lower scores, and the mean score of a General College was somewhat below the mean score of all high school graduates.

The high school academic grade point average reflects the performance of students in the courses classified as academic, as compared to the overall grade point average based on all courses taken in high school. Grade point average differences between colleges correspond to the differences found on high school percentile rank and Minnesota Scholastic Aptitude Test score.

The American College Testing Program tests are administered to all students who apply to the University during their high school senior year. The scores reported in the table are standard scores, with a score of 17 corresponding more or less to the score earned by the average high school graduate. The scores obtained by all students participating in this achievement testing program in Minnesota and planning on attending college are also presented in the table and the average score here is between 21 and 22. Some interesting sex and college differences are found on these tests. The average freshmen entering the Institute of Technology does about as well on the English test as does the average man entering the Arts College, and there is little difference in their scores on the social studies test. However, on the mathematics and natural science tests the scores are quite different and in the expected direction. The women in the Arts College, the General

College, and in Agriculture, do considerably better on the English test than do the men and in these three colleges on the mathematics test the men excel. Differences are not great on the social studies test but again on the natural science test the mean scores for the men are higher.

This information regarding the abilities and information of University freshmen suggests that compared to high school graduates in general, University freshmen are an exceptionally capable group of students. Large and significant differences are found within the University between colleges and rather consistently freshmen in the Institute of Technology have more academic potential than do students in other colleges, with students in the Arts College falling close behind. The average entering freshmen in the General College tends to be somewhat inferior in terms of his academic potential to the average high school graduate.

Table 5 is somewhat deceptive insofar as only the mean scores are presented. The standard deviations for each of these indices and for each of these groups are large and significant and this analysis shows, as have previous analyses, that every college of the University has intelligent and competent entering freshmen, and also freshmen who are considerably below average, regardless of the college group with which they are compared. Each college has a diverse entering class, diverse in terms of ability, previous experiences, and family background. Knowledge about the average characteristics of a group of students entering a college somewhat helpfully describes that college, but provides relatively little useful information in dealing with individual students. However, the group information does provide a point of reference in considering the characteristics of any individual student.

When students apply for admission to the University, on their application form they indicate what they consider to be their prospective major. Recognizing that many such choices are highly tentative and perhaps this information is not too useful for prediction purposes, it may provide some useful information concerning the aims and objectives of University students.

The largest proportion of entering freshmen in the Institute of Technology, 24 percent, are decided about their engineering specialty. Eighteen percent have tentatively selected electrical engineering, ten percent mathematics, and seven percent physics, chemical engineering, and aeronautical engineering.

In the Arts College, about 41 percent of the students are undecided. The next largest single group, ten percent of the men, are seriously considering entering business and seven percent of the men are seriously considering medicine, six percent law. Among the women the largest single group with a plan, six percent, is seriously considering elementary education with about four percent considering medicine and another four percent English.

In the College of Agriculture, Forestry, and Home Economics, most students have tentative decisions, with 19 percent of the men selecting forestry, 18 percent veterinary medicine, and 12 percent fish and wild life management. Among the women, 30 percent have selected home economics related art, 30 percent home economics, and 21 percent home economics education.

In the General College, almost two-thirds of the men and nearly that many women are undecided. About 14 percent of the men are seriously considering entering business. About ten percent of the women are considering entering elementary education. None of the other categories include more than a few students.

A Look Ahead

What will happen to these freshmen? Predictions can be based on the histories of earlier classes. The freshmen who enter the University one year are quite similar to those of preceding years, and although changes do occur in the characteristics of freshmen classes, these changes occur slowly and gradually.

An analysis of the history of the freshmen class entering in 1962 suggests that of the freshmen who entered in the Fall of 1967, 89 percent will have returned in the Winter quarter of 1968 to the same college in which they were originally enrolled, one percent will return to another college in the University, and ten percent will no longer be in the University. By the beginning of the Spring quarter in 1968, 78 percent will have returned to the same college, 3 percent will have returned to a different college, and 19 percent of the Fall quarter entering freshmen will not be in the University. By the Fall of 1968, 57 percent of these freshmen will return to their original college, 8 percent to another college, and 34 percent will no longer be in the University.

By the beginning of what should be the junior year for this freshmen class, 35 percent will return to their original college, 16 to another college, and 49 no longer will be in the University. By the Fall quarter of what should be their senior year, 26 percent will remain in their original college, 17 percent will be in another college in the University, and 57 percent will no longer be in the University.

Wide differences exist among colleges. For example, by the beginning of 1970, only six percent of this year's entering freshmen will be in the General College and ten percent will be in another college, whereas in the Arts College, 25 percent will be in the Arts College and 21 percent in another college. In the Institute of Technology, 35 percent will be in the Institute and 22 percent in other colleges. By the beginning of the senior year, 54 percent of Arts College freshmen of this year, 43 percent of IT freshmen, 84 percent of General College freshmen, and 54 percent of Agriculture freshmen no longer will be in the University.

This does not mean that the students in residence will all be ready to graduate in the Spring of 1971 insofar as large numbers of students do not attend every quarter or each quarter complete the number of credits required for a degree in four years. The figures do suggest that about one half of the 1967 students entering four year colleges in the University will not be in residence in this University in the Fall quarter of 1970. Figures from other Universities suggest that perhaps ten percent of the students who enter this University and who do not obtain degrees here may obtain degrees elsewhere and perhaps one can estimate that approximately 60 percent of entering freshmen in this University succeed in obtaining a degree. This is only a rough estimate.

Figures available for the freshmen class entering in the Fall of 1966 suggest that by the end of the Fall quarter, the freshmen entering in the Fall of 1967 should have a mean grade point average of 2.29 in the Arts College, 2.34 in the College of Agriculture, 2.28 in the Institute of Technology, and 2.20 in the General College. In succeeding years of attendance these mean grade point averages for the students who remain should tend to increase. For example, when these freshmen become sophomores the Liberal Arts grade point average should be 2.47, the Institute of Technology grade point average 2.38, and the College of Agriculture grade point average 2.39. The end of the year grade point average tends to be the same for first and second year students in the General College. By the time these students are seniors the grade point average for the senior year should be about 2.75 in the Arts College, 2.75 in the Institute of Technology, and 2.80 in the College of Agriculture. The figures now available do not show the freshmen grade point averages of current seniors, and much of the average increase from class to class can be attributed to the departure during intervening years of students who may have low grade point averages.

Conclusion

This review of the available information indicates that freshmen entering the University constitute an extremely diverse group of young people, quite homogenous in age, on the average having good high school records and high scores on college aptitude tests, and showing much academic promise.

Differences are found among average students entering the four colleges admitting most freshmen, but regarding almost all characteristics extensive overlapping is found among the students in these colleges and the "best" students in some colleges always are better than the "poorest" in other colleges.

Large numbers of students come from homes where parents have had relatively little or no education beyond high school and a considerable number of students come from homes where the parents have not had high school education. Many students come from homes where fathers are in laboring or skilled trades occupations, and relatively few students come from homes where fathers are in occupations classified as professional or managerial.

The evidence suggests that many more students have the ability to successfully complete the work required for a degree than actually do and in colleges such as the Arts College or the Institute of Technology, where almost all entering students have at least a minimum amount of the required intelligence, perhaps only slightly more than one half of the entering freshmen become college graduates. Too little is known regarding reasons for this and a program of continuing developmental research is necessary if the University is to learn how to increase the proportion of freshmen it graduates.

NRC
3/27/94

UNIVERSITY OF MINNESOTA

Research Bulletin
of the
Office of the Dean of Students

Volume 10, Number 1

June 20, 1969

A STUDY OF RELIGIOUS FOUNDATIONS

AND THEIR FACILITIES *

BY

Donald A. Biggs

Student Life Studies

*This is a cooperative research project of the Lutheran Student Center, University Episcopal Center, Newman Club, Luther Hall, Wesley Foundation, the United Campus Christian Fellowship and the Student Life Studies Bureau at the University of Minnesota.

A Study of Religious Foundations and Their Facilities

Donald A. Biggs
Student Life Studies
University of Minnesota

State universities have had a long and mutually profitable relationship with the campus ministry. Churches have made a number of significant contributions to the academic community. Most of these are not easily defined or measured, for in the liaison between college clergy and the universities there is not one particular set of political, legal, constitutional, educational, or social concepts that are solely applicable. These campus pastors, according to Garrison (1967), are marginal men with innovative and creative kinds of positions. This factor makes it difficult to carefully define their role.

At the University of Minnesota, the campus chaplaincy has been a social, cultural, and educational partner to faculty, students, and members of the community. The religious foundations function to bring these three, sometimes divergent parts, into educational dialogues. Clergymen in turn represent dynamic forces on the campus that are not simplistically categorized with either denominational or transcendental notions. Welsh (1968) stated the nexus of the problem, "The clergyman in an academic community in a time of general windiness is therefore a man doubly beset. Always somewhat alien to the community of learning, because he was a clergyman, he now finds further reason for being an alien in that everyone is now an alien, whatever he may be." There can be strikingly different expectations for the campus ministers. Gibson (1967) reported on a nation-wide study of the Methodist campus ministry. He found that many local churchmen and laymen expected the ministers to help students "avoid the wrong crowd" and become "committed" people. On the other hand the campus church workers expected the campus ministers to encourage students to use their minds to criticize and reform the church, and to encourage their participation in civil rights and political movements. The local churchmen did not consider these latter expectations to be a significant part of the campus pastor's role.

Since 1941 churches have operated religious centers at the University of Minnesota (U of M). The investment in these buildings is large. The value of the services extended is impossible to estimate. University budget expenditures and taxes have been saved because these facilities have provided study space, cafeterias, bag lunch rooms, lounges, and seminar rooms. The original purposes for erecting these buildings may have been quite different from those functions which they now serve. This is to be expected. Contemporary students are probably less interested in the rather stereotyped concept of

fellowship which characterized some earlier religious foundations. Gossett (1966) made an interesting observation, "When the Christian church is presented to the modern student as just another fellowship, it has little or no attraction except for the lonely and the maladjusted."

As the campus population at the U of M grew larger and living-learning space grew smaller, enterprising students, faculty and staff used campus religious foundations for meeting new and pressing needs. This study is concerned with describing some of students and their different ways of using religious centers at the University of Minnesota.

Two previous studies of the students using the University Episcopal Center (UEC) at the U of M have been completed (Biggs and Frishe, 1968; Biggs, 1968). The results suggested that this particular facility was being used by a diverse group of individuals. These students represented heterogeneous backgrounds, and varied in ages, religious preferences, and high schools attended. Most of the students were utilizing the UEC facility for eating, studying, and finding companionship. A number of inadequacies in the research design of the UEC studies made it difficult to generalize from them. Because of these problems a group of campus chaplains and representatives from the Student Life Studies Bureau at the U of M met in the Fall of 1968 to develop a plan for more detailed investigation of the ways in which students use the religious centers.

The Problem

The objectives of this study were twofold. The first was to describe some of the more significant characteristics of students who make use of campus religious centers. The second was to describe different uses of these centers.

Method

Instrument

The questionnaire employed in this investigation consisted of twenty-six questions which were concerned with: (1) academic characteristics of students; (2) demographic characteristics of students; (3) religious characteristics of students; (4) reasons for using religious centers; (5) time patterns of using religious centers. The content of the specific items was developed in a committee consisting of representatives of the Newman Club, Lutheran Campus Ministry, Lutheran Student Center, University Episcopal Center, and the Wesley Foundation.

Sample

Approximately 685 individuals received questionnaires and 632 or 92 percent completed them. The questionnaires were given to every individual entering the centers during the time periods sampled. The inventories were distributed during the week of April 7 through 11, 1969, in six campus religious centers; the Newman Club, The United Campus Christian Fellowship, the University Episcopal Center, Luther Hall, Lutheran Student Center, and the Wesley Foundation. The time periods in which students were sampled represented times in which there were relatively large numbers, average numbers, and relatively small numbers of students on campus. Table 1 describes the days and hours in which samples of students were asked to complete the questionnaires.

Table 1

Day and Time period when the Religious Foundation Surveys were distributed.

Day	Time	8	9	10	11	noon	1	2	3	4	5	6	7	8	9	
Monday																29.2%
Tuesday																31.6%
Wednesday																23.3%
Thursday																9.6%
Friday																6.3%

Total Responding N=631

Each of the chaplains indicated that the sample of students was probably representative of the total population using these buildings.

The Kruskal-Wallis test was used to determine if differences among samples were due to chance. The null hypothesis, that the several samples from the different religious centers were drawn at random from the same population, was tested. The Kruskal-Wallis test is based on a comparison of the sums of the ranks for several samples.

Results

Demographic Characteristics

Approximately fifty-five percent of the students were male. In all but one of the buildings, there were slightly more males than females. The majority of individuals (60 percent) lived with their parents. In one building most (44 percent) rented apartments while in another about an equal percentage (20 percent) either lived with their parents, or lived in residence halls or fraternities, or rented their own apartments.

For the most part students lived between five and twenty miles from the centers. The exceptions were one building in which most lived within one-half mile and another in which most lived within a mile. The majority of the students in the centers were from either Minneapolis or St. Paul.

Table 2

Selected Demographic Characteristics of Individuals Using U of M Religious Centers

How far from this center do you live?	Type of Residence while at the University			City or suburb you live in while at the University				
	%	rank		%	rank		%	rank
< 1/2 mile	11.6	4	live with parents	60.5	1	Minneapolis	35.5	1
1/2 to 1 mi	8.5	5	rent apartment	16.1	2	St. Paul	22.2	2
1 to 5 mi	13.3	3	own/rent house	6.7	3	Northeast suburbs	9.0	3
5 to 10 mi	30.0	2	U. residence hall	4.8	4	Southwest	7.3	4
10 to 20 mi	31.8	1	fraternity/sorority	4.2	5	S. Southeast	6.5	5
>20 mi	5.1	6	rooming house	3.2	6	North central	5.9	6
			U. apartment	2.1	7	West central	4.9	7
			other	1.4	8	Northwest	4.1	8
			private hall	1.0	9	W. West Central	1.5	9
						S. Southwest	.8	10
						N. Northeast	.8	10
						East Central	.5	12
						Other	.5	12
						N. North Central	.3	14
						N. Northwest	.3	14
Total Responding	N=622		623			620		

Academic Characteristics

The largest percentage of students had graduated from high school in either 1966 or 1967. About an equal number of them graduate in 1968 and 1965. The greater number of the people in the centers were enrolled in the College of Liberal Arts. This was also true for each of the buildings surveyed. Overall, the second largest group consisted of students in the College of Education. Four exceptions were two buildings in which the second largest group were students from the Institute of Technology (IT), and one building where the second largest group were General College students (GC), and one building in which the second largest were non-students involved in a community theatre project. There were no faculty members in any of the buildings and a very small percentage of University staff were using one particular center. Overall, about one percent of those in the centers were students from colleges other than the University of Minnesota.

The largest number of individuals utilizing the centers were sophomores, then juniors, then freshmen and finally seniors. Relatively few graduate students were in any of the centers. In four of the six centers sampled, the majority of the people were sophomores, in one center they were juniors, and in another, seniors.

For the most part the students had been enrolled at the University less than two years. In two centers the largest number had been at the University less than one year, while in three, the largest number had been at the University between one and two years. Only in one center had the majority of students been at the University between one and three years.

Table 3

Selected Academic Characteristics of Individuals using U of M Religious Centers

College or Occupation			Classification or degree achieved			Years studied at the University			Year graduated from high school		
College	%	rank	Class	%	rank	# of yrs.	%	rank		%	rank
CLA	55.6	1	Freshman	18.1	3	0	7.0	5	Before 1959	10.0	5
Ed	11.0	2	Sophomore	30.3	1	<1	25.0	2	1959	.3	11
IT	7.4	3	Junior	23.9	2	1-2	29.3	1	1960	.8	10
Grad	4.4	5	Senior	15.8	4	2-3	18.8	3	1961	2.8	8
G.C.	6.5	4	Master's			3-4	14.9	4	1962	1.5	9
Univ.Coll.	2.9	6	candidate	1.5	7						
Other	2.1	7	Master's			4-6	4.8	6	1963	3.2	7
AFHE	1.9	8	degree	.8	6	6-8	.2	7	1964	8.1	6
S.B.A.	1.6	9	Ph.D.			>8	0	8	1965	14.3	4
Student at another college	1.0	10	candidate	1.1	9				1966	21.5	2
Staff at U.	1.0	10	Ph.D. degree	.0	11				1967	22.7	1
			Adult spec.	1.3	8				1968	14.9	3
			Prof. degree	.5	10						
			Other	2.3	5						
Total Responding N=619			620			611			618		

Religious Characteristics

More students at the University of Minnesota indicate their religious preference as Roman Catholic and similarly, more individuals in the centers listed their preference as Roman Catholic. The second largest group using the centers was Lutheran, and the third was Methodist. More students were undecided about their religious preferences than were either Presbyterians or Episcopalians. In three buildings, most of the people were Roman Catholic. The only exceptions were the two Lutheran centers where most were Lutheran, and the Wesley Center where most were Methodist.

Table 4

Denominational Affiliations of Individuals using U of M Religious Centers

Religious Denomination	%age	rank		%age	rank
Roman Catholic	41.6	1	United Church of Christ	.8	11
Lutheran	23.0	2	Unitarian	.8	11
Methodist	6.7	3	Evangelical Covenant	.3	13
Undecided	6.5	4	Evangelical Free	.2	14
Presbyterian	4.9	5	Christian Reformed	.2	14
Episcopal (Anglican)	4.4	6	Latter Day Saints	.2	14
Others Christian	2.6	7	Mennonite	.2	14
Baptist	2.1	8	7th Day Adventist	.2	14
Congregational	1.3	9	Eastern Orthodox	.2	14
Jewish	1.1	10	Bahai World Faith	.2	14
Total Responding N=			613		

As might be expected, the centers do seem to attract students in terms of the particular denominational affiliations. Of the Roman Catholics sampled, the majority were using the Newman Club. Of the Episcopalians sampled, the majority were using the University Episcopal Center. Of the Methodists sampled, the majority were using the Wesley Foundation, of the Presbyterians sampled, the majority were using the United Campus Christian Fellowship, and the majority of Lutherans sampled were using one of the two Lutheran Centers. Few Jewish students utilized any of these centers.

The religious experiences of the students who go to campus religious centers are varied. Most of them indicated that, on the average, they worship at a church or synagogue once a week. Approximately 13 percent worship twice a month, while 15 percent usually attend no services. The number of non-attenders varied from 10 to 25 percent. For the most part the people worship at other churches or temples within the Twin Cities area, rather than the campus centers. A majority of students were not members of any church organizations. Only 18 percent belong to church organizations associated with the University. Most have never taken any courses in religious studies which have been offered by the University or the Free University. Only 7 percent had taken University courses in religious studies.

Table 5

Selected Religious Characteristics
of Individuals using U of M Religious Centers

How often do you worship at any churches or synagogue?			Where do you usually worship?			Do you belong to any church organizations?			Have you ever taken a course offered in religion?
	%age	rank		%age	rank		%age		%age
Once a week	57.6	1	At this center	12.5	3	Associated with the University	18.1	At the University	7.5
Twice/month	12.7	3	At another church assoc. with the U	3.9	4	Not associated with the University	19.3	At the Free University	3.9
Once every two or three months	7.7	3	Inside TC area	63.1	1	No	62.6	No	85.5
Once or twice a year	5.9	5	Outside the TC area	3.4	5				
Do not usually attend services	13.6	2	Do not usually attend services	15.5	2				
Total Responding N= 623				615			618		598

Patterns of Using the Centers

The facilities provided by the different centers participating in this study vary. Different names are used to identify similar facilities and similar names are used to identify different facilities. For example, in one center students continue to call a specific room a cafeteria even though meals are no longer served.

Most of the individuals in the centers were planning on using rest rooms, cafeterias, and lounges. Only in one center did the majority report that they were going to use study rooms. Approximately 7 percent of the people sampled were going to attend chapels. This number varied from 3 percent to 11 percent.

There was a trend for more students to report using all of the facilities in the past. For example, about 37 percent of them indicated that they had previously gone to chapels. A much higher number also stated that they had previously taken advantage of the libraries and the study rooms. The heaviest used facilities in the past were the lounges, the cafeterias, and the rest rooms. The only exception was the one center in which the study room was also the most frequent previously used facility .

Table 6

Estimates of Facilities Used at U of M Religious Centers

What facilities will you use today?			What facilities have you used in the past?	
Facilities	Percentage	Rank	Percentage	Rank
Cafeteria	57.2	2	75.4	3
Lounge	50.7	3	76.4	2
Library	27.3	4	63.5	4
Restroom	63.0	1	78.0	1
Lockers	8.3	8	15.6	10
Bag lunch room	26.6	5	47.6	5
Meeting room	8.0	9	25.7	8
Typing room	3.2	11	13.2	11
Bookstore	2.4	13	20.3	9
Chapel	6.8	10	37.3	7
Classroom	2.9	12	11.4	12
Study room	23.4	6	46.6	6
Other	10.8	7	9.0	13
Total responding N= 631			622	

The reasons students gave for first coming to religious centers were diverse. There was no one dominant purpose that seems to characterize all of the centers. About an equal percentage of people came to meet their friends, to see what the places were like, and to study. Overall, the number of those who first came to centers to worship was approximately 11 percent. This varied from 3 to 18 percent. In one center the majority first came there to study. This is the only case in which there was a noticeable dominant purpose for first using the center. Other buildings were characterized by a variety of purposes.

The major reasons individuals gave for being in the centers at the time of the survey were to study, to eat, and to meet friends. An exception was one building in which most people were planning to attend classes taught by the Free University. Approximately 10 percent of the people were in the centers to sleep and about 12 percent were hoping to meet new friends.

Only 42 percent of the students in this study do not use other centers. Many of the same individuals must be found in different buildings. The number of people who do not use other centers varies from 16 percent to 52 percent.

Table 7

Purpose	Purpose for using center today		Purpose for first coming to center		Purpose in using other centers	
	Percentage	Rank	Percentage	Rank	Percentage	Rank
To study	56.7	1	20.4	3	24.3	4
To eat	53.3	2	16.2	4	28.8	2
To meet friends	49.5	3	27.5	1	24.6	3
To meet carpool	23.6	4	14.2	5	5.3	7
Other	15.1	5	8.9	7	4.1	9
To meet new friends	12.7	6	7.3	8		*
To sleep	10.6	7	2.2	11	3.8	10
To play cards	7.6	8	3.2	10	3.8	10
To worship	7.3	9	10.8	6	13.0	5
To attend class sponsored by Free University	3.5	10	2.1	12	2.4	12
To meet with University committee	3.0	11	1.4	14	2.1	14
To attend lecture sponsored by this center	1.7	12	2.1	12	6.5	6
To attend a class sponsored by this center	1.6	13	.8	15	2.4	12
To play music or records	1.0	14	.2	17	1.4	15
To practice for choir	.8	15	.8	15	1.2	16
To see what it was like		*	24.5	2		*
Do not use other centers		*		*	42.0	1
To see minister or chaplain		*	3.7	9	5.0	8
Total responding N=		629		631		585

*: This answer was not offered as a possible response for this question.

A sizeable number of individuals thought that the one most important service offered by the centers was social. About 42 percent of them reported that the centers were places for them to get together with friends between classes. The second most important service was that the buildings provided places to eat, and the third was the buildings were places to study. Few considered counseling to be a very important service. Also, and rather surprisingly, a relatively small number of students stated that an important service was that centers were places to meet carpools.

In three of the centers, the most important service was provision of places to get together with friends. In one center, the most important service was that this was a place to study. In two centers, the two equally most important services were that these were places to meet friends and to study.

Individuals indicated few differences among the important services offered by the centers. Some of these were practical matters. For example, in those three buildings in which there were cafeterias, most of the students indicated that eating was the second most important service offered.

Table 8

Estimates of Important Services Offered by U of M Religious Centers						
	Most important service offered by this center		Second most important service offered by this center		Third most important service offered by this center	
	Percentage	Rank	Percentage	Rank	Percentage	Rank
Get together with friends between classes	42.0	1	19.3	3	14.6	3
To eat	15.7	3	45.2	1	33.3	2
To study	25.7	2	25.2	2	35.7	1
To meet carpool	11.9	4	4.2	4	6.7	4
It provides counseling	2.3	5	2.3	5	2.0	6
To play cards	.2	7	1.3	7	4.7	5
It offers classes not offered by the University	2.3	5	1.9	6	2.0	6
Play music & records	0	8	.6	8	.9	8
Total Responding N=	522		476		445	

The planned programs sponsored by religious centers cover a wide range of topics. Clubs, groups, task forces, and committees are sponsored. Generally the number of students who attended any planned events or club meetings was small. Only about 20 percent had gone to films or theatre productions, and this was the largest number of people who had gone to any of the events.

Table 9

Estimates of Programs, Committees, and Club Meetings
Attended by Individuals Using U of M Religious Centers

Event	%	Rank	Meetings	%	Rank
Theatre productions or films	19.3	1	Draft Information Center	7.4	1
Other	5.6	2	Kappa Kappa Lambda	4.5	2
David Llorens (Oct. 28)	4.4	3	Alpha	4.4	3
Rosemary Reather (Jan. 10)	4.2	4	Campus Crusade	3.8	4
Alpha Weekend	2.6	5	Program committee for center	3.8	4
Alan Richardson (Oct. 16-20)	1.2	6	Other	3.5	6
Ecumenical Institute Conference classes	1.2	6	Gamma Delta	3.4	7
Jean Charlot (Oct. 20)	1.0	8	Free U (not classes)	3.0	8
John Cooper (Nov. 3)	1.0	8	Inter-Varsity Christian Fellowship	2.7	9
Reading Dynamics Classes	.8	10	Lutheran Student Assoc. (Regional or National)	2.6	10
Lutheran Youth Encounter Activities	.4	11	Council of Student Religious Organizations	2.2	11
			Wesley State Conference	1.8	12
			Covenant Club	1.2	13
			Kappa Phi	.4	14
			Beta Sigma Psi	.4	14
			Episcopal Society for Cultural Racial Unity	.4	14
Total Responding N=		502			501

A majority of individuals started going to religious centers within one month after they enrolled at the University. About 50 percent have been coming to these buildings for one or two years. A sizeable number utilized these facilities more than once a week, and many entered them before 9:00 a.m. Fewer people go to these buildings during the afternoon and evening hours. There were two exceptions to this trend. In one case individuals went to a center in the evening to study; while in another they went to a center for play rehearsals.

Table 10

Estimates of Time Patterns for Individuals Using U of M Religious Centers

When was the first time you came to this center after coming to the U?			How long have you been coming to this center?			How often do you use this center?			When was the first time you entered this building today?		
	%	Rank		%	Rank		%	Rank		%	Rank
Within 1 mo.	51.4	1	Less than 1 month	12.4	4	This is 1st time	7.2	2	Before 7 a.m.	5.4	7
Within 2 mos.	8.3	4	1-3 mos.	9.2	6	Less than once a mo.	5.9	4	7-9	33.1	1
3-6 mos.	11.0	3	4-6 mos.	11.2	5	Once a mo.	2.1	6	9-11	15.7	3
7-9 mos.	6.0	6	7-9 mos.	14.1	3	2-3 times a mo.	5.9	4	11-1	20.9	2
10-12 mos.	5.5	7	10-12 mos.	3.2	7	More than once a wk.	6.9	3	1-3	7.7	4
1-2 yrs.	11.2	2	1-2 yrs.	23.9	2	More than once a wk.	71.8	1	3-5	7.5	5
more than 2 yrs.	6.7	5	More than 2 yrs.	26.0	1				5-7	3.0	8
									7-9	6.6	6
									After 9 p.m.	.2	9
Total Responding N= 617			623			625			626		

In several instances differences in both characteristics and uses of the centers have been reported. The Kruskal-Wallis Test was used to test the null hypothesis that on selected characteristics and uses, the samples in each of the centers were drawn at random from the same population. Table 11 presents the relevant statistics. The data suggests that the null hypothesis cannot be rejected. None of the differences between centers are statistically significant.

Table 11

Kruskal-Wallis Test of Differences in Selected Individual Characteristics and Uses of Facilities for Samples from Different Religious Centers.

Table Number	Table Name	χ^2 (Uncorrected for ties)	P
3	Occupation or college	1.1652	.95
3	Classification or degree achieved	.7427	.99
4	Denomination	11.0355	.10
6	Facilities use - today	2.5837	.90
6	Facilities use - past	1.7840	.90
7	Purpose - today	1.3259	.95
7	Purpose - past	8.5596	.12
8	Most important service	1.8951	.90
8	Second Most important service	3.9086	.70
8	Third most important service	2.6430	.80

SUMMARY

This study has been concerned with the description of people and their uses of campus religious centers at the University of Minnesota. Not all foundations participated in the survey, therefore generalizations are necessarily limited. Possible generalizations are also limited as this is not a report about what campus chaplains should or should not do or be doing. Our objectives were limited to an approximate assessment of the ways in which people use facilities. The campus chaplaincy is much more than these buildings.

The results from this investigation strongly indicate that the buildings provided by churches for University of Minnesota students are supplying necessary social services. Few can disagree that on such a large campus students must have places to meet their friends, study and eat. Helping to meet these social needs is one of the major contributions of the churches.

This study has not yielded particularly surprising results or discoveries. But it has been a significant project because of the active participation of the campus chaplains. They toiled, debated, and developed this questionnaire. As a result, this inventory is possibly more relevant to their needs.

References

- Biggs, D. A. The Religious Foundation and the University Student, Cooperative Research Report II, The University Episcopal Center and the Office of the Dean of Students, Student Life Studies Bureau, University of Minnesota, 1968, Mimeo, 13 pages.
- Biggs, D. A. and Frishe, Nancy. Cooperative Research Report I, The University Episcopal Center and the Office of the Dean of Students, Student Life Studies Bureau, University of Minnesota, 1968, Mimeo, 12 pages.
- Garrison, K.C., Jr. A Sociological Perspective on Campus Ministry Styles. The Church Society for Social Work, 1968, 56-61.
- Gibson, S.N. A Study of the Wesley Foundations and the Campus Ministry of the Methodist Church, for the Division of Higher Education, General Board of Education, the Methodist Church, Nashville, 1967.
- Gossett, E. F. College kids know Functional Christianity is not enough. Christian Advent, 1966, 10 (23), 11-12.
- Welsh, C. W. Introduction, Case Studies in the Campus Ministry, The Church Society for Social Work, 1968, 4 & 5.

ARCHIVES

UNIVERSITY OF MINNESOTA
Research Bulletin
of the
Office of the Dean of Students

Volume 10, Number *x2*

December 3, 1969

A PROFILE OF STUDENTS:
UNIVERSITY OF MINNESOTA IN THE LATE SIXTIES
by
Ralph F. Berdie
Student Life Studies
Office for Student Affairs

Two kinds of students are in the University, men and women. Two kinds of students are in the University, those who live on the campus and those who live off the campus. Four kinds of students are in the University, men who live on the campus, men who live off the campus, women who live on the campus, and women who live off the campus. There are two kinds of students in the University, those who are occupationally motivated and those who are not. There are eight kinds of students in the University, men who live on the campus who are occupationally motivated, men who live off the campus who are not occupationally motivated, - - - but by now the intent should be clear.

Many dimensions can be used to describe students. How these dimensions should be used in establishing types or categories depends mainly on the questions that are asked, the decisions to be made. Generalizations about the student body are easy to make, difficult to justify. A hippie subculture can be identified and defined, but is it meaningful? Similarly, Greek cultures, commuter cultures, or black cultures can be hypothesized and frequently these facilitate interesting and stimulating conversation. These concepts even may help us solve problems, but only if we keep in mind that really we have 50,000 students in the University, each of whom resists being categorized and typed and each who must be recognized as a unique and different individual.

How Many?

In the fall of 1969, 50,415 University of Minnesota students were registered in 24 major divisions of the University located on five campuses. Of these students, 62 per cent were men. Almost one-fifth of all students had been in high school the previous year and slightly fewer than ten per cent transferred this fall to the University after completing some college work elsewhere. A little more than one-third of the entire University enrollment was in one college, the Arts college, and of the 17,580 students in that college, over 12,000 were freshmen or sophomores and only 5,000 were upperclassmen. Compared to the Arts college, the second largest college in the University is small. The Graduate School contains 7,700 students. In descending order of size, the Duluth campus enrolls 5,468 students, the Institute of Technology 3,679, the General College 3,351, the College of Education 3,173, and the College of Agriculture, Forestry and Home Economics 2,732. Of these 24 University divisions, sixteen enroll fewer than 1,000 students.

Who are these students? From where do they come? What do they do in the University? What do they do when they leave the University? What happens to them as a result of enrolling in the institution? These all are interesting questions but in a sense the answers, when they are available, are somewhat incomprehensible. Describing the students in the University is somewhat like describing the inhabitants of the United States. Statistics and figures derived from research can provide information that reveals changes, suggests problems, and allows some generalization, but such data do not allow one to describe University students any more than they allow one to describe the personality pattern of the American citizen.

Insofar as the University exists for and primarily consists of students, descriptions of the student population have relevance. Educational policies and programs are formulated in light of student and community needs and one assumes, although this is only an assumption, that the more information known about students, the wiser will be educational decisions.

Information is available about the number of students, from where they come, what their previous experiences have been, what their competencies, abilities, interests, and temperaments are, where they live while in college, how they finance their education, what their experiences in college are, what their attitudes are when they enter college and after they have been in college, and how these attitudes change, how long they persist in college, how long it takes them to graduate, how satisfied they are with their University experiences, and what they do when they leave the University. An attempt will be made here to summarize information from a great variety of sources. These sources are listed at the end of this report. Most of the information is relatively recent, that is, it has been gathered within the last three or four years. Some information describes students who entered in the fall of 1969, other information describes students who graduated a year or two ago, and some data refers to students who left the University 25 or more years ago.

Most of the information is derived from samples of students. No data are included when any evidence suggests that the samples studied were not representative of the groups from which the samples were drawn. One must remember that the information is anchored in time and that student characteristics over time do change. The information that has been gathered year after year, however, suggests that such changes in student characteristics occur rather slowly and that information descriptive of a student group this year will correspond closely to information gathered on next year's group.

From Where Do They Come?

Large proportions of students who enter the University are making a giant step forward in the educational pattern of their families. Of our new freshmen men, fourteen percent come from homes where the father had no more than an eighth grade education, 23 percent come from homes where the father was not a high school graduate and 69 percent come from homes where the father had no more than twelve years of education. Of the new freshmen girls, six percent come from homes where the mother had no more than an eighth grade education, fourteen percent come from homes where the mother was not a high school graduate, and 64 percent come from homes where the mother had no more than twelve years of education. Less than one quarter of the men who enter the University have fathers who themselves are college graduates and fewer than half of that proportion of women have mothers who were college graduates. The average increase in national educational level is about one year per generation. Many students who enter the University are attempting to make in their own generation an advance in their family educational level that normally requires six or eight generations. Most of our new freshmen are "first generation" college students.

New freshmen come from a broad diversity of home backgrounds. About one-third of the students come from homes where the father is in a skilled, semi-skilled, or unskilled occupation. Less than ten percent of the students have fathers who own or manage farms. About one-third of the students have fathers who are in professional occupations or who own or manage businesses. About sixteen percent of the students have fathers who are in office, clerical or sales occupations. The distribution of parental occupations for University freshmen is not too different from the occupational distribution in the state although University students tend to be drawn somewhat disproportionately from homes having fathers high on the occupational hierarchy.

Although the University's admissions policies may be regarded as egalitarian in terms of father's occupation, its graduation policies cannot. Something rather disturbing happens between the times of matriculation and graduation. In the Arts college in 1963, 28 percent of the entering freshmen had fathers who were in professions or who owned or managed businesses and 32 percent had fathers who were in skilled, unskilled, semi-skilled, or semi-professional occupations. Within five years of matriculation, 47 percent of the first group graduated from the University, as compared to only 33 percent of the second group. Examination of the admissions requirements of the college suggests that practically everyone of the entering students had sufficient ability to graduate. The facts suggest that a person who comes from a home higher on the economic scale has a better chance of graduating than one who does not. This has serious implications for programs of financial aid, orientation of new students, and advising and counseling.

How Apt Are Students?

What are the abilities of University students? Each division in the University adopts entrance requirements it deems appropriate for its purposes and consequently the student body within any division is quite different from that in any other division. Each division also admits a most divergent group of students and in almost any division students can be found who are more competent and less competent academically than the average student in any other division. There is great overlapping among the divisions of the University; there is great variation in the entrance requirements of the various divisions; and there is great diversity within each division.

Through means of the State-Wide Testing Program, data have been available for almost 40 years which present a picture comparing University of Minnesota students to students in other Minnesota colleges. The students in the Institute of Technology and the Arts college tend to be somewhat superior in terms of academic aptitudes to liberal arts college students in the state. Taken as a whole, university students, who constitute about one-third of the undergraduate enrollment in the state, are quite representative of the total undergraduate enrollment in terms of their ability and high school backgrounds. Each year several hundreds of new freshmen in the University have characteristics which

would make them most welcome by any University in the country. Thirteen percent of all University of Minnesota freshmen in the fall of 1969 came from the upper five percent of their high school graduating classes; 54 percent came from the upper quarter of their high school graduating class; and 82 percent came from the upper one-half of their high school graduating class. Evidence from the college aptitude tests used in admitting students supports the conclusion that the freshmen enrollment contains a large proportion of students with superior academic aptitude and considerable potential for University work.

What Are Their Attitudes?

Other information is available concerning the attitudes and expectations of students when they come to the University. Students perceive the University as an institution which emphasizes personal, humane, poetic, and political meaning and which is concerned with increasing self-understanding, reflection, establishment of identity, and search for personal meaning. Students perceive the University primarily as an academic and scholarly institution having competitively high academic expectations. They approach the University in terms of its intellectual and cognitive functions to a far greater extent than in terms of its social and practical functions.

The attitudes of students do change while they're in the University. Students learn that the campus is less socially structured than they originally expected, that students assume more responsibility for their own social and interpersonal behavior, and that the faculty and administration exert less control than they had originally expected. They report they realize they have moved into an adult world.

They learn that the campus is not quite as exciting intellectually as they had anticipated and they realize that some professors are dull, that some required studying promises little immediate reward, and that less intellectual stimulation is present than they had assumed. They also learn that academic requirements are not quite as strenuous as they originally had anticipated. However, although many students learn that teachers were not as thorough as they originally had anticipated, nevertheless more than two-thirds of students reported that professors were thorough and really probed into the fundamentals of their subjects. Although many students change their original opinion that students set high standards of achievement for themselves, nevertheless over three quarters of the students still agreed that students do set high standards for themselves.

Students come to the University with much ability, from varying family backgrounds, with a considerable amount of enthusiasm (practically all of the freshmen indicated that they wanted to attend the University and their parents strongly supported this choice) and most entering freshmen were aware of the broad and multiple purposes of the University.

When students are asked why they attend the University most of them said they were here to prepare for an occupation and then added that they also were

here for a liberal education. These two purposes are dominant. Relatively few studied suggest purposes related to meeting other people, marriage, avoiding selective service, making money, or "nothing else to do". Students are serious in their intent to come to the University, and almost all students who enter the University plan to remain until they graduate.

Figures regarding graduation rates, or persistence, are not as complete as they should be. A recent national study suggests that about 60 percent of entering freshmen in the United States graduate within four or five years. A 1969 study of University of Minnesota arts college students showed that 25 percent graduated within four years of matriculation and that within five years of matriculation, 37 percent obtained four year degrees, three percent two year degrees, and about seven percent were still in the University. 60 percent of the entering arts college freshmen had not obtained degrees from the University of Minnesota by the end of the fifth year. These statistics do not account for students who obtained degrees elsewhere. One might hazard a guess that approximately 60 percent of entering University of Minnesota freshmen eventually obtain a college degree but that less than one-half of the students who do obtain degrees follow the traditional pattern of four years of academic work. For many students college attendance is intermittent, interrupted, and extended.

Students on the Campus

Where do University students live? Of entering freshmen, fewer than five percent come from outside of Minnesota. Of the total enrollment, 13 percent come from outside of Minnesota and about three percent come from outside of the United States. Of all students, 39 percent live at home with their families, one percent live with relatives, 9 percent live in University residence halls, one percent live in University owned apartments, 3 percent live in fraternity or sorority houses, 8 percent live in houses they own or rent, 24 percent live in apartments, 2 percent live in rooming houses, and the remainder live in residences which have not been identified. Although fewer than 17 percent of students are married, the total number of married students exceeds 6,600. Naturally, the living arrangements of married and single students are different and students' arrangements for living vary according to their year in college and their age. Of the 18 year old unmarried students, practically all of whom are freshmen, 70 percent live at home with their families, 19 percent live in University residence halls, 1 percent live in fraternities or sororities, and 5 percent live in apartments. Of the 21 to 25 year old unmarried students, 37 percent live at home with their families, fewer than 10 percent live in University residence halls, 7 percent live in fraternity or sorority houses, and 37 percent rent apartments. Most younger students live at home with their families and the residence of older students depends on whether they are married or not, with large numbers of older, single students living in apartments. The living patterns of men and women students are somewhat similar, with a few differences. Proportionately more women live with their families and in University residence halls and slightly more men rent apartments and live in fraternity houses.

Regarding the University of Minnesota as a strictly commuter campus is not justified because large proportions of students, and even the majority of older students, do not live with their families. The major problems presented by the commuting student are due to the large proportions from lower divisions that live at home.

How do students finance their education? To quote the most recent study on student finances, "The vast majority of the students attending the University of Minnesota rely heavily upon their parents for funds with which to carry on the life of the University student. Slightly more than half the University students obtained 40 percent or more of their support from their family or friends. ...it is equally clear that a large proportion of the students depend on income from employment to facilitate their University attendance. More than half of the female students and three out of five male students worked during the year of study."

The pattern of financing college may be changing so quickly that generalizations may be hard to make. For example, a few years ago perhaps one out of eight students received support from loans and perhaps one out of five from scholarships or grants. With new loan and grant programs today, the pattern may be quite different from what it was only two years ago.

About two years ago, the average (median) student reported spending \$526 per quarter if he were a male and \$472 if she were a female on the Twin Cities campus. Costs varied according to the campus on which the student was located, sex of the student, college in which he was registered, and whether he lived at home, in University housing, or had other arrangements. In 1965-66, a student needed about \$1,500 to attend the University. Today the figure is perhaps closer to \$1,800.

What happens to students when they get here? A recent study by Hood reports that the grades students earn in college depend considerably on the college in which they are enrolled. For a sample of freshmen students, the mean grade point average in the College of Agriculture was 2.0, in the Institute of Technology 2.0, in the General College 1.8, and in the College of Liberal Arts 2.0. The average grade point average in private liberal arts colleges in the state was 2.3, in Catholic men's colleges 2.1, and in Catholic women's colleges 2.6. Average grade point averages in state colleges was 2.0 and in junior colleges 2.1. "There was little relationship between the ability of students in a particular college and the mean grade point average received at that college." The average University freshman gets about a C average, and this means that approximately 50 percent of freshmen obtain grade averages below a C. The proportion of college freshmen who fail is a function of the quality of the freshmen who are admitted, the type of instruction and examination provided by the University, and the grading practices of the instructors. Changing the quality of students and of instruction and examinations will have little effect on failure rates if instructors continue to regard a C grade as an average grade.

Some evidence suggests that college faculties can shift their points of reference. Recently a study in the Institute of Technology revealed that more than three quarters of freshmen in that college had grade averages above C. Experience in the Arts college thirty some years ago provided additional evidence that college faculties can change.

College Experiences

What have students done before coming to college and what do they do after arriving here? The average entering freshman comes from a home with possessions regarded as essentials in an affluent society (radios, dictionaries, television sets, games, tools, and so on). He comes from a home where six or seven magazines are regularly available; these tend to be magazines such as Reader's Digest, Life, Look, Better Homes and Gardens, and farm magazines. Parents of students are moderate joiners and the average student has parents who belong to three or four different organizations. Students have traveled rather extensively, almost all of them having been outside of the state, and the average student reports that he has been in at least twelve different states and one foreign country, probably Canada.

Most students prior to coming to the University had public library cards and the average freshman reported he had read four non-school books the year preceding college entrance. Students were reasonably well-acquainted prior to coming to the University with the names of authors but quite unfamiliar with the names of painters. Most University students had as children attended kindergarten but fewer than one-fifth attended nursery school. They had been to circuses, visited museums, attended professional athletic events, been to concerts, and had music lessons. Practically all of them had access to a daily newspaper and large proportions had rather well established newspaper reading habits.

This pattern of experience is continued and to some extent extended during the first two years students spend in the University. For example, about 85 percent of sophomores reported they read a daily newspaper fairly regularly and most of them read the front page; most of the men read the sports section. About two-thirds of the students read the comics, two-thirds read the local news, and almost one-half read the editorials. The number of non-school books University students read is about the same in college as it was before college - the average student reports reading about four books a year that are not part of his school work. In college their acquaintance with authors and painters grows and by the end of the second year in college they are somewhat better informed about the fine arts than they were before they arrived. In college about 25 percent attended a Minneapolis Symphony concert, about one-half visited art galleries and museums, and about two-thirds reported they had attended University football games and other varsity events. About one-third of new freshmen and one-fifth of new transfer students buy athletic tickets. About one-half of the men report they participate in intramural sports. About one-half of the students reported that they had been to no plays during their first

two years in college. About two-thirds reported that they had attended a convocation during their freshman year and about 50 percent reported they had attended a convocation at least once during their sophomore year. Students' reports of their recreational activities in college suggest that relatively few students participate in any one activity but most students participate in something and the diversity of such experience is great. The average student appears to participate in about three to four different campus events and activities each month. Most students do something on the campus besides going to class, but one half of recent graduates report they wished they had done more.

Students tend to be satisfied with their experiences at the University. Student satisfaction has been studied at the end of the sophomore year and at the end of the senior year. In general, students express relatively great satisfaction with the many opportunities the campus provides for cultural and intellectual development. They express dissatisfaction with the counseling and advising services that are available to them. No one aspect of the University attracts large numbers of complaints when students are asked about what has disappointed them most in the University, but students name such things as large classes, impersonal treatment, classes being boring, the University is too large, and it is difficult to make friends.

Students frequently have been asked questions concerning their attitudes about a variety of issues. In general most students endorse statements that the University should be intellectually stimulating, should provide opportunities for the presentation of controversial issues, should be a place where the widest possible range of viewpoints can be expressed but where none has official endorsement. Of entering freshmen, between one-quarter and one-third disagreed with the principle of full freedom of the press, approved police use of the third degree, and felt that the police should be allowed to enter a house to search without a warrant. Most entering freshmen are quite aware of current social issues but a substantial minority are not.

The religious and racial backgrounds of students can be estimated. Approximately two-thirds of entering freshmen come from homes with a basic religious belief that is somewhat conservative, that is, Roman Catholic or Lutheran. Available evidence suggests that the religious beliefs of college students do not change markedly while they are in college. Of the 50,000 University students, perhaps fewer than 20 or 30 are American Indians and perhaps no more than 400 are black.

Most University students have had experience with alcohol and relatively few have had experience with other drugs not used medically. Among entering freshmen, approximately eight percent had some nonmedical experience with drugs and about three percent described themselves at the beginning of the school year as current users. Figures are somewhat higher for sophomores. The drug most commonly used was marijuana.

The physical health of University students is good, compared to other persons of the same age range outside of the University. Communicable disease rates are low. Suicide rates are low. Hospitalization for mental disorders is low.

The number of discipline cases called to the attention of University authorities is small when compared to crime and delinquency rates for this age group outside of the University. Recent developments leading to arrests for civil disorders may change this picture.

Exit from the University

Some information is available about University students once they leave the institution. A sample of graduates of 1968 was followed up a year after graduation. Of the 211 students, 46 percent of the men and 35 percent of the women were married. Of the men, 61 percent were employed on full time jobs, 17 percent were in the military service, 19 percent were in school, two percent were unemployed, and about one percent were in other activities. Of the women, 77 percent were on full time jobs, ten percent were in school, five percent were housewives, two percent were unemployed, and six percent were in other activities. Of the men, 28 percent said they had already completed their military service, 72 percent had not.

Most of the employed graduates were in professional occupations, 70 percent of the men and 75 percent of the women. Nine percent of the men and seven percent of the women were in managerial occupations; one percent of the men were in clerical occupations, one percent in sales occupations; four percent in service occupations, and one percent in skilled manual trades.

These former students who were employed were asked how satisfied they were with their present jobs. Twenty-five percent of the men and 44 percent of the women said they were thoroughly satisfied and would not change their job; 44 percent of the men and 32 percent of the women said they were satisfied but would consider changing jobs. Approximately 70 percent of these former students expressed good job satisfaction. About seven percent of the students are completely dissatisfied and about eighteen percent are somewhat dissatisfied, with the remainder being indifferent.

Slightly over one-half of the employed students said their present job was in the same field in which they majored in college. An additional 23 percent said they were employed in a related field, and 24 percent reported that they were employed in a field different from that of their college major.

Of the former students who had post-college education, 52 percent of the total group of graduates, one-half reported that they had some formal education in graduate and professional schools since graduating from college and about 25 percent reported they had taken extension or evening courses during the year.

These graduates were asked to respond to this question: "In terms of the cultural and general education you received at the University, in your opinion how do you compare with recent graduates of other institutions with whom you have come in contact?" Eleven percent reported they were very much above average; 42

percent reported they were somewhat above average; and 46 percent reported they were about equal. Fewer than one percent reported they were below average.

A somewhat similar question was asked: "In terms of professional and occupational preparation you received at the University, in your opinion how do you compare with recent graduates of other institutions with whom you have come in contact?" Thirteen percent of the students reported they were very much above average, 37 percent reported they were somewhat above average, and 43 percent reported they were about equal. Only eight percent reported they were below average. These ratings suggest that University of Minnesota graduates are relatively satisfied with their general, cultural, and professional education when they compare themselves to other persons.

The graduates indicated they were satisfied with their life in general. Thirty-five percent reported they were very happy with the way things are; an additional 35 percent reported that they were happier than average; twenty percent reported they were about average in terms of their feelings toward their total life situation; and about eleven percent reported that they were unhappy.

Students were also asked: "If you could relive your academic experience, what different choices would you make?" Students checked as many items as they wished. Of all of the students, thirteen percent said they would attend a different college or university, ten percent said that they would attend a small college for the first two years and then transfer to the University, two percent said they would not attend college but would select another kind of training, 30 percent said they would select another college major or make another academic and vocational choice, sixteen percent said they would put less emphasis on social activities and invest more time in study, 48 percent said they would become more involved in extracurricular and social activities, and 54 percent said that they would become more active in University affairs. Apparently large numbers of former students have regrets because they were not more a part of the University.

A study extending over a longer period of time reported the reactions of students who were in the University from 1933 to 1935. When studied in 1963 these students were scattered throughout the world with about 50 percent of them still in Minnesota. Two-thirds of these students eventually graduated from college; 90 percent have been married; and they had on the average about two or three children. As a group they had been successful, reporting an average income 25 years after college of about \$15,000. They reported they like their jobs and were satisfied with their lives.

The alumni were divided into three groups, according to their self-descriptions, liberal Democrats, conservative Republicans, and a third group consisting of liberal Republicans, conservative Democrats, and Independents. About 25 percent of the former students were in the third group. The conservative Republicans outnumbered the liberal Democrats almost two to one. (The original purpose of this longitudinal study was to compare the success and satisfaction

of college freshmen who had and had not been counseled. Dr. David Campbell, the author of the study, concluded, "There were substantial differences in all phases of academic achievement, favoring the counseled students. On measures such as total four year grade point, degrees earned, honors won, leadership positions filled, and percent being elected to Phi Beta Kappa, large, impressive, and statistically significant differences were noted in favor of the counseled students - - - There were much smaller - indeed, faint - but detectable differences in adult achievement between the counseled and noncounseled students.")

Conclusion

For purposes of understanding and planning, students can be divided into meaningful groups. For example, the entering freshman class in the fall of 1969 contained 86 students who were 26 years of age or older. Chances are that many of these students were married and had families, some most likely were divorced, perhaps all had considerable work experience, and many had participated actively in a variety of community activities. Most of them did not live in University residence halls, many of them had extensive experiences of reading and attending concerts, lectures and theaters, and some were active in community and political organizations. The educational needs of this relatively small group most likely were quite different from the needs of the much larger group of eighteen year old entering freshmen.

The total student population contains a relatively small group of students, perhaps 100, whose interests and activities center around the theater. They are interested in acting, directing, and writing, and they constitute a rather well-defined sub-culture. Another such sub-culture consists of the few hundred students, almost all men, whose interests are primarily in athletics. Most of these aspire toward careers in athletics, their reading and recreational habits may be influenced strongly by their interests, and they form a separate group.

On the campus many such groups can be found, some small, some large. Several students belong not only to one group, but to several, and a member of a hippie culture may be a member of the theater culture, or even of the athletic culture. Perhaps attempting to understand the University student as a species is only an interesting and challenging intellectual game, but hopefully, such understanding will provide us some suggestions as we plan and manage our University.

R E F E R E N C E S

- BERDIE, R. F. Changes in University perceptions during the first two years in college. The Journal of College Student Personnel, 1968, 9, 85-89.
- BERDIE, R. F. College expectations, experiences, and perceptions. The Journal of College Student Personnel, 1966, 7, 336-344.
- BERDIE, R. F. Pre-college experiences of University of Minnesota freshmen. Research Bulletin of the Office of the Dean of Students, 9, Number 1, July 15, 1967, 8 pages.
- BERDIE, R. F. The University of a many-faceted thing. Personnel and Guidance Journal, 1967, 46, 768-775.
- BERDIE, R. F. The University of Minnesota freshman class of 1967, Research Bulletin of the Office of the Dean of Students, 9, Number 1, July 15, 1967, 12 pages.
- BERDIE, R. F., LAYTON, W. L., HAGENAH, T., & SWANSON, E. O. Who Goes to College? Minneapolis: University of Minnesota Press, 1962.
- BERDIE, R. F., PILAPIL, & IN JAE IM, Graduating seniors' satisfaction with the University, Minneapolis: University of Minnesota, Bureau of Institutional Research, 1968.
- CAMPBELL, D. P. A study of college freshmen - 25 years later. Cooperative Research Project Number 2160. Minneapolis: University of Minnesota, 1963-1965.
- HARROLD, R. D., & CHAPIN, E. B., Jr. An analysis of student athletic sales at the University of Minnesota. Minneapolis: University of Minnesota Student Activities Bureau, July, 1969.
- HINCKLEY, R. G. Non-medical drug use and the college students. The Journal of the American College Health Association, 1968, 17, 35-42.

HOOD, A. B. What type of college for what type of students? Minneapolis: University of Minnesota Press, 1968

HUEBNER, J. M. The 28th annual demographic analysis of the total enrollment. Minneapolis: University of Minnesota Student Housing Bureau, 1968.

MINNESOTA HIGHER EDUCATION COORDINATING COMMISSION. 16th annual survey of Minnesota college and university enrollments, November, 1969.

OFFICE OF ADMISSIONS AND RECORDS, University of Minnesota, Distribution Summaries of Entering Freshmen, 1969.

OFFICE OF ADMISSIONS AND RECORDS, University of Minnesota. Registration second week, October 10, 1969.

PLACEMENT OFFICE, College of Liberal Arts, University of Minnesota: Beginning Jobs of Graduates: College of Liberal Arts. Minneapolis: University of Minnesota, 1966.

RUPPRUCHT, Paul, Memorandum to Dr. James Reeves, August 19, 1969.

STECKLEIN, J. E., FENSKE, R. H., & HUANG, A. S., Student finances study, Minneapolis: University of Minnesota Bureau of Institutional Research, 1967.

TAYLOR, R. G. Summary of IT freshman grades, Fall, 1968, dittoed.

31 342

UNIVERSITY OF MINNESOTA

**Research Bulletin
of the
Office of the Dean of Students**

Volume 10, Number 3

December 5, 1969

**SELECTING RESIDENCE COUNSELORS -
JOB VIEWPOINTS OR PERSONALITY CHARACTERISTICS?**

by

Donald A. Biggs

Student Life Studies

Office for Student Affairs

One factor in the selection of residence counselors is the applicant's viewpoint about the prospective job. The candidate's perspective on residence counseling includes both his viewpoint about the role he should play as a residence counselor and his attitudes about interpersonal relations. These two characteristics, job viewpoints and interpersonal attitudes, are likely to influence the job success of a counselor. This study explores two questions: (1) What are the relevant job viewpoints and interpersonal attitudes of candidates for residence counseling positions, and (2) are different job viewpoints and interpersonal attitudes of applicants related to their subsequent job performance?

A review of the literature does not provide data for establishing guidelines to select residence hall counselors. There are widely different opinions about the appropriate roles and job duties of these student personnel workers. Hoyt and Davidson (1967) described four roles played by residence counselors: the buddy role, the authoritarian role, the interest role, and the competency role. In addition, these same authors found that effective and ineffective advisors held different opinions about residence advising. However, Gonyea and Warman (1962) reported that dormitory residents, experienced counselors, inexperienced counselors, head residents, and student personnel administrators all agreed that the ideal residence counselor should be extremely motivated to help and understand people, moderately dominant and achievement motivated, not very autonomous, and definitely not exhibitionistic. Schroeder and Dowd (1968) described an ideal women's residence counselor as an individual who gives help with immediate problems such as dormitory living, study habits, and social skills, while Murphy (1964) reported that in many colleges and universities the main functions of residence counselors were order and control, personal and educational counseling, and advising residents about student government. Only one institution thought residence counselors should be concerned with developing an academic atmosphere in the halls. Hoyle and Gazda (1963) have gone so far as to recommend that the word "counselor" no longer be used to describe student personnel workers employed in residence halls. Future research concerned with selection of residence counselors needs to accept the presence of divergent viewpoints about the appropriate roles for residence counselors. Should they be friends, counselors, or teachers? Should residence counselors be selected on the basis of their personality or their acceptance of a particular philosophy on residence counseling? These are practical questions.

Systematic information regarding various viewpoints about residence counseling and their significance could be useful in the development of selection and training programs for counselors. Such data might be employed to match counselors, head residents, and residents who have congruent viewpoints or similar attitudes. The problem of selecting residence counselors would then involve empirical matching of viewpoints and attitudes rather than a selection program in which acceptance or rejection of applicants was based on matching with an abstract model of the "good" residence counselor. Objective estimates of job viewpoints and social attitudes of candidates for residence counseling positions could also be helpful in developing focused pre-service and in-service training programs. An analysis of the discrepancies between counselors' viewpoints, residents' viewpoints and head residence counselor viewpoints would provide the content for such programs.

The first objective of this study is to describe and measure different job viewpoints and interpersonal attitudes of candidates for residence counseling positions. The second is to describe the relationship between the job viewpoints and interpersonal attitudes of these applicants and subsequent head counselor evaluations of their job performance.

Procedures

Measures

The Residence Hall Viewpoints Inventory was developed as a means of measuring job viewpoints and interpersonal attitudes of candidates for residence counseling positions. The questionnaire had 120 questions, 60 of which were based on the subject matter presented in the 1967 University of Minnesota (U of M) Residence Counseling Training Manual. The items covered such topics as the objectives for residence counseling, the differences between residence and non-residence counseling, how to conduct interviews with residents, how to advise residence hall groups, and methods of disciplining residents. Individuals were to respond either strongly agree, agree, undecided, disagree or strongly disagree. The inventory was pre-tested on a sample of 32 male residents and 35 residence counselors and head residence counselors. The frequency distribution of their responses was analyzed and questions were revised.

The Residence Hall Viewpoints Inventory also included 60 questions regarding interpersonal relations. These items were written to measure the following five dimensions of interpersonal relationships.

First - Individuals differ in their attitudes and beliefs about the significance of past, present, and future in their interpersonal relationships;

Second - Individuals differ in their attitudes and beliefs about privacy, intimacy, social distance and free movement among people;

Third - Individuals differ in their attitudes and beliefs about the significance of positive and negative social feedback from others;

Fourth - Individuals differ in their attitudes and beliefs about the values of active and passive approaches to interpersonal conflicts and disputes;

Fifth - Individuals differ in their attitudes and beliefs about the values of influence, emotional expressive, and task orientated interpersonal relationships.

The rating form used to evaluate residence counselor job performance had four sections: interest in position, supervisory ability, relationships with others, and personal characteristics. There were a total of 23 ratings possible. The rater was to check one of the following: improvement needed, satisfactory, improving, or excellent.

Samples

The Residence Hall Viewpoints Inventory was mailed to 176 applicants for residence counseling positions at the University of Minnesota. Slightly more than 57% of these candidates were males, the largest percentage (67%) were between the ages of 20 and 23 and most of them had already received a bachelor's degree. The Residence Hall Viewpoints Inventory was completed by 76% (N=124) of the applicants who were the Ss for the factor analysis. There were job performance ratings and Residence Hall Viewpoints Inventory scores available for 62 of the residence counselors who were the Ss for the correlational analyses.

Statistical Analysis

The responses to the Residence Hall Viewpoints Inventory were analyzed with a Reciprocal Averages - Internal Program. Appropriate items were then selected and factor analyzed employing the Kaiser Varimax criterion. Multiple correlations and canonical correlations between Residence Hall Viewpoints Inventory scores and Head Residents Job Performance Ratings were completed.

Results

Residence Counseling Job Viewpoints

The first 60 items of the Residence Hall Viewpoints Inventory regarded appropriate job attitudes and roles for residence counselors. The Hoyt reliability, with six iterations was .92. Response frequencies, mean item responses, and reciprocal averages internal item weights were examined and 41 items were selected and used in the factor analysis. Three factors accounted for 56% of the common variance and also seemed logical.

The first Job Viewpoint factor had 24 items which load .19 or higher. Only one item had a positive loading (.39). This statement was, "When a residence counselor (RC) has referred a resident to another office on campus, he should consider the case closed". The statements with the highest negative loadings (.57, .58, .64) were, "The RC sets a good example for the students living in his house", "The atmosphere of a residence hall can stimulate or retard an individual student's academic achievement" and "No student should accept the position of RC unless he can fulfill the obligations associated with the job and still maintain his academic progress". Two other statements with high negative loadings (.53, .50) were, "A residence hall is a student's home while at the University". and "When a student accepts the position of residence counselor, he should agree to accept the philosophy of the residence counseling program". The Hoyt reliability for these 24 items was .81. The scale was labeled Job Involvement or Laissez Faire Role. The items on this scale seemed sensible since it has been observed that a number of candidates for residence counseling jobs at the University of Minnesota have stated that they are only interested in earning money and do not accept any particular philosophy of residence counseling.

The second job viewpoint factor had eleven items which load .21 or higher. The statement with the highest positive loading (.56) was "A residence counselor's responsibility should be primarily to the students in his house and secondarily to the head residence counselor". The second highest positive loading (.44) was the statement, "Residence counselors ought to protect students from college and university regulations that are considered inappropriate". The highest negative loading (.52) was the statement, "The RC should support the policies of the Office of the Dean of Students". The Hoyt reliability for these eleven items was .56. The scale was labeled Student Loyalty or Friend Role. This factor also seemed reasonable. Yarborough and Cooper (1963), have commented that residence assistants have to become accustomed to the fact that it is almost impossible to be the voice of authority and to be liked by everyone. These authors also pointed out that an important feature of the resident assistant's job is that he often is forced to choose between duty and popularity.

The third Job Viewpoint factor had 20 items which load .20 or higher. Twelve of these statements appear on both the first and third factors. Eleven items have negative loadings on the first factor and positive loadings on the third factor. Interestingly the only item with a negative loading on the third factor has a positive loading on the first factor. Statements with the highest positive loadings (.66, .65) were, "The RC should encourage residents to visit art galleries" and "The RC should encourage residents to attend operas, plays, and symphonies". Two other statements with high positive loadings (.60, .55) were "The RC should advise his student government officers on how to hold and evaluate meetings" and "The RC should help student government officers to plan programs which are congruent with the goals of the residence hall". The Hoyt reliability for these 20 items was .79. The scale was labeled Liberal Educational Philosophy or Teacher Role. This factor was reasonable since most of the items represent the stated philosophy of the University of Minnesota Residence Counseling program.

Attitudes About Interpersonal Relations.

The last sixty items of the Residence Halls Viewpoints Inventory concerned attitudes about interpersonal relationships. The Hoyt reliability for this set of items with four iterations was .83. Response frequencies, mean item responses, and reciprocal averages internal item weights were examined and 34 items were selected for factor analysis. Three factors accounted for 53% of the common variance and also seemed logical.

The first factor had eleven items which load .21 or higher. Three statements with high negative loadings (.54, .34, .42) were, "If I am riding in a bus, I feel uncomfortable when a stranger starts a conversation with me", "Most students just don't know what's good for them" and "I feel uncomfortable when I talk about my feelings". The only statement having a positive loading (.25) was, "When I think I'll disagree with someone, I try to discuss these differences with him". The Hoyt reliability for these eleven items was .67. The scale was labeled Attitudes About Discussing Personal Feelings.

The second factor had twelve items which load .12 or higher. Three statements with high positive loadings (.46, .33, .33) were, "I try to avoid disagreeing with people who are powerful", "When I'm trying to complete a task I'd like someone to tell me how I'm doing" and "I think that people who work together should not be close personal friends". The statement with highest negative loading (.38) was, "Most people are basically good". The Hoyt reliability for these twelve items was .53. The scale was labeled Attitudes About Power to Influence Others.

The third factor had thirteen items which load .21 or higher. Statements with the highest negative loadings (.58, .49, .45) were, "I feel very tense when I lose an argument", "I think people my own age give the best advice" and "The popular student in college is usually not being his 'true self'". The only statement with a positive loading (.46) was, "I think that two people may look at a problem differently and both be right". The Hoyt reliability for these items was .43. The scale was labeled Attitudes About Accepting Interpersonal Differences.

The Relationship Between the Residence Hall Viewpoints Inventory and Job Performance.

The Hoyt reliability for the four sections and the total rating on the job performance rating for were .87, .77, .69, .78, and .93 respectively. The correlations between the four kinds of job performance ratings; interest in position, supervisory ability, relationships with others, and personal characteristics, ranged from .78 to .82.

Factor matrix scoring weights for the Residence Hall Viewpoints Inventory scales were used in the multiple correlations and canonical correlations. The multiple R between the six Residence Hall Viewpoints Inventory scales and the total performance rating was .29, which is not statistically significant. The canonical correlation of the combination of Residence Hall Viewpoint Inventory scales and the most predictable combination of job performance ratings was .56 which is statistically significant at the .01 level. The beta weights for the canonical R are shown in Table 1.

Residence Hall Viewpoints Inventory scores, obtained during the selection process, provide useful information for predicting subsequent job performance ratings of residence counselors. Among the Residence Hall Viewpoints Inventory scales; student loyalty, attitudes about accepting interpersonal differences and attitudes about the power to influence others have the largest beta weights. While among the job performance ratings, personal characteristics and supervisory ability have the largest beta weights. These beta weights indicate that measures of interpersonal attitudes rather than measures of job viewpoints are more significant factors in predicting job performance ratings of residence counselors. The Job Viewpoint scale, Liberal Educational Philosophy, had one of the smallest beta weights.

Discussion and Conclusion

This study describes significant job viewpoints and interpersonal attitudes of candidates for residence counseling positions at the University of Minnesota. The three Job Viewpoint factors identified were laissez faire role or job involvement, friend role or student loyalty, and teacher role or liberal educational philosophy. The three factors describing interpersonal attitudes were attitudes about discussing personal feelings, attitudes about the power to influence others, and attitudes about accepting interpersonal differences.

Individuals charged with selecting residence counselors should carefully examine the findings from this study which indicate that attitudes about interpersonal relations are important in predicting job performance. No matter how much professional rhetoric student personnel workers use in describing residence counseling, the personality characteristics of the counselors may be most important in predicting job success. Thus selection and training of these staff members might place less emphasis on professionalizing them and more emphasis on personal and social development. The job of the residence counselor can become an important student personnel developmental service for both undergraduate and graduate students who are so employed. Human relations training rather than lectures and discussions about counseling and small group work may be more relevant to the real work of the residence hall counselor. Future research might examine the effects of holding the job of the residence counselor: how does being a residence counselor change an individual?

Studies concerned with selecting residence counselors should also examine the relationship between candidate's attitudes or viewpoints and subsequent student ratings of job performance. It is altogether possible that Head Residents and students evaluate residence counselors quite differently.

Table 1

Beta Weights for Maximum Canonical Correlations of Residence Hall Viewpoints Inventory (RHVI) and Head Residence Counselor Evaluations of Residence Counselor Job Performance

Beta Weights	Predictors Residence Halls Viewpoints Inventory	Beta Weights	Criteria Residence Counselor Job Performance Ratings
-.03	Job Involvement	.38	Interest in Position
.49	Student Loyalty	-.59	Supervisory Ability
-.07	Liberal Educational Philosophy	-.28	Relationship with Others
-.18	Attitudes About Discussing Personal Feelings	.65	Personal Characteristics
-.74	Attitudes About Power to Influence Others		
-.42	Attitudes About Accepting Interpersonal Difference		

References

- Gonyea, G.G., Warman, R.E. Differential perceptions of the student dormitory counselor's role. The Personnel and Guidance Journal. December, 1962, 41, 350-355.
- Hoyle, R.F., Gadza, G.M. Qualifications, trainings, and duties of directors and staff of men's residence halls. Journal of College Student Personnel, June, 1963, 4, 231-234.
- Hoyt, D.F., Davidson, A. Evaluating residence hall advisers. Journal of College Student Personnel, July, 1967, 8, 251-256.
- Murphy, R.O. Administrative practices in utilizing students and staff in residence halls. Journal of College Student Personnel, December, 1964, 6, 109-113.
- Schroeder, R., Down, E. Selection, function and assessment of residence hall counselors. The Personnel and Guidance Journal, October, 1968, 47, 151-156.
- Yarborough, I.M., Cooper, R.A. The present day resident assistant program. Journal of College Student Personnel, June, 1963, 4, 246-249,

UNIVERSITY OF MINNESOTA

Research Bulletin
of the
Office of the Dean of Students

Volume 10, Number 4

February 18, 1970

COLLEGE AND UNIVERSITY STUDENTS EVALUATE RESIDENCE COUNSELORS¹

by

Donald A. Biggs

Student Life Studies

Office for Student Affairs

College and University students should be involved in the systematic evaluation of residence counselors as well as of other student personnel workers. This can improve programs and provide representative social feedback for individual staff members. Presently, on most campuses, student opinions about residence counselors are assessed in a haphazard manner. Supervisors get fragments of information from residents who are vocal and willing to register "gripes". Sometimes, assessments based on global questions about "liking" or "disliking" are used in popularity polls which can intimidate individual counselors. Residents either can be satisfied or dissatisfied with a counselor for numerous reasons. The problem is to describe what influences opinions about residence counselors. This study explores two questions: (1) what are different opinions about residence counselors, and (2) what are the relationships between evaluative opinions and certain demographic and personal characteristics of students.

Studies of opinions about residence counselors have been sparse. Duncan (no date) presents evidence that residents can discriminate between behaviors and activities of counselors who they judge to be effective or ineffective. He used these data to construct a forced-choice rating scale for students to evaluate counselors. Van Pelt (no date) predicted counselor ratings on the Duncan scale with their scores on the Edwards Personal Preference Schedule and sex. He concludes that sex was the most discriminating of the predictor variables, and his explanation was that either women were better accepted than men by the counselees regardless of competency or they were more effective counselors. Generalizations about student opinions concerning residence counselors should be limited until further research describes the correlates associated with differing opinions.

Information concerning various opinions about residence counselors could be of practical use to those concerned with selection, training, and supervision of residence counselors. Student personnel administrators need to know more about the factors influencing these opinions so that they can accurately diagnose, interpret, and constructively advise counselors and residents. Residents may report that they are satisfied or dissatisfied with a particular hall staff member, but these feelings could be a reflection of their own expectations, their attitudes about the concept or idea of a residence counselor, their relationships with a certain residence counselor, or their age and year in school. Any practical use of residents' opinions as a criterion for evaluating counselors should be based on a consideration of how these variables interact and influence opinions.

The objective of this investigation was to describe student opinions about residence counselors. Four types of opinions were assessed: (1) topics for discussion with a competent counselor, (2) evaluation of the concept of a residence counselor, (3) satisfaction with present residence counselor, and (4) description of present residence counselor's behavior and activities. Attempts also were made to observe relationships between these different kinds of opinions and certain demographic and personal characteristics.

Method

Instrument

The Residence Counselor Survey was developed as a means of assessing student opinions about residence counselors. The inventory included four sections. The first had 23 possible topics for discussion with a competent counselor. The assumption was that responses to this section were a reflection of the student's concept of a competent counselor. Topics concerned the student's relationships with his roommates, his relationships with parents, and his relationships with the opposite sex. Other topics included educational - vocational problems and personal and ethical decisions. There were also topics having to do with the day to day operation of the residence halls. Students used a five point scale to indicate willingness to discuss each topic with a competent residence counselor.

The second part of the survey includes fifteen bi-polar adjectives from Osgood's Semantic Differential (Osgood, Suci, and Tannenbaum, 1957). This series of adjectives can be considered a measure of the evaluative dimension of a concept. Students were asked to indicate what the term "Residence Counselor" meant to them using the series of pairs of adjectives.

The third section of the rating form had three items about satisfaction with residence counselors. These were adapted from the College Satisfaction Blank developed by Roy (1949). Two questions concerned satisfaction with your present counselor and one question satisfaction with the present system of residence counseling.

The fourth part of the rating form was composed of 19 items which were descriptions of residence counselor job behaviors and personal qualities. The students used a five point scale to indicate whether each of the statements was generally a true or false description of their present residence counselor. The items included the counselor's willingness to help with study problems, his willingness to spend time talking with residents, and his interest in helping residents with their personal problems. Other statements concerned how the counselor enforced rules, his ability to explain University policies and practices, whether he was a good source of information about either student activities or academic matters, and whether he regularly advised student government officers. There were also items about whether he was friendly, set a good example, and had the residents' interest in mind.

Sample:

The Residence Counselor Survey was mailed to 1,800 residents in eleven residence halls on the University of Minnesota, Minneapolis and St. Paul campuses. About 734, or 41% of the residents completed the rating form. The sample included: 142 freshman males, 150 freshman females; 92 sophomore males, 92 sophomore females; 65 junior males, 64 junior females; 33 senior males, 26 senior females; 38 male graduate students and 32 female graduate students.

The mean percentage of returned surveys from the eleven residence halls ranged from the two lowest of 8.5 percent and 25 percent to the two highest of 49 percent and 70 percent. The mean number of quarters of residence hall living varies from 2.9 for freshman males and females to 9.7 for senior females. The mean ages of the sample went from 18.4 years for freshman males and females to 29.2 years for female graduate students. The mean grade point averages ranged from 2.65 for freshman males and senior males to 3.47 for male graduates. The mean number of miles from home varies from 13.7 miles for female freshman to 67.7 miles for female graduate students.

Statistical Analyses:

The responses were tabulated for each of the four parts of the rating form. Two way analysis of variance (ANOVA) was used to examine responses to the various sections. The independent variables were sex and year in school in one set of two-way ANOVA's and sex and satisfaction in the other set. The sample was divided according to total score on the satisfaction section of the rating form into three groups: top one-third or high satisfaction, middle one-third or average satisfaction, and lower one-third or low satisfaction. Pearson product moment correlations were used to examine relationships between different kinds of evaluative ratings and certain demographic and personal characteristics.

Results

Topics for Discussion with a Competent Counselor

Students differed in the topics they would discuss with a competent counselor but a common group of topics was similar among male and female students in all classes

The two-way ANOVA's for each of the twenty-three topics by year in school and sex, provided 17 out of 23 possible significant F ratios for year in school, and 4 out of 23 possible significant F ratios for sex. No interaction effects were significant. For the most part, differences in willingness to discuss these particular topics with a competent counselor are more related to class in school than to sex. Lower division students are more willing to discuss more topics with a competent counselor.

Some topics for discussion with a competent counselor were similar for students in all five classes. Residents, regardless of year in school, would discuss problems of not being able to study because of noise on the floor, finding things missing from their rooms, organizing residents to change rules in the residence halls, and dirty restrooms. They were uncertain as to whether they would discuss arguments with their roommates and they would probably not discuss arguments with their parents. Male students would be less likely than females to talk about such topics as things missing from their rooms, dirty restrooms, and changing rules in the residence halls. As might be expected, males were less willing than females to discuss feelings of lonesomeness.

Evaluating the Concept of a Residence Counselor

A two-way ANOVA for the Semantic Differential scores with year in school and sex as independent variables was completed. The F ratios for year in school and sex were both significant. There was no interaction effect. The upper division and graduate students evaluated the concept of a residence counselor more negatively than did lower division students. Further, males were more negative than females about the concept of a residence counselor. A two-way ANOVA for semantic differential scores with satisfaction and sex as the independent variables yielded significant F ratios for both satisfaction and sex with no interaction effect. Satisfied students were more positive about the concept of a residence counselor.

Satisfaction With my Present Residence Counselor

Are there differences in student satisfaction with residence counselors that are related to either sex or year in school? The two-way ANOVA's for the three satisfaction questions and total satisfaction score, by year in school and sex, yielded significant F ratios for each of the comparisons. There were no interaction effects. The mean satisfaction scores tend to be higher for freshmen and sophomores than for juniors, seniors, and graduates. The mean satisfaction scores were higher for females than males. Lower division students are more satisfied than upper division students and females are more satisfied than males.

Differences in student concepts about a competent counselor may be related to satisfaction with their present residence counselor. Two-way analyses of variance with sex and satisfaction as the independent variables were used to examine students' willingness to discuss 23 possible topics with a competent counselor. These two-way ANOVA's had 22 out of 23 possible significant F ratios for satisfaction, 10 out of 23 possible significant F ratios for sex and one interaction effect.

Residents who are willing to discuss more topics with a competent counselor are more satisfied with their present counselors. It may be that students who are willing to discuss a limited number of topics with a competent counselor have such narrow expectations for counselors that they are more often dissatisfied. Of course, it is not possible to know the direction of the relationships between concepts of a competent counselor and satisfaction. But, there is some limited information that satisfaction with counseling is related to personality variables (Berdie, Pilapil, and Im, 1968). Females, again, are apt to discuss more topics with a competent counselor than are males.

Descriptions of Present Residence Counselor

Student descriptions of present residence counselors vary by class and sex. The two-way ANOVA's for each of the 19 descriptions yielded five out of 19 possible significant F ratios for year in school, ten out of 19 possible significant F ratios for sex, and no interaction effects. Upper division students more often report the following descriptions were less true when applied to their counselor: 1) he

is a good source of information about student activities, 2) he is willing to help with study problems, 3) he is willing to spend time talking with residents, 4) he is genuinely concerned with the welfare of individual residents, and 5) he is interested in helping residents with their personal problems.

Female students indicated the following descriptions were more true when applied to their present residence counselor: 1) he enforces rules fairly, 2) he is willing to help with study problems, 3) he is an effective counselor, 4) he has the residents' interest in mind, 5) he is willing to spend time talking with residents, 6) he is genuinely concerned with the welfare of individual residents, 7) he is interested in helping residents with their personal problems, 8) he is friendly, 9) he supports the policies of the Office of the Dean of Students, and 10) he encourages residents to visit art galleries, plays, and symphonies.

Two-way ANOVA's with sex and satisfaction as the independent variables were used to examine differences in the 19 descriptions of residence counselors. There were 19 out of 19 possible significant F ratios for satisfaction, six out of 19 possible significant F ratios for sex, and six out of 19 possible interaction effects.

Residents who were more satisfied with their present residence counselors described them as behaving differently than did those residents who were less satisfied. There were also sex X satisfaction interactions on the following descriptions: 1) he understands the resident's point of view, 2) he is friendly, 3) he sets a good example, 4) he protects students from inappropriate University regulations, 5) he encourages residents to visit art galleries, plays, and symphonies, and, 6) he can be trusted with private information.

Evaluative Opinions About Residence Counselors

A second problem in the present study was to describe relationships between different kinds of evaluative opinions about residence counselors. Three methods of evaluating residence counselors were used in the rating form: 1) Students were asked if the statement, "he is an effective counselor", was true or false when applied to their present residence counselor; 2) Students were asked about their degree of satisfaction with their present residence counselor; 3) Students were asked to evaluate the meaning of the term residence counselor using 15 bi-polar evaluation adjectives from the Semantic Differential. Table 1 shows the inter-correlations between these three opinions, age, grade point average, miles from home, and number of quarters of residence hall living. The measure of satisfaction was significantly correlated with the semantic differential, as well as responses to the statement, "he is an effective counselor". The high correlations between these evaluative opinions lend some construct validity to all three. This data also suggests that satisfaction with a residence counselor is related to how the concept of a residence counselor is evaluated, and how the effectiveness of a particular counselor is evaluated.

Summary and Conclusion

The findings from this study have raised some interesting questions about student satisfaction with their residence counselors: 1) Do expectations about a competent counselor influence residents' satisfaction with a counselor; 2) Do counselors of residents who are satisfied behave differently than counselors of dissatisfied residents?

Practically, what are the implications of this research? Residents' ideas about competent counselors seem to reflect their class or year in school rather than sex differences. This could indicate that grouping male and female lower division students with active counselors would be effective. Hoyt and Davidson (1967) found that counselors judged to be effective by both residence hall business managers and head counselors were more prone to endorse "activity" type job roles while ineffective advisors endorsed "power" type job roles. Upper division students may also wish to have a kind of residence counselor but he would probably have to define his role quite differently.

The relationship between satisfaction and year in school is puzzling. Upper division students are more dissatisfied than lower division students. For males, there is a significant negative correlation between satisfaction and number of quarters of residence hall living. There are several possible explanations. At the time the student rating forms were completed, there was a large number of complaints about operational procedures in the residence halls housing a majority of upper division students. It is also possible that satisfaction is related to certain personality characteristics, and that residence halls attract a select group of upper division students who have such characteristics. Further, it may be that upper division residence counselors do not meet the unique needs of upper division residents.

The term residence counselor may be a problem. Residents seem rather negative about the concept. This is particularly true of upper division and graduate students. Student opinions might be quite different if these residence hall staff were identified in some new way. This should not only be a matter of name change but include a change in how the residence counselors for upper division and graduate students are selected and maintain their jobs. Residence might elect them.

Some may ask, do students like or approve of residence counselors? Any yes or no answer would be an overgeneralization. Opinions about residence counselors are influenced by an individual's year in school, sex, his concept of a competent counselor, and the behavior of his residence counselor. The important problem which needs to be examined in future research is, why are students satisfied or dissatisfied with their residence counselors? The present study has only provided some hints that might be useful.

Table 1

Correlates Associated With Student
Evaluations of Residence Counselors

Intercorrelations For Males (N=372)								
		1	2	3	4	5	6	7
Quarters of Residence Hall Living	1	1.00						
Age	2	.20 ¹	1.00					
GPA	3	-.01	-.00	1.00				
Miles From Home	4	-.02	.17 ¹	.11 ²	1.00			
He is an Effective Counselor	5	.16 ¹	.05	.02	-.04	1.00		
Semantic Differential	6	-.07	-.02	-.08	-.02	-.26 ¹	1.00	
Satisfaction	7	-.14 ¹	-.08	-.06	-.02	-.42 ¹	.73 ¹	1.00

Intercorrelations For Females (N=377)								
		1	2	3	4	5	6	7
Quarters of Residence Hall Living	1	1.00						
Age	2	.17 ¹	1.00					
GPA	3	.08	.11 ²	1.00				
Miles From Home	4	.01	.25 ¹	.12 ²	1.00			
He is an Effective Counselor	5	-.03	-.10	.09	.07	1.00		
Semantic Differential	6	-.05	-.10	-.08	-.10	-.34 ¹	1.00	
Satisfaction	7	-.05	-.04	-.11 ²	-.05	-.56 ¹	.76 ¹	1.00

¹significant at .01 level²significant at .05 level

REFERENCES

- BERDIE, R.F., PILAPIL, B., & IM, I. J. Graduating seniors' satisfaction with the University. Minneapolis, Bureau of Institutional Research, The University of Minnesota, December, 1968.
- DUNCAN, J. F. Construction of a forced-choice rating scale for student evaluation of residence hall counselors. Mimeo. report, Corvallis, Oregon: Oregon State University, no date.
- HOYT, D. P., and DAVIDSON, A. Evaluating residence hall counselors. Journal of College Student Personnel, July 1967, 8, 251-256.
- OSGOOD, C. E., SUCI, G. J., & TANNENBAUM, P. H. The Measurement of Meaning. Urbana, Illinois: University of Illinois Press, 1957.
- ROY, H. L. The construction of a college satisfaction index. Ph.D. dissertation, The University of Minnesota, Minneapolis, 1949.
- VAN PELT, N. A study of the Edwards Personal Preference REcord as related to residence hall counseling success. Mimeo. report, Alamosa, Colorado: Adams State College, no date.

1112C
9 28 54r

UNIVERSITY OF MINNESOTA

Research Bulletin
of the
Office of the Dean of Students

Volume 10, Number 5

February 23, 1970

A COLLEGE HISTORY OF 215 UNIVERSITY OF MINNESOTA STUDENTS
(and an Addendum)

by

Ralph F. Berdie

Student Life Studies

Office for Student Affairs

The University of Minnesota, like many other universities, knows much more about its entering freshmen than about its graduating seniors. Freshmen data are easier to collect. After four years of college, many students become resistant to questionnaires or interview surveys; students seldom are assembled so that data can be collected easily; and appropriate samples of students are difficult to identify. Consequently, information regarding college experiences seldom is as accurate or adequate as information about pre-college experiences. Often what we know about college students is based on rather poor samples and makeshift observations.

This University has participated in the American College Testing Program since its inception in 1959. For several years the program has provided to the University information regarding its entering freshmen. Recently information has been made available regarding the college experiences and reactions of some students who were admitted as freshmen in 1965.

In the spring of 1969, the research office of ACT sent to the University a list of 900 names of freshmen who entered in 1965. These names were selected at random from the names of the 9000 freshmen who entered the University four years earlier. The University was able to find addresses for and presumably deliver questionnaires to 420 of these 900 students. Completed questionnaires were returned by 215 students or about 50 percent of the students to whom questionnaires were mailed. This was only 24 percent of the 900 names and fewer than three percent of all entering freshmen.

The sample may be biased; we do not know. The information reported here must be regarded simply as information about 215 students who entered the University four years prior to completing the questionnaire. Any generalizations will have to be made with extreme care and one seriously may question whether the presentation of such inadequate information is worthwhile. The only justification is that the information is the best available and it may provide some incentive to the gathering of more reliable data.

Majors and Occupations

In 1969, the 215 respondents described their current majors as distributed¹ among 44 specific categories grouped in the more general categories listed here:

Social Sciences	
Religion	26 percent
Education	
Administrative	
Political	12 percent
Persuasive	

¹Here and elsewhere, percentages do not always total 100 because of rounding off decimals and incomplete responses.

Business and Finance	7 percent
Science	14 percent
Engineering Agriculture Technology	13 percent
Medical Fields	8 percent
Arts and Humanities	14 percent
Undecided	1 percent
Other	4 percent

No one specific category attracted a large proportion of students: ten percent were in engineering, nine percent on elementary education, seven percent in political science, and six percent in sociology.

The current vocational choices of students also were reported and they closely resembled the academic majors.

Social Sciences Religion Education	27 percent
Administrative Political Persuasive	13 percent
Business and Finance	4 percent
Science	8 percent
Engineering Agriculture Technology	10 percent
Medical Fields	10 percent
Arts and Humanities	6 percent
Undecided	14 percent
Other	8 percent

Of the total group, six percent had selected their vocations prior to high school, 25 percent in high school, eight percent when they were college freshmen, 22 percent as college sophomores, 14 percent as college juniors, and 13 percent

as college seniors. The "undecided" senior is not a rare bird. Forty-six percent had not changed their major while they were in college; 36 percent had changed their vocational choice once; ten percent had changed their vocational choice twice; and seven percent had changed their vocational choice three or more times. Vocational choices of college students are far from "fixed". For this particular sample, vocational choice is the product of a process that begins for many students long before they arrive in college but which does not reach a decision until the senior college year. The fact that one quarter of these students had not chosen a vocation until after two years of college suggests that upperclassmen, as well as lower division students, are, or should be, paying much attention to vocational choice.

Just one-half of these students said that following graduation they planned to find a job; fourteen percent planned to attend graduate school (an additional seven percent said they would go to graduate school if they were admitted); and fifteen percent planned to enter the armed service. Four percent planned to continue on jobs they already had and only two students, or fewer than one percent, planned to become housewives.

Most of the students described themselves as University seniors; 81 percent used that classification. Eleven percent described themselves as juniors and four percent described themselves as sophomores. Six, or three percent, of these students already were graduate students. Of students who were not seniors, 24 percent said they were not seniors because they had withdrawn from school, one percent because they had been working, one percent because they had repeated courses, eighteen percent because they had changed their major, one percent reported they had been to school part time, and the remainder gave other reasons.

The students were asked to describe their academic status. Six percent reported that they had grade point averages of A; 35 percent reported they had grade point averages between B and A, and 53 percent reported they had grade point averages of C or C+. Fewer than one percent reported they had grade point averages of D+. They also reported their grade point averages in their major fields which were significantly better than their total grade point averages, with fourteen percent reporting GPA's of A and sixty percent reporting GPA's of B.

In reporting plans for future education, 35 percent reported they intended to earn no more than a B.A., 45 percent reported they planned to earn an M.A., and eighteen percent reported they planned to earn doctorate or professional degrees (seven percent planned to earn a Ph.D.).

Thirty-seven percent said their most important goal in attending college was to secure vocational or professional training and 35 percent reported the most important goal was to develop the mind and intellectual abilities. Seven percent reported they were here mainly to earn a higher income and four percent reported they were here to develop a satisfying philosophy. Not a single student said that his major purpose in attending the University was to develop moral standards.

Finances

Most students named their family and work as the major sources of college funds. Fourteen percent said that scholarships, fellowships, or grants provided a major source of funds and thirteen percent named loans. Twenty-eight percent had received loans and 31 percent grants and scholarships.

Ten percent of the students reported they had not worked while attending college; 33 percent reported that some of the time they worked part time; 27 percent reported that all of the time they worked part time; 27 percent reported they had worked on both part time and full time jobs; and two percent reported they had worked full time during some of the time they were in college. Only one percent reported they had worked full time during their entire college career.

College Residence

The students were asked where they had lived while attending the University during each of the four years. Relatively more students during their freshman year and fewer during their senior year lived at home or in dormitories and fewer freshmen and more seniors lived in apartments. For example, during the freshman year 22 percent lived in residence halls, 67 percent lived at home with their families, and five percent lived in apartments. During the senior year 50 percent lived at home with their families, six percent lived in residence halls, and 29 percent lived in apartments. During the year 1968-69, 22 percent of the students reported they spent fewer than ten minutes commuting to and from college each day; 30 percent reported they spent between eleven and 30 minutes; 29 percent said they spent between 31 and 60 minutes; and eighteen percent reported they spent more than one hour traveling to and from college. These students during their first year in college tended not to have cars; only 34 percent reported they had a car on the campus, but during their senior year, 67 percent reported they had cars.

Most of these students, 75 percent, were single, eleven percent were engaged, and thirteen percent married. Only two percent reported they had children.

The reproductive plans of these students well might provide some concern to persons worried about the population explosion. They were asked, "In your opinion, how many children make an ideal family?" Responses were:

None	3 percent
1	1 percent
2	28 percent
3	37 percent
4	21 percent
5	5 percent
6 or more	5 percent

Over two-thirds of these students wished to do more than reproduce themselves.

The Extra-Curriculum

Students were asked to report the extra-curricular activities in which they had participated. Below are listed the categories of activities and the percentages of students reporting they had participated some or a great deal in these activities.

Music	20 percent
Writing	9 percent
Student government	17 percent
Science clubs	10 percent
Debate	2 percent
Dramatics	7 percent
Academic clubs	37 percent
Intramural athletics	38 percent
Varsity athletics	7 percent

Each student was asked to identify his main extra-curricular activity and then asked why he began to participate in that particular one. Thirty-one percent said they had selected that activity because they saw it as an opportunity to develop a special talent. Twenty-two percent said they selected the activity because it was something they had done in high school. Twelve percent selected the activity because someone asked them to participate. Twenty-seven percent said they had not participated in extra-curricular activities.

An additional attempt was made to obtain information about leadership achievement by asking a variety of questions. Below are listed the proportions of students reporting each of the listed experiences.

Active member of four or more student groups	6 percent
Elected as a member of a campus-wide student governing body	5 percent
Elected as an officer of a campus-wide student body	1 percent
Appointed to one or more student offices	10 percent
Served on a student-faculty committee	9 percent
Elected president of a special interest club	3 percent
Received an award of special recognition of any kind of leadership	14 percent
Organized a college political group or campaign	4 percent
Worked actively in an off-campus political campaign	16 percent
Initiated or organized a student movement	1 percent
Won a prize, award, or special recognition for scholarship	27 percent
Gave an original paper at a convention or meeting sponsored by a scientific society or association	1 percent
Author or co-author of scientific or scholarly paper published in a scientific journal	2 percent
Member of a student honorary scientific society	4 percent

Publicly performed on two or more musical instruments (including voice) which do not belong to the same family of instruments	7 percent
Took part in an independent study or honors program for outstanding students	17 percent
Produced on my own (not as part of a course) one or more works of art, such as drawings, paintings, etc.	19 percent

Students were asked about the extent to which they had discussed with friends, read about, or listened to lectures about such things as sports, student protest movements, problems of American farmers, and minority groups. For example, 80 percent reported they had discussed sports, 82 percent said they had read a newspaper or magazine article, 25 percent said they had attended lectures, and 31 percent said they had read books about sports.

Most students had discussed and read articles about student protest movements although only 41 percent had attended lectures and thirteen percent had read related books. Relatively few students had studied farm problems but most students had paid considerable attention to minority problems. Pollution and urban problems also obtained considerable attention from these students, and 76 percent had discussed, 78 percent read articles, 47 percent attended lectures about, and 29 percent read books about the population explosion.

Students were asked to describe their college using a list of thirteen characteristics. The proportions of students saying that the characteristics or adjective did and did not apply to their college are listed below.

	<u>Did apply</u>	<u>Did not apply</u>
Friendly students	92 percent	7 percent
Intellectual	91 percent	9 percent
Straight-laced	77 percent	22 percent
Party school	80 percent	20 percent
Religious	29 percent	70 percent
Friendly faculty	89 percent	10 percent
Rigid rules	65 percent	34 percent
Keen competition for grades	92 percent	7 percent
Impersonal	90 percent	9 percent
Much school spirit	35 percent	64 percent
Liberal	94 percent	4 percent
Informal	96 percent	3 percent
Good teaching	96 percent	4 percent

Students were asked to describe the extent they were satisfied with the University. Five percent checked the response, "This is only a fair college, and there are many others which would probably suit me better." Forty-seven percent checked the response, "This is a good college for me, but there are a few that I think are better." Forty-six percent checked the response, "To my knowledge, this is the best possible college for me." These results agree with results from other studies. Graduating seniors are relatively satisfied with the University, with a

small proportion quite dissatisfied, a significant proportion very well satisfied. The results regarding satisfaction agree with those reported in a more extensive study of satisfaction by Berdie (1969).

In general, students regarded their college as intellectual, liberal, competitive, and impersonal and they were not impressed by the amount of school spirit and personal interest that prevailed. These results also correspond with those of earlier studies (Berdie, 1966). Students reported that their greatest sources of satisfaction in college were their courses in their field of specialization, the special skills they developed, their associations with other students, and their associations with others having the same interests. Friendships were major sources of satisfaction in college. Most students considered involvement in social, political, and current issues a relatively minor source of satisfaction.

Seventy-six percent of the students said that college had influenced them considerably in developing vocational knowledge and 65 percent said it had helped them develop vocational skills. Large proportions thought that college had increased their self-confidence, their ability to get along with others, their appreciation of fine arts, their independence of their parents, their training for family life, and their development of a life philosophy. In general, most students thought that college had contributed both to their vocational preparation and to their personal development.

Addendum: 211 University of Minnesota Graduates One Year After Graduation

Related information is available for a similar sample of Minnesota students. In the spring of 1968, a random sample of 177 men and 123 women was selected of students who expressed the intention of receiving a baccalaureate degree at the end of Spring Quarter, 1968. Of this group, 79 percent returned completed questionnaires designed to elicit their satisfaction with the University.

One year after graduation, in the spring of 1969, the students who had returned the questionnaire were asked to complete a second questionnaire which provided, among other things, information regarding their current status. Of the 237 students in that sample, 211, or 89 percent, returned the questionnaire. This group contained 127 men and 84 women.

Of this group, 46 percent of the men and 35 percent of the women were married one year after graduation. Sixty-one percent of the men and 77 percent of the women were employed on full time jobs, seventeen percent of the men were in military service, nineteen percent of the men and ten percent of the women were doing advanced study, and five percent of the women described themselves as housewives. Two of the men and two of the women described themselves as unemployed. Of the men, 28 percent said they had completed their military service.

The respondents who were employed described their jobs and 70 percent of the working men and 75 percent of the women described their jobs and professional in nature. Nine percent of the men and seven percent of the women said they were in managerial occupations and four percent of the men and three percent of the women who were employed said they were in service occupations.

Of the 211 respondents, 56 persons said they had already had some graduate or professional school, 27 had extension or evening courses, and eight had training on the job.

Students were asked how closely their present jobs corresponded to their field of specialization in college. Forty-seven percent of the employed men and 62 percent of the employed women said they were in the same field, and 29 percent of the men and fifteen percent of the women said they were in related fields. Almost one-quarter of the men and women said that their present position was in a field other than that of their college major.

When graduates responded regarding the extent of their job satisfaction, 25 percent of the employed men and 44 percent of the women said they were thoroughly satisfied and would not change their job and an additional 44 percent of the men and 32 percent of the women said they were satisfied but would consider changing jobs. Thus, about 72 percent of the graduates who were employed liked their jobs. An additional three percent said they were indifferent; eighteen percent said they were somewhat dissatisfied; and seven percent said they were completely dissatisfied.

Students also were asked how their professional or occupational preparation received in the University compared with recent graduates or other institutions with whom they have had contact. Thirteen percent of the graduates said their training was very much above average; 37 percent said it was somewhat above average; and 43 percent said it was about average. Only eight percent described their training as below average. Thus, 92 percent of these former students considered their occupational preparation average or above.

Students were asked the same question concerning their general and cultural education and results were quite similar. Eleven percent of the students said they thought they were very much above average in terms of their education, 42 percent said they were somewhat above average, and 46 percent said they were about average. Only one percent said that they thought their cultural or general education was below average. Students seem to think that their education has been at least adequate.

Graduates also were asked what decisions they would make if they could relive their academic experiences. Thirteen percent of the respondents reported they would attend a different college or university and ten percent said they would attend a small college for the first two years and then transfer to the University. Two percent said they would not attend college but would select another kind of training and 30 percent said they would select another college major or make a different academic or vocational choice. Sixteen percent of the students said they would spend less time on social activities and study more and 48 percent of the graduates said they would become more involved in extra-curricular and social activities. The proportion saying they would become more active in University affairs was even larger, 54 percent. These graduates, for the most part, believed that they had not exploited adequately all of the resources provided by the University and had not participated enough in the operation of the University.

Graduates also were asked how they would describe their feelings toward their total life situation one year after graduation. Thirty-five percent reported that they were very happy with the way things were and another 35 percent reported they were happier than average. About 20 percent indicated they were as happy as the average person and eleven percent reported they were less happy than the average person.

Conclusion

Information from these two small and perhaps biased samples of students who completed their undergraduate work at the University provides little basis for generalization so conclusions must be limited to these samples.

The academic majors, the occupational choices, and the occupation entered after college for most students are the same. A few students enter occupations only distantly related to their academic major. A large proportion of occupational decisions are made after students enter college and many students do not make these decisions until after at least two years of college. Vocational exploration and counseling, or equivalent experiences, must be available to students throughout the four years of college.

Of the seniors included in the ACT sample, a majority planned on advanced education but fewer than 25 percent planned to continue their education immediately after graduation. Of the other sample, one year after graduation, sixteen percent were engaged in advanced study as their major activity and 27 percent had attended graduate or professional school since graduation. An additional 25 percent had some other advanced education. Thus in the first sample, 63 percent planned an advanced study; in the second sample, 52 percent had completed some advanced study within the first year of graduation. Hopefully, formal education for most graduates does not terminate with the Baccalaureate. Consideration of information about plans for advanced education must take into account the type of education and when it is planned.

About fifteen to 20 percent of the men either plan to or actually do enter military service shortly after graduation. Few of the women immediately become housewives.

For the most part, students who graduate tend to have superior academic records. Inferences from another study provide evidence that the academic grades of graduating seniors are about the same during each of their years in college.

Almost all students obtained work experience while in school and most of them depended on jobs to a large extent for financial support. Families tended to provide the rest of the money, and relatively few students obtained scholarships or grants. Loans provided a significant source of support for a relatively large proportion of students.

Most students do not marry immediately after graduation but most students do plan on eventually marrying and having families. Students express an awareness of problems of population explosion but in terms of their own preferences they express a desire to have three or more children.

In general, many students are quite enthusiastic about their experiences in the University. They regard themselves as well educated persons, both in terms of general education and occupational preparation, and most students who remain in the University long enough to graduate express the opinion that choosing the University was a good decision.

Students who have completed their work at the University express regret that they had not participated more in the many opportunities available on the campus, and particularly they regret the fact that they had not been more active in influencing decisions in the University which affected them. Perhaps the greater visibility of student effort to influence decisions today makes students who have left here more aware of opportunities they have missed.

The evidence adds to that already available which suggests that students who master the University sufficiently to remain here and receive degrees feel satisfied with their experiences and express considerable respect for the institution, but at the same time, they express regret that they had failed to use all of the opportunities offered to them by the University.

References

- BERDIE, R. F. College expectations, experiences, and perceptions. Journal of College Student Personnel, 1966, 7, 336-344.
- BERDIE, R. F., PILAPIL, B., and IM, I. J. Graduating seniors' satisfaction with the university. American Educational Research Journal. March, 1970, in press.

112
S. 11-11

UNIVERSITY OF MINNESOTA

Research Bulletin
of the
Office of the Dean of Students

Volume 10, Number 6

February 27, 1970

HIGHER EDUCATION AS EXPERIENCE: THE BEHAVIOR OF UNIVERSITY STUDENTS

by

Ralph F. Berdie

Student Life Studies

Office for Student Affairs

ACKNOWLEDGMENTS

Much of the analysis on which this report is based was completed by Mr. Gary Hanson and by Miss Elizabeth McIntosh. Appreciation also is expressed to Miss Kay Gonnerman for typing this and other manuscripts.

Psychologist, philosopher, and educator each defines experience in his own way. A philosophical definition states that experience is the totality of the cognitions given by perceptions: all that is perceived, understood, and remembered. An educational one defines experience as knowledge or practical wisdom gained from what one has observed, encountered, or undergone. Other definitions limit experience to particular instances, processes, or facts of personally observing, encountering, or undergoing something. An experience may simply be something that a person has done or that has happened to him, or it may be something that has affected or had an impact on him. Even if one admits that all experiences affect the experiencer, one must recognize that effects vary and the impact of some experiences is insignificant, of others, consequential.

John Dewey defined education as experience and considered the function of the teacher and the school to provide experiences to students. He recognized that not all experiences were worthwhile and some might be detrimental when viewed in light of the educator's role. Dewey stated,

"The belief that all genuine education comes about through experiences does not mean that all experiences are genuinely or equally educative. Experience and education cannot be directly equated to each other. For some experiences are mis-educative. Any experience is mis-educative that has the effect of arresting or distorting the growth of further experience. An experience may be such as to engender callousness; it may produce lack of sensitivity and responsiveness. Then the possibilities of having richer experiences in the future are restricted. Again, a given experience may increase a person's automatic skill in a particular direction and yet tend to land him in a groove or rut; the effect again is to narrow the field of further experience." (1938, p. 25-26)

In spite of the fact that the occurrence of experiences can be established more reliably and more validly than can the impact of the experience on the individual, most efforts to assess education have been observations of changes in students produced by educational experiences. The assessment of educational impact requires assumptions, measurement, and observation techniques, and experimental and statistical analyses which frequently lead to tenuous conclusions. The inferences regarding education based on observation of the occurrence of experiences also require assumptions, many of which are questionable, but educators should be concerned with the questions of whether something has happened, as well as with the question concerning the impact of the happening on the individual.

Society assumes that colleges and universities have an impact on students. Professors who teach students, taxpayers and donors who finance institutions, parents who enroll students, and students themselves all expect that something will happen to them in college. Serious questions were raised regarding this assumption when Jacob (1957) published a book summarizing research on the impact of college and reported that most research findings suggested college had little or no impact on students. A comprehensive study of the American Counsel on Education reported by Astin and Panos in 1969 concluded that whatever changes did occur in students while in college were more a function

of the characteristics of students at entrance than a function of the uniqueness of the institution. Little is known regarding how and how much colleges change students.

This is not surprising when one considers the individual differences in patterns of experiences of college students. Even in a small, relatively homogeneous college, few students have the same experience pattern. A few students participate in athletics, a few students participate in theatrical activities, a few students belong to fraternities, a few students take chemistry, a few students take music, a few students associate with a Quaker activist professor, a few students become acquainted with the president. The development of students who participate in athletics may be quite different from the development of students who do not and who do participate in something else. Lumping all college experiences together, calling this the college experience, and attempting to determine the impact of college may be a waste of effort in light of the differences in students' behavior histories.

Emphasis should be shifted from observations of the impact of college to observations of the impact of specified college experiences. Before this can be done, however, more must be known about these experiences and techniques must be developed for estimating their occurrence.

The purpose of the project described here was to explore techniques that might be useful in counting and describing student experiences in college and to study relationships among the experiences observed and between these experiences and other characteristics of students.

Little systematic information is available concerning the experiences of students have while registered at the University of Minnesota. In addition to a broad curriculum and rich and related instructional, library, and laboratory resources, the University provides a rich source of experiences for students who have access to cultural, recreational, social, and athletic programs.

A purpose of this study was to determine the extent to which students in a defined sample transformed these opportunities into personal experiences. To what extent do students attend lectures outside of the classroom, the theater, concerts, football games, and dances? How much and what do they read? What associations do they have with other students and faculty members? How are these experiences related to other characteristics of the student? To the college in which he is registered? To his parental background? To what extent are the experiences he has in college related to those reported prior matriculation?

Method

Almost every freshman entering the University of Minnesota in the Fall of 1966 was asked to complete an inventory during the late summer or early fall as he participated in the orientation and registration program for new students. Students were told that the responses to the inventory would be used for research purposes only. A copy of the inventory is included in the appendix. The eight page inventory of Pre-college Experiences asked for, in addition to identifying information, occupation of father, education of parents, and availability in the home of 37 items or possessions, extending

all the way from world globes, basketball hoops, and chess games, to boats, skiing equipment, and original paintings or drawings. Students also were asked to check from a list of 35 magazines those regularly found in the home and to indicate how many books were in their home. A list of 35 authors was presented and each student was asked to indicate if he had read a book by the author, had heard of him but had never read a work by the author, or had never heard of him. Other questions concerned organizations to which families belonged, experiences at libraries, nursery school, or kindergarten, attendance at art galleries, concerts, etc. Questions were asked regarding the extent of traveling students had done and names of books they had read during the last year.

Information derived from this Pre-College Experience Inventory was reported in research bulletins in July and November, 1967. For those analyses, a sample of 200 persons was drawn at random from the males in the College of Liberal Arts, another sample from the Institute of Technology, and a third sample from the females in the College of Liberal Arts.^{1, 2}

In the spring of 1968, when these students presumably were completing their second year in the University, another questionnaire, an Inventory of College Experiences, was mailed to the 200 students included in the Arts College male sample, the Arts College female sample, and the Institute of Technology male sample. A copy of that inventory also is included in the appendix.

An error was made in the selection of questionnaires of persons to be included in the sample and consequently the freshman sample for the Institute of Technology contained 198 rather than 200 students. Two weeks after the sophomore questionnaire had been mailed to the students, a reminder was sent to them, and two weeks after that, another copy of the questionnaire and an accompanying letter mailed to the non-respondents. Table 1 shows the number and percent of students who completed the sophomore questionnaire.

Insert Table 1 about here

Of the 598 students in the sample, 423, or 71 percent provided information on the sophomore questionnaire. Among the Arts College males, 67 percent cooperated, but among the Arts College females 72 percent, and among the Institute of Technology males 74 percent returned the inventory. Of all the questionnaires, excluding those not delivered because of inadequate address or death, 76 percent were returned.

1. Berdie, R.F. Pre-College Experience of University of Minnesota Freshmen. Minneapolis: Research Bulletin of the Office of the Dean of Students, University of Minnesota, Vol. 9, No. 1, July 15, 1967, 8 pages mimeographed.

2. Berdie, R.F. Are Economically Needy Minnesota Freshman Culturally Deprived. Minneapolis: Research Bulletin of the Office of the Dean of Students, University of Minnesota, Vol. 9, No. 2, November 1, 1967, 27 pages, mimeographed.

Table 1

Number of Persons by Sex and College From Whom
Freshman and Sophomore Data Were Available

	Freshman	Sophomore	Percent of Freshman in Sophomore Sample
College of Liberal Arts Males	200	133	67
College of Liberal Arts Females	200	143	72
Institute of Technology Males	198	147	74
TOTAL	598	423	71

The comparability of students who returned and did not return the sophomore questionnaire was determined by examining the freshmen questionnaire differences in paternal occupation and education, number of states visited, number of jobs held, number of books read in the past year, and number of memberships in youth groups. For the Arts College men, Arts College women, and Institute of Technology men, the differences in father's education between students who did and did not return the sophomore questionnaire were not statistically significant. Comparisons of father's occupation showed that the respondents and non-respondents among the Institute of Technology men and Arts College women were similar, but the Arts College men who responded and those who did not respond were significantly different, as shown by Chi Square value with the probability of less than .05. No differences that attained statistical significance were found among the respondents and the non-respondents in terms of states they had visited, number of books they had read, and number of youth organizations to which they belonged. A statistically significant difference (probability less than .05) was found among the Arts College men in terms of the number of jobs held, with the respondents reporting a mean number of jobs of 2.68, the non-respondents a mean of 3.10 jobs. These few comparisons suggested that for the Arts College women and the Institute of Technology men, respondents resembled non-respondents. Among the Arts College men non-respondents tended to have fathers in lower level occupations and to have reported significantly more job experience. Generalizations about the sophomore data obtained from Arts College men will have to be considered in light of a probable socio-economic difference with respondents more likely than non-respondents to come from upper level economic families.

Of the 423 respondents, 12 had remained in the University only for 1 quarter, 18 for 2 quarters, 30 for 3 quarters, 19 for 4 quarters, 33 for 5 quarters, and 303 for 6 quarters, excluding summer sessions. The other 8 records were incomplete. Among the Arts College men, 84% had remained in school for 5 or more quarters, and for Arts College women the proportion was 74%, for Technology men 80%. The large majority of respondents had been on campus a considerable length of time, 80 percent for 2 years, 93 percent for 1 year.

A DESCRIPTION OF MEN ORIGINALLY ENTERING THE ARTS COLLEGE

Self-descriptions are available from 133 men who entered the University of Minnesota College of Liberal Arts in the Fall of 1966 and who in the Spring of 1968, when they normally would be completing their sophomore year, described themselves and their experiences during the two years following admission to college.

Although these men had matriculated in the Liberal Arts College in May 1968, only 74 percent of them were in that college, 14 percent of them were registered in other colleges in the University, and 3 percent were in other universities or colleges. The remainder of these former freshmen either were not currently students (8%) or were in business or technical schools (1%). (In other places in this report the percentages do not always add up to 100 because of decimals rounded off). About three-quarters of the students in the sample started and remained in the Arts College for two years. About 15 percent started in the Arts College but transferred to another college within the University, and for many students this is quite a normal part of their educational program, and a few students were no longer in the University. In general, we can assume that the experiences described by these students are those of a group of students who for the most part were University students during the time under consideration.

Practically all of these students were 19 or 20 years of age, with 50 percent of 19 and 47 percent of 20. The mean age was 19.5, with a standard deviation of .64 years.

Exactly two-thirds of these students lived with their parents and another 2 percent lived in the homes of other relatives. Eleven percent resided in University resident halls and 10 percent rented apartments. Five percent lived in fraternities or sororities and the few remaining ones lived in private resident halls or had other living arrangements. Thus, about two-thirds lived with their parents; perhaps one-quarter of the students lived on or close to the campus. Of all 19-20 year old men in the University that year 60 percent lived with their parents, 16 percent in apartments, but except for these differences, the sample of CLA men resembled the total group of corresponding age in terms of residence.

The students were asked how they were financing their current college year. Each student was asked to estimate the percentage of his funds which came from saving, work, family, etc. They estimated that approximately 34 percent of their funds came from their families, 28 percent came from work, and 24 percent came from the student's savings. Only 6 percent came from scholarships and grants, 2 percent from loans, and 6 percent from other or undesignated sources. Major support came from the family with substantial support coming from work or from savings, and a minor proportion of support came from scholarships and grants. Ninety-nine percent of these students reported that sometime or other they had worked on a paid job for a week or more for someone other than their parents and the average number of jobs since starting college for this group was 2.0 with a standard deviation of 1.1. On the average each student had two jobs during the two years he had been in college and almost all had some introduction to the role of a worker.

These men were asked to report the number of hours a week they had been working during the present quarter (Spring quarter, 1968) and 36 percent reported they had not been working, 14 percent reported they had been working from 1 to 10 hours, 23 percent reported they had been working from 11 to 20 hours, 17 percent reported they had been working from 20 to 30 hours, 6 percent reported they had been working from 30 to 40 hours, and 5 percent reported they had been working more than 40 hours. If 15 hours is considered to be a reasonable work load for a student, 59 percent reported they had not been working excessively. If more than 30 hours a week of work is considered to be detrimental to a student's academic work, 11 percent were working that much. The modal student who did work was working between 16 and 20 hours a week with a substantial number working between 21 and 25 hours a week.

What were the experiences and interests of these students both before and during their two years since starting college? Responses to the questionnaire provide information regarding the extent to which they traveled, how much they read, their experiences involving art, music, sports, theater, their interests in lectures and public affairs, their recreational activities, and relationships with fellow students and faculty members.

One student reported he had never been more than 100 miles from his home. The average student reported that he had visited 15 different states in the U.S. (the standard deviation was 10) and 1.2 foreign countries (the standard deviation was 1.6). A large proportion of Minnesota residents have visited

Canada, although they often do not consider this type of excursion a visit to a foreign country. Almost one-third of the students reported they had never ridden in a airplane (31%) and 13 percent reported they had never ridden in a train. Eighty-three percent had taken a trip on a bus, and approximately the same proportion (88%) had ridden in a taxi. One might conclude that this group was moderately "well-traveled". Perhaps the group is a little more experienced than the Brooklyn College group reported by Stapleton (1966) who found that in 1966 about 12 percent of the entering class had not traveled outside of New York City. Insofar as some students in the University have had practically no experience outside of their native state, perhaps the University could accept some responsibility for identifying them, making opportunities available for them to extend their experiences, and encouraging them to take advantage of these opportunities.

What They Read

We can infer something about the reading habits of the students from the information they provided. They were asked to indicate from a check list the magazines they read fairly regularly during the past year. According to their responses, the most popular magazines consist of Time (59%), Playboy (56%), and Life (54%). Another group of fairly popular magazines included Readers' Digest and Sports Illustrated (both about 40%), Look (41%), and Newsweek (32%). Magazines dealing with subjects in somewhat greater detail were less popular: The Atlantic Monthly (5%), Science (2%), Scientific American (4%), New Yorker (12%). Magazines read by the students are not particularly "weighty" intellectually.

About 86 percent of the men reported that they read a daily newspaper fairly regularly and 91 percent of these indicated that they read the front page news, 74 percent the sports section, 68 percent the comics, 63 percent the local news, 72 percent the national news, 54 percent the foreign news, and 47 percent the editorials. For this group the daily paper apparently provides an important source of information.

Students were asked to report the number of books in their personal libraries. Nine percent reported that they had fewer than 10 books; almost one-quarter reported they had 100 or more books in their library. Slightly more than half reported they had fewer than 50 books in their library. Most have small libraries of their own; a few have extensive collections. When they were asked to list all of the books they remembered reading during the past year, not including those read as school assignments, the mean number of books read was 3.6 with a standard deviation of 4.8, which suggests that many students read few or no books and a considerable number of students read many books. About three-quarters of the students reported that they owned a public library card and about the same number reported that they had been to a public (not a school or University) library during the past year.

Each student was asked to respond to a list of thirty authors and to indicate if he had read a book by that author, had heard of him but never read a book of his, or had never heard of him. In this group were included four non-existent authors in order to provide a check on the veracity of responses. Unfortunately, it was difficult to construct names that sounded believable and at the same time had no association with existing authors, so some students might have indicated that they had read books by non-existent

authors simply because the name somewhat resembled the name of an author of a book they had read.²

The most commonly read authors were Hemingway and Steinbeck, both writers whose books are included in many high school curricula. Among the other most read authors were: Faulkner (71%), Ian Fleming (71%), Salinger (58%), Tolstoi (55%), Michener (56%), James Joyce (49%). Among the authors identified with the current generation of college student, 26 percent of the students reported that they had read one or more books by Camus (50 percent reported they had never heard of him), 23 percent reported that they had read books by Sartre (although over 17 percent had never heard of him), 29 percent had read books by Henry Miller, although only 5 percent had read books by Kerouac. Twenty-four percent had read books by Ayn Rand, and 41 percent had read books by William Golding. From 0 to 7 percent of students reported that they had read books by the non-existent authors, The authors popular when the present generation of college professors were students were little read by todays students. Dos Passos had been read by only 14 percent of todays students, D. H. Lawrence by 23 percent, James Farrell by 7 percent. Sixty-nine percent or more of todays students have never heard of these authors: Anatole France, Jack Kerouac, Rabelais, and Lawrence Durrell. More than one-half of the students indicated that they had not heard of Balzac, Camus, Dos Passos, and Ionesco. The results suggest that this group of college students consists of many who have read very little, some who have read a great deal, and for the most part a large number of students who do not explore freely and extensively in literature and who do not get far off the beaten track of a few authors popular with college students.

Fine Arts and Music

Information also is available concerning interests and experiences related to art. Interest in art, particularly modern art, can be inferred from the extent to which students reported they visited the Walker Art Center in Minneapolis. Forty-one percent reported that they had visited the Walker Art Center during the past year. Thirty-three percent reported that they had not visited an art gallery at all during their first year in college; 43 percent reported that they had not visited an art gallery during their second year. During their first year in college, 46 percent reported that they had visited an art gallery once or twice, 16 percent reported that they had visited galleries three to five times, and 5 percent reported that they had visited galleries more than that. During the second year in college, 35 percent reported that they had visited art galleries once or twice, 15 percent reported that they had visited art galleries from three to five times, and about 5 percent reported that they had visited art galleries more than that. An Art Sale is held at Coffman Union each year and among this group of students slightly over one-quarter reported that they had attended these Art Sales.

2. A report on the adequacy of the information check list used here is included in the appendix.

Students also were asked to indicate their familiarity with artists, as they had been asked to report their experiences with authors. They were requested to respond to a list of thirty-five painters and to report whether they had ever seen a picture by the painter, had heard of him but never had seen a picture of his, or had never heard of him. The most "seen" painter was Rembrandt, with 98 percent of the students reporting that they had seen a picture of his. All of the students reported that they had heard of him. He was the only one of the painters whose name was familiar to all students, although only 4 percent of the students reported that they had not heard of Van Gogh. Other painters familiar to the students included Rubens (62 percent of the students had seen pictures by him), Raphael (68%), El Greco (66%), Goya (59%), Andy Warhol (56%), and Salvador Dali (42%). Forty-seven percent of the students had never heard of Cezanne, 56 percent had never heard of Diego Rivera, and 56 percent had never heard of Jackson Pollack.

The impression one obtains from looking at these figures is that many students in the University are beginning to get some introduction to fine Arts but for many this hadn't as yet gone deep or far.

Similar information can be examined regarding musical experiences. Of these students, 25 percent report that during the past year they had attended a Minneapolis Symphony Concert. Nine percent reported that they had been to a Jazz Concert by Doc Evans presented on the campus, although fewer than 2 percent reported that they had been to a concert presented by William Clawson featuring folk songs and ballads.³ The Union has Jazz Workshops and only about 20 percent of the students reported that they had ever attended these, with 8 percent reporting that they had attended once, 13 percent reported that they had attended more than once. The Union also presents a Chamber Music Series and 8 percent of the men reported that they had attended this series once but no more, and 7 percent reported they had attended more than one of these series. Students were asked how many concerts they had attended during their first year in college and also during their second year. Fifty-one percent of the students reported that they had attended no concerts during their first year and approximately the same proportion reported that they had attended no concerts during the second year. Twenty-five percent of the students attended one or two concerts during their first year; approximately the same proportion the second year. A relatively small number of students were regular or consistent concert attenders, insofar as only 9 percent reported that they attended 6 or more concerts during the first year with about 7 percent reporting this for the second year. If one could assume about six percent of students were "steady"³ concert goers, this would mean a total group of about 2,400 on the campus.

A list of names of presumably well-known persons was presented to the students and they were asked to indicate which names they recognized or could identify. Among these names were those of three musicians. Almost all of the students could identify Leonard Bernstein, and 83 percent were able to identify Van Cliburn. However, only 8 percent could identify Piatigorsky, one of the world's greatest cellists, and an additional 18 percent reported that they had heard the name but could not identify him.

3. One must recall that in the fall of 1967, the Arts College enrolled 3,541 men who were sophomores, so if an event only attracted two percent, this would amount to 71 male sophomores, or about 800 of all students on the campus.

These results suggest that this group of CLA men consists of some students with moderate or great interest and experience with music, large number of students with rather superficial interest and experience related to music, and perhaps a similar number with practically no interest or experience in music.

Athletics

Male college students are expected to have great interest in sports and athletics. To what extent did this group of men obtain athletic experiences during their first two years of college? Forty-seven percent reported that during the past year they had participated in intramural sports. Forty-four percent reported that they had bowled at the Union, and 49 percent reported that they had played billiards there. Only 2 percent of this group had participated in the Ski Train Trip sponsored by the Union. Not quite 31 percent reported that they had attended no football games during their first year in college and the figure is roughly the same for the second year in college. Seventeen percent reported that they had attended one or two football games, 30 percent reported that they had attended three to five games during the freshman year. During the second year, only 23 percent reported that they had attended one or two games, and only 23 percent reported that they had attended three to five games. Students attended basketball and hockey games less often than they attended football games and attendance at athletic events apparently declined somewhat from the first to the second year in college.

Some of the names of well-known persons that students were asked to identify consisted of athletes. All of the men said they could identify Harmon Killebrew, Johnny Unitas, and Wilt Chamberlain. More people knew who Killebrew was than who knew who Chief Justice Earl Warren was.

Students also were asked to respond to a question in order to indicate what their greatest sources of satisfaction were. Nine different sources were listed: classes and curriculum, friends, student activities, informal social contacts, domicile, athletics, campus cultural events, instructors, and campus recreational facilities. Each student was asked to place a 1 before the source he considered to be his greatest satisfaction, a 2 before the second one, etc. When these were ranked and analyzed, the greatest source of satisfaction was friends, the second classes and curriculum, the third informal social contacts, and the fourth student activities. Athletics and student activities were almost tied. Athletics provided a greater source of satisfaction than did instructors, campus recreational facilities, campus cultural activities or events, and place of residence.

The information regarding students' experiences with sports and athletics suggests that these are fairly important in the lives of many students, but not of overriding importance in that large numbers of students are not interested and do not participate in athletics, although superficial and general information regarding sports appears to be widely shared among the group.

Drama and Public Affairs

This group did not constitute a large theater audience. During their first year in college, 52 percent and during the second year 58 percent reported that they attended no plays. One third of the men said they had been to the Guthrie theater during the past year; 29 percent reported that they had seen at least one film presented by the University Film Society, and 31 percent reported that they had been to an "underground movie". They seemed familiar with the names of persons connected with the theater, although much familiarity may be due to the exposure of these persons on television or in movies. Tennessee Williams was a name recognized by 87 percent of the men, Bill Cosby by 100 percent, Melina Mercouri by 53 percent, Spencer Tracy by 95 percent, Lorne Greene by 99 percent, and Shirley Boothe by 82 percent. For a large number of men, the theater is an unimportant part of their lives.

The University provides remarkable opportunities for students to hear speakers and lecturers and many opportunities are presented through the University's series of convocations. During the two years the students were on campus, 18 percent heard Senator Eugene McCarthy when he spoke; 10 percent heard Martin Luther King, Jr.; 7 percent heard Margaret Mead. Fewer than 2 percent heard Charles Roberts speak on the President and the presses and Louis Simpson speak on Modern poetry from symbolism to the present. Many students reported they recalled no information that these persons were speaking on campus. For example, although 10 percent reported that they had not heard of McCarthy's speech on campus, 83 percent reported they had not been aware of Roberts' speech.

36 percent of the students reported that they had attended no convocation during their freshman year; 50 percent reported that they had attended none during their second year. Only 14 percent reported that they had attended three or more convocations during the first year; only 11 percent reported this during the second year. When students were asked regarding the number of campus lectures they attended, about one-third reported they had attended none during their freshman year; about 43 percent reported that they attended none during their sophomore year. Twenty percent reported they had attended three or more lectures during their first year; only 16 percent reported this during the second year. The extensive programs of speakers and lecturers in the University have an impact on only a few lower division students.

Several questions elicited information pertaining to the involvement of the student in public affairs. The program in the union included series on citizen involvement, human relations, and world affairs. Fewer than 3 percent of students reported participating in the first; almost 10 percent participated in the second; and about 10 percent participated in the third. Fewer than 1 percent participated more than once in the citizen series; about 4 percent participated more than once in the human relations program; and about 2 percent participated more than once in the world affairs program. Although students were not particularly involved in these campus programs, they appeared to have considerable familiarity with persons prominent in public affairs. For example, practically all of them could identify U Thant, Dean Rust, Robert McNamara, Kosygin, and Mao Tse Tung. Fewer could identify these persons: Bishop Pike, 71 percent; Harold McMillan, 89 percent; Francis Spellman, 82 percent; Steward Udall, 82 percent; Werner Von Braun, 81 percent; Thomas Watson, 13 percent; James Conant, 14 percent; John Gardner, 41 percent.

Recreation and Friends

Information also is available concerning recreational activities of students. More than 96 percent had never participated in the contract bridge program of the union. About 10 percent had participated at least once in the chess program. Eight percent of the students had gone to only one of the Variety dances in the union; 23 percent had attended more than one. Almost one-third of the students had attended one or both Homecoming dances at the union. During their freshmen year, 30 percent of the students reported that they had attended no dances on campus, 32 percent reported they had attended one or two, and the remainder reported they had attended three or more dances. During the sophomore year, 44 percent reported they had attended no dances, 29 percent reported that they had attended one or two, and the remainder reported attending more dances. This group of students reported attending slightly fewer dances during the second year in college than during the first year. Students appear to make more use of many campus resources during their freshman year than they do during their sophomore year. This is in part a function of the proportion of students who were not in the University during the second year.

About 10 percent of the students reported they had attended or participated in at least one of the Craft Workshop programs at the union. If these figures suggest anything, it is that the recreational activities of these students are quite diverse and perhaps no single recreation attracts more than a small proportion of University students.

Responses to the questionnaire provided relevant information regarding relationships these students had with fellow students. Student and other organizations played a relatively small part in these relationships. During the first year in college, almost two-thirds of the students belonged to no student organization and about an equal number did not belong to non-campus organizations. During the second year the proportions were about the same. Most of the students who did belong to student organizations belonged to one or two organizations; about 32 percent the first year and 26 percent the second year so reported. No more than five percent of the students belonged to three or more organizations. Similarly, most of the students who belonged to non-campus organizations belonged only to one or two such groups. During the first year, the average number of campus organizations to which students belonged was 1.63, with a standard deviation of 1.07, and corresponding figures during the second year were 1.48 and .95. These figures are based only on the 41 students during the first year and 44 students during the second year who reported they belonged to any organizations. About 60 percent of the students each year reported they had attended no meetings of student organizations. During the first year 11 percent reported they had attended one or two meetings; 8 percent reported they had attended three to five meetings; and 17 percent reported they had attended more than ten meetings. During the second year 60 percent reported they attended no meetings; 8 percent reported they attended one or two meetings; 9 percent reported they attended three to five meetings; and 14 percent reported they attended more than ten meetings. Several students did not provide information. In this sample the typical student goes to fewer than one meeting of a student organization each quarter.

Responses to the questions concerning friends in the University suggest that interpersonal relationships are far more dependent on friendships than they are on student organizations. Most students reported that since starting college, they had made more than 15 friends. Only 8 percent reported that they had met fewer than 5 friends; 13 percent reported they had met between 5 and 9 friends; 20 percent reported they had met between 10 and 14 friends; 14 percent reported they had met 15 to 19 friends; and 44 percent reported they had met 20 or more friends.

Students were asked to describe their current friends. About one-half of the current friends were met before the student graduated from high school, and about one-half of the current friends attend the University. Only 13 percent of current friends never attended college; 8 percent dropped out of college; and 23 percent were attending other colleges.

Students also were asked how similar in background their current acquaintances were compared to those prior to college. 12 percent described their current friends as very different, 27 percent as somewhat different, 44 percent as somewhat similar, and 16 percent as very similar. Thus about one-half of the friends of college students were made before coming to college; about one-half were in college; and slightly more than one-half were quite similar to the friends they had before coming to college. The figures suggest that college provides an opportunity for considerable extension of friendships but that a marked continuity in these is found between high school and college. Students also were asked whether they had opportunities to talk with foreign students during the past year and 69 percent reported they had such opportunities.

Another question elicited the extent to which students were satisfied with the University as a place in which to make friends. The following proportions of students responded to each alternative:

I hate it.	1.5%
I dislike it very much.	4.5%
I dislike it.	9.0%
I am indifferent to it.	20.3%
I like it.	30.1%
I like it very much.	30.0%
I like it better than I could possibly like anything else.	3.0%
No response.	1.5%

Thus, 15 percent of the students indicated dissatisfaction, 64 percent satisfaction, and 20 percent indifference. A significant proportion of University students do not like this aspect of the University, but a large majority appear to be satisfied with it.

Related to friendship patterns are dating patterns. Of these men, only 3 percent were married and a similar proportion engaged. 24 percent reported they were going steady; 69 percent described themselves as unattached. In responding to the question of how often they dated, 9 percent reported they did not date, 9 percent reported they dated less than once every 4 weeks, 17 percent reported they dated about once every 4 weeks, 15 percent reported they dated once every two weeks, 26 percent reported they dated about once a week, and 22 percent reported they dated more than once a week. The proportion going steady was just about equal to the proportion saying they dated more than once a week. 35 percent reported they dated no more than once a month or so. For a significant number of men dating is not a time-consuming activity. Unfortunately no attempt was made to learn more about satisfaction with dating behavior.

Several questions attempted to uncover information about relationships students had with faculty members. The Union program provides for student-faculty get-togethers. Over 94 percent of the students reported they had never attended these, 3 percent attended once and about 2 percent attended more than once. This program does not contribute greatly to faculty-student relationships. Students were asked to report how many times they had talked with faculty members before or after a class. 6 percent responded never; 17 percent reported once or twice; 41 percent reported between 3 and 10 times; and 35 percent reported more than 10 times. Students also were asked to report how many times they had talked with a faculty member during his office hours. 15 percent responded never; 24 percent responded once or twice; 47 percent responded 3 to 10 times; and 14 percent responded more than 10 times. Then students were asked how many times they had talked with faculty members at times other than before or after class or during office hours. In response to this 32 percent of the students responded never, 35 percent responded once to twice, 23 percent responded 3 to 10 times, 8 percent responded more than 10 times. Most interaction outside of class with faculty members appears to occur during office hours or before or after class but apparently there is some interaction in other situations.

The student's relationships with faculty members can be inferred on the basis of his estimate of the number of faculty members who know him by name. Only 13 percent of students reported that no faculty members knew them by name, but 25% reported that only one or two faculty members knew them by name. Another 25 percent reported that they were known by from 3 to 5 faculty members; 8 percent reported that from 6 to 10 faculty members knew them; and 27 percent reported that more than 10 faculty members knew them by name. Thus, perhaps one-third of the students in the University felt that really no or few faculty members have much of an idea of who they are; perhaps an equal number feel that a considerable number of faculty persons are aware of their existence as individuals.

In ranking sources of satisfaction within the University, students did not derive great satisfaction from their instructors insofar as instructors were rated 6th out of 9. The following responses were made to the item asking how satisfied students were with instructors:

I like all of my instructors	12%
I like all but one of my instructors	10%
I like most of my instructors	53%
I like about one-half of my instructors	11%
I like few of my instructors	7%
I like only one of my instructors	2%
I like none of my instructors	1%
No response	1%

Thus about 76 percent of the students expressed considerable liking for their instructors; 10 percent reported considerable disliking of their instructors.

These figures suggest that a sizeable minority of students feel they have little relationship with instructors outside the classroom. Many of these students are dissatisfied with these relationships, but on the other hand a considerable number of students have established what they perceive as satisfying faculty relationships.

A few other items not easily classified bear some brief mention. About one-half of these students reported they had visited a campus religious foundation during the year. About 9 percent reported they had attended a freshmen camp or a dean's retreat. Slightly fewer than 2 percent reported they had served as a freshman camp, welcome week, or orientation sponsor. A good proportion of students at least are aware of the campus religious foundations. A surprisingly large proportion, about 9 percent, took advantage of the camp or retreat opportunities designed for a relatively small group of students.

Students were asked to consider and rank 5 sources which had influenced their way of looking at the world. Family was ranked first, college 2nd, friends 3rd, church 4th, and home community 5th. The spread between the first 3 was small; church and home community lagged considerably behind the others. Students then were asked to indicate the extent to which college had influenced their way of looking at the world. 45 percent responded very much, 50 percent somewhat, 4 percent not at all. As these students see it, college already has been a considerable influence in their lives. This is borne out somewhat by the responses students make when they are asked to indicate their satisfaction with the whole university:

I am completely dissatisfied with it.	1%
I am very much dissatisfied with it.	5%
I am dissatisfied with it.	11%
I am indifferent to it.	7%
I am satisfied with it.	45%
I am well satisfied with it.	28%
I am completely satisfied with it.	2%
No response	2%

77 percent of the students indicated satisfaction as compared to 15 percent reporting dissatisfaction. Surprisingly, only 7 percent of the students reported indifference. This was a question students found easy to answer.

Summary

Most of these men were 19 or 20 years old, lived at home, worked considerably while attending school, received considerable financial assistance from their families and relatively little from scholarships and grants, and had traveled in the United States. Many read magazines but those read were drawn from a relatively small number of publications. Most students were not avid readers of books, although they did tend to read newspapers consistently. A considerable number had shown interest in art, although their familiarity with painters, particularly modern painters, was limited. A considerable number also had musical interests and experiences and expressed some familiarity with music. They knew a lot about sports, and about one-half appeared to participate in sports actively or as spectators.

A large number showed little interest in the theatre and most had failed to take advantage of speakers or other cultural activities on the campus. Only a relatively few students had participated in any or many of the programs offered by the Union. They considered their relationships with fellow students and friends important but most of their social satisfaction seemed to come through means other than those provided by student organizations and activities. A considerable number had interacted with the faculty, although a significant minority had not.

These inferences are based on a sample of students among whom most had remained in the University during their first two years after matriculation. The figures obviously are somewhat diluted by the fact that about 10 percent of the students in the sample no longer were in the University, but the shifting of students from one college in the University to another should have relatively little impact on the experiences reported by students.

THE EXPERIENCES OF ARTS COLLEGE WOMEN

Information comparable to that available for Arts College men also was available for 143 women who entered the Arts College in the Fall of 1966 and who in the Spring of 1968 reported information about their college experiences. In many ways the experiences of the women were similar to those of the men, but differences can be observed. The following paragraphs will be concerned mainly with how the experiences of the women differed from those of the men.

The women tended to be slightly younger than the men, with 58 percent of the women being 19 years of age or under, as compared to 50 percent of the men. The age difference, however, was not large. A small but noticeable difference also was observed in the academic status of the women at the end of what normally would have been their sophomore year. Only 66 percent of this group of women were still registered in the Arts College, as compared to 74 percent of the men. As sophomores, a larger proportion of men were in the General College and the Institute of Technology, and a larger proportion of women were in other colleges in or out of the University. A significant difference was that among the men, fewer than 9 percent were no longer students; among the women 17 percent were no longer in school.

More of the men (66%) lived with their parents than of the women (52%). On the other hand, more women lived in University residence halls and in rented apartments. This may be related to the difference in socioeconomic status of parents frequently observed between the sexes in studies of the University students. This is supported somewhat by the sex difference in financial support reported by the students. Among the men, 34 percent reported their families as the principal source of support, as compared to 42 percent of the women. More men were dependent on savings and work. Practically all of the men and women reported paid work experience and the sexes did not differ on the number of jobs held since starting college. Slightly more of the men, 36 percent, reported that they had not worked during the present quarter, as compared to the women, 31 percent, but more of the women, 47 percent, reported that during the present quarter they were working from one to twenty hours, as compared to the men, 37 percent. Slightly more of the men, 27 percent, reported that they were working twenty-one hours or more, as compared to the women, 21 percent. About 10 percent of the women were working more than thirty hours a week, as compared to a similar proportion of the men. One can conclude that about the same proportion of men as women work while attending the University, but among those who do work a tendency exists for the men to work more hours than the women, but this sex difference is not large.

The travel experiences reported by the women were similar to those of the men.

Marked differences, most of them in the expected direction, were observed in the reported reading habits of men and women. Among the men the most popular magazines were Time and Playboy, among the women, Life and Time. Whereas, 56 percent of the men read Playboy, only 14 percent of the women did. Only 5 percent of the men read McCall's as compared to 43 percent of the women; none of the men read Seventeen, as compared to 29 percent of the women; and less than 1 percent of the men read Glamour, as compared to 43 percent of the women. Seventeen percent of the men reported that they read Mad, as compared to 5 percent of the women and 41 percent of the men reported they read Sports Illustrated, as compared to 7 percent of the women. Twelve percent of the men read Sports Afield, as compared to none of the women. The reported reading habits suggested that men read news magazines, Playboy, and magazines dealing with the outdoors. Women on the other hand read news magazines and women's magazines.

The newspaper reading habits of the two sexes were similar and the only large difference observed was that 74 percent of the men reported that they regularly read the sports news, as compared to 27 percent of the women. Women reported they had slightly more books in their personal library. Thirty-one percent of the men and 19 percent of the women reported fewer than 25 books in their libraries, but 57 percent of the women and 44 percent of the men reported between 25 and 100 books. Women also reported that they had read more books during the past year. The average woman reported that she had read 4.20 books as compared to the average for men of 3.6. Slightly more women reported that they owned a public library card, 86 percent as compared to 77 percent for men; and considerably more women, 88 percent, reported that they had been to a public library during the past year, as compared to 77 percent of the men. Women do read different magazines than do men and also tend to read more books.

Some sex differences appeared in the familiarity of these students with the authors listed on the questionnaire. Of the 26 authors listed, 17 had been read by more women, 6 by more men, and for 3 there was no difference. Of the 23 where there were differences, however, the differences were large, that is 10 percentage points or more, on only Fleming, Salinger, Camus, Ionesco, Sartre, and Joyce. More men than women read Ian Fleming. For each of the other authors more women had read them than men. Whereas, 73 percent of the women had read Salinger, 26 percent Ionesco, and 45 percent Sartre, corresponding percentages for the men were 58 percent, 8 percent, and 23 percent. The evidence suggests not only do the women read more books but as a result, they are familiar with a greater number of authors.

Women also have greater familiarity with and more interest in art than do men. Of the men, 41 percent had visited the Walker Art Gallery, as compared to 58 percent of the women. About 71 percent of the men had never attended the Art Sale in the Union, as compared to only 59 percent of the women. Thirty-three percent of the men had not visited an Art Gallery during their first year in college, as compared to only 15 percent of the women, and during the second year in college 43 percent of the men had not visited an art gallery, as compared to 27 percent of the women.

Of the 35 artists listed, 32 had been seen by more women, 2 by more men, and for 1 there was no difference. The same proportion of men and women had seen pictures by Rembrandt. Two percent more men than women had seen pictures by Turner. Differences between the sexes exceeded 10 percent, and favored the women for: Degas, Toulouse-Lautrec, Rubens, Velasquez, Delacroix, Raphael, Watteau, Seurat, Botticelli, Manet, Keane, Cezanne, and Dali. A marked difference in the area of the Fine Arts existed between men and women.

Somewhat similar differences are found regarding musical experiences. Whereas 25 percent of the men reported that they had attended a Minneapolis Symphony Concert during the past year, 39 percent of the women had. Relatively more of the men, 9 percent, than of the women, 8 percent, had attended a jazz concert by Doc Evans, but more women, 4 percent, had attended a folk songs and ballads concert than of the men, 2 percent. The proportions attending Jazz Workshops in the Union were the same for men and women.

Whereas 51 percent of the men reported that they attended no concerts during their first year in school, the corresponding percentage for women was only 20 percent. Among the women, 37 percent had attended one or two concerts, 28 percent had attended from three to five concerts, 8 percent had attended from six to ten concerts, and 7 percent had attended more than ten concerts. Corresponding percentages for the men were 25 percent, 15 percent, 4 percent and 5 percent. Apparently the proportions of men and women attending large numbers of concerts are the same, but other than these inveterate concert goers, more women than men attend concerts and they attend more of them. No large sex difference was found in the familiarity of these students with the 3 musicians whose names were included in the list of well-known persons.

The sex differences observed regarding music suggest that women are more interested in concerts and in chamber music, that men may be slightly more interested in jazz and other types of music.

Some of the largest differences observed, not too surprisingly, were related to sports and athletics. Whereas 47 percent of the men had participated in intramural sports during the past year, only 12 percent of the women had. More than 44 percent of the men had bowled and 49 percent had played billiards at the Union; corresponding figures for the women were 33 percent and 13 percent. During the first year in college, 31 percent of the men and 34 percent of the women had never attended a football game, 53 percent of the men and 62 percent of the women had never attended a basketball game, and 53 percent of the men and 55 percent of the women had never attended a hockey game. During the second year in college, 33 percent of the men and 48 percent of the women had not attended football games, 65 percent of the men and 72 percent of the women had not attended basketball games, and 55 percent of the men and 60 percent of the women had not attended hockey games. The number of men and women attending football games during the first year in college was about the same. Fewer students attended football games during the second year in college, but the decline in attendance was greater for the women than for the men. Hockey during the first year was about as popular among the women as among the men, but during the second year masculine attendance at hockey games was somewhat greater. Some differences were found in familiarity with the names of well-known athletes, but a surprisingly large number of women knew who these people were. For example, 88 percent of the women said they could identify Johnny Unitas, as compared to 99 percent of the men. All of the women said they knew who Harmon Killebrew was. Although 99 percent of the men could identify Wilt Chamberlain, only 71 percent of the women could.

These results suggest that many men participate in athletic activities, are interested observers, and know something about sports. Women participate considerably less, observe somewhat less than men, and are reasonably well-informed.

As would be expected, when students were asked the extent to which athletics provided a source of satisfaction, men listed this as fourth among 9 sources, women listed it as ninth.

More of the women than of the men were involved in the theater. Sixty-two percent of the women, as compared to thirty-five percent of the men, had attended the Guthrie Theater during the past year. Over one-half of the men reported they had not attended a play during the first year of college, and even more, 58 percent, reported they had not attended a play during the second year of college. Corresponding percentages of non-theatergoers among the women for the first and second years were 23 percent and 31 percent. Among the men, 15 percent reported they had attended three or more plays during the second year in college; among the women this percentage was 36. Considerably more of the men, 31 percent, had attended an underground movie, which was attended by only 17 percent of the women, but 46 percent of the women, as compared to 29 percent of the men had attended at least one film of the University Film Society. Slightly more women, 62 percent, than men, 53 percent, knew who Melina Mercouri was, but there were no large differences with the names of Spencer Tracey or Lorne Green. More of the women knew who Shirley Booth was, 94 percent, than did men, 82 percent. Whereas the theater

appears to be an unimportant part of the lives of men students, it plays a more prominent part in the lives of these women.

Some but not all of the differences between men and women were small regarding lectures and related programs. Eighteen percent of the men, but 26 percent of the women heard Senator McCarthy speak. Seven percent of the men and 18 percent of the women heard Margaret Mead, and 10 percent of the men and 20 percent of the women heard Martin Luther King, Jr. These and other differences between the sexes are difficult to evaluate in light of the small proportions of students of either sex attending lectures.

More women than men attended convocations; 36 percent of the men and 24 percent of the women reporting they attended no convocations during the first year and 50 percent of the men and 38 percent of the women so reporting for the second year. The proportions of men and women attending no campus lectures were the same.

Whereas 10 percent of the men reported they had participated in the World Affairs Program at the Union, 16 percent of the women so reported. Nine percent of the men reported they had participated in the Human Relations Program in the Union and for the women this proportion was 17 percent. Fewer than 2 percent of the men participated in the Citizens Series presented at the Union, as compared to 4 percent of the women. Interest in public affairs as shown by familiarity with the names of well-known persons suggested that the men and women were about equally well informed. The evidence suggested that women are slightly more prone than men to attend lectures and to participate in programs at the University concerned with public and social issues.

Attendance at dances in the Union is the same for men and women. The proportions of students reporting they attended varying numbers of dances during the first year and the second year were similar for men and for women. The proportions of either sex playing bridge at the Union were about the same, and quite small, but considerably more men, almost one-half, reported they played billiards at the Union, as compared to fewer than 14 percent of the women. More men played chess and bowled at the Union; more women went on Union sponsored ski trips. Significantly more women also participated in the crafts workshops programs in the Union, fifteen percent of the women as compared to 8 percent of the men.

These figures suggest rather marked sex differences in the recreational patterns of the two sexes.

The figures related to relationships students have with other students differ for the two sexes. Whereas 64 percent of the men reported that they did not belong to a student organization during the first year and 65 percent reported they belonged to no such organization during the second year, corresponding figures for the women were 49 percent and 58 percent. Not only did more women belong to more student organizations, but those who belonged tended to belong to more of them. For example, 41 percent of the women belonged to one or two of these organizations, 9 percent belonged to from three to five. Of the men, 61 percent had attended no meetings of student organizations as compared to 47 percent of the women. Nineteen percent of the women and also 17 percent of the men reported they had attended more than ten such meetings so persistent meeting goers perhaps are found equally among men and women students. The proportions of students belonging to non-U campus organizations

were about the same for men and women. Slightly over one-third of these students belonged to one or more such organization. For both men and women, friends were by far the first main source of satisfaction at the University with classes and curriculum named second by both sexes. Informal social contacts were named third. The proportions of men and women dissatisfied with the University as a place to make friends were about the same, about 15 percent, but 20 percent of the men indicated they were indifferent to the University as a place to make friends, as compared to only 10 percent of the women. Three percent of the men said they liked this aspect of the University about as much as they possibly could like anything, as compared to 12 percent of the women. Apparently dissatisfaction is found equally among the sexes, extreme satisfaction considerably more among the women.

Women reported they had met more friends since starting college than did men with 21 percent of the men as compared to 14 percent of women reporting they had met fewer than ten friends and 57 percent of men as compared to 68 percent of women reporting that they had made more than fifteen friends. More of the men described their friends as having been met before high school graduation whereas the women tended to meet their friends after high school graduation. The men and women described their current acquaintances in much the same way when they were asked to compare current acquaintances to those they had prior to college.

Differences were found between men and women in dating or the marital status category. Whereas 6 percent of the women were married, only three percent of the men were. Among the women, 11 percent were engaged, as were only 2 percent of the men. Sixty-nine percent of the men described themselves as unattached, as compared to 55 percent of the women. Nine percent of the men and 11 percent of the women said they did not date; 40 percent of the women and 22 percent of the men said they dated more than once a week. Among the women, 25 percent said they dated no more than once every four weeks, as compared to 35 percent of the men, but among the men 48 percent reported they dated once a week or more often as compared to 57 percent of the women. Apparently among women who date, dating occurs more often than it does among men who date.

Some differences emerged in reported student faculty relationships. Among the men was a tendency for the students who had contacts with faculty members to have them more often. For example, although six percent of the men and six percent of the women reported they had not talked with faculty members before or after class, 36 percent of the men as compared to 22 percent of the women reported they had talked with faculty members after or before class more than ten times. Sixteen percent of the women and 15 percent of the men reported they had not talked with faculty members during office hours, but among the men, 14 percent reported they had talked with faculty members more than ten times in their offices as compared to four percent of the women. There was no real difference between men and women regarding the number of faculty members who knew the students by name. Men and women appeared to express about equal satisfaction with their instructors.

Sex differences were not large regarding the students reports about how much college had influenced their ways of looking at the world. When students were asked to rank church, college, family, friends, and home community, as these influenced their perception of the world, men tended to rank family first and college second, and women ranked family first and friends and college tied for second rank.

In general, indices of satisfaction with the University in various aspects of the University were not different for men and for women.

Most of the differences in experiences reported by women and by men were rather small, but some were large and many quite meaningful. Most of the differences were not surprising and almost all easily agreed with the stereotyped ideas most persons have regarding sex differences. The differences are small enough perhaps to suggest that most of the programs and services appropriate for men also are appropriate for women but the number of differences that have been found and the size of some suggest the need to consider carefully sex differences when University programs are being developed.

STUDENTS IN THE INSTITUTE OF TECHNOLOGY AS COMPARED TO THOSE IN THE COLLEGE OF LIBERAL ARTS

In many ways the male students in the Institute of Technology were different from those in the Arts College. Of the random sample of 200 Institute of Technology freshmen selected from the total group who had completed the Pre-College Questionnaire at matriculation, 114 returned the College Experience Inventory at the end of what would normally be their second year in college. Of these former entering freshmen, 55 percent remained in the Institute of Technology, 22 percent had transferred to the College of Liberal Arts, 5 percent were in other colleges in the University, 4 percent were in colleges or universities other than the University of Minnesota, 2 percent were in business or technical schools, and 10 percent currently were not students. Whereas almost three-quarters of the respondents in the Arts College group who entered that college as freshmen were still there as end-of-year sophomores, only slightly more than one-half of the Institute of Technology freshmen who responded to the questionnaire remained in that college with about half that number having transferred to the Arts College. The proportion of respondents in each group who were no longer students was the same.

The Arts College and the Institute of Technology respondents were no different in age or in source of financial support. The proportions in the two groups who had some work experience and the mean number of jobs the groups had were the same. However, the Arts College students reported that they had been working more hours per week during the quarter. In the Institute of Technology, 42 percent of the students reported they had not worked that quarter, as compared to 36 percent in the Arts College. In the Arts College, 23 percent and in the Institute of Technology, 24 percent reported that they were working from one to fifteen hours a week, but in the Arts College 28 percent of the men reported that they were working twenty or more hours a week, as compared to 18 percent in the Institute of Technology. Thus, a small difference indicated that the Arts College men spend more time on outside jobs. This may be a function of the relatively heavier course load and greater number of hours spent in class for Institute students. They have less time to devote to work.

The two groups did not differ markedly in their reported travel experiences, in terms of how many had been one hundred miles or more from their homes, the number of states and countries visited, and the proportions riding in trains, taxicabs, and buses.

The reading experiences of the groups in the two colleges differed somewhat. Rather consistently the Arts College men reported more reading of daily newspapers, although these differences were small. For example, although 10 percent of the Institute of Technology freshmen reported that they did not read any of the newspaper regularly, 6 percent of the Arts College students so reported. The only marked difference in newspaper reading habits was reflected by the report that 74 percent of the Arts College men said they read the sports news regularly, as compared to 63 percent of the Institute of Technology men.

Magazine reading habits differed somewhat. Fifty-nine percent of the Arts College men reported they read Time, 41 percent reported they read Look, and 32 percent reported they read Newsweek. Corresponding percentages for the Institute of Technology men were 48, 29, and 25 percent. More Arts College men read news magazines. More Arts College men also read Sports Illustrated and Sports Afield, the proportions for the Arts College being 41 percent and 12 percent, for the Institute of Technology, 26 and 3 percent. More Arts College men read Fortune, Mad, and the New Yorker, and more Institute of Technology men read Scientific American, National Geographic, and Popular Science. These latter differences are what one would expect. The proportion in the two colleges reading Playboy, one of the most popular magazines, was the same.

The two groups differed also in their reports of the number of books in their personal libraries. Nine percent of the Arts College men, as compared to 5 percent of the Institute of Technology men, reported they had fewer than ten books in their personal libraries. Thirty-one percent of the Arts College men as compared to 24 percent of the Institute of Technology men reported they had from zero to twenty-four books in their library, whereas 32 percent of the Institute of Technology men and 24 percent of the Arts College men reported they had from twenty-five to forty-nine books in their libraries. The proportions having more than fifty books in their libraries were about the same, but the evidence suggests that Institute of Technology freshmen tend to own slightly more books than Arts College freshmen. The two groups differ also but in the opposite direction in their reports of the number of books they have read during the last year. The Arts College freshmen reported reading a mean number of 3.6 books, as compared to the mean for the Institute of Technology men, 3.2. This may be a function of the amount of required course reading, time spent in class, and time required for studying. The two groups did not differ in terms of ownership of a library card or visits to the library.

The two groups were similar in their reported familiarity with authors whose names were included in the list on the questionnaire, but practically all of the few observed differences indicated that the Arts College men were more familiar with the authors than were the Institute of Technology men. For example, 29 percent of the Arts College men reported that they had read books by Henry Miller, as compared to 22 percent of the Institute of Technology men. Comparable figures for Salinger were 58 and 49; for Tolstoi, 55 and 42;

for Hemingway, 89 and 82; for Dostoevski, 43 and 31; for Voltaire, 50 and 38; and for James Joyce, 49 and 43. Thus, the differences were not large but they were rather consistent. If authors of books on science or technology had been included, results might have been reversed. The comparisons here may be a function of differences in interests rather than of amount of reading.

The evidence suggests that the reading habits and behaviors of Arts College and Institute of Technology freshmen differ somewhat both in terms of amount and kind, but the differences are small and the two groups overlap a great deal.

The two groups also differed and in the same direction in respects to their familiarity with artists and related art experiences. Of the Arts College men, 62 percent had reported that they had seen a picture of Rubens, as compared to 52 percent of Institute of Technology men. Corresponding percentages for Velasquez were 29 and 20; for El Greco, 66 and 56; for Vermeer, 16 and 11; for Goya, 59 and 48; for Sargent, 14 and 7; etc. The same proportion of men in the two groups reported they had visited the Walker Art Gallery.

The groups differed also in terms of some other University experiences. The same proportions reported that they had visited or attended symphonies, museums, and campus religious foundations. More of the Arts College men had participated in intramural sports, 47 to 35 percent, more had talked with foreign students, 69 to 65 percent, but more Institute of Technology men had attended Dean's retreats or freshmen camps, 17 versus 9 percent. They did not differ in terms of the number of Union programs in which they had participated nor in the number of speakers heard.

When asked regarding the experiences during the first year in college, more Institute of Technology men, 41 percent, reported they had heard no lectures, as compared to 34 percent of the Arts College men. Similarly, more of the Institute of Technology men had failed to attend plays, football and basketball game, and dances. Whereas, only 52 percent of the Arts College men had attended no plays during their freshman year, 57 percent of the Institute of Technology men had attended none. Fifty-three percent of the Arts College men had attended no basketball games, as compared to 61 percent of the Institute of Technology men. More of the Institute of Technology men failed to attend a play, or to go to football or basketball games during their sophomore year as compared to Arts College men. Although during the freshman year more Arts College men had attended dances on the campus, during the sophomore year these proportions were the same.

The two groups differed slightly in terms of membership in organizations. Sixty-four percent of the Arts College men as compared to 71 percent of the Institute of Technology men belonged to no student organization during the first year and during the second year similar proportions were 65 and 73 percent. The differences were about the same size and the same direction for non-student organizations. The two groups did not differ during the first year in their report of the number of meetings of students organizations they attended, but during the second year the Arts College students reported they did attend more such meetings. In terms of campus experiences, the similarities between the two college groups are more impressive than the differences.

The two groups did not differ markedly in the number or types of friends that they had in the University. There were some slight differences in the contacts with faculty but these differences were not large nor systematic. The two groups were slightly different in terms of their relationships with members of the other sex. Sixty-nine percent of the Arts College men described themselves as unattached, as compared to 66 percent of the Institute of Technology men. In the Arts College, 26 percent of the men reported that they were engaged or going steady, compared to 31 percent of the Institute of Technology men, but in the Institute of Technology group, 14 percent reported they did not date, as compared to only 9 percent of the Arts College group. In the Institute of Technology, 41 percent of the men reported they dated once every four weeks or fewer times, as compared to 35 percent in the Arts College. Thus appears a tendency for Institute of Technology men to get themselves attached a little earlier, but also for a larger proportion of men in the Institute of Technology to have relatively few formal contacts with girls.

The two groups differed only slightly in their responses to satisfaction with different aspects of the University. Seventy-six percent of the Arts College men expressed satisfaction with their curriculum, as compared to 73 percent of the Institute of Technology men. Seventy-five percent of the Arts College men said they liked most or all of their instructors, as compared to 69 percent of the Institute of Technology men. Responses were much the same in the two groups regarding the University as a place to make friends. Similarly, no differences were found between the two groups regarding reactions to satisfaction with opportunities for cultural development. Men in the Institute of Technology expressed considerably more dissatisfaction with their faculty advisors, and 10 percent said they were completely dissatisfied, as compared to less than 3 percent of the Arts College group. Satisfaction with the entire University appeared to be about the same in the two groups as expressed by reactions to the item concerned with the whole University.

The out-of-class room experiences of men in the College of Liberal Arts and the Institute of Technology are remarkably similar and many of the few differences observed well might be related to the different academic demands in the college. Other differences reflect differences in interests. In every comparison, however, much overlapping is observed and Technology and Arts students do not constitute two separate species of students.

Student Disappointment in the University

Each student who responded to the College Experience Inventory was asked to respond to the question: "My greatest disappointment in the University is:- - -". Some students did not respond at all to this question, 22% of the IT men, 20% of the Arts College men, and 14% of the Arts College women.

Table 2 reports the responses for the three groups as they have been categorized. Among Institute of Technology men, 14% complained about conditions related to their classes, 5% complained about conditions related to personal problems, and so on. The 147 men in the Institute of Technology group reported a total of 129 complaints; some individuals complaining about more than one disappointment; some about none. Consequently the responses can be viewed in terms of the proportion of individuals reporting disappointments or the proportion of total complaints assigned to each category.

Table 2

Greatest Disappointments in the University

Areas of Disappointment:	IT N=147		CLA Male N=133		CLA Females N=143	
	Number of Responses	Percent of Individuals	Number of Responses	Percent of Individuals	Number of Responses	Percent of Individuals
Classes	20	14%	14	11	30	21%
Personal Problems	8	5	13	10	9	6
"Red Tape"	11	7	8	6	13	9
Apathy	8	5	15	11	2	1
Impersonality	9	6	9	7	15	10
Size of the University	9	6	10	13	7	5
Grading System	7	5	7	5	7	5
Commuters - Commuter Campus	5	3	--	--	4	3
Student-Faculty-Administration Relations	8	5	5	4	8	6
Friends	5	3	6	5	9	6
Other	34	23	25	19	33	23
No Complaints	5	3	5	4	3	3
Number of Responses	129		117		140	
No Response		22		20		14
TOTAL						
	N=147		N=133		N=143	

For each of the three groups, Institute of Technology men, CLA men, and CLA women, the category with the largest number of complaints was the other or miscellaneous category. Included in this category were statements reporting poor advising and counseling, course evaluation, agitators, prerequisites, length of the quarter, finances, inflexibility of the system, lack of facilities, lack of time, difficulty of work, "too ivory tower", poor class schedules, University impact on the community, draft pressure (selective service), parking, conservatism of the University, no personal feeling about the University, individual departments, housing, difficulty in joining student organizations, lack of campus activity, "mediocrity", University forms, monotony of daily schedule, the quarter system, student organizations, University standards, high school preparation, excessive theory and too little practical application, heavy credit loads, a lack of classroom discussion, inconsistency, difficulty of understanding foreign instructors, failure to take advantage of opportunities in the University, faculty members, liberal education courses, the university in general, competition, the University radio station (WMMR), and University cooperation with the war and the draft. As many as 5 students in each of the three groups wrote "No complaint" in response to this item and from 5 to 6 students complained about individual departments, advising, and student organizations. In no group did more than three students complain about any one of these "other" topics and usually only one or two students in each college group specified the issue.

When students reported they were disappointed about their classes they named such things as "Classes were too large", "Classes were boring", closed circuit T.V. instruction disappointing, curriculum and instruction was inadequate, classes were uninteresting, class instruction was of a low quality, instructors were not interested in students, professors were not present at recitation sessions, courses required too much memorization, and courses were too rigidly scheduled. Anywhere from 10 to 20 percent of students considered that things related to classes their greatest source of disappointment.

The impersonality of the university was named by 6% of IT men, 7% of Arts College men, and 10% of Arts College women. A few students elaborated here indicating that most people were unfriendly, even students, and that they were treated like machines or numbers.

From 5 to 13 percent of the students commented on conditions directly related to the size of the University, saying such things as the University is too large or the University is so large one cannot achieve individuality. Only about 5 percent of the students referred to the grading system of the University and they said such things as there's too much pressure for good grades, grades are not really related to learning, there's too much pressure just before examinations, the grading system is too rigid, the grading system destroys learning and produces too much pressure.

Under personal problems, which was mentioned by from 5 to 10 percent of the students, such things were listed as poor grades, personal difficulties and becoming involved, leaving school for the service, disliking Minnesota weather, lack of an objective or purpose, boyfriend at a different school, not fulfilling ones own abilities, dislike of school.

Under apathy students referred to student-faculty-administration relationships, lack of organization for lower division students, and disinterest of students, faculty, and administration.

Under red tape students referred to registration, changing colleges, excessive bureaucracy, excessive time to get something done, stupid employees, and bureaucracy. The few students who referred to student-faculty-administration relationships mentioned lack of personal contact between students and faculty, administration makes students feel as if they were unnecessary, lack of communication, need for more interaction and personal attention, dislike of in loco parentis dormitory regulations. Students who were disappointed because of being on a commuter campus mentioned a campus split, discrimination against commuters, lack of facilities for commuters, the fact that commuters don't want to be part of the campus. About 5% of the students mentioned such things as it is hard to make friends and meet people, hard to meet girls or form lasting relationships through classes, too difficult to meet people in classes and form lasting relationships, the campus is too large to make friends, and many students are commuters.

Examination of the responses indicating sources of student disappointment suggest that first, many conditions in the University lead to disappointment reactions on the part of some students and secondly, that no single condition seems to be a source of disappointment for large numbers of students. The size of the University, which is one of its most impressive characteristics, is not considered as a major source of disappointment for large numbers of students. Many things happen on the campus and to each of these perhaps a few students react unfavorably and express disappointment.

The results of this analysis provide some support to other results suggesting that the amount of student satisfaction in the University is relatively high. Many students have complaints or disappointments but there appears little agreement among students regarding what in the University most needs change.

THE FREQUENCY OF AND CHANGES IN EXPERIENCES DURING THE FIRST TWO YEARS OF COLLEGE

Most of the information summarized to this point pertains to specific experiences. The questionnaire data also has been collated by type of experience and summary information shows the number of magazines read, the number of persons known, and the number of experiences reported.

For example, among the CLA men the average number of magazines read regularly during the pre-college year was 7, as compared to 4.97 during the second year of college. The mean number of magazines read for women dropped from 6.9 to 5.3 and for IT men from 5.7 to 4.2. Before coming to the University the average freshman read about 6 magazines and this number was reduced to between 4 and 5 during the second year of college.

The average Arts College man, when he entered the University, said he could identify 19 of the 33 names of well known persons. The average at the end of the second year was 24.5. For the IT men the mean number of well known persons known increased from 20.4 to 23.9 but for the Arts College women, the mean was 21 for both years.

Included in the check list were the names of 30 authors, including 4 non-existent ones. As an entering freshman, the average Arts College man reported he had read books by 6.4 of these authors and by the end of the sophomore year the average increased to 9.2. Similar averages for the Arts College women were 7.4 and 10.4 and for the IT men 6.2 and 8.2. One could estimate from this that the average student increases his range of reading, in terms of number of authors, by about 40% during the first two years of college.

The increases are more noticeable pertaining to the number of artists whose pictures have been seen by the students. Of the 40 names included in the list of artists, the average entering Arts College man reported he had seen pictures by 6.2 and as a second year student he indicated he had seen pictures by 10.7 of these artists. Comparable means for the Arts College women were 8.3 and 14.0 and for the IT men 5.3 and 9.5.

The questionnaire contained a list of 13 experiences students could obtain on the University campus and each student was asked to indicate at the end of the sophomore year how many he had experienced during his first year in college and how many during his second year. Students responded for each experience: None, once or twice, 3 - 5 times, 6 - 10 times, and more than 10 times. Two IT men indicated that during their freshman year they had experienced none of these things and six Arts College men, three Arts College women, and ten IT men indicated that during their sophomore year they had experienced none.

From the questionnaire an attempt was made to determine how many experiences each group of students had during the freshman and sophomore years. During the freshman year, the 133 Arts College men reported a total of 3,847 experiences included in this list, or an average of 28.9 per student. The average number of experiences per year for the Arts College men for the second year was 25.4. Similar averages for the Arts College women were 21.1 and 20.4 and, for the IT men, 20.3 and 15.7.

One can conclude that when college out-of-classroom experiences are defined in terms of those listed here, that the average students perhaps has two such experiences every three weeks. For each of the three groups, the average declined from the first year to the second year, with the largest relative decline occurring for the IT men. The Arts College men reported more experiences during both the first and second years than did the Arts College women. They also reported more experiences both years than did the IT men. The Arts College women and the IT men had about the same number of experiences during the first year but during the second year the Arts College women had more experiences than the IT men. These differences and similarities are in part a function of the items included in the list.

For the Arts College men during the first year, considering the experience categories, 6 of the 133 men reported that they had at least one experience in each of the 12 categories, 7 additional men reported they had had experiences in 11 out of the 12 categories, 9 additional reported they had experiences in 10 of the categories, etc. Examination of the distribution suggests that many students had a rather broad diversity of experiences as defined by these categories.

The questionnaire also contained a list of 16 activities occurring at the Student Union. Of the Arts College men, 13% reported they had never participated in any of these 16 activities and over one-half reported they had participated in no more than 3 of the activities. Figures were somewhat comparable although they suggested slightly less activity for Arts College women and IT men.

What Are Experiences Related To?

One purpose of the investigation was to examine the relationships between the students' status prior to entering the University, and experiences reported in the University. Five items from the inventories reflected the economic status of the home. These items pertained to fathers' occupation, fathers' education, mothers' education, number of possessions in the home, and number of hours worked while in school. The first four items were obtained from the freshman questionnaire, the last from the sophomore questionnaire. Correlations are presented in Table 3 for CLA men. Fathers' occupation correlated .25 with mothers' education, .44 with fathers' education, .25 with number of home possessions, and .26 with number of hours the student worked. These correlations are based on Arts College men. Mothers' education and fathers' education correlated .61 and mothers' education correlated .19 with the number of home possessions and -.05 with number of hours students worked. Fathers' education correlated .27 with number of home possessions and -.09 with number of hours worked, and the number of home possessions correlated -.17 with number of hours students worked. Here a correlation coefficient of .17 is statistically significant at the .05 level and one of .22 is statistically significant at the .01 level. These items reflect something we can call "home status".

Another cluster of items consisted of number of magazines read before college, number of organizations parents belong to, number of states visited before college, number of books read before college, number of youth groups belonged to, number of states visited after two years of college, and number of home possessions. These correlations are shown in Table 4. Particularly notable are the correlations of .79 between number of magazines read and number of organizations parents belong to, .77 between number of magazines read and number of youth groups which the student belonged to, and .87 between number of organizations parents belonged to and number of youth groups students belonged to. The number of states visited prior to college and after two years of college reflect essentially the same thing as shown by the correlation of .87. Number of possessions in the home is significantly related to each of these variables.

Table 3
Intercorrelations Between Selected Inventory
Family Status Items For CLA Men

	2	3	4	12
1 Father's Occupation ⁽¹⁾	.25**	.44**	.25**	.26**
2 Mother's Education		.61**	.19**	-.05
3 Father's Education			.27**	-.09
4 Number Home Possessions				-.17*
12 Number Hours Worked 1 Week				

(1) Signs of correlations for father's occupation have been reversed because in list lowest numbers were assigned to professional occupations.

* $P < .05$

** $P < .01$

Table 4
Intercorrelations Between Selected Inventory Items for CLA Men

	6	7	9	10	13	4
5 No. Magazines read (Pre-College)	.79**	.36**	.45**	.77**	.14	.49**
6 No. Organizations Parents Belong To		.32**	.59**	.87**	.11	.40**
7 States Visited (Pre-College)			.27**	.35**	.86**	.38**
9 Books Read (Pre-College)				.57**	.14	.28**
13 States Visited (Sophomore)					.07	.33**
4 No. Home Possessions						.32**

** $P < .01$

From the two inventories, five change scores were obtained. The first reflected the change in familiarity with authors from the pre-college to the sophomore questionnaire. The next two indexes reflected changes in the knowledge of artists and of well-known persons. The next change score reflected the change in number of activities from the first to the second year of college and the final change score reflected the change in the number of states visited. Table 5 shows these intercorrelations. The change in the number of authors known was related to changes in artists and well known persons, and the changes in the number of artists known was related to changes in well known persons, changes in activity scores, and changes in states visited. Although the relationships between these change scores are not high, in terms of the reliability of such change data, it is rather surprising to find any significant correlations at all and the results do provide some support for the hypothesis that students most likely to change during college in one way are likely to change also in selected other ways. Change during college is not highly specific.

For each of the three groups, Arts College men, Arts College women, and IT men, the students were divided according to the occupation of the father and comparisons were made for both freshman and sophomore data of the number of states visited, number of magazines read, famous persons known, famous artists known, and famous authors known. Similar breakdowns were based on fathers' education, on type of residence while in college, and on number of hours worked. The relationships between the classification variables and college experiences and participation in union programs also was observed.

The following comments pertain to men in the College of Liberal Arts. The sons of fathers who were in professions, in business management jobs, and in office jobs, tended to have traveled in more states than did the sons of other fathers. No consistent relationship appeared between the number of magazines read and the occupation of the father. Familiarity with the names of well known persons, with artists, and with authors appeared to be somewhat related to occupational level of father but these were not consistent nor straight line relationships. For example, the average score on the famous persons check list for the 23 sons of professional men was 20.4 and for the 22 sons of salesmen 18.8. The average score on the artists check list for the first group was 7.3, for the second group 8.1, and on the authors check list 6.0 and 7.9. The sons of men in professions as freshmen reported they had visited more states than the sons of skilled tradesmen, read more magazines, knew of more well known persons, and were more familiar with artists; but the sons of skilled tradesmen reported they had read books of more listed authors. At the end of the second year the sons of professional men maintained their advantage in travel but the sons of skilled tradesmen reported they read more magazines, knew many well known persons, and had read more of the listed authors.

Some clue may be obtained here as to why children attend college. Among the Arts College men, 15 reported that their fathers had only an eighth grade education; 25 reported their fathers were college graduates but had no more than one degree. For the sons of men with an eighth grade education, the average number of magazines read was 8.3, for the college graduates' sons, 6.8. The sons of college graduates reported more knowledge than did the other groups regarding well known persons, familiarity with artists, (and here the difference was large) and familiarity with authors. Parents with relatively little formal education provide varying opportunities in the home for intellectual development and those parents who have little education themselves but who provide these opportunities are more likely to have children who attend college

Table 5

Intercorrelation For CLA Men Between Five
Change Scores Derived From Inventories

	15	16	17	20
14 Change - Authors	.26**	.24**	.20**	.01
15 Change - Artists		.17**	.28**	.20**
16 Change - Personages			.09	-.04
17 Change scores - Activity				-.06
20 Change score - States				

* P < .05

** P < .01

Relationships also were observed between experiences and the place of the student's residence while in college and the number of hours which he worked. However, even when differences among averages appeared, the amount of overlapping was large.

Tables 6 to 13 show relationships between fathers' occupation and college experiences, fathers' education and college experiences, type of residence and college experiences, and number of hours worked and college experiences for CLA men. In these tables data are included concerning participation in union activities.

In summary one can conclude that the occupation of the father is related to his education, to the mother's education, to the number of possessions in the home, to the number of hours a student works while in school, and to the change score in the student's college activities from the first to the second year. Fathers' education is related to mothers' education, to the number of home possessions, to the number of youth groups to which the student belongs, to where he lives while attending school, to the amount of traveling he has done, to the change scores for famous artists and college activities. Where the student lives while attending college appears to be significantly related to fathers' education and nothing else. How much the student works while in college appears to be related to the fathers' occupation, number of home possession, and nothing else. The correlation between change scores and other indexes, when they are significant, are so low as to suggest that the extent to which a student changes along these dimensions while he is in college is not to any great extent a function of the other variables studied here.

Seventeen variables from the Pre-College and College Experience Inventories were selected for the Arts College men and the intercorrelations were determined. The resulting correlation matrix was then factor analyzed in order to identify any basic dimensions that might underlie these seventeen variables.

The variables consisted of:

- Father's occupation
- Mother's education
- Father's education
- Number of home possessions
- Number of magazines read
- Number of organizations parents belong to
- Number of states visited as reported in pre-college inventory
- Number of books read as reported in pre-college inventory
- Number of youth groups joined as reported in pre-college inventory
- Type of residence while in college
- Number of hours worked per week while in college

Table 6

Relationship for CLA Men Between Paternal Occupation and Responses to Items from the Pre-College and College Experience Inventories

N=133

Fathers Occ. *	N	States Visited				Magazines Read				Famous Persons Known			
		1966		1968		1966		1968		1966		1968	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	23	15.0	8.4	17.2	9.4	7.7	3.9	4.5	2.7	20.4	8.0	24.7	3.0
2	20	15.0	12.3	16.4	12.6	5.8	3.4	5.1	4.0	19.5	5.5	23.7	3.3
3	15	15.9	11.6	14.0	12.2	11.4	11.1	5.0	3.0	16.9	7.5	24.8	3.3
4	22	13.8	8.1	15.5	8.5	5.5	2.9	4.5	2.0	18.8	8.6	25.8	2.3
5	7	9.1	5.4	12.0	5.7	5.1	2.7	4.4	2.2	17.7	6.4	23.0	3.7
6	17	13.0	9.8	14.1	8.1	5.6	3.2	6.1	5.6	17.8	7.8	24.5	3.7
7	6	8.3	7.1	7.3	4.5	5.2	2.0	5.2	3.4	20.5	4.5	22.5	4.1
8	21	12.2	10.0	14.6	9.7	5.9	2.8	5.3	6.0	21.2	6.7	24.9	3.1
10	2	13.0	4.0	17.0	7.0	6.0	3.0	4.0	2.0	20.0	2.0	20.5	1.5

Fathers Occ. *	N	Famous Artists Known				Famous Authors Known				* 1 = Professional 2 = Business Owned or Managed 3 = Office Work 4 = Sales 5 = Farmer 6 = Skilled Trades 7 = Factory Work or Laborer 8 = Other 10 = No Response
		1966		1968		1966		1968		
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	
1	23	7.3	6.7	10.2	6.8	6.0	3.1	8.1	4.3	
2	20	5.9	5.1	11.4	7.3	5.7	3.2	9.3	3.9	
3	15	5.5	5.2	11.1	8.6	4.4	2.3	9.5	5.0	
4	22	8.1	6.4	12.7	7.8	7.9	3.9	10.2	4.9	
5	7	3.9	2.8	8.7	6.5	6.0	4.4	6.9	4.5	
6	17	4.5	2.9	8.8	6.0	6.6	2.6	9.7	4.5	
7	6	3.2	2.6	7.3	6.2	6.8	3.3	8.2	3.5	
8	21	6.9	5.5	11.7	6.2	7.4	3.0	10.0	3.6	
10	2	3.5	2.5	5.0	4.0	4.0	1.0	4.5	1.5	

Table 7

Relationship for CLA Men Between Paternal Occupation and
Number of College Experiences Reported for
First and Second Years in College

N=133

Fathers Occ. *	<u>N</u>	Campus Experiences				Coffman Union Programs	
		1st Year		2nd Year		Mean	SD
		Mean	SD	Mean	SD		
1	23	5.0	3.2	5.6	3.0	13.3	1.9
2	20	5.2	2.5	6.5	3.2	13.4	1.7
3	15	5.5	2.6	6.6	3.1	13.1	2.6
4	22	5.8	2.9	6.0	3.0	12.8	3.1
5	7	5.0	3.5	4.1	4.2	13.1	3.1
6	17	5.4	3.2	6.2	3.4	12.7	3.9
7	6	6.5	1.4	8.0	1.7	13.3	1.8
8	21	6.4	2.1	7.5	2.1	13.7	1.6
10	2	5.5	.5	6.0	1.0	12.5	1.5

- *
- 1= Professional
 - 2= Business Owned or Managed
 - 3= Office Work
 - 4= Sales
 - 5= Farmer
 - 6= Skilled Trades
 - 7= Factory Work or Laborer
 - 8= Other
 - 10= No Response

Table 8

Relationship for CLA Men Between Paternal Education and Responses to Items from the Pre-College and College Experience Inventories

N=133

Fathers Educ. *	N	States Visited				Magazines Read				Famous Persons Known			
		1966		1968		1966		1968		1966		1968	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
2	3	16.3	12.2	9.7	5.2	13.3	14.0	4.0	2.9	8.3	3.4	23.0	4.2
3	15	13.4	9.7	13.1	6.4	8.3	9.9	5.9	6.6	17.2	6.5	23.7	2.8
4	10	14.0	13.2	14.8	12.1	5.6	2.3	4.2	1.6	22.5	3.1	23.8	3.7
5	45	11.3	9.1	13.6	9.9	5.9	3.1	4.8	4.1	18.8	8.0	24.8	2.9
6	6	7.8	6.8	8.0	6.1	4.3	1.9	5.2	3.8	17.5	4.8	21.5	4.6
7	16	14.4	10.3	16.3	10.5	6.9	3.7	5.3	3.4	21.3	6.0	24.9	2.8
8	25	16.3	8.1	18.0	9.9	6.8	3.4	5.7	3.3	20.1	7.2	25.1	3.7
9	13	16.8	9.5	18.3	10.0	7.2	3.4	3.7	2.3	19.7	8.4	24.9	2.9

Fathers Educ. *	N	Famous Artists Known				Famous Authors Known			
		1966		1968		1966		1968	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
2	3	4.0	2.9	10.3	6.5	2.7	.9	7.7	3.1
3	15	3.3	2.6	7.7	5.6	5.7	3.5	8.7	4.4
4	10	5.2	4.4	14.5	8.9	6.9	3.7	8.3	4.7
5	45	4.7	2.9	10.2	6.8	6.8	3.0	9.9	3.9
6	6	3.7	3.3	5.5	3.9	5.3	2.5	7.7	3.4
7	16	8.8	7.1	11.5	6.7	6.4	3.7	9.3	3.8
8	25	9.4	6.4	13.3	7.8	7.3	3.6	9.9	5.9
9	13	7.8	7.6	9.2	5.9	5.3	2.8	7.5	3.1

*
 2 = Some Grade School
 3 = Completed Grade 8
 4 = Some High School
 5 = High School Graduate
 6 = Business or Trade School
 7 = Some College
 8 = College Graduate
 9 = More Than one College Degree

Table 9

Relationship for CLA Men between Paternal Education and
Number of College Experiences Reported for
First and Second Years in College

N=133

Fathers Educ. *	<u>N</u>	Campus Experiences				Coffman Union Programs	
		1st Year		2nd Year		Mean	SD
		Mean	SD	Mean	SD		
2	3	5.3	2.9	6.7	3.7	14.3	1.2
3	15	5.3	2.7	6.5	3.2	13.7	2.1
4	10	6.0	3.1	5.7	3.7	13.2	1.8
5	45	5.7	2.9	6.4	3.1	13.4	1.8
6	6	6.5	1.4	9.2	1.8	12.0	5.7
7	16	6.2	2.2	6.9	2.8	13.4	1.7
8	25	5.0	2.9	5.0	2.6	12.2	3.5
9	13	5.2	3.1	6.8	2.6	13.9	1.4

*

- 2= Some Grade School
- 3= Completed Grade 8
- 4= Some High School
- 5= High School Graduate
- 6= Business or Trade School
- 7= Some College
- 8= College Graduate
- 9= More than one College Degree

Table 10

Relationship for CLA Men Between Collegiate Residence and Responses to Items from the Pre-College and College Experience Inventories

N=133

Type of Res. *	N	States Visited				Magazines Read				Famous Persons Known			
		1966		1968		1966		1968		1966		1968	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	2	13.0	2.0	12.5	2.5	6.5	.5	5.0	1.0	16.0	8.0	26.0	1.0
2	14	20.9	10.8	21.6	12.4	11.3	9.4	6.0	2.8	20.0	8.0	26.1	3.0
4	7	11.1	6.3	13.1	7.5	8.6	4.5	7.7	3.7	22.4	4.3	25.1	2.9
5	1	41.0	0.0	45.0	0.0	14.0	0.0	6.0	0.0	23.0	0.0	28.0	0.0
6	13	11.6	7.9	14.5	7.9	4.5	1.9	5.4	7.1	17.8	7.6	23.0	3.0
7	1	12.0	0.0	7.0	0.0	2.0	0.0	7.0	0.0	5.0	0.0	26.0	0.0
8	1	13.0	0.0	21.0	0.0	11.0	0.0	0.0	0.0	19.0	0.0	22.0	0.0
9	6	7.8	4.1	10.8	4.2	8.0	3.8	6.5	3.4	21.5	2.8	23.2	3.5
10	88	13.0	9.7	14.1	9.4	5.9	4.0	4.5	3.5	19.1	7.5	24.4	3.3

Type of Res. *	N	Famous Artists Known				Famous Authors Known				*
		1966		1968		1966		1968		
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	
1	2	4.5	.5	13.0	2.0	5.5	1.5	7.0	2.0	1 = Living with Relative
2	14	8.3	5.8	13.6	6.9	5.0	2.8	11.1	5.4	2 = University Residence Hall
4	7	4.1	2.5	9.7	8.2	7.3	3.3	8.9	3.3	4 = Fraternity-Sorority
5	1	6.0	0.0	29.0	0.0	13.0	0.0	17.0	0.0	5 = Own or Rent House
6	13	4.7	6.0	7.5	6.1	6.3	3.7	8.3	4.3	6 = Rent Apartment
7	1	8.0	0.0	18.0	0.0	2.0	0.0	12.0	0.0	7 = Rooming House
8	1	3.0	0.0	9.0	0.0	5.0	0.0	13.0	0.0	8 = Private Residence Hall
9	6	3.7	5.2	11.2	8.4	6.3	2.1	9.3	3.8	9 = Other
10	88	6.5	5.5	10.4	6.9	6.6	3.4	8.9	4.3	10 = Living with Parents

Table 11

Relationship for CLA Men Between Collegiate Residence and
Number of College Experiences Reported for
First and Second Years in College

N=133

Type of Res *	<u>N</u>	Campus Experiences				Coffman Union Programs	
		1st Year		2nd Year		Mean	SD
		Mean	SD	Mean	SD		
1	2	6.0	2.0	6.0	2.0	14.5	.5
2	14	3.9	2.1	4.6	2.5	12.3	2.8
4	7	3.6	2.4	3.7	2.2	13.4	2.1
5	1	4.0	0.0	5.0	0.0	14.0	0.0
6	13	5.9	1.9	7.9	1.9	13.7	1.6
7	1	5.0	0.0	7.0	0.0	13.0	0.0
8	1	8.0	0.0	3.0	0.0	13.0	0.0
9	6	4.5	2.6	4.0	4.6	13.2	3.3
10	88	6.0	2.9	6.8	3.0	13.2	2.6

*

- 1= Living with Relative
- 2= University Residence Hall
- 4= Fraternity-Sorority
- 5= Own or Rent House
- 6= Rent Apartment
- 7= Rooming House
- 8= Private Residence Hall
- 9= Other
- 10= Living with Parents

Table 12

Relationship for CLA Men Between Number of Hours Worked and Responses to Items from the Pre-College and College Experience Inventories

N=133

Hours Worked	N	States Visited				Magazines Read				Famous Persons Known			
		1966 Mean	1966 SD	1968 Mean	1968 SD	1966 Mean	1966 SD	1968 Mean	1968 SD	1966 Mean	1966 SD	1968 Mean	1968 SD
1-5	8	14.2	11.3	15.9	12.5	6.8	3.9	3.4	2.3	20.5	5.1	24.2	3.5
6-10	10	11.2	6.8	12.9	8.4	5.6	3.0	6.2	6.7	20.6	6.9	24.5	3.3
11-15	12	25.2	13.4	24.5	12.1	5.9	2.2	5.3	2.3	19.1	9.6	26.6	2.0
16-20	19	13.0	7.8	15.2	8.8	6.3	3.1	4.2	3.2	18.5	6.7	24.0	3.0
21-25	14	15.9	9.3	14.3	7.9	7.1	7.5	3.9	2.4	20.4	6.1	23.9	2.3
26-30	8	8.4	5.6	11.5	7.2	5.4	3.0	3.0	2.8	20.5	6.3	22.5	5.2
31-35	3	8.0	4.3	8.0	5.0	4.0	1.6	6.3	2.4	22.3	3.1	24.0	1.6
36-40	5	6.8	4.3	9.6	5.3	5.6	2.8	2.6	1.9	20.2	4.5	23.2	3.9
40 +	6	7.0	2.2	10.2	4.2	5.3	4.3	11.0	8.4	16.2	8.9	25.2	3.7
None	48	13.3	9.0	15.0	9.9	7.7	6.3	5.4	3.0	18.7	7.8	24.8	3.2

Hours Worked	N	Famous Artists Known				Famous Authors Known			
		1966 Mean	1966 SD	1968 Mean	1968 SD	1966 Mean	1966 SD	1968 Mean	1968 SD
1-5	8	5.6	3.7	11.5	7.7	7.0	2.6	10.6	4.2
6-10	10	5.8	5.2	8.4	7.6	6.3	3.4	9.5	3.9
11-15	12	9.3	5.7	13.5	6.3	8.2	3.4	11.1	4.7
16-20	19	4.7	4.5	9.2	6.7	6.5	2.9	8.5	4.1
21-25	14	6.1	5.2	10.4	6.1	7.0	4.0	9.3	4.3
26-30	8	4.9	4.0	8.9	8.2	5.8	1.9	6.4	2.8
31-35	3	3.7	.5	16.0	3.3	6.7	1.2	13.7	4.0
36-40	5	4.4	3.9	7.2	4.2	5.2	1.7	6.4	1.0
40 +	6	10.0	8.2	13.2	8.9	9.2	4.1	12.5	4.8
None	48	6.3	5.8	11.0	7.2	5.6	3.3	8.7	4.4

Table 13

Relationship for CLA Men Between Number of Hours Worked and
Number of College Experiences Reported for
First and Second Years in College

N=133

Hours Worked	<u>N</u>	Campus Experiences				Coffman Union Programs	
		1st Year		2nd Year		Mean	SD
		Mean	SD	Mean	SD		
1-5	8	4.6	2.8	4.9	2.2	13.6	1.1
6-10	10	5.0	2.4	5.6	3.2	12.8	1.5
11-15	12	4.0	2.9	5.5	2.8	12.9	2.1
16-20	19	6.1	2.9	6.6	2.8	13.5	2.3
21-25	14	6.3	2.9	8.1	2.7	13.1	1.6
26-30	8	6.8	2.1	7.3	2.6	11.9	4.7
31-35	3	4.3	4.8	3.7	4.5	11.3	3.3
36-40	5	6.4	1.6	7.4	2.2	14.6	.8
40 +	6	6.0	2.7	7.5	3.7	11.2	5.5
None	48	5.6	2.6	6.1	3.1	13.6	2.0

Corresponding change score for famous artists
Corresponding change score for well-known persons
Change score in college activities from first to second years
Number of attendances at programs at Coffman Student Union
Change score in number of states visited (1968 - 1966)

These variables provided information about parental occupation and education, home status, and activities and changes in activities as reported by students.

The correlations in the matrix ranged from $-.52$ to $.79$. The correlation of $-.52$ was between number of youth groups joined and change in the number of states visited. That is, students who belonged to the most youth groups prior to college changed least in terms of visiting new states during their first two years in college. Actually the group that belonged to most organizations had visited most states prior to coming to college so they had the fewest number to add. The correlation of $.79$ was between number of magazines read the number of organizations parents belonged to.

Table 14 shows the correlational matrix. Table 15 shows four identified factors and the factor loadings on the variables associated with the factor. Factor One seemed to appear in variables reflecting home opportunities and resources with heavy weighting in the number of youth groups belonged to prior to college, the number of organizations parents belonged to, and the number of magazines and books read. Also heavily loaded with this factor were home possessions, states visited, and hours worked per week. Some of the change scores also appeared to be weighted here.

The second factor most reflected parental education and occupation with considerable weighting on home possessions and some weighting on change score.

The third factor was essentially a change factor but also referred to the number of Union programs attended. This factor appeared on the change score in the states visited, the change score for famous authors, and the change score for famous artists.

The fourth factor was a more miscellaneous one that appeared in the youth groups joined prior to college, the type of residence while in college, the student union programs, the change scores for artists, the number of books read prior to college, and father's occupation.

One can infer from this factor analysis and also from the more armchair type of analysis that some vague entity known as home-educational-cultural level is related to what students experience. Apart from this, another concept pertains to the parental education and occupation. Changes while in college seem to group themselves together somewhat, but certainly not completely independently from other variables.

Table 14

Intercorrelations^a Between Selected Variables From Pre-College and College Experiences Inventories - College of Liberal Arts Men

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Father's Occupation	--	-25	-44	-25	-15	-12	-14	03	-08	-07	26	-03	06	-02	21	02	00
2. Mother's Occupation		--	-25	19	-09	-16	17	-08	-23	-06	-05	-06	-12	-15	-20	-11	09
3. Father's Education			--	27	-05	-12	14	-13	-21	-27	-09	-06	-24	-08	-32	-09	12
4. Number of Home Possessions				--	49	40	38	28	33	-10	-17	10	13	13	10	-11	-11
5. Number of Magazines Read (Pre-College)					--	79	36	45	77	07	-15	27	17	19	35	11	-39
6. Number of Organizations Parents Belong To						--	32	59	87	04	-12	25	12	26	35	01	-40
7. States Visited (Pre-College)							--	27	35	-06	-14	21	14	19	05	04	-25
8. Books Read (Pre-College)								--	57	-04	04	30	16	31	42	-30	-25
9. Number of Youth Groups Joined (Pre-College)									--	03	-13	27	07	24	36	02	-52
10. Type of Residence										--	08	09	12	-05	08	03	12
11. Number of Hours Worked Per Week											--	-09	-03	-06	13	-16	00
12. Change Score Famous Authors ^b												--	26	24	20	-18	01
13. Change Score Famous Artists													--	17	28	-16	20
14. Change Score Famous Persons														--	09	-09	-04
15. Change Score Extra College Activities															--	-12	-06
16. Coffman Programs																--	-23
17. Change Score States Visited (1968 minus 1969)																	--

-31a-

Note -- Decimal points are omitted

^bNumber famous authors known in 1968 minus number of famous authors known in 1966^ar=.17 significant at $p < .05$ with $df = 132$

Table 15

Factor Analysis of Selected Variables From Pre-College and
College Experience Inventory - College of Liberal Arts Men

Variables	Rotated Factor Loadings					
	1	2	3	4	5	h^2
Father's Occupation	09	64	06	33	18	56
Mother's Education	20	-68	-23	18	-25	65
Father's Education	19	-83	-15	18	-03	79
Number of Home Possessions	-50	-49	-17	02	-08	53
Number of Magazines Read (Pre-College)	-85	-13	15	-11	-18	80
Number of Organizations Parents Belonged To	-89	-04	14	01	-11	82
States Visited (Pre-College)	-49	-37	-05	-05	12	40
Books Read (Pre-College)	-72	09	-24	33	01	69
Number of Youth Groups Joined (Pre-College)	-89	02	24	05	-03	86
Type of Residence	-02	27	-11	-51	-63	74
Number of Hours Worked Per Week	14	35	-12	-57	-36	60
Change Score Famous Authors ^a	-42	07	-42	-21	15	43
Change Score Famous Artists	-26	26	-54	-35	05	55
Change Score Famous Persons	-38	06	-24	-07	57	53
Change Score Extra College Activities	-49	43	-21	16	-23	55
Coffman Programs	05	-01	70	-39	05	65
Change Scores States Visited (1968 minus 1969)	47	05	-61	-25	-01	66

Grades, Persistence, and Experiences

At the end of the sophomore year, a grade point average was computed for each student using all of the grades earned while the student was in residence. Table 16 shows the means and standard deviations for the grade point average and similar statistics for scores on the Minnesota Scholastic Aptitude Tests and other data from the College Experience Inventories. These are presented for the CLA men, the CLA women, and the IT men. The following three tables show the intercorrelations among these variables for each of these three groups.

The mean grade point averages for the three groups were roughly the same - the average student was slightly better than a C student. The three groups also resembled one another in terms of the number of quarters of residence in the University; the average student remained in the University somewhat over 5 quarters. The comparison of the mean scores on the Minnesota Scholastic Aptitude Test is somewhat misleading insofar as percentile scores were used but the figures do reveal that the Institute of Technology students had higher college aptitude test scores than did the Arts College students and this is true of the populations from which these samples were drawn.

In examining the College Experience Inventory data, variables 4 through 11, the general trend is for higher mean scores for the two CLA groups than for the IT group. This trend appears on all variables with the exception of the number of famous persons identified; IT men have a slightly higher mean here than do CLA women. The other College Experience variables, reflecting more cultural and aesthetic dimensions of the college student's awareness, indicate that CLA students report a broader knowledge than do IT students. Few of these mean differences, however, approach an acceptable criterion of one-half standard deviation difference between groups. Variable 7, number of painters whose works students have seen, reflects the largest difference between groups; as with the other variables, IT men are the lowest and CLA women, the highest.

Although CLA students have had broader "college experiences" than IT students, CLA women have had more cultural aesthetic experience than CLA men. Although the "college experience" is intended to broaden the perspectives of both men and women, these data indicate that men and women are differentially responding to the cultural and aesthetic opportunities available at the University.

An examination of total first year experiences and total second year experiences provides some distressing interpretations. Consistent for all three groups, students report a smaller number of experiences in their second year than in their first year. Some interpretation of this could be: 1) As freshmen, students have had limited exposure to certain types of experiences, and, consequently, make up for this deficit during their first year; 2) students have less time to explore during the second year; 3) students may have moved far from campus, thus reducing their chances of attending various events; or 4) as a result of some first year experiences relevant to University life, students seek other, maybe "more meaningful", experiences.

Table 16

Means and Standard Deviations Related to the College Experience Inventory
 For IT Men (N=147), CLA Men (N=133) And CLA Women (N=143)

Variable	<u>IT Men</u>		<u>CLA Men</u>		<u>CLA Women</u>	
	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
1. MSAT %	74.48	24.93	63.19	28.29	65.39	30.85
2. GPA	2.23	.74	2.24	.72	2.45	.84
3. No. Quarters at U	5.30	1.59	5.39	1.53	5.17	1.67
4. No Magazines Read	4.20	2.86	5.04	4.05	5.36	3.04
5. No. Famous Persons Identified	22.90	5.29	23.49	5.24	22.64	5.13
6. No. Authors Read	8.22	4.38	9.16	4.47	10.36	4.81
7. No. Painters Works Seen	9.46	6.85	10.69	7.24	14.06	8.08
8. Miscellaneous Experiences	9.16	2.71	9.49	2.86	10.45	2.59
9. No. Campus Events	.49	.88	.65	1.44	.85	1.09
10. Total of First Year Experiences	21.59	5.99	22.59	6.64	24.42	6.19
11. Total of Second Year Exp.	19.48	6.80	20.71	6.80	20.92	7.85
12. Total Satisfaction With U	4.97	1.16	4.77	1.38	5.23	1.12

Mean scores for the final variables, total satisfaction with the University, show that IT and CLA students are quite similar in their evaluations of the University.

The intercorrelation tables for the 12 variables for the IT men, CLA men and CLA women are Tables 17, 18, 19, respectively; there are 28, 32, and 30 correlations significant in these three respective groups. Considering all three groups simultaneously, 21 of the correlations between variables are significant in all three of the groups of students. For example, all three of the correlations between first and second year experiences are significantly different than zero; these correlations are also the highest correlations in each of the tables. Correlations between first year experiences and second year experiences are .61 for IT men, .76 for CLA men and .72 for CLA women.

Examining the first three variables, MSAT, GPA, and number of quarters at the University, provides some interesting comparisons. As can be noted from Tables 17-19, MSAT did not correlate with GPA in any of the three groups nor did MSAT consistently correlate with any of the College Experience variables or total satisfaction with the University. Some hypotheses can be suggested to explain the correlations between GPA and number of quarters at the University; these correlations are .37 for CLA women, .63 for CLA men and .57 for IT men. The relatively higher scores for the male groups suggest that academic achievement may be emphasized more for men than women during a student's enrollment at the University. The number of quarters at the University was correlated significantly with the total number of second year experiences for all three groups. The same trend appeared in two of the three groups when quarters at the University and first year experiences were correlated.

In examining the Inventory of College Experiences variables 4 through 11, one can note a high degree of intercorrelation between variables in all three of the student groups; this indicates that the dimensions measured are not independent domains in the student's college environment. In terms of these eight variables, the variable "number of famous persons identified" showed the smallest number of significant correlations with the other College Experience variables; this variable correlated significantly with only two other variables, number of authors read and number of painters whose works had been seen. Identification of famous persons, rather than pertaining specifically to experiences related to the University environment, could be seen as a "dimension of world and national awareness". The variable "number of authors read" was significantly correlated with all seven of the other variables in each of the three groups; this indicates that the extensity of a student's reading can serve as a basis for the prediction of his participation in a wide variety of college experiences.

The correlations between the Inventory of College Experiences variables and a student's total satisfaction with the University were not consistently significant across groups for any of the eight variables. The correlations between MSAT, GPA, number of quarters, and total satisfaction were also non-significant across groups. These results indicate that those dimensions of the college experience as measured by the Inventory of College Experiences are unrelated to a student's satisfaction; other possible variables determining satisfaction could be strength of academic programs, quality of instructors or degree of personal involvement in the University.

Table 17

Intercorrelations of Selected College Experience -
Data and Academic Indices For 147 I.T. Men

		1	2	3	4	5	6	7	8	9	10	11	12
MSAT	1.	1.00											
GPA	2.	.07	1.00										
Quarters	3.	.01	.57*	1.00									
Magazines	4.	.18*	-.01	-.04	1.00								
Persons	5.	.18*	.05	-.11	.29*	1.00							
Authors	6.	.18*	-.15	-.08	.38*	.20*	1.00						
Painters	7.	.25*	.01	-.10	.30*	.26*	.46*	1.00					
Misc. Expense	8.	.04	-.05	-.01	.32*	.22*	.37*	.27*	1.00				
Campus Events	9.	-.02	-.08	-.14	.24*	.02	.45*	.28*	.36*	1.00			
1st Year	10.	-.02	-.12	-.11	.16	.07	.33*	.07	.49*	.36*	1.00		
2nd Year	11.	-.00	.12	.23*	.11	-.00	.19*	.06	.37*	.38*	.61*	1.00	
Total Satisfaction	12.	-.00	.09	.14	-.00	-.15	-.15	-.22*	.04	-.04	.07	.03	1.00

*Correlations coefficient is significantly different than zero at the .05 level of confidence.

Table 18

Intercorrelations of Selected College Experience -
For 133 CLA Men

	1	2	3	4	5	6	7	8	9	10	11	12
1.	1.00											
2.	.13	1.00										
3.	.01	.63*	1.00									
4.	-.09	-.09	-.09	1.00								
5.	.04	.05	.07	.02	1.00							
6.	-.02	.02	-.01	.36*	.23*	1.00						
7.	.05	.03	.09	.27*	.18*	.51*	1.00					
8.	.05	.08	.03	.40*	.18*	.47*	.31*	1.00				
9.	-.19*	-.05	-.08	.32*	.11	.43*	.24*	.37*	1.00			
10.	-.19*	.13	.15	.35*	.11	.37*	.30*	.49*	.47*	1.00		
11.	-.03	.27*	.33*	.29*	.10	.36*	.29*	.57*	.41*	.76*	1.00	
12.	-.00	.28*	.23*	.04	.16	-.04	-.04	.14	.12	.19	.30*	1.00

* Correlation coefficient is significantly different than zero at the .05 level of confidence.

Table 19

Intercorrelations of Selected College Experience -
For 144 CLA Women

	1	2	3	4	5	6	7	8	9	10	11	12
1.	1.00											
2.	.06	1.00										
3.	.08	.37*	1.00									
4.	-.08	-.24*	-.07	1.00								
5.	-.04	.03	.05	.17*	1.00							
6.	.03	.10	.10	.32*	.24*	1.00						
7.	.14	.10	.09	.24*	.22*	.51*	1.00					
8.	-.07	.05	.22*	.24*	.12	.51*	.34*	1.00				
9.	.04	.05	.14	.25*	-.04	.28*	.23*	.36*	1.00			
10.	-.01	.11	.21*	.19*	.11	.41*	.14	.50*	.39*	1.00		
11.	.06	.25*	.43*	.07	.10	.35*	.26*	.45*	.38*	.72*	1.00	
12.	.00	-.04	.15	.17*	-.20*	-.14	-.03	.04	.15	.14	.16	1.00

* Correlation coefficient is significantly different than zero at the .05 level of confidence.

Conclusion

This exploratory study was designed to provide information about the experiences of students during their first two years in college and to provide information regarding the feasibility of the method here used, the College Experience Inventory.

The experience inventory approach provides information that is consistent and relatively stable and reliable. Students are willing to devote time and effort to complete such inventories. The College Experience Inventory is 12 pages long and perhaps requires from 30 to 45 minutes to complete. Response rate was reasonably good and a few respondents even noted at the end of the questionnaire that they had enjoyed completing it and had learned something about themselves in the process.

The checklist approach to determine how much students know provided results somewhat comparable to those obtained using a traditional multiple choice information test. The results reported in the appendix to this report suggest that the checklist provides a satisfactory index of ignorance, a less satisfactory index of knowledge. If a student says he does not know something, the chances are great that he really does not know it. If a student says he does know something, most probably he does know it, but there is greater error involved here than in the denial of knowledge.

Instruments such as the experience inventory more easily provide information about specific experiences and behaviors than they do about behaviors grouped or categorized. Broad indices of range of experience can be obtained by totaling or summing responses, but the inventory seems useful primarily for determining the proportion of students who do certain things and the characteristics of these students.

The major finding of the exploratory study is that few if any students have similar patterns of experiences in college. Considering the first two years of college as a "collegiate experience" and comparing students who are grouped together simply because they are on the same college campus or in the same unit of a college means relatively little. The impact of college on students depends on what students do or what happens to them in college.

A few students have practically no experiences in college other than those obtained in the classroom. A few students take advantage of a large number of resources on the campus and report dozens or hundreds of experiences each year. Most students are quite selective and report relatively limited numbers of experiences.

A survey done with an entire college population to determine the extent to which musical appreciation developed during the first two years in college would reveal relatively little if only 10 percent of the students had any experiences related to music. If the students who had musical experiences were observed, however, one might learn that for these particular students music appreciation was greatly affected. Students' social, political, and religious values also would be differentially influenced. These experience differences also extend to the classroom. On a large complex campus relatively few students have the same pattern of academic courses, and perhaps no group of students can be found who have the same courses and the same instructors during an entire year.

The proposal is made here that attempts to observe the impact of college on students be forsaken, and rather that efforts now be directed toward observing the impact of specific collegiate experiences on students who have those experiences. Do students who participate actively in organizations concerned with campus government develop different attitudes and values concerning social and political issues than students who do not participate? Is the amount of participation related to the extent of impact?

The experiences students have in college are dependent to some extent to the experiences they have had prior to college and these in turn are related to the student's family, particularly his parental educational and economic background. Even here one must be aware that the range of experiences does not seem to be as broad as the range of social-economic background and the relationship between range of experience and socio-economic background is low. Many students from economically deprived homes have had rich experience backgrounds, and some students from homes that are wealthy and where parents are well educated have had restricted experience backgrounds. The students studied here did not include substantial numbers of students coming from minority populations or deprived groups and generalizations to these students are not justified on the basis of our data.

No attention has been given in this research to the academic or classroom experiences of students and certainly these are among the most important of college experiences. Differences in courses, modes of instruction, instructors, text books, types of laboratories and related assignments, etc., all must make some difference but none of these have been observed or considered here.

When class or course experiences are considered along with other collegiate experiences the total range of college experience is extremely wide and the diversity among students tremendous.

References

- ASTIN, A. W., & PANOS, R. J. The educational and vocational development of college students. Washington, D. C.: American Council on Education, 1969.
- BERDIE, R. F. Are economically needy University freshmen culturally deprived? Minneapolis: Research Bulletin of the Office of the Dean of Students, University of Minnesota, Volume 9, Number 2, November 3, 1967, 27 pages. Mimeographed.
- BERDIE, R. F. Pre-college experiences of University of Minnesota freshmen. Minneapolis: Research Bulletin of the Office of the Dean of Students, University of Minnesota, Volume 9, Number 1, July 15, 1967, 8 pages. Mimeographed.
- DEWEY, J. Experience and education. New York: Collier, 1938 (page 25-26).
- JACOB, P. E. Changing values in college. New York: Harper and Row, 1957.
- STAPLETON, Mary. Report of the class of June 1966, unpublished, reported in Watson, G. H. The Brooklyn College student: A pilgrim's progress, New York: Twane Publishers, Inc., 1966.

Self-Claimed and Tested Knowledge¹

by

Ralph F. Berdie

Student Life Studies

University of Minnesota

The traditional method for observing whether or not a person knows something is to develop a test or examination which provides an opportunity for him to demonstrate his knowledge. The person is asked to indicate, through recall or recognition, the answer to a question and the person asking the question then decides regarding the correctness or appropriateness of the answer. The decision regarding the person's knowledge is a function of what he actually knows, the way the question is asked, and the way the judgment is made concerning the correctness of the answer. The assumption is made that if a question is asked of a person and he answers the question in the proper way, he has the information, and if he does not answer the question properly, he does not have the information.

An alternative method to determine whether or not a person knows something is to ask him if he knows it. Thus one can present an individual with a list of laws, principles, persons, or facts and ask the person to check or otherwise indicate the ones with which he is familiar and the degree of his familiarity.

Many people do not like to take tests and become frightened or anxious when faced by a test. Tests also can demand much time to develop, administer, and score. On the other hand, few people are reluctant to tell another that they do or do not know something and the collection of such information can be done fairly quickly and economically.

The motivation of the respondent and his perception of the reason for which he is being questioned most likely effect his responses, regardless of their mode. Revealing the extent of ones information to a professor offering pellets of high grades may be quite different from responding for a graduate student collecting dissertation data.

The author, in an attempt to observe the reported experiences of students, both before and after entering college, developed a set of experience inventories and asked students to describe their experiences (private music lessons, attendance at lectures and concerts, membership in youth organizations, and so on). As part of this experience inventory, three separate lists of relatively well-known persons were devised, a list of authors, a list of painters, and a list of other public figures, including businessmen, politicians, entertainers, and athletes. Students were asked to indicate that they had never heard of the person, that they had heard of the person but had no other experiences regarding him, or that they had read a book by the person, seen a picture painted by the person, or knew who the person was. The responses of students in different colleges were different, and the responses of students before and after two years of college were different. Thus the method apparently reflected differential experiences.

¹The author acknowledges the assistance of Mr. Gary R. Hanson in developing the test, collecting the data, and analyzing the results.

The question still remained, however, as to the correspondence that existed between what students said they knew and what they actually knew, as shown by more traditional achievement examination.

Method

From the experience inventory a list of twelve persons well-known in public life, thirteen well-known authors, and fourteen well-known painters was prepared. The names included were: Bishop Pike, Henry Miller, John Gardner, Melina Mercouri, Van Cliburn, Thomas Watson, James Conant, Shirley Booth, Werner Von Braun, Francis Spellman, Stewart Udall, Lorne Green, Albert Camus, Fyodor Dostoyevski, Ayn Rand, Henry James, James Baldwin, D. H. Lawrence, Leo Tolstói, William Golding, J. D. Salinger, Jean Paul Sartre, James Joyce, Francois-Marie Voltaire, James Michener, Edgar-Hilaire Degas, Henri Toulouse-Lautrec, Peter Paul Rubens, Grant Wood, Velasquez, El Greco, Botticelli, Manet, Andy Warhol, Cezanne, Salvador Dali, Jackson Pollack, Vincent Van Gogh, and Raphael.

For the well-known men, students were asked to respond in one of three ways: know who he is, have heard of him but cannot identify him, have never heard of him. The responses for the authors consisted of: read a book by him, heard of him but have not read a book by him, have never heard of him. The responses for painters consisted of: seen a picture by him, heard of him but have not seen a picture by him, have never heard of him. Students were instructed to place check marks in the appropriate positions and the purpose of the research presented before they completed the checklist was described as to determine how much students knew of these things.

The achievement examination consisted of forty items and the stem of each item included the names of the well-known persons. Five alternatives were presented for each item. Examples are: Bishop Pike is known for his experiences with a) LSD b) hypnosis c) group meditation d) speaking with the dead e) anxiety perception; Which of these novels was written by Albert Camus? a) Pere Goriot b) Walden Two c) One Flew Over the Cuckoo's Nest d) The Great Gatsby e) The Stranger; Salvador Dali painted a) "The Last Supper" b) "Young Beggar" c) "The Steamship" d) "View of Toledo" e) "Titus".

Total scores were obtained for the checklist and for the test, and three additional subscores were obtained for each instrument, one based on artists, one based on authors, and one based on public figures.

Two samples were studied. One contained 84 males and 80 females, mostly sophomores, who were drawn from the subject pool of the second semester of general psychology in the Spring Quarter of 1969. Each of these subjects received two "Course grade points" for participating in the research. The second sample consisted of 17 males and 35 females who lived in a coeducational freshman dormitory and who volunteered to take these tests in order to receive one dollar for their effort.

The instructions for each instrument were printed on the first page. The experience checklist was distributed and subjects were instructed to read the sheet of instruction and begin immediately. No time limit was set and most subjects finished in 7 to 10 minutes. After the checklist was completed and before the test was given to the students, they were told that the research was designed

to compare the two methods of observing what students know and that after they had completed the test the experimentors would compare their responses to the checklist to the answers they provided on the test. Subjects then were told to read the printed test instructions and begin immediately. Most subjects required between 15 and 25 minutes to complete the test.

Within both samples, analyses were completed separately for men and women. The experience checklist was scored by assigning a weight of three to the category of knowing who the person was, a weight of two to the category of having heard of the person, and a weight of one to the category of never having heard of the person. The total score for the checklist consisted of the sum of all of these items. The score for the achievement test consisted of the number of items answered correctly.

The number of subjects who checked each category on the checklist was determined, the number of subjects who checked each category on the checklist and also provided the correct answer for the corresponding item on the achievement test was observed, and the percent of individuals who checked each category and also checked the correct answer was determined. The product-moment correlation coefficients were computed between the total scores and for the three subtest scores for each sample.

Students' responses to the test items cannot provide an absolute indication of their knowledge or lack of knowledge about the person. Subjects were asked to identify the name of a person with one of several possible facts about that person and some of the subjects might have known much about a person but not known the fact presented. For example, the alternatives presented for the novelist, James Michener, included the names of four books that Michener did not write and the title of a book he did write, Tales of the South Pacific. A student might not have known that Michener wrote that particular book, but he may have read another book by him and have known quite a lot about him. Thus, the test gives only one of several possible indications as to the students' knowledge regarding these people.

Results

Table 1 presents the intercorrelations between the test scores and the checklist scores. Statistics are presented for the males and for the females in sample 1.

The correlations between total scores on the test and the checklist ranged from .47 to .74. The correlations for the three largest samples were .65 and above. These three correlations for the total scores are statistically significant beyond the .01 level, the correlation for the smallest group is significant beyond the .05. The correspondence between the two measures is more than faintly observable.

The subtest correlations are greatest for the public figures and nonexistent for the artists. This may be due in part to the relatively greater experience students have with names of public figures and the little experience they have in the field of fine arts.

The results on Table 1 suggest that a checklist provides a rough but acceptable means for determining how much students, as a group, know about some things but not about others.

The next analysis was of relationships between responses to individual items on the checklist and corresponding items on the test. For example, of the 80 women in the psychology pool sample, 43 said they knew who Bishop Pike was, 28 said they had heard of him but could not identify him further, and 9 said they had never heard of him. Of the 43 who said they knew who he was, 65 percent answered correctly the test item regarding Pike. Of the 28 who said they had heard of him, 43 percent answered the test item correctly. Of the 9 who said they had never heard of him, 11 percent answered the item correctly. Chance alone would provide that 20 percent would answer the item correctly insofar as there were five alternative answers. For each of the 39 items, the percentage was determined of students who said they knew the items and who answered the test item correctly. Then of the students who indicated they had heard the item but had no further experience with it, the percentage who answered the test item was observed. Finally, of the students who indicated they did not know the item, the percentage who answered correctly the test item was determined.

This analysis first was done for the 12 items regarding public figures. For the 80 women, the percentages indicating on the checklist that they knew who these people were ranged from 10 to 76, with Lorne Green being the best known person. The percentages indicating they had heard of these people but knew no more about them ranged from 1 to 28. The percentages indicating they had never heard of these people ranged from 2 to 53. Conant was the least known person. For this group of women, and considering only the items pertaining to public figures, the median percentage correct on the test was 56. Of the students who checked they knew who these people were, the median percentage correct on the test was 85. For the people who checked that they were acquainted with the names of these people but could not identify them, the median percentage correct on the test was 53. For the people who said they did not know who they were, the median percentage correct was 18.

For the authors' item, the median percentage correct on the test was 66. Considering only those persons who said they had read books by these authors, the median percentage correct on the test was 74. For those who indicated they knew the persons but had not read books by them, the median percentage correct on the test was 68. For the subjects who said they did not know who these authors were, the median percentage correct was 20.

For artists, the median percentage correct for the total group was 39. For the subjects who said they had seen pictures by these artists, the median percentage correct was 52. For the subjects who recognized the names but had not seen pictures by these persons, the median percentage correct was 23, and for the subjects who said they did not recognize the names of the artists, the median percentage correct was 22.

Thus, for the subjects who described their knowledge as nil, the median percentage correct on the tests was chance. For the most part, people who said they knew more about the person also performed better on corresponding items.

An inference regarding the validity of the method can be obtained by examining results from the original experience inventory. Among the list of names of thirty authors were included the names of four persons who were, as far as this writer knows, nonexistent and among the listed names of forty artists were included the names of four persons who were not known as artists. Among a group of entering freshman men, from 0 to 3 percent reported they had read books by the nonexistent authors and from 5 to 25 percent indicated they had heard of these persons. From 71 to 93 percent reported they had never heard of these persons; the remainder of the responses were unclassifiable. From 0 to 8 percent of the students indicated they had seen pictures by the nonexistent painters and from 4 to 19 percent reported they had heard of these. From 72 to 96 percent reported they had never heard of these nonexistent painters. Insofar as the students were under no pressure to lie, the responses indicating experiences with the nonexistent persons might be attributed to erroneous associations with the names of existing persons. For example, one of the nonexistent author name was Samuel Green. Students might have associated this with someone like Samuel Butler or Graham Green. One of the names presented was Gilbert Deck, a name that apparently does not resemble that of any well-known authors, for only 1 percent of the students reported they had read a book by him and only an additional 5 percent indicated they had actually heard of him. Similarly, the name of Paul Fondley, presented as an artist, was recognized by only 4 percent of the students and none of the students claimed they had seen a picture by him. These sketchy results suggest that not much purposeful distortion was reflected by the experience inventory.

Conclusion

The results suggest that for survey purposes, asking people whether or not they possess information may provide a satisfactory means for observing whether or not they know something. The effectiveness of the checklist method may be quite dependent on the content and also on the level of familiarity the subjects have with the content.

The results also suggest that if a person on a checklist indicates he does not know something, his lack of information will be verified by an achievement test. The checklist method may not be quite so adequate in showing whether or not people who think they know something actually do know it. In a sense, we have here an excellent method for determining the extent of a person's ignorance, perhaps a less satisfactory method for determining the extent of his knowledge.

This conclusion has practical significance. Surveys of amount of knowledge and information possessed by members of a group can be simplified by successive screening. Large numbers of persons can be asked to indicate on a checklist what they know and then achievement tests given only to those claiming knowledge. The assumption is that those who say they do not know really are ignorant and further testing of them is unnecessary. How acceptable this assumption is depends in part on the motivation of respondents.

Table 1. Intercorrelations between scores on the test and scores on the checklist for the four samples.

	N	Artists (14 items)	Authors (13 items)	Public Figures (12 items)	Total (39 items)
CLA males	84	.07	.44	.76	.74
CLA females	80	-.05	.69	.67	.67
Dormitory males	17	-.07	.40	.72	.47
Dormitory females	35	-.03	.30	.40	.65

**STUDENT COUNSELING BUREAU
OFFICE OF THE DEAN OF STUDENTS
University of Minnesota
1966**

Inventory of Pre-College Experiences

College students differ from one another in many ways. Students, their counselors and advisers, college instructors, and administrators, must know about the nature and relevance of these differences if college programs are to be well planned and if appropriate curricula and services are to be made available to students. The ways in which college students differ from one another when they enter college depend, in large part, on their earlier experiences. At present we know little about the experiences of students. You are being asked to provide information so that the University can more carefully consider the needs of students in the development of new and evaluation of old programs and services.

One way to learn if a student knows about a certain person, activity, or thing, is to give him a test to observe his knowledge. Another and a far simpler way is to simply ask him if he knows something and then assume his answer is frank and honest. We have selected this latter method because most students find it more enjoyable than taking a test and we assume that you will cooperate with us and answer with complete honesty.

Your replies will be held in strict confidence and in no way will the information you provide be used in determining grades, making administrative decisions, or communicated to anyone but the research personnel who analyze the data.

No student will be able to answer positively all, or perhaps many, of the questions asked here. We simply want to learn more about the experiences entering students have had. Most of your answers can simply be checked; however, there are a few answers you will need to write out. Do not let the numbering system bother you. Most of the answers you check are pre-coded to make it easy to punch your responses into special data processing cards.

Please go ahead now and complete the questionnaire. We are asking for your name because we wish to determine relationships between answers and some of the information available about students from other sources, such as psychological and admissions tests. Regardless of this, however, all of the information you provide will be regarded as confidential.

Date _____
month day year

1-4 I. D. No. _____ (write nothing here)

Name _____
last first middle

High School from which graduated _____ Year of Graduation _____

5. Sex: _____(1) _____(2)
M F 6-7. _____ Age at last birthday

8. College (Check the college you are enrolled in):

- | | |
|---|--------------------------------|
| (1) _____ College of Liberal Arts | (5) _____ College of Education |
| (2) _____ General College | (6) _____ Dental Hygiene |
| (3) _____ Institute of Technology | (7) _____ Practical Nursing |
| (4) _____ College of Agriculture, Forestry,
and Home Economics | |

9. Occupation of Father (Check the item which applies): If you live with or were raised by persons other than your "true" parents, answer these questions in terms of persons most responsible for your upbringing.

- (1) _____ Profession (lawyer, banker, doctor, teacher, minister, dentist, etc.)
 (2) _____ Owns or manages business (store, gas station or garage, photography or barber shop, insurance agency, hotel or cafe, repair shop, newspaper, etc.)
 (3) _____ Office work (bookkeeper, cashier, postal clerk, etc.)
 (4) _____ Sales (insurance, real estate, retail store, etc.)
 (5) _____ Owns or manages farm
 (6) _____ Skilled tradesman (carpenter, electrician, machinist)
 (7) _____ Factory worker (laborer, farm laborer, janitor, mine laborer)
 (8) _____ Other Occupations: (Be specific) _____

(write in name of occupation)

10-11. Education of Parents (Check highest level attained):

- | | |
|-----------------|-----------------|
| Mother | Father |
| _____ (1) _____ | _____ (1) _____ |
| _____ (2) _____ | _____ (2) _____ |
| _____ (3) _____ | _____ (3) _____ |
| _____ (4) _____ | _____ (4) _____ |
| _____ (5) _____ | _____ (5) _____ |
| _____ (6) _____ | _____ (6) _____ |
| _____ (7) _____ | _____ (7) _____ |
| _____ (8) _____ | _____ (8) _____ |
| _____ (9) _____ | _____ (9) _____ |

12-15. Below are listed a number of things, some of which are found in many homes and some in only a few homes. Before each item place a check if during most of your life you have had available to you in your home the thing specified. Leave the space blank (place no check before the item) if this thing has not been in your home for most of your life. Be sure and read each item.

- | | |
|--|--|
| (0)_____Radio—AM | (0)_____Guns |
| (1)_____Television set | (1)_____Camping equipment |
| (2)_____Table Tennis | (2)_____Original paintings or drawings |
| (3)_____Pool table | (3)_____Skiing equipment |
| (4)_____Dictionary | (4)_____Sled |
| (5)_____Encyclopedia | (5)_____Ice skates |
| (6)_____Atlas | (6)_____Bible |
| (7)_____World globe | (7)_____Camera |
| (8)_____Radio—FM | (8)_____Sewing machine |
| (9)_____Piano | (9)_____Power tools |
| (0)_____Musical instruments other than piano | (0)_____Work bench |
| (1)_____Baseball equipment—bat, ball, mitt, etc. | (1)_____Record player, hi-fi or stereo |
| (2)_____Basketball hoop | (2)_____Records of "classical" music |
| (3)_____Football | (3)_____Pop records |
| (4)_____Tennis racket | (4)_____Movie projector |
| (5)_____Golf clubs | (5)_____Telescope |
| (6)_____Checker set | (6)_____Boat |
| (7)_____Chess set | |
| (8)_____Croquet set | |
| (9)_____Fishing equipment—rod, reel, lures, etc. | |

16-19. Check the magazines below that your family subscribes to or regularly buys. Be sure and read the name of each magazine.

- | | |
|--------------------------------------|---|
| (0)_____Reader's Digest | (0)_____Newsweek |
| (1)_____Life | (1)_____Successful Farming |
| (2)_____Saturday Evening Post | (2)_____U. S. News & World Report |
| (3)_____Look | (3)_____Sports Afield |
| (4)_____McCall's Magazine | (4)_____Sports Illustrated |
| (5)_____Ladies Home Journal | (5)_____Holiday |
| (6)_____Better Homes & Gardens | (6)_____New Yorker |
| (7)_____Good Housekeeping | (7)_____Fortune |
| (8)_____American Home | (8)_____The Farmer |
| (9)_____Coronet | (9)_____Atlantic Monthly |
| (0)_____Farm Journal | (0)_____Harper's |
| (1)_____Redbook | (1)_____Saturday Review |
| (2)_____National Geographic Magazine | (2)_____Church Magazines |
| (3)_____Time | (3)_____“Mechanics” magazines |
| (4)_____True | (4)_____Professional, scientific, or trade journals |
| (5)_____Parents' Magazine | |
| (6)_____Capper's Farmer | |
| (7)_____Argosy | |
| (8)_____Popular Mechanics | |
| (9)_____Popular Science | |

80.(1)

20. Approximately how many books does your family have in your home? (Check appropriate category)

- (1)_____0-9 (2)_____10-24 (3)_____25-49 (4)_____50-99 (5)_____100-up

21-50. Below are listed the names of several authors. In the appropriate space after each name indicate if you have ever read a book by that author, if you have heard of him but never read a book he wrote, or if you have never heard of him. Be sure you place one check mark after each name.

	Have read a book he wrote.	Have heard of him but never read a book of his.	Have never heard of him.
	(1)	(2)	(3)
21. J. D. Salinger	_____	_____	_____
22. Leo Tolstoi	_____	_____	_____
23. John Dos Passos	_____	_____	_____
24. Ernest Hemingway	_____	_____	_____
25. Samuel Green	_____	_____	_____
	(1)	(2)	(3)
26. Anatole France	_____	_____	_____
27. Honore de Balzac	_____	_____	_____
28. Henry Martin	_____	_____	_____
29. Albert Camus	_____	_____	_____
30. Henry James	_____	_____	_____
	(1)	(2)	(3)
31. James Baldwin	_____	_____	_____
32. Eugene Ionesco	_____	_____	_____
33. D. H. Lawrence	_____	_____	_____
34. Jean Paul Sartre	_____	_____	_____
35. Fyodor Dostoevski	_____	_____	_____
	(1)	(2)	(3)
36. Mary Allen	_____	_____	_____
37. Francois-Marie Voltaire	_____	_____	_____
38. Jack Kerouac	_____	_____	_____
39. Henry Miller	_____	_____	_____
40. James Farrell	_____	_____	_____
	(1)	(2)	(3)
41. John Steinbeck	_____	_____	_____
42. Ayn Rand	_____	_____	_____
43. Gilbert Deck	_____	_____	_____
44. Francois Rabelais	_____	_____	_____
45. James Joyce	_____	_____	_____
	(1)	(2)	(3)
46. William Faulkner	_____	_____	_____
47. James Michener	_____	_____	_____
48. Lawrence Durrell	_____	_____	_____
49. William Golding	_____	_____	_____
50. Ian Fleming	_____	_____	_____

5-44. Below are listed the names of several painters. In the appropriate space after each name indicate if you remember ever seeing a picture (or reproduction) by that painter, if you have heard of his name but never seen a picture of his, or if you have never heard of him. Be sure you place a checkmark after each name.

	Have seen a picture by him	Have heard of him but never seen a picture he painted	Have never heard of him
	(1)	(2)	(3)
5. Vincent Van Gogh	_____	_____	_____
6. Edgar-Hilaire Degas	_____	_____	_____
7. Henri de Toulouse-Lautrec	_____	_____	_____
8. Rembrandt	_____	_____	_____
9. Leslie Granger	_____	_____	_____
	(1)	(2)	(3)
10. Peter Paul Rubens	_____	_____	_____
11. Grant Wood	_____	_____	_____
12. Thomas Benton	_____	_____	_____
13. Eugene Snell	_____	_____	_____
14. John Stewart Curry	_____	_____	_____
	(1)	(2)	(3)
15. George Grosz	_____	_____	_____
16. John Marin	_____	_____	_____
17. John Sloan	_____	_____	_____
18. Howard Dumont	_____	_____	_____
19. Titian	_____	_____	_____
	(1)	(2)	(3)
20. Velasquez	_____	_____	_____
21. Delacroix	_____	_____	_____
22. Raphael	_____	_____	_____
23. Watteau	_____	_____	_____
24. El Greco	_____	_____	_____
	(1)	(2)	(3)
25. John Constable	_____	_____	_____
26. Vermeer	_____	_____	_____
27. Goya	_____	_____	_____
28. Seurat	_____	_____	_____
29. Paul Fondley	_____	_____	_____
	(1)	(2)	(3)
30. Turner	_____	_____	_____
31. Courbet	_____	_____	_____
32. Botticelli	_____	_____	_____
33. Manet	_____	_____	_____
34. Simmons	_____	_____	_____
	(1)	(2)	(3)
35. Mary Cassatt	_____	_____	_____
36. Sargent	_____	_____	_____
37. George Bellows	_____	_____	_____
38. Winslow Homer	_____	_____	_____
39. Andy Warhol	_____	_____	_____

	Have seen a picture by him	Have heard of him but never seen a picture he painted	Have never heard of him
	(1)	(2)	(3)
40. Walter Keane	_____	_____	_____
41. Cezanne	_____	_____	_____
42. Diego Rivera	_____	_____	_____
43. Salvador Dali	_____	_____	_____
44. Jackson Pollack	_____	_____	_____

45-48. **Organizations:** Check the organizations to which your father, your mother, or both of them belong.

- | | |
|---|---|
| (0) _____ PTA or Mother's Club | (0) _____ Shrine |
| (1) _____ American Legion, VFW, or other veterans' organization | (1) _____ Ladies Aid |
| (2) _____ Rotary | (2) _____ League of Women Voters |
| (3) _____ Knights of Columbus | (3) _____ Neighborhood or other social card-playing group |
| (4) _____ Elks | (4) _____ Country club or golf club |
| (5) _____ Masons | (5) _____ Study or literary club |
| (6) _____ Eastern Star | (6) _____ American Automobile Association (AAA) |
| (7) _____ Odd Fellows | (7) _____ A sportsman club |
| (8) _____ Rebeccas | (8) _____ American Association of University Women |
| (9) _____ Lions | (9) _____ National origin group (such as Sons of Norway) |
|
 | |
| (0) _____ Moose | (0) _____ Church club or group |
| (1) _____ Eagles | (1) _____ Athletic club or group |
| (2) _____ Labor Union | (2) _____ Hobby club or group |
| (3) _____ Farm Bureau | (3) _____ National Farmers Organization (NFO) |
| (4) _____ Farm Union | (4) _____ B'nai B'rith |
| (5) _____ Grange | (5) _____ Others _____ |
| (6) _____ Bowling league | (write in) |
| (7) _____ Service club (Altrusa, Zonta, etc.) | |
| (8) _____ Chamber of Commerce or Community Business Club | |
| (9) _____ Kiwanis or Rotary | |

49-64. Answer each one of the following questions.

- | | | |
|--|-----------|----------|
| 49. Do you have a public library card? | yes _____ | no _____ |
| | (1) | (2) |
| 50. As a small child, did you attend nursery school? | yes _____ | no _____ |
| | (1) | (2) |
| 51. Did you attend kindergarten? | yes _____ | no _____ |
| | (1) | (2) |
| 52. As a small child did you ever attend a circus? | yes _____ | no _____ |
| | (1) | (2) |
| 53. During the past year have you visited an art gallery? | yes _____ | no _____ |
| | (1) | (2) |
| 54. During the past year have you visited a museum other than an art gallery? | yes _____ | no _____ |
| | (1) | (2) |
| 55. During the past year have you been to a public library (not a school library)? | yes _____ | no _____ |
| | (1) | (2) |
| 56. Have you ever visited a zoo? | yes _____ | no _____ |
| | (1) | (2) |
| 57. Have you ever seen the "Twins" play (in person, not on TV)? | yes _____ | no _____ |
| | (1) | (2) |
| 58. Have you ever ridden in an airplane? | yes _____ | no _____ |
| | (1) | (2) |

59. Have you ever ridden in a train?yes_____no_____ (1) (2)
60. Have you ever ridden in a taxicab?yes_____no_____ (1) (2)
61. Have you ever taken a trip on a bus?yes_____no_____ (1) (2)
62. Have you ever been to a concert?yes_____no_____ (1) (2)
63. Have you ever had music lessons (outside of school)?yes_____no_____ (1) (2)
64. Have you ever been more than 100 miles from your home?yes_____no_____ (1) (2)

65-70. Below is a list of the 50 states and the District of Columbia. Place a check mark after each one in which you have ever been.

- | | |
|------------------------------|------------------------|
| (0)_____Alabama | (0)_____New Jersey |
| (1)_____Alaska | (1)_____New Mexico |
| (2)_____Arizona | (2)_____New York |
| (3)_____Arkansas | (3)_____North Carolina |
| (4)_____California | (4)_____North Dakota |
| (5)_____Colorado | (5)_____Ohio |
| (6)_____Connecticut | (6)_____Oklahoma |
| (7)_____Delaware | (7)_____Oregon |
| (8)_____District of Columbia | (8)_____Pennsylvania |
| (9)_____Florida | (9)_____Rhode Island |
|
 | |
| (0)_____Georgia | (0)_____South Carolina |
| (1)_____Hawaii | (1)_____South Dakota |
| (2)_____Idaho | (2)_____Tennessee |
| (3)_____Illinois | (3)_____Texas |
| (4)_____Indiana | (4)_____Utah |
| (5)_____Iowa | (5)_____Vermont |
| (6)_____Kansas | (6)_____Virginia |
| (7)_____Kentucky | (7)_____Washington |
| (8)_____Louisiana | (8)_____West Virginia |
| (9)_____Maine | (9)_____Wisconsin |
|
 | |
| (0)_____Maryland | (0)_____Wyoming |
| (1)_____Massachusetts | |
| (2)_____Michigan | |
| (3)_____Minnesota | |
| (4)_____Mississippi | |
| (5)_____Missouri | |
| (6)_____Montana | |
| (7)_____Nebraska | |
| (8)_____Nevada | |
| (9)_____New Hampshire | |

71-78. List below the names of any foreign countries you have ever been in, if any. Include Canada and Mexico.

_____	_____
_____	_____
_____	_____
_____	_____

80.(2)

1-4. I. D. No. _____ (Write nothing here)

5. Have you ever had a paid job where you worked for a week or more for someone other than your parents? yes_____ (1) no_____ (2)

6-16. List all the jobs you have had in your life (working for pay for other than your family and including jobs lasting for more than a week).

Name of job

Approximate length of time on job

Name of job	Approximate length of time on job
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

17-27. List the names of all the books you remember reading during the past year. Do not include those read as school assignments. If you cannot remember the exact title, use a descriptive phrase.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

28-29. Place a check mark before the names of the youth groups to which you have belonged sometime during your life:

- | | |
|-------------------------------|-------------------------------------|
| (0) _____ Girl Scouts | (0) _____ AZA |
| (1) _____ Boy Scouts | (1) _____ CYO |
| (2) _____ YMCA | (2) _____ Indian Guides |
| (3) _____ YWCA | (3) _____ High School Honor Society |
| (4) _____ YMHA | (4) _____ Junior Achievement |
| (5) _____ Campfire Girls | (5) _____ FTA |
| (6) _____ Hi-Y | (6) _____ School clubs |
| (7) _____ Church youth groups | (7) _____ Little League |
| (8) _____ 4-H | (8) _____ DeMolay |
| (9) _____ FFA | (9) _____ Job's Daughters |

30-32. Which of the following books, some frequently read by children, have you read sometime during your life?

- | | |
|---|-----------------------------------|
| (0) _____ Alice in Wonderland | (0) _____ Just So Stories |
| (1) _____ Bullfinches the Age of Fable | (1) _____ Dr. Seuss Books |
| (2) _____ Peter Rabbit | (2) _____ Swifty |
| (3) _____ Little Women | (3) _____ Heidi |
| (4) _____ Arabian Nights | (4) _____ The Wind in the Willows |
| (5) _____ Grimm's Fairy Tales | (5) _____ Tom Sawyer |
| (6) _____ Miracle Men | (6) _____ Gulliver's Travels |
| (7) _____ Hans Christian Andersen's Fairy Tales | (7) _____ Swiss Family Robinson |
| (8) _____ Treasure Island | (8) _____ Winnie the Pooh |
| (9) _____ Robinson Crusoe | (9) _____ The Little Prince |
- (0) _____ Wizard of Oz
(1) _____ David Copperfield
(2) _____ Animal Farm
(3) _____ Catcher in the Rye
(4) _____ Caddie Woodlawn
(5) _____ The Yearling
(6) _____ Nancy Drew

33. What do you read regularly in the daily newspapers?

(1) _____ Don't have access to a daily paper.

(2) _____ Don't read any of it regularly.

34. If you read a newspaper fairly regularly, indicate below which parts of the newspaper you read.

(0) _____ Most of newspaper

(6) _____ Foreign news

(1) _____ Front-page news

(7) _____ National news

(2) _____ Editorials

(8) _____ Women's pages

(3) _____ Comics

(9) _____ Movie and theatre reviews

(4) _____ Sports

(10) _____ Syndicated columns

(5) _____ Local news

35-67. Below are listed several names. If you have never heard of the person, place a check mark opposite the name in the first column. If you have heard of the person but cannot identify what he does or who he is, check in the second column. If you know who he is or what he does, check the third column. Be sure to place a check mark after each name.

	Have never heard of him	Have heard of him but cannot identify	Know who he is
35. Frederick Kappel	_____	_____	_____
36. U Thant	_____	_____	_____
37. Harold Macmillan	_____	_____	_____
38. Harmon Killebrew	_____	_____	_____
39. Sargent Shriver	_____	_____	_____
40. Johnny Unitas	_____	_____	_____
41. Bishop Pike	_____	_____	_____
42. Dean Rusk	_____	_____	_____
43. Earl Warren	_____	_____	_____
44. Robert McNamara	_____	_____	_____
45. Wilt Chamberlain	_____	_____	_____
46. Francis Spellman	_____	_____	_____
47. James Shannon	_____	_____	_____
48. Stewart Udall	_____	_____	_____
49. Henry Miller	_____	_____	_____
50. Tennessee Williams	_____	_____	_____
51. Thomas Watson	_____	_____	_____
52. O. Meredith Wilson	_____	_____	_____
53. Bill Cosby	_____	_____	_____
54. Kosygin	_____	_____	_____
55. Mao Tse Tung	_____	_____	_____
56. James Conant	_____	_____	_____
57. John Gardner	_____	_____	_____
58. Leonard Bernstein	_____	_____	_____
59. Melina Mercouri	_____	_____	_____
60. Van Cliburn	_____	_____	_____
61. Edward Land	_____	_____	_____
62. Spencer Tracy	_____	_____	_____
63. Gregor Piatigorsky	_____	_____	_____
64. Sandy Keith	_____	_____	_____
65. Lorne Greene	_____	_____	_____
66. Shirley Booth	_____	_____	_____
67. Werner Von Braun	_____	_____	_____

OFFICE OF THE DEAN OF STUDENTS
University of Minnesota
STUDENT LIFE STUDIES
INVENTORY OF COLLEGE EXPERIENCES

College students differ from one another in many ways. Students, their counselors and advisers, college instructors, and administrators, must know about the nature and relevance of these differences if college programs are to be well planned and if appropriate curricula and services are to be made available to students. In a sense, the purpose of a University is to provide selected experiences to students. At present we know little about the college experiences of students. You are being asked to provide information so that the University can more carefully consider the needs of students in the development of new and evaluation of old programs and services.

One way to learn if a student knows about a certain person, activity, or thing, is to give him a test to observe his knowledge. Another and a far simpler way is to simply ask him if he knows something and then assume his answer is frank and honest. We have selected this latter method because most students find it more enjoyable than taking a test and we assume that you will cooperate with us and answer with complete honesty.

Your replies will be held in strict confidence and in no way will the information you provide be used in determining grades, making administrative decisions, or communicated to anyone but the research personnel who analyze the data. We are asking for your name because we wish to determine relationships between answers and some of the information available about students from other sources, such as psychological and admissions tests. Regardless of this, however, all of the information you provide will be regarded as confidential.

No student will be able to answer positively all, or perhaps many, of the questions asked here. We simply want to learn more about the experiences students have. Most of your answers can simply be checked; however, there are a few answers you will need to write out. Do not let the numbering system bother you. Most of the answers you check are pre-coded to make it easy to punch your responses into special data processing cards.

Date _____
month day year

1-6. File No. from your I.D. card _____

7-11. Code No. _____
Leave Blank

Name _____
last first middle

High School from which graduated _____ Year of Graduation _____

12. Sex (1) _____ (2) _____
M F

13-14. _____ Age at last birthday.

15. College (Check the college you are enrolled in):

University of Minnesota

(1) _____ College of Liberal Arts

(7) _____ Other college or university

(2) _____ General College

(3) _____ Institute of Technology

_____ Name

(4) _____ College of Agriculture,
 Forestry, and Home Economics

(8) _____ Business or technical school

(5) _____ College of Education

_____ Name

(6) _____ Other U of M college _____
Name

(9) _____ Not currently a student.

16. Current type of residence (check one):

(0) _____ Living with parents

(5) _____ Own or rent house

(1) _____ Relative's home

(6) _____ Rent apartment

(2) _____ University Residence Hall

(7) _____ Rooming house

(3) _____ "U" Apartments

(8) _____ Private residence hall

(4) _____ Fraternity-Sorority

(9) _____ Other

How have you financed this current college year? Opposite each source of income, write the appropriate percentage so the total adds to 100 percent. If you live at home and your board and room are provided by your family, include this as 30 percent in the contribution of your family. If your family provides additional funds, this figure will be more than 30 percent.

	Percent
17-18. My savings	_____
19-20. Work	_____
21-22. Loans	_____
23-24. Family	_____
25-26. Scholarships and grants	_____
27-28. Other (please specify)	_____
Total	100%

29. Have you ever had a paid job where you worked for a week or more for someone other than your parents?
 (1) Yes _____ (2) No _____

30. How many hours per week do you work during the present quarter?

(0) None _____	(5) 21-25 _____
(1) 1-5 _____	(6) 26-30 _____
(2) 6-10 _____	(7) 31-35 _____
(3) 11-15 _____	(8) 36-40 _____
(4) 16-20 _____	(9) More than 40 _____

31-32. List all the jobs you have had since starting college (working for pay for other than your family and including only jobs lasting for more than a week).

Name of job	Approximate length of time on the job

33. Have you ever been more than 100 miles from your home? (1) Yes _____ (2) No _____

34-35. Below is a list of the 50 states and the District of Columbia. Place a check mark before each one in which you have ever been.

- | | | |
|--------------------------------|---------------------|-------------------------|
| (0) _____ Alabama | (0) _____ Georgia | (0) _____ Maryland |
| (1) _____ Alaska | (1) _____ Hawaii | (1) _____ Massachusetts |
| (2) _____ Arizona | (2) _____ Idaho | (2) _____ Michigan |
| (3) _____ Arkansas | (3) _____ Illinois | (3) _____ Minnesota |
| (4) _____ California | (4) _____ Indiana | (4) _____ Mississippi |
| (5) _____ Colorado | (5) _____ Iowa | (5) _____ Missouri |
| (6) _____ Connecticut | (6) _____ Kansas | (6) _____ Montana |
| (7) _____ Delaware | (7) _____ Kentucky | (7) _____ Nebraska |
| (8) _____ District of Columbia | (8) _____ Louisiana | (8) _____ Nevada |
| (9) _____ Florida | (9) _____ Maine | (9) _____ New Hampshire |

- | | | |
|--------------------------|--------------------------|-------------------|
| (0) _____ New Jersey | (0) _____ South Carolina | (0) _____ Wyoming |
| (1) _____ New Mexico | (1) _____ South Dakota | |
| (2) _____ New York | (2) _____ Tennessee | |
| (3) _____ North Carolina | (3) _____ Texas | |
| (4) _____ North Dakota | (4) _____ Utah | |
| (5) _____ Ohio | (5) _____ Vermont | |
| (6) _____ Oklahoma | (6) _____ Virginia | |
| (7) _____ Oregon | (7) _____ Washington | |
| (8) _____ Pennsylvania | (8) _____ West Virginia | |
| (9) _____ Rhode Island | (9) _____ Wisconsin | |

36-37. List below the names of any foreign countries you have ever been in, if any. Include Canada and Mexico.

_____	_____
_____	_____
_____	_____
_____	_____

Check the magazines below that you have read fairly regularly this past year.

- | | | |
|------------------------------------|-------------------------------|---|
| 38. _____ Reader's Digest | 50. _____ Sports Illustrated | 62. _____ Seventeen |
| 39. _____ Time | 51. _____ Ladies Home Journal | 63. _____ Esquire |
| 40. _____ Life | 52. _____ Scientific American | 64. _____ Science |
| 41. _____ Look | 53. _____ Redbook | 65. _____ Rod and Custom |
| 42. _____ McCall's | 54. _____ Sports Afield | 66. _____ The Farmer |
| 43. _____ Fortune | 55. _____ New Yorker | 67. _____ Atlantic Monthly |
| 44. _____ Saturday Review | 56. _____ Newsweek | 68. _____ Glamour |
| 45. _____ Successful Farming | 57. _____ Cosmopolitan | 69. _____ Popular Mechanics |
| 46. _____ Modern Bride | 58. _____ Playboy | 70. _____ Professional, scientific, and
trade journals |
| 47. _____ Argosy | 59. _____ National Geographic | 71. _____ Other |
| 48. _____ U.S. News & World Report | 60. _____ Popular Science | |
| 49. _____ Mad | 61. _____ Farm Journal | |

80. (4)

5:1-6. _____
I.D. Number

7-11. _____ (leave blank)
Code Number

What do you read regularly in the daily newspapers?

12. _____ Don't read any of it regularly.
13. _____ Read it fairly regularly. If you read a newspaper fairly regularly, check below the parts of the newspaper which you read.
- | | |
|---------------------------|-------------------------|
| 14. _____ Front-page news | 18. _____ Local news |
| 15. _____ Editorials | 19. _____ Foreign news |
| 16. _____ Comics | 20. _____ National news |
| 17. _____ Sports | |

Below are listed several names. If you know who the person is or what he does, place a check mark opposite the name in the first column. If you have heard of the person but cannot identify what he does or who he is, check in the second column. If you have never heard of him, check the third column. Be sure to place a check mark after each name.

	Know who he is (1)	Have heard of him but cannot identify him (2)	Have never heard of him (3)
21. Frederick Kappel	_____	_____	_____
22. U Thant	_____	_____	_____
23. Harold Macmillan	_____	_____	_____
24. Harmon Killebrew	_____	_____	_____
25. Sargent Shriver	_____	_____	_____
26. Johnny Unitas	_____	_____	_____
27. Bishop Pike	_____	_____	_____
28. Dean Rusk	_____	_____	_____
29. Earl Warren	_____	_____	_____
30. Robert McNamara	_____	_____	_____
31. Wilt Chamberlain	_____	_____	_____
32. Francis Spellman	_____	_____	_____
33. James Shannon	_____	_____	_____
34. Stewart Udall	_____	_____	_____
35. Henry Miller	_____	_____	_____
36. Tennessee Williams	_____	_____	_____
37. Thomas Watson	_____	_____	_____
38. O. Meredith Wilson	_____	_____	_____
39. Bill Cosby	_____	_____	_____
40. Kosygin	_____	_____	_____
41. Mao Tse Tung	_____	_____	_____
42. James Conant	_____	_____	_____
43. John Gardner	_____	_____	_____
44. Leonard Bernstein	_____	_____	_____
45. Melina Mercouri	_____	_____	_____
46. Van Cliburn	_____	_____	_____
47. Edward Land	_____	_____	_____
48. Spencer Tracy	_____	_____	_____
49. Gregor Piatigorsky	_____	_____	_____
50. Sandy Keith	_____	_____	_____
51. Lorne Green	_____	_____	_____
52. Shirley Booth	_____	_____	_____
53. Werner Von Braun	_____	_____	_____

54. How many books do you have in your own personal library?

_____ 0 to 9 _____ 10 to 24 _____ 25 to 49 _____ 50 to 99 _____ 100 and up
 (1) (2) (3) (4) (5)

55-56. List the names of all the books you remember reading during the past year. Do *not* include those read as school assignments. If you cannot remember the exact title, use a descriptive phrase.

Below are listed the names of several authors. In the appropriate space after each name indicate if you have ever read a book by that author, if you have heard of him but never read a book he wrote, or if you have never heard of him. Be sure you place one check mark after each name.

	Have read a book he wrote	Have heard of him but never read a book of his	Have never heard of him
	(1)	(2)	(3)
57. J. D. Salinger	_____	_____	_____
58. Leo Tolstoi	_____	_____	_____
59. John Dos Passos	_____	_____	_____
60. Ernest Hemingway	_____	_____	_____
61. Samuel Green	_____	_____	_____
62. Anatole France	_____	_____	_____
63. Honore de Balzac	_____	_____	_____
64. Henry Martin	_____	_____	_____
65. Albert Camus	_____	_____	_____
66. Henry James	_____	_____	_____
67. James Baldwin	_____	_____	_____
68. Eugene Ionesco	_____	_____	_____
69. D. H. Lawrence	_____	_____	_____
70. Jean Paul Sartre	_____	_____	_____
71. Fyodor Dostoevski	_____	_____	_____
72. Mary Allen	_____	_____	_____
73. Francois-Marie Voltaire	_____	_____	_____
74. Jack Kerouac	_____	_____	_____
75. Henry Miller	_____	_____	_____
76. James Farrell	_____	_____	_____
80. (5)			
12. John Steinbeck	_____	_____	_____
13. Ayn Rand	_____	_____	_____
14. Gilbert Deck	_____	_____	_____
15. Francois Rabelais	_____	_____	_____
16. James Joyce	_____	_____	_____
17. William Faulkner	_____	_____	_____
18. James Michener	_____	_____	_____
19. Lawrence Durrell	_____	_____	_____
20. William Golding	_____	_____	_____
21. Ian Fleming	_____	_____	_____

Below are listed the names of several painters. In the appropriate space after each name indicate if you remember ever seeing a picture (or reproduction) by that painter, if you have heard of his name but never seen a picture of his, or if you have never heard of him. Be sure you place a check mark after each name.

	Have seen a picture by him (1)	Have heard of him but never seen a picture he painted (2)	Have never heard of him (3)
22. Vincent Van Gogh	_____	_____	_____
23. Edgar-Hilaire Degas	_____	_____	_____
24. Henri de Toulouse-Lautrec	_____	_____	_____
25. Rembrandt	_____	_____	_____
26. Leslie Granger	_____	_____	_____
27. Peter Paul Rubens	_____	_____	_____
28. Grant Wood	_____	_____	_____
29. Thomas Benton	_____	_____	_____
30. Eugene Snell	_____	_____	_____
31. John Stewart Curry	_____	_____	_____
32. George Grosz	_____	_____	_____
33. John Marin	_____	_____	_____
34. John Sloan	_____	_____	_____
35. Howard Dumont	_____	_____	_____
36. Titian	_____	_____	_____
37. Velasquez	_____	_____	_____
38. Delacroix	_____	_____	_____
39. Raphael	_____	_____	_____
40. Watteau	_____	_____	_____
41. El Greco	_____	_____	_____
42. John Constable	_____	_____	_____
43. Vermeer	_____	_____	_____
44. Goya	_____	_____	_____
45. Seurat	_____	_____	_____
46. Paul Fondley	_____	_____	_____
47. Turner	_____	_____	_____
48. Courbet	_____	_____	_____
49. Botticelli	_____	_____	_____
50. Manet	_____	_____	_____
51. Simmons	_____	_____	_____
52. Mary Cassatt	_____	_____	_____
53. Sargent	_____	_____	_____
54. George Bellows	_____	_____	_____
55. Winslow Homer	_____	_____	_____
56. Andy Warhol	_____	_____	_____

	Have seen a picture by him	Have heard of him but never seen a picture he painted	Have never heard of him
	(1)	(2)	(3)
57. Walter Keane	_____	_____	_____
58. Cezanne	_____	_____	_____
59. Diego Rivera	_____	_____	_____
60. Salvador Dali	_____	_____	_____
61. Jackson Pollack	_____	_____	_____

Please answer each one of the following questions.

	(1) Yes	(2) No
62. Do you have a public library card?	_____	_____
63. During the past year have you visited a campus religious foundation?	_____	_____
64. During the past year have you visited the Walker Art Center?	_____	_____
65. During the past year have you visited a museum other than an art gallery?	_____	_____
66. During the past year have you been to a public library (not a school or university library)?	_____	_____
67. Have you ever ridden in an airplane?	_____	_____
68. During the past year have you attended the Guthrie Theater?	_____	_____
69. During the past year have you watched educational television (channels 2 or 17)?	_____	_____
70. Have you ever ridden in a train?	_____	_____
71. Have you ever ridden in a taxi?	_____	_____
72. Have you ever attended an "underground" movie?	_____	_____
73. Have you ever taken a trip on a bus?	_____	_____
74. Have you ever attended a U. Film Society film?	_____	_____
75. During the past year have you attended a Minneapolis symphony concert?	_____	_____
76. During the past year have you participated in intramural sports?	_____	_____
77. During the past year have you talked to a foreign student?	_____	_____
78. Have you ever attended Freshmen Camp or a Dean's Retreat?	_____	_____
79. Have you ever served as a Freshmen Camp, Welcome Week or Orientation Sponsor?	_____	_____
80. (6)		

7:1-6. _____ 7-11. _____ (Leave Blank)
I.D. Number Code Number

Below are listed some events occurring and speakers appearing on campus during the past two years. In the appropriate column check if you attended the event, heard of it but did not attend, or didn't hear of it.

	Attended (1)	Heard of it but did not attend (2)	Did not hear of it (3)
12. Senator Eugene McCarthy	_____	_____	_____
13. Charles Roberts, on "The President & the Press"	_____	_____	_____
14. Ninian Smart on "Buddhism vs. Hinduism"	_____	_____	_____

	Attended (1)	Heard of it but did not attend (2)	Did not hear of it (3)
15. Louis Simpson on "Modern Poetry from Symbolism to the Present"	_____	_____	_____
16. Oxford—University of Minn. debate on Viet Nam	_____	_____	_____
17. Doc Evans and his Band	_____	_____	_____
18. Ali Akbiar Khan and Company	_____	_____	_____
19. Jacques Piccard on underwater exploration	_____	_____	_____
20. Wm. Clawson—folksongs and ballads	_____	_____	_____
21. Margaret Mead—Anthropologist	_____	_____	_____
22. Martin Luther King, Jr.	_____	_____	_____

Below are some events occurring as Coffman Union programs. In the appropriate column check if you participated or attended never, once, or more than once.

	Never (1)	Once (2)	More than once (3)
23. Jazz Workshop	_____	_____	_____
24. Art Sale	_____	_____	_____
25. Contract Bridge	_____	_____	_____
26. Dance Guild Theatre	_____	_____	_____
27. Billiards	_____	_____	_____
28. Chess	_____	_____	_____
29. Bowling	_____	_____	_____
30. Citizens Series	_____	_____	_____
31. Student-faculty get together	_____	_____	_____
32. Human Relations Program	_____	_____	_____
33. Ski Train	_____	_____	_____
34. Variety Dance	_____	_____	_____
35. Homecoming Dance	_____	_____	_____
36. Chamber Music	_____	_____	_____
37. World Affairs Programs	_____	_____	_____
38. Crafts Workshops	_____	_____	_____
39. Others (please list)	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

After each question, indicate your best estimate by placing a checkmark in the appropriate column.

During your first year in college (1966-67):

	None (1)	1 or 2 (2)	3 to 5 (3)	6 to 10 (4)	More than 10 (5)
40. How many times did you visit an art gallery?	_____	_____	_____	_____	_____
41. How many concerts did you attend?	_____	_____	_____	_____	_____

	None (1)	1 or 2 (2)	3 to 5 (3)	6 to 10 (4)	More than 10 (5)
42. How many convocations did you attend?	_____	_____	_____	_____	_____
43. How many campus lectures did you attend?	_____	_____	_____	_____	_____
44. How many plays did you attend?	_____	_____	_____	_____	_____
45. How many football games did you attend?	_____	_____	_____	_____	_____
46. How many basketball games did you attend?	_____	_____	_____	_____	_____
47. How many hockey games did you attend?	_____	_____	_____	_____	_____
48. How many campus dances did you attend?	_____	_____	_____	_____	_____
49. How many students organizations did you belong to?	_____	_____	_____	_____	_____
50. How many meetings of student organizations did you attend?	_____	_____	_____	_____	_____
51. How many non-campus organizations did you belong to?	_____	_____	_____	_____	_____
52. List the <i>student</i> /campus organizations to which you belonged.	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

During this current academic year in college (1967-68):

	None (1)	1 or 2 (2)	3 to 5 (3)	6 to 10 (4)	More than 10 (5)
53. How many times did you visit an art gallery?	_____	_____	_____	_____	_____
54. How many concerts did you attend?	_____	_____	_____	_____	_____
55. How many convocations did you attend?	_____	_____	_____	_____	_____
56. How many campus lectures did you attend?	_____	_____	_____	_____	_____
57. How many plays did you attend?	_____	_____	_____	_____	_____
58. How many football games did you attend?	_____	_____	_____	_____	_____
59. How many basketball games did you attend?	_____	_____	_____	_____	_____
60. How many hockey games did you attend?	_____	_____	_____	_____	_____
61. How many campus dances did you attend?	_____	_____	_____	_____	_____
62. How many student organizations did you belong to?	_____	_____	_____	_____	_____
63. How many meetings or student organizations did you attend?	_____	_____	_____	_____	_____
64. How many non-campus organizations did you belong to?	_____	_____	_____	_____	_____
65. List the student/campus organizations to which you belonged during this current academic year (1967-68):	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

After each question indicate your best estimate for this current year by placing a checkmark in the appropriate column.

	None (1)	1 or 2 (2)	3 to 5 (3)	6 to 10 (4)	More than 10 (5)
66. How many times have you talked with a faculty member (Professor, teaching assistant, etc.) before or after class?	_____	_____	_____	_____	_____
67. How many times have you talked with a faculty member during his office hours?	_____	_____	_____	_____	_____

- | | None
(1) | 1 or 2
(2) | 3 to 5
(3) | 6 to 10
(4) | More
than 10
(5) |
|--|---------------|---------------------------------------|------------------|------------------|------------------------|
| 68. How many times have you talked with a faculty member at times other than before or after class or during office hours? | _____ | _____ | _____ | _____ | _____ |
| 69. How many faculty members know you by name? | _____ | _____ | _____ | _____ | _____ |
| 70. Dating or Marital Status | | | | | |
| Married _____ | Engaged _____ | Going Steady _____ | Unattached _____ | | |
| (1) | (2) | (3) | (4) | | |
| 71. How often do you date? | | | | | |
| Don't date | _____ | Less than once every four weeks | _____ | | |
| (1) | | (2) | | | |
| About once every four weeks | _____ | About once every two weeks | _____ | | |
| (3) | | (4) | | | |
| About once a week | _____ | More than once a week | _____ | | |
| (5) | | (6) | | | |
| 72. How many friends have you met since starting college? | | | | | |
| 0-4 _____ | 5-9 _____ | 10-14 _____ | 15-19 _____ | 26 or more _____ | |
| (1) | (2) | (3) | (4) | (5) | |

80. (7) _____

8:1-6 _____ 7-11 _____ (Leave Blank)

I.D. Number Code Number

What percent of your current friends fall in the following categories? The percents should add to 100 percent.

	Percent
12-13. Never attended college	_____
14-15. Dropped out of college	_____
16-17. Attend a college other than the university	_____
18-19. Attend the University	_____
Total	100%
20-21. Met since high school graduation	_____
22-23. Met before high school graduation	_____
Total	100%

24. How similar in background are your current acquaintances compared to those you had prior to college?

- | | |
|--------------------------|------------------------|
| _____ Very Different | _____ Somewhat Similar |
| (1) | (3) |
| _____ Somewhat Different | _____ Very Similar |
| (2) | (4) |

25. To what extent has college influenced your way of looking at the world?

- | | | |
|-----------------|----------------|------------------|
| _____ Very much | _____ Somewhat | _____ Not at all |
| (1) | (2) | (3) |

Rank from 1 to 5 the degree of influence the following have had on your way of looking at the world, with the factor having the most influence being ranked *one*.

- | | |
|-------------------|--------------------------|
| 26. Church | 29. Friends |
| 27. College | 30. Home Community |
| 28. Family | |

In the University what has been your greatest source of satisfaction? Place a 1 opposite that source, 2 opposite the next, and so on, until you have a number ranking each source.

31. _____ Classes and curriculum
32. _____ Friends
33. _____ Student activities
34. _____ Informal social contacts
35. _____ Domicile (residence hall, fraternity, apartment, etc.)
36. _____ Athletics
37. _____ Campus cultural events
38. _____ Instructors
39. _____ Campus recreational facilities

My greatest disappointment in the University is: _____

40. Choose ONE of the following statements which best tells how well you like *your curriculum*. Place a check mark (✓) in front of that statement.

_____ I hate it.
(1)

_____ I dislike it very much.
(2)

_____ I dislike it.
(3)

_____ I am indifferent to it.
(4)

_____ I like it.
(5)

_____ I like it very much.
(6)

_____ I like it better than I could possibly like anything else.
(7)

41. Choose ONE of the following statements which best tells how you feel toward *your instructors*. Place a check mark (✓) in front of that statement.

_____ I like all of my instructors.
(1)

_____ I like all but one of my instructors.
(2)

_____ I like most of my instructors.
(3)

_____ I like about half of my instructors.
(4)

_____ I like few of my instructors.
(5)

_____ I like only one of my instructors.
(6)

_____ I like none of my instructors.
(7)

42. Choose ONE of the following statements which best tells how you feel about *this University as a place in which to make friends*. Place a check mark (✓) in front of that statement.

_____ I hate it.
(1)

_____ I dislike it very much.
(2)

_____ I dislike it.
(3)

_____ I am indifferent to it.
(4)

_____ I like it.
(5)

_____ I like it very much.
(6)

_____ I like it better than I could possibly like anything else.
(7)

43. Choose ONE of the following statements which best tells how you feel about *the opportunities for cultural development in this University*. Place a check mark (✓) in front of that statement.

_____ I am enthusiastic.
(1)

_____ I am well satisfied.
(2)

_____ I am mildly satisfied.
(3)

_____ I am neither satisfied nor dissatisfied.
(4)

_____ I am mildly dissatisfied.
(5)

_____ I am very much dissatisfied.
(6)

_____ I am extremely dissatisfied.
(7)

44. Choose ONE of the following statements which best shows how well satisfied you are with *your faculty advisor*. Place a check mark (✓) in front of that statement.

_____ Completely satisfied.
(1)

_____ Very well satisfied.
(2)

_____ Satisfied.
(3)

_____ Indifferent.
(4)

_____ Dissatisfied.
(5)

_____ Very much dissatisfied.
(6)

_____ Completely dissatisfied.
(7)

45. Choose ONE of the following statements which best tells how well you like *the place where you are living while attending the University*. Place a check mark (✓) in front of that statement.

_____ I hate it.
(1)

_____ I dislike it.
(2)

_____ I don't like it.
(3)

_____ I am indifferent to it.
(4)

_____ I like it.
(5)

_____ I am enthusiastic about it.
(6)

_____ I like it better than I could possibly like anything else.
(7)

46. Choose ONE of the following statements which best shows how well satisfied you are with *the whole University*. Place a check mark (✓) in front of that statement.

_____ I am completely dissatisfied with it.
(1)

_____ I am very much dissatisfied with it.
(2)

_____ I am dissatisfied with it.
(3)

_____ I am indifferent to it.
(4)

_____ I am satisfied with it.
(5)

_____ I am well satisfied with it.
(6)

_____ I am completely satisfied with it.
(7)

MRC
St 94r

UNIVERSITY OF MINNESOTA

Research Bulletin

of the

Office of the Dean of Students

Volume 10, Number 7

June 1, 1970

STUDENTS' ATTITUDES AND PERCEPTIONS TOWARDS PARTICIPATION
IN THE GOVERNANCE OF A UNIVERSITY

by

Darwin D. Hendel

Student Life Studies

Office for Student Affairs

The Berkeley Free Speech Movement in 1964 signalled the beginning of a new era of student involvement on our nation's campuses. This involvement continues to increase as students become more visible participants within the academic community. The scope of this involvement is widespread, as evidenced by the May, 1970 reaction to President Nixon's announcement of the military action in Cambodia. Student involvement in the governance of the university itself is also drastically changing. The purpose of this paper is to provide some tentative answers to questions such as those presented by Keeton (1967): "On what issues do students want a vote, and what voice do they want on each? What voice do they now have and on what matters?"

Student requests and demands for a greater voice in university governance have met with varied degrees of success. As Hodgkinson (1968) has noted, a more basic question may be: "Who decides who decides?" Student requests for an increased role in university governance also must be viewed in terms of the prevailing attitudes of others in campus communities who face the possibility of a decreased role. Wilson and Gaff (1969), in a study of 1500 faculty at six colleges in three states, found faculty reluctance towards an increased student voice in academic matters but general acceptance of the student's role in social matters. This implies that as students demand a voice in different areas which influence their daily campus experiences, the focus of resistance to the demand will vary depending on the issue.

Butler (1966) has stated: "Each of the 2,300 different colleges and universities must define for itself to what extent and how it shall attempt to involve students, faculty, and administration in the decision-making process." Carried one step further, each institution must also be prepared to allow for different means of involvement and different content issues of concern for various student subgroups. Assuming that wide variation exists in student interest in participating in university governance, what are some of the individual difference variables which account for these variations in attitudes? Determining which students are willing to devote some time and resources to university governance is an additional question to be answered by individual institutions.

Golden and Rosen (1966) examined attitudes towards participation in a public university, a private non-denominational college, and a Catholic college and found significant differences in all three settings between desire for participation and perceived opportunity for participation (discrepancy score). They found a correlation of $-.26$ between discrepancy and the individual's overall satisfaction with the institution and a correlation of $.20$ between discrepancy and self-reported grades. Their findings also indicated that the more authoritarian students saw student involvement as less legitimate and consequently, they had smaller discrepancy scores.

Other relevant variables may be shown to relate to similar dimensions of the student participation issue. The present study investigated the relationship between ten individual difference variables and University of Minnesota students' attitudes and perceptions towards participation in university governance.

METHOD

Instrument

The instrument used to measure students' attitudes and perceptions towards participation was a modified form of the Participation Scale (Golden and Rosen, 1966). The Student Participation Questionnaire used in the present study referred to 25 different areas of interest for student involvement and participation. The questionnaire consisted of two parts: 1) Part I asked students to indicate the frequency with which University of Minnesota students SHOULD PLAY an important part in the particular activity; and 2) Part II asked students to indicate the frequency with which University of Minnesota students ACTUALLY DO PLAY an important part in the particular activity. Each of the 25 items in both parts of the questionnaire had five response alternatives. The options were: 5 = always, 4 = usually, 3 = sometimes, 2 = seldom, and 1 = never.

The "Biographical Data" section of the questionnaire asked for the student's marital status, sex, age, year in school, college of registration at the University of Minnesota, number of quarters completed at the University, type of local residence, estimated cumulative grade point average, satisfaction with grade point average as a reflection of his work, and overall satisfaction with the University of Minnesota as a place to get a college education. Appropriate response categories were provided for each of the first seven items; estimated cumulative grade point average required a free response from each student. The seven possible response categories for the two satisfaction questions were: 7 = extremely satisfied, 6 = moderately satisfied, 5 = slightly satisfied, 4 = neutral, 3 = slightly dissatisfied, 2 = moderately dissatisfied, and 1 = extremely dissatisfied.

Subjects

The 1969-70 Student Directory of the University of Minnesota was used as the basis for a systematic sampling of students enrolled at the Twin Cities campus. The sample was drawn by using the first complete address entry in the third column of each page of the directory. The final sample consisted of 200 University of Minnesota students. The questionnaires, together with an appropriate letter and return envelope, were mailed to the students on February 25, 1970. Of the 200 questionnaires sent, 120 (60% of 200) were returned by the students. These 120 questionnaires included two from individuals who said they were no longer students, nine which contained numerous missing responses,

and one which was returned after the data analysis began. Hence, a total of 108 questionnaires were used in the data analysis; this represents 54% of the students who were sent the questionnaire. No follow-up letters were sent to non-respondents.

The frequencies and percentages in each of the categories for the ten independent variables are listed in Table 1. For example, of the 108 respondents, 52 were enrolled in the College of Liberal Arts, thirteen in the Institute of Technology, fourteen in the College of Education, ten in Agriculture, Forestry, and Home Economics, and nineteen in the other eight colleges combined. Similarly, for variable 10 (overall satisfaction with the University of Minnesota as a place to get an education), a total of 47 students (43.5%) said they were moderately satisfied. The mean age for the total group of students was 21.9 years and the mean number of quarters completed at the University of Minnesota was 5.66. The percentages for the first seven variables in Table 1 closely approximate those which characterize the entire student population and indicate that the sampling procedure used was adequate to obtain a representative cross-section of students.

Analysis

Each student responded twice to the same item content but with different directions. In Part I, the student responded in terms of an attitude ("Should Play"); in Part II, the student responded in terms of a perception ("Actually Do Play"). Consequently, a difference score for each item was calculated by subtracting the Part II response from the Part I response to parallel items.

In addition to the 25 Part I items, the 25 Part II items, and the 25 calculated difference items, averages for each student for the three sets of 25 items were calculated. Average "should play," average "actually do play," and average "difference" scores were calculated for each student. Each student had 78 Student Participation Questionnaire scores which were used in the subsequent data analysis, scores on 25 "should" items, scores on 25 "do" items, discrepancy scores on 25 items, and three "averages" scores.

The ten variables listed in Table 1 were used as independent variables in a series of one-way analyses of variance with the 78 scores from the Student Participation Questionnaire as the dependent variables. The categories of each independent variable were chosen for meaningfulness and to prevent extremely small frequencies for some categories; for example, dormitory, fraternity, and sorority residents were combined in variable 7. For variables 3, 6, and 8, categories were chosen to approximate equal frequencies in each category.

Intercorrelations between five independent variables (3, 6, 8, 9, and 10), "average should play," "average actually do play," and "average difference" were also calculated for the total group of students. As noted in Table 1, some students did not complete the Biographical Data section; hence, only 101 of the 108 students were used in the inter-correlation analysis.

RESULTS

Part I: "Should play" items

The means and standard deviations for the 108 students on the 25 items from Part I of the Student Participation Questionnaire are listed in Table 2. The items are ordered according to decreasing item means and range from a high of 4.48 for "conducting freshman orientation" to a low of 2.37 for "establishing faculty pay scale." In terms of the meaning of these numerical values, students felt that University of Minnesota students almost always should play an important part in "conducting freshman orientation" and seldom should play an important part in "establishing faculty pay scale." Of the 25 items, all but "selecting sites for new buildings" and "establishing faculty pay scale" had means greater than 3.00. The range of item means indicates that student involvement and participation in various areas of the University are not equally desired by the students. Students feel they should play an important part in those activities which they see as relevant to meeting their needs as students.

The p-values obtained in the one-way ANOVA's for the 25 "should play" items for each of the ten independent variables are listed in Table 3. For example, the p-values for the first independent variable, marital status, range from .06 for "developing intellectual programs" to .96 for "conducting freshman orientation"; as can be noted, none of the p-values for marital status are significant. For the second variable, sex, men and women have significantly different means on four items. The means and standard deviations for all "should play" items having significant ANOVA p-values are listed in Table 4. Females scored higher on all four: "handling commuter problems," "establishing grading policy," "training student leaders," and "establishing library policies." For the third variable, age (which was split into the three age groups noted in Table 1), none of the 25 items had significantly different means. For year in school, the only significant p-value was for "establishing admissions policies"; sophomores had the highest mean, followed in order by seniors, freshmen, juniors, and graduates. For the fifth variable, college, students registered in Agriculture, Forestry, and Home Economics had lower means on "establishing dormitory policies" than students registered in all the other colleges. Variable 6, number of quarters completed at the University of Minnesota, had significant p-values for "planning charity campaigns" and "coordinating religious activities"; students with more completed quarters scored higher on both

of these items. There were four significant p-values for the residence variables: "meeting with the Board of Regents," "training student leaders," "establishing dormitory policies," and "establishing library policies." For all four items, students living in dormitories, fraternities, and sororities scored highest, students in apartments were second, students living with parents were third, and students living in rooming houses had the lowest means. For estimated cumulative GPA, students with lower GPA's had higher means for "establishing admissions policies" than high GPA students. Students who expressed greater satisfaction with their GPA (variable 9) had lower means for "establishing tuition policy" than low satisfaction students. For the last variable, overall satisfaction with the University of Minnesota, there were significant p-values for four "should play" items: "establishing grading policy," "establishing tuition policy," "planning curriculum in major," and "planning course content." For all four "should play" items, as expressed overall satisfaction with the University of Minnesota increased, the item means tended to decrease.

Part II: "Actually do play" items

Table 5 contains the means for the sample of 108 students on the 25 "actually do play" items. The means range from a high of 3.98 for "conducting freshman orientation" to a low of 1.16 for "establishing faculty pay scale." In contrast to Part I where 23 of 25 (92%) means were greater than 3.00, only four of 25 (16%) items in Part II had means greater than 3.00. Students perceive that they infrequently play important roles in activities they feel they should play important parts. The student responses on the 25 "actually do play" items do not represent what may in fact be the true picture. For example, students may be misinformed, unaware of recent changes, or simply have no idea at all as to the part students "actually do play" in an activity such as "establishing tuition policy." None of the nine incomplete questionnaires which were excluded from the data analysis contained any responses to Part II. Students made comments such as: "I don't feel I know enough about the University to be able to accurately complete this section." This points to the need for increased communication with students if the goal of increasing meaningful participation is to be achieved.

The p-values for the 25 "actually do play" items for each of the ten independent variables are listed in Table 6. Of a total of 250 ANOVA's, p-values are significant for seven of them. This contrasts with the 250 ANOVA's for the "should play" items which yielded eighteen significant p-values. This comparison suggests that the ten independent variables used in this study are more relevant in examining student attitudes than perceptions of existing circumstances. None of the p-values were significant for age, number of quarters completed, residence, and satisfaction with GPA. For marital status, single students scored higher on "regulating athletics programs" than married students. The means and standard deviations for the "actually do play" items having significant ANOVA p-values are listed in Table 7. Females had higher means on "selecting

sites for new buildings" and on "planning charity campaigns" than male students. For variable 5, students in IT had the highest mean on "regulating placement programs" followed in order by AFHE, CLA, other colleges, and CE, and students in "other" colleges had the highest mean on "developing safety programs" followed in order by CE, IT, AFHE, and CLA. Students having higher cumulative GPA's had higher means on "establishing dorm policies" than low GPA students. For the last variable, students who were more satisfied with the University saw students as actually having more frequent involvement with "planning charity campaigns" than less satisfied students.

Difference Items

The "difference" items were calculated for each individual for the 25 items which appeared in Parts I and II of the Student Participation Questionnaire. The means for the total sample of 108 students on these 25 calculated differences are listed in Table 8. Note that the differences were calculated by subtracting the student's response on the "actually do play" item from his response on the "should play" item. The range of possible difference scores was from -4 to +4 depending upon the student's response to the item; a calculated difference of 0 meant that attitudes of "should play" were the same as the perception of "actually do play." The calculated differences listed in Table 8 range from a high of 2.11 for "establishing tuition policy" to a low of .50 for "conducting freshman orientation." None of the means were less than zero. Students' perceptions of what is currently available at the University of Minnesota do not agree with what they feel should be possible.

The ANOVA p-values for the 25 calculated differences items for each of the ten independent variables are given in Table 9. Twenty of these p-values are significant as compared with eighteen for the "should play" analysis and seven for the "actually do play" analysis. Over one-half of these significant p-values are for the variable of overall satisfaction with the University of Minnesota. Married students have a higher discrepancy on "regulating athletics programs" than single students. The means and standard deviations for the calculated difference items having significant ANOVA p-values are listed in Table 10. For variable 2, sex, men score higher on "coordinating religious activities" than females. For age, older students had higher discrepancies for "regulating athletics programs" than younger students. For variable 4, year in school, sophomores had higher discrepancies for "establishing admissions policies" and "selection of a new President" than all the other groups. Students in CE and "other" colleges had larger discrepancies on "regulating placement programs" than AFHE, IT, and CLA. For number of quarters completed at the University, students completing 3-5 quarters had larger discrepancies on "selection of a new President" than the three other groups. None of the p-values for the residence variable were significant. As estimated cumulative GPA increased, the discrepancy scores on "establishing admissions policies" and "coordinating freshman orientation" decreased. Similarly, as satisfaction with GPA increased,

discrepancy scores decreased on "regulating placement programs." For variable 10, overall satisfaction with the University of Minnesota, seven of the p-values are significant at p .05 and four at p .01. For all eleven discrepancy items, the general trend was for satisfaction to decrease as the discrepancy score increased. Some of the significant items are: "planning curriculum in major," "planning course content," "establishing dormitory policies," and "regulating placement programs."

Averages Analysis

In addition to an analysis of each item, average scores over the sets of 25 items were calculated for each individual. Each student had averages for Part I and Part II of the Student Participation Questionnaire and for the calculated differences set of items. The analysis of variance p-values for these three average scores for each of the ten independent variables are given in Table 11. The only independent variable which yielded a significant p-value for the average of 25 "should play" items was the students' residence. The means for the four residence groups are as follows: dormitory, fraternity, and sorority residents have an average "should play" response of 4.00; students living in apartments have a mean of 3.80; students living with parents have a mean of 3.67; and residents in houses and rooming houses have a mean "should play" response of 3.39. None of the ten independent variables have significant p-values for the average of the 25 "actually do play" items.

For the average "difference" item, the only independent variable yielding a significant p-value was overall satisfaction with the University of Minnesota. As satisfaction increases, the size of the average discrepancy score decreases; the mean discrepancy of students who said they were extremely dissatisfied is 1.97 and the mean of those who said they were extremely satisfied is .86. The mean discrepancy score (across the 25 items) for the sample of 108 students was 1.40; the average discrepancies ranged from a low of -.28 to a high of 4.00. Of the 108 average discrepancy scores, 102 (94.4%) of them were greater than zero indicating the majority of students feel they should be involved in more decision-making activities than are currently available at the University of Minnesota.

Correlational Analysis

The intercorrelations, means, and standard deviations for five independent variables and the three summary scores are given in Table 12. These intercorrelations confirm the results obtained in the ANOVA's for the averages scores. Table 12 shows, for example, that overall satisfaction with the University is negatively correlated ($r = -.33$) with the average difference score. The intercorrelations between the three summary scores suggest that the average discrepancy score was not due solely to either the "should play" or the "actually do play" response. The discrepancy score correlates .81 with the "should" response and -.51 with the "actually do" response. In terms of being the most important determinant of discrepancy, the should response accounts for 64% of the

variance in the discrepancy scores. There is no relationship ($r=.09$) between an individual's response to the "should play" item and his response to the "actually do play" item.

DISCUSSION

The high means for the "should play" items suggest that students think they should participate in a wide variety of University governance activities. Some of the high items, such as for "conducting freshman orientation," are for governance activities which currently exist. Others, such as "planning curriculum in major," are at the same high level but are not being provided. The low "should play" items may reflect one or both of the following: 1) students may feel that they do not have the ability to decide on issues such as "selecting sites for new buildings"; or 2) students may not want to be concerned with activities such as "establishing faculty pay scale" that are only tangentially related to their needs as students. Students do not want to become part time administrators and have little concern in routine daily operations of the University. However, they do want to be included in decisions and curriculum planning which they see as having personal relevance. This implies that as our universities become multiversities, governance units must remain small if students are to participate in activities which have some degree of importance in the students' daily experiences.

The means for the "actually do play" items are much lower than the "should play" items. Two possible interpretations are possible. First, the low means may reflect the reality of the situation indicating that the students' perceptions are accurate. Second, the perceptions may be inaccurate representations of what currently exists at the University of Minnesota. These interpretations are not mutually exclusive; the students' lack of information as to channels available for participation in University governance is more easily remedied. The four highest "actually do play" items are all non-academic concerns such as "conducting freshman orientation" and "planning charity campaigns." Participation in similar activities reflects a philosophy of student activities and participation to "keep students busy and involved" but has little chance to change their institution or their education. Students see that they seldom actually do play an important part in "planning curriculum in major" or "planning course content." Other low items such as "establishing tuition policies" reflect non-academic decision-making areas which students see as seldom including students.

If dissatisfaction is a function of not having felt needs met by the environment, then the discrepancy between what students say should exist and what they perceive to currently exist is a good indicator of student dissatisfaction. The largest discrepancy score was for "establishing tuition policy." Other high discrepancy items such as "planning curriculum in major" reflect activities which have immediate personal relevance for students. High items such as "selection of a new president" and

"meeting with the Board of Regents" reflect students' wanting to become an equal voice with faculty and administration. None of the 25 discrepancy scores were negative, indicating that the sample of students did not view present participation as excessive. Golden and Rosen's (1966) results suggest that the sample of students in the present study was relatively non-authoritarian.

In contrast to the correlation of $r=.20$ between discrepancy and grades found by Golden and Rosen (1966), this study yielded a correlation of $-.17$ indicating that as estimated grade point average increased, the discrepancy between what should and what does exist decreased. The sample size ($N=101$) limits the practical significance of this correlation. Satisfaction with grades and overall satisfaction with the University are correlated $.22$ indicating that satisfaction dimensions are related without implying that one may be a causal factor in determining the other satisfaction level. Number of quarters completed is correlated $.19$ with the individual's average "actually do play" response which suggests that as a student spends more time at the institution he sees more student participation activities actually existing. The negative correlations between satisfaction with GPA ($-.23$), overall satisfaction with the University ($-.33$), and the students' average discrepancy score supports the interpretation of discrepancy as an indicator of student dissatisfaction.

A brief discussion of the implications of the results obtained from the ANOVA procedures with the ten independent variables follows. In examining the ten variables, note that they are most relevant for the attitudes and discrepancy analyses and have little import for the perception of what currently exists. The results of the correlation analysis showed that attitudes are more important in determining discrepancy ($r=.81$) than are students' perceptions ($r=.51$).

Marital status and age did not meaningfully differentiate between subgroups for any of the 78 independent variables. They are not crucial determinants of attitudes and perceptions about student participation. The results of the ANOVA's with sex as the independent variable suggest that females may have stronger pro-participation attitudes than males. Since this difference was noted for only four "should play" items and not for any of the averages scores based on the three sets of 25 items, further research on sex differences in the realm of student participation is suggested.

The analyses of year in school and number of quarters completed yielded similar results. The correlation between number of quarters and average "actually do play" scores was $.19$ and none of the items or the average "actually do play" score had significant ANOVA p-values. Students do not perceive greater availability of participation as they spend more time at the University. Significant p-values for the discrepancy items were obtained for "selection of a new president" and "establishing admissions policies" with sophomores and the 3-5 quarters completed groups scoring the highest.

The analysis for students' college of enrollment yielded a significant p-value for the discrepancy item "regulating placement programs." For estimated GPA, significant discrepancy items were "establishing admissions policies" and "conducting freshman orientation." If student satisfaction is to be increased, the appropriate changes in placement programs may be necessary. Discrepancy scores for low GPA students were higher than for students with higher GPA's indicating that low GPA students tend to be slightly more dissatisfied with the availability of participation activities. This is additional support for the correlation of .20 between discrepancy and grades obtained in the correlation analysis.

The four significant items for the residence variable suggest an attitudinal difference between groups. This difference also appeared for the average "should play" score. As students see themselves as more detached either physically or psychologically from the mainstream of University life, they feel that students "should play" a less important part in University governance. Students in dormitories, sororities, and fraternities have the highest means and students in rooming houses have the lowest means. The very high p-values for the "actually do play" items suggest that there are no differences in residence groups in knowledge about the campus.

The variable of overall satisfaction with the University had eleven significant discrepancy items and a significant p-value for the average discrepancy. These results suggest that participation in University governance is a relevant variable for future research. The correlation of -.33 between overall satisfaction and average discrepancy replicates the results of Golden and Rosen (1966). Student dissatisfaction with the University as a determinant of extreme participation (rebellion) is questionable. Somers (1965), in his interview-based analysis of the Free Speech Movement, found dissatisfaction with the overall university experience to be quite low. Although attitudes towards participation and resulting discrepancy scores are related to dissatisfaction, actual participation in university governance may be more closely related to other individual difference variables.

Table 1

Frequencies for ANOVA categories for each of the ten independent variables

<u>Variable</u>	<u>Total N.</u>	<u>Categories</u>	<u>Number</u>	<u>Percent</u>
1. Marital Status	108	Single	89	82.4
		Married	19	17.6
2. Sex	108	Male	55	50.9
		Female	53	49.1
3. Age	108	18-19 years	31	28.7
		20-21 years	37	34.3
		22-50 years	40	37.0
4. Year in School	108	Freshman	20	18.5
		Sophomore	24	22.2
		Junior	16	14.8
		Senior	30	27.8
		Graduate students and others	18	16.7
5. College	108	College of Liberal Arts (CLA)	52	48.2
		Institute of Technology (IT)	13	12.0
		College of Education (CE)	14	13.0
		Agriculture, Forestry, Home Economics (AFHE)	10	9.3
		Other	19	17.5
6. No. Quarters at University	108	1-2	32	29.6
		3-5	30	27.8
		6-9	26	24.1
		10-25	20	18.5
7. Residence	108	Dormitory, fraternity, or sorority	16	14.8
		Rooming house or house	15	13.9
		With parents	47	43.5
		Apartment	30	27.8
8. Estimated Cumulative GPA	102	Low: 1.80-2.55	33	32.4
		Average: 2.56-3.01	35	34.3
		High: 3.02-4.00	34	33.3
9. Satisfaction with grades as reflection of work	108	Extremely or moderately dissatisfied	14	13.0
		Slightly dissatisfied	11	10.2
		Neutral	21	19.4
		Slightly satisfied	16	14.8
		Moderately satisfied	35	32.4
Extremely satisfied	11	10.2		
10. Overall satisfaction with University of Minnesota as a place to get an education	108	Extremely dissatisfied	11	10.2
		Moderately dissatisfied	11	10.2
		Slightly dissatisfied or neutral	11	10.2
		Slightly satisfied	16	14.8
		Moderately satisfied	47	43.5
Extremely satisfied	12	11.1		

Table 2

"Should play" items ordered according to decreasing means

Item Content	Mean (N=108)	Standard Deviation
Conducting freshman orientation	4.48	.72
Establishing dorm policies	4.41	.95
Training student leaders	4.14	1.00
Meeting with Board of Regents	4.09	1.00
Developing intellectual programs	4.06	.95
Planning curriculum in major	4.00	1.16
Establishing library policies	3.94	1.04
Establishing off-campus housing policies	3.93	1.23
Selecting visiting speakers	3.92	.87
Handling commuter problems	3.89	.95
Coordinating religious activities	3.89	1.08
Establishing physical education programs	3.83	.97
Establishing grading policy	3.82	1.04
Planning charity campaigns	3.77	.87
Planning academic calendar	3.73	1.16
Selection of a new President	3.63	1.27
Developing safety programs	3.62	1.12
Establishing tuition policy	3.60	1.08
Planning course content	3.49	1.09
Regulating placement programs	3.41	1.04
Planning scholarships and loans	3.38	1.16
Regulating inter-collegiate athletics	3.36	1.16
Establishing admissions policies	3.17	1.27
Selecting sites for new buildings	2.95	1.02
Establishing faculty pay scale	2.37	1.25

Table 3

Student Participation Questionnaire: ANOVA p-values for separating categories
of 10 independent variables for 25 "should play" items

Item Content	Marital	Sex	Age	Year in	College	Number	Resi-	GPA	Satis-	Satis-
	Status (N=108)	(N=108)	(N=108)	School (N=108)	(N=108)	Quar- ters at U (N=108)	dence (N=108)	(N=102)	faction with GPA (N=108)	faction with U of M (N=108)
1. Select sites for new buildings	.07	.65	.60	.95	.75	.62	.71	.77	.53	.17
2. Regulating placement programs	.68	.54	.54	.40	.24	.84	.99	.60	.14	.09
3. Planning charity campaigns	.91	.24	.25	.25	.58	.01*	.11	.81	.50	.63
4. Establishing grading policy	.87	.03*	.94	.20	.26	.17	.26	.51	.38	.02*
5. Selecting visiting speakers	.68	.67	.81	.66	.26	.71	.60	.72	.81	.33
6. Establishing tuition policy	.20	.10	.15	.53	.52	.59	.34	.07	.05*	.05*
7. Planning academic calendar	.20	.06	.62	.55	.93	.84	.10	.96	.36	.50
8. Developing safety programs	.28	.72	.86	.80	.39	.89	.37	.59	.79	.38
9. Planning curriculum in major	.82	.68	.51	.09	.62	.06	.30	.71	.52	.01*
10. Planning course content	.87	.29	.37	.06	.64	.54	.64	.17	.81	.01*
11. Planning scholarships and loans	.95	.19	.53	.53	.67	.90	.21	.90	.95	.64
12. Coordinating religious activities	.66	.63	.12	.08	.14	.00**	.91	.55	.83	.74
13. Establishing admissions policies	.81	.66	.89	.03*	.52	.22	.24	.02*	.61	.30
14. Regulating athletics programs	.80	.76	.27	.51	.70	.21	.57	.56	.97	.83
15. Meeting with Board of Regents	.84	.83	.97	.81	.24	.97	.02*	.24	.36	.52
16. Training student leaders	.56	.01*	.76	.88	.37	.74	.02*	.83	.41	.74
17. Conducting freshman orientation	.96	.08	.83	.79	.18	.77	.59	.11	.55	.56
18. Selection of new President	.70	.19	.73	.08	.96	.28	.13	.08	.35	.17
19. Establishing dorm policies	.94	.19	.92	.41	.00**	.11	.00**	.09	.27	.12
20. Establishing phy. ed. programs	.64	.86	.16	.51	.67	.69	.36	.29	.10	.36
21. Handling commuter problems	.62	.04*	.97	.51	.77	.28	.51	.94	.55	.06
22. Establishing off campus housing policy	.08	.28	.07	.78	.07	.28	.23	.51	.94	.36
23. Establishing library policies	.14	.03*	.19	.94	.73	.54	.02*	.88	.70	.34
24. Developing intellectual programs	.06	.84	.18	.18	.17	.51	.13	.31	.55	.56
25. Establishing faculty pay scale	.16	.70	.53	.60	.94	.57	.16	.23	.19	.11

* p-value of $\leq .05$ in one-way ANOVA

** p-value of $\leq .01$ in one-way ANOVA

Table 4

Means and standard deviations for the "should play" items having significant ANOVA p-values for each of the 10 independent variables

VARIABLE NUMBER AND NAME	Means						Standard Deviations						
	Item Number and Content		Categories of Independent Variable				Categories of Independent Variable						
2. <u>SEX</u>		<u>Male</u>	<u>Female</u>				<u>Male</u>	<u>Female</u>					
4. Est. grading policy		3.62	4.04				1.11	.92					
16. Train. student leads.		3.91	4.38				1.09	.84					
21. Handling comm. probs.		3.71	4.08				.96	.92					
23. Est. libr. policies		3.73	4.17				1.11	.91					
4. <u>YEAR IN SCHOOL</u>		<u>Fresh.</u>	<u>Soph.</u>	<u>Jun.</u>	<u>Sen.</u>	<u>Grad</u>	<u>Fresh.</u>	<u>Soph.</u>	<u>Jun.</u>	<u>Sen.</u>	<u>Grad</u>		
13. Est. adm. policies		2.95	3.83	2.81	3.13	2.71	1.28	1.27	1.11	1.17	1.14		
5. <u>COLLEGE</u>		<u>AFHE</u>	<u>CE</u>	<u>CLA</u>	<u>IT</u>	<u>Other</u>	<u>AFHE</u>	<u>CE</u>	<u>CLA</u>	<u>IT</u>	<u>Other</u>		
19. Est. dorm. policies		3.40	4.71	4.48	4.46	4.47	1.35	.47	.96	.97	.61		
6. <u>NO. QUARTERS AT U</u>		<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-25</u>		<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-25</u>			
3. Plan. char. campns.		3.50	3.90	3.62	4.26		.80	.92	.85	.73			
12. Coord. rel. activ.		3.31	4.07	4.08	4.37		1.33	1.08	.74	.60			
7. <u>RESIDENCE</u>		<u>Dorm or</u>	<u>Rmng.</u>				<u>Dorm or</u>	<u>Rmng.</u>					
		<u>frat-soror.</u>	<u>House</u>	<u>Parents</u>	<u>Apt.</u>		<u>frat-soror.</u>	<u>House</u>	<u>Parents</u>	<u>Apt.</u>			
15. Mtg. with Bd. of Reg.		4.56	3.47	4.09	4.17		.63	.99	.97	1.09			
16. Train. student leads.		4.63	3.67	3.98	4.37		.50	1.05	1.09	.89			
19. Est. dorm. policies		4.81	3.73	4.32	4.67		.54	1.33	.96	.66			
23. Est. libr. policies		4.38	3.47	3.77	4.23		.72	.83	1.11	1.04			
8. <u>GPA</u>		<u>Low</u>	<u>Aver.</u>	<u>High</u>			<u>Low</u>	<u>Aver.</u>	<u>High</u>				
13. Est. adm. policies		3.45	3.29	2.68			1.20	1.27	1.09				
9. <u>SATISFACTION WITH GPA</u>		<u>1 & 2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>1 & 2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
6. Est. tuition policy		4.00	4.00	3.95	3.44	3.37	3.00	.88	.89	.80	1.21	1.09	1.41
10. <u>SATISFACTION WITH U OF M</u>		<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5</u>	<u>6</u>	<u>7</u>
4. Est. grading policy		4.45	4.27	3.64	3.44	3.89	3.25	.82	1.01	1.36	1.26	.81	1.06
6. Est. tuition policy		4.09	4.00	3.73	3.06	3.68	3.08	.83	1.26	1.35	1.06	.91	1.24
9. Plan. curr. in major		4.91	4.18	4.00	3.81	4.04	3.08	.30	.98	1.34	1.17	1.00	1.62
10. Plan. course content		4.00	3.73	3.91	2.81	3.60	2.92	.77	1.01	1.22	1.16	.99	1.08

Table 5

"Actually do play" items ordered according to decreasing means

Item Content	Mean (N=108)	Standard Deviation
Conducting freshman orientation	3.98	.96
Establishing dormitory policies	3.37	.93
Coordinating religious activities	3.26	.94
Planning charity campaigns	3.19	1.04
Training student leaders	2.88	1.04
Selecting visiting speakers	2.81	.91
Developing intellectual programs	2.70	.98
Handling commuter problems	2.59	1.00
Meeting with Board of Regents	2.40	.96
Establishing physical education programs	2.40	.86
Establishing off-campus housing policies	2.34	1.00
Regulating inter-collegiate athletics	2.28	1.08
Establishing library policies	2.18	.88
Establishing grading policy	2.17	.86
Planning curriculum in major	2.09	.90
Planning academic calendar	2.00	1.04
Developing safety programs	1.98	.95
Planning course content	1.98	.80
Regulating placement programs	1.98	.82
Selection of a new President	1.81	1.11
Planning scholarships and loans	1.75	.76
Establishing admissions policies	1.60	.68
Establishing tuition policy	1.49	.78
Selecting sites for new buildings	1.49	.69
Establishing faculty pay scale	1.16	.44

Table 6

Student Participation Questionnaire: ANOVA p-values for separating categories of 10 independent variables for 25 "actually do play" items

Item Content	Marital	Sex	Age	Year in	College	Number	Resi-	GPA	Satis-	Satis-
	Status (N=108)	(N=108)	(N=108)	School (N=108)	(N=108)	Quar- ters at (N=108)	dence (N=108)	(N=102)	faction with GPA (N=108)	faction with U of M (N=108)
1. Select sites for new buildings	.11	.02*	.15	.89	.40	.95	.92	.98	.99	.56
2. Regulating placement programs	.84	.99	.81	.91	.04*	.36	.58	.90	.54	.18
3. Planning charity campaigns	.90	.01*	.57	.72	.53	.39	.73	.62	.15	.01**
4. Establishing grading policy	.80	.79	.54	.74	.99	.26	.60	.51	.57	.71
5. Selecting visiting speakers	.66	.22	.52	.06	.28	.64	.54	.80	.81	.13
6. Establishing tuition policy	.28	.80	.83	.71	.55	.92	.69	.88	.21	.51
7. Planning academic calendar	.14	.59	.53	.92	.18	.72	.57	.96	.17	.42
8. Developing safety programs	.72	.83	.20	.09	.02*	.63	.60	.06	.31	.97
9. Planning curriculum in major	.63	.69	.75	.56	.77	.58	.16	.07	.58	.51
10. Planning course content	.59	.66	.76	.32	.72	.81	.16	.24	.24	.58
11. Planning scholarships and loans	.06	.50	.35	.41	.19	.29	.91	.73	.24	.85
12. Coordinating religious activities	.59	.09	.63	.61	.88	.71	.09	.13	.42	.09
13. Establishing admissions policies	.58	.60	.63	.72	.26	.85	.65	.55	.08	.84
14. Regulating athletics programs	.03*	.10	.58	.18	.84	.77	.19	.28	.09	.62
15. Meeting with Board of Regents	.68	.31	.95	.87	.35	.39	.93	.87	.76	.20
16. Training student leaders	.51	.52	.60	.60	.33	.58	.56	.64	.33	.06
17. Conducting freshman orientation	.72	.32	.88	.96	.75	.35	.98	.52	.34	.41
18. Selection of new President	.61	.69	.69	.64	.17	.30	.87	.68	.85	.55
19. Establishing dorm policies	.60	.60	.58	.11	.97	.55	.09	.02*	.51	.55
20. Establishing phy. ed. programs	.66	.60	.70	.70	.71	.27	.91	.88	.63	.33
21. Handling commuter problems	.95	.63	.14	.65	.23	.32	.96	.53	.53	.40
22. Establishing off campus housing policy	.71	.55	.56	.31	.16	.99	.81	.96	.51	.21
23. Establishing library policies	.70	.88	.99	.81	.55	.23	.57	.26	.88	.87
24. Developing intellectual programs	.65	.80	.62	.62	.50	.55	.20	.76	.85	.54
25. Establishing faculty pay scale	.25	.56	.85	.58	.99	.81	.93	.68	.15	.93

-16-

* p-value of $\leq .05$ in one-way ANOVA** p-value of $\leq .01$ in one-way ANOVA

Table 7

Means and standard deviations for the "actually do play" items having significant ANOVA p-values for each of the 10 independent variables

VARIABLE NUMBER AND NAME Item Number and Content	Means Categories of Independent Variables					Standard Deviations Categories of Independent Variables						
	1. <u>MARITAL STATUS</u>	<u>Single</u>	<u>Married</u>				<u>Single</u>	<u>Married</u>				
14. Regulating athletics progs.	2.38	1.79				1.10	.86					
2. <u>SEX</u>	<u>Male</u>	<u>Female</u>				<u>Male</u>	<u>Female</u>					
1. Sel. sites for new bldgs.	1.35	1.64				.62	.74					
3. Plan. char. campaigns	2.95	3.43				1.04	.97					
5. <u>COLLEGE</u>	<u>AFHE</u>	<u>CE</u>	<u>CLA</u>	<u>IT</u>	<u>Other</u>	<u>AFHE</u>	<u>CE</u>	<u>CLA</u>	<u>IT</u>	<u>Other</u>		
2. Reg. placement programs	2.10	1.57	1.96	2.54	1.90	.74	.65	.82	.88	.81		
8. Dev. safety programs	1.80	2.36	1.71	2.15	2.42	.79	.93	.80	1.07	1.12		
8. <u>GPA</u>	<u>Low</u>	<u>Average</u>	<u>High</u>			<u>Low</u>	<u>Average</u>	<u>High</u>				
19. Est. dorm policies	3.09	3.43	3.71			.98	.85	.87				
10. <u>SATISFACTION WITH U OF M</u>	<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5</u>	<u>6</u>	<u>7</u>
3. Plan. charity campaigns	2.36	2.73	3.18	3.44	3.23	3.83	1.03	1.27	1.08	.96	.89	.94

Table 8

"Difference" items ordered according to decreasing means

Item Content	Mean (N=108)	Standard Deviation
Establishing tuition policy	2.11	1.28
Planning curriculum in major	1.91	1.44
Selection of a new President	1.82	1.41
Establishing library policies	1.76	1.24
Planning academic calendar	1.73	1.45
Meeting with Board of Regents	1.69	1.36
Establishing grading policy	1.65	1.36
Developing safety programs	1.64	1.19
Planning scholarships and loans	1.63	1.44
Establishing off-campus housing policies	1.59	1.41
Establishing admissions policies	1.57	1.37
Planning course content	1.51	1.35
Selecting sites for new buildings	1.50	1.06
Regulating placement programs	1.43	1.19
Establishing physical education programs	1.43	1.26
Developing intellectual programs	1.36	1.16
Handling commuter problems	1.30	1.15
Training student leaders	1.26	1.26
Establishing faculty pay scale	1.21	1.24
Selecting visiting speakers	1.11	1.14
Regulating inter-collegiate athletics	1.08	1.19
Establishing dormitory policies	1.04	1.27
Coordinating religious activities	.63	1.28
Planning charity campaigns	.58	1.04
Conducting freshman orientation	.50	1.00

Table 9

Student Participation Questionnaire: ANOVA p-values for separating categories of 10 independent variables for "difference scores" for 25 items

Item Content	Marital			Year in		Number			Satis-	Satis-
	Status (N=108)	Sex (N=108)	Age (N=108)	School (N=108)	College (N=108)	Quar- ters at U (N=108)	Resi- dence (N=108)	GPA (N=102)	faction with GPA (N=108)	faction with U of M (N=108)
1. Select sites for new buildings	.51	.32	.89	.93	.80	.74	.65	.58	.53	.04*
2. Regulating placement programs	.81	.59	.57	.56	.00**	.82	.80	.20	.05*	.00**
3. Planning charity campaigns	.98	.14	.68	.56	.53	.74	.60	.23	.64	.00**
4. Establishing grading policy	.78	.15	.69	.73	.53	.92	.92	.34	.30	.02*
5. Selecting visiting speakers	.65	.81	.76	.15	.60	.60	.88	.53	.39	.02*
6. Establishing tuition policy	.68	.22	.34	.36	.24	.59	.74	.10	.06	.00**
7. Planning academic calendar	.98	.05	.92	.53	.27	.54	.12	.85	.10	.18
8. Developing safety programs	.19	.62	.26	.10	.10	.63	.27	.08	.50	.55
9. Planning curriculum in major	.89	.29	.58	.66	.57	.38	.99	.12	.24	.00**
10. Planning course content	.54	.77	.31	.19	.52	.84	.74	.74	.37	.01*
11. Planning scholarships and loans	.30	.15	.57	.33	.35	.71	.39	.62	.54	.54
12. Coordinating religious activities	.69	.04*	.76	.40	.07	.06	.37	.24	.87	.21
13. Establishing admissions policies	.62	.26	.68	.01*	.27	.17	.21	.04*	.41	.34
14. Regulating athletics programs	.03*	.23	.02*	.52	.51	.06	.24	.33	.52	.73
15. Meeting with Board of Regents	.88	.61	.93	.61	.31	.63	.06	.30	.57	.26
16. Training student leaders	.30	.18	.96	.77	.57	.60	.57	.57	.51	.07
17. Conducting freshman orientation	.71	.77	.77	.78	.75	.72	.51	.01*	.52	.37
18. Selection of new president	.95	.61	.56	.00**	.55	.01*	.40	.15	.37	.07
19. Establishing dorm policies	.74	.17	.51	.08	.28	.16	.56	.07	.40	.03*
20. Establishing phy. ed. programs	.96	.65	.11	.97	.89	.98	.83	.30	.15	.15
21. Handling commuter problems	.72	.22	.17	.23	.80	.90	.88	.58	.24	.02*
22. Establishing off campus housing policy	.07	.17	.32	.54	.07	.34	.31	.58	.98	.03*
23. Establishing library policies	.13	.08	.32	.68	.92	.97	.60	.52	.52	.50
24. Developing intellectual programs	.52	.95	.80	.60	.95	.94	.99	.25	.30	.10
25. Establishing faculty pay scale	.17	.68	.63	.69	.97	.59	.15	.18	.09	.10

* p-value of $\leq .05$ in one-way ANOVA

** p-value of $\leq .01$ in one-way ANOVA

Table 10

Means and standard deviations for the "calculated difference" items having significant ANOVA p-values for each of the 10 independent variables

VARIABLE NUMBER AND NAME Item Number and Content	Means						Standard Deviations					
	Categories of Independent Variable						Categories of Independent Variable					
1. <u>MARITAL STATUS</u>	<u>Single</u>	<u>Married</u>					<u>Single</u>	<u>Married</u>				
14. Reg. athletics programs	.96	1.63					1.14	1.30				
2. <u>SEX</u>	<u>Male</u>	<u>Female</u>					<u>Male</u>	<u>Female</u>				
12. Cond. religious activities	.87	.37					1.25	1.27				
3. <u>AGE</u>	<u>18-19</u>	<u>20-21</u>	<u>22-50</u>				<u>18-19</u>	<u>20-21</u>	<u>22-50</u>			
14. Reg. athletics programs	.71	.97	1.48				1.10	1.26	1.11			
4. <u>YEAR IN SCHOOL</u>	<u>Fresh.</u>	<u>Soph.</u>	<u>Jun.</u>	<u>Sen.</u>	<u>Grad.</u>		<u>Fresh.</u>	<u>Soph.</u>	<u>Jun.</u>	<u>Sen.</u>	<u>Grad.</u>	
13. Est. admissions policies	1.25	2.38	1.18	1.60	1.00		1.48	1.35	.83	1.38	1.36	
18. Sel. of a new President	1.45	2.71	1.94	1.53	1.43		1.73	1.23	1.53	1.20	1.09	
5. <u>COLLEGE</u>	<u>AFHE</u>	<u>CE</u>	<u>CLA</u>	<u>IT</u>	<u>Other</u>		<u>AFHE</u>	<u>CE</u>	<u>CLA</u>	<u>IT</u>	<u>Other</u>	
2. Reg. placement programs	1.50	1.93	1.35	.46	1.89		1.18	1.00	1.20	1.05	.99	
6. <u>NUMBER QUARTERS AT U</u>	<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-25</u>			<u>1-2</u>	<u>3-5</u>	<u>6-9</u>	<u>10-25</u>		
18. Sel. of a new President	1.42	2.50	1.73	1.58			1.62	1.36	.92	1.35		
8. <u>GPA</u>	<u>Low</u>	<u>Average</u>	<u>High</u>				<u>Low</u>	<u>Average</u>	<u>High</u>			
13. Est. admissions policies	1.82	1.77	1.09				1.42	1.35	1.24			
17. Cond. fresh. orientation	.82	.11	.53				1.00	.83	1.05			
9. <u>SATISFACTION WITH GPA</u>	<u>1 & 2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>1 & 2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
2. Reg. placement programs	2.21	1.45	1.62	1.38	1.20	.82	1.25	.69	1.40	.81	1.28	.75
10. <u>SATISFACTION WITH U OF M</u>	<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>1</u>	<u>2</u>	<u>3 & 4</u>	<u>5</u>	<u>6</u>	<u>7</u>
1. Sel. sites for new bldgs.	2.09	2.09	1.63	1.31	1.26	1.17	1.14	1.45	1.12	1.08	.85	.94
2. Reg. placement programs	2.36	2.18	1.45	1.25	1.21	.92	1.50	1.47	1.21	.93	.95	1.16
3. Plan. charity campaigns	1.18	1.45	.45	.38	.51	-.08	1.17	1.44	.69	.62	.91	1.16
4. Est. grading policy	2.64	2.09	1.36	1.25	1.74	.83	1.03	1.30	1.96	1.44	1.11	1.34
5. Sel. visiting speakers	1.81	1.55	1.00	.63	1.17	.50	.98	1.37	1.18	1.09	.96	1.31
6. Est. tuition policy	2.81	2.45	2.36	1.44	2.26	1.25	1.08	1.92	1.36	1.26	.97	1.29
9. Plan. curric. in major	3.27	2.27	2.00	1.63	1.85	.83	1.01	1.62	1.55	1.45	1.14	1.70
10. Plan. course content	2.27	1.82	1.91	.94	1.59	.58	1.10	1.54	1.22	1.18	1.31	1.31
19. Est. dorm. policies	1.82	1.36	1.18	.56	1.10	.25	1.17	1.36	.87	1.21	1.17	1.66
21. Handl. commuter problems	1.73	2.18	1.00	1.00	1.32	.67	1.01	.98	1.10	.73	1.14	1.50
22. Est. off campus housing	1.82	2.27	2.00	1.13	1.68	.58	.87	1.19	1.34	1.15	1.32	2.15

Table 11

Student Participation Questionnaire: ANOVA p-values for separating categories of 10 independent variables for three summary scores

<u>Summary Scores</u>	<u>Marital Status (N=108)</u>	<u>Sex (N=108)</u>	<u>Age (N=108)</u>	<u>Year in School (N=108)</u>	<u>College (N=108)</u>	<u>Number Quarters at U. (N=108)</u>	<u>Residence (N=108)</u>	<u>GPA (N=102)</u>	<u>Satisfaction with GPA (N=108)</u>	<u>Satisfaction with U of M (N=108)</u>
Average "Should" Item	.82	.09	.90	.26	.63	.36	.04*	.25	.33	.07
Average "Actually Do" Items	.57	.54	.61	.95	.68	.87	.60	.59	.27	.09
Average "Difference" Item	.88	.63	.87	.30	.51	.81	.35	.11	.18	.00**

* p-value of $< .05$ in one-way ANOVA

** p-value of $< .01$ in one-way ANOVA

Table 12

Intercorrelations of five independent variables
and three summary scores (N=101)

Variable	1.	2.	3.	4.	5.	6.	7.	8.	Mean	Standard Deviation
1. Age	1.00								21.94	4.64
2. No. Quarters at U of M	.18	1.00							5.66	3.89
3. Estimated GPA	.35**	.08	1.00						2.86	.55
4. Satisfaction with GPA	.16	.05	.37**	1.00					4.65	1.68
5. Satisfaction with U	-.01	-.03	.13	.22*	1.00				4.83	1.90
6. Average "should"	-.00	.11	-.14	-.20*	-.23*	1.00			3.71	.63
7. Average "actually do"	.05	.19	.09	.10	.23*	.09	1.00		2.31	.43
8. Average "difference"	-.03	-.02	-.17	-.23*	-.33**	.81**	-.51**	1.00	1.40	.73

* Significant at $p < .05$ (correlation of .195 is significant)

** Significant at $p < .01$ (correlation of .254 is significant)

REFERENCES

- Butler, William R. Student involvement in the decision-making process. College Student Personnel, Vol. 7, No. 6, 1966, pp. 331-335.
- Golden, Patricia M., and Rosen, Ned A. Student attitudes toward participation in university administration: An empirical study related to managerial prerogatives. College Student Personnel, Vol. 7, No. 6, 1966, pp. 323-331.
- Hodgkinson, Harold L. Governance and factions - Who decides who decides. Research Reporter, 3, No. 3, 1968, pp. 4-7.
- Keeton, Morris. A productive voice for students. Paper presented at the National Summer Conference for Academic Deans, July, 1967.
- Somers, Robert H. The Mainspring of the Rebellion: A Survey of Berkeley Students in November, 1964. Berkeley, 1965.
- Wilson, Robert C., and Gaff, Jerry G. Student voice - Faculty response. Research Reporter, 4, No. 2, pp. 1-4.

1111
957541

UNIVERSITY OF MINNESOTA

Research Bulletin
of the
Office of the Dean of Students

Volume 10, Number 18

June 10, 1970

STUDENT PARTICIPATION IN UNIVERSITY GOVERNANCE:
A SURVEY OF THE BIG TEN CONFERENCE

by

Darwin D. Hendel

Student Life Studies

Office for Student Affairs

ABSTRACT

Student participation in University governance gradually is being seen as a legitimate student concern. Attitudes and perceptions regarding participation vary widely from campus to campus. The first step in research on student participation consisted of a survey of the schools in the Big Ten Conference. The research questionnaire had three sections: 1) short essay questions on participation; 2) attitudes and perceptions towards participation activities; and 3) criteria used in evaluation of participation experiences. All institutions returned the research information.

Results of this survey are completely descriptive. The essay questions stimulated numerous additional hypotheses for research investigation and some practical suggestions to improve the quality of student participation. The respondents emphasized the importance of research on question such as "What participation experiences have what outcomes for what students?"; however, little research on student participation exists. Student self-selection of relevant experiences, based on accurate information and self-knowledge, was emphasized. Big Ten administrators who responded to the questionnaire felt that there should be more frequent student participation than currently exists although some differences between institutions existed. Results indicated that student based criteria were more important than institutional based criteria. Well-designed studies which compare students before and after certain experiences are necessary.

The University of Minnesota Office for Student Affairs "Committee on Student Participation and Leadership" and the division of Student Life Studies conducted this survey of the Big Ten universities. The original directive given to the committee was: "To study student involvement in University governance and to make necessary recommendations and to recommend and/or develop student leadership programs". As a first step in research on student participation, the committee attempted to determine the extent of current student participation in University governance and to examine ideas which could be used in developing new programs. The committee used the schools in the Big Ten Conference as the first set of institutions to be examined. Participating institutions are anonymously labelled in this report.

Research questionnaires were distributed in Chicago on February 1, 1970, at a meeting of the Vice Presidents for Student Affairs from the Big Ten Conference. Participants returned the questionnaires within ten weeks after the Chicago meeting. Individuals other than those given the questionnaire answered the questions for some institutions. Contrasts between universities may reflect these differences in the administrative hierarchy. Differences in responses also reflect individual differences and differences in institutional concern for student participation and involvement.

The research questionnaire had three different sections. One section was a series of short answer essay questions. The second section contained attitudes and perceptions towards 25 different participation activities. The third section examined criteria used in the evaluation of participation experiences. Sections two and three were in multiple choice response format to be described later.

PART I

Since Part I of the questionnaire consisted of seventeen short answer essay questions concerning student participation in the governance of the university, no numerical analysis of the data is feasible. Each question will be presented followed by abbreviated summaries from the representatives of the ten institutions. When responses were similar in basic content for two or more institutions, summaries reflect the combined suggestions of those institutional representatives.

1. What are some ways to identify potential participants and leaders upon entrance to your institution?

Two different time periods during which potential participants can be identified are: 1) when the student enters the University; and 2) later in the course of a student's college experience. For example, Pine University sponsors a "Freshman Conference" for about 300 new students prior to fall registration; many prove to be future leaders. Most of the additional later participants are identified by their personal initiative in volunteering for student activities. Identification of participants at Birch University is based on "demonstrated interest in campus activities", with no apparent attempt to identify and recruit new student participants. Suggestions from Spruce University included use of ACT Biographical Data, high school activities records, past experience and/or performance, self-selection at registration, and interviews with individual students.

Recruiting students "who ask questions and make suggestions" is much more valuable than use of grade point average and previous involvement as indices of potential activism. A "newspaper clipping service from the high schools and recruiting facilities during the first week of school" are used at Oak University. Tests given by the Student Counseling Bureau, such as the Leadership scales on the Minnesota Counseling Inventory and the Strong Vocational Interest Blank, which are given to all freshmen, could identify students with high potential.

Suggestions from Walnut University included the use of high school records, leadership training opportunities and forms on which students could indicate their potential for involvement in several different areas. The identification of effective leaders should include criteria such as "students' willingness to make definite time commitments necessary to be competent and effective participants"; this identification could take place only after individuals have had time to demonstrate competence. Willow University uses the Biographical Data section of ACT as a basis for generating computer print-outs for students interested in leadership activities. This information is made available to the Offices of Student Affairs and academic divisions of the University which are recruiting student participants.

Identification of potential participants at Maple University is based on a series of honors programs, academic and personal counseling, and through advisory committees within each school. The ACT non-academic achievement scales, indicating past leadership activities, are used at Linden University as a means of identifying potential student participants. The overall tone of responses suggests that most institutions "could" identify students having varying degrees of potential. Whether these methods have validity in predicting involvement is a question to be answered by appropriate research.

2. Describe how you could determine what participation would be most beneficial for which students.

The overall consensus of opinion was that institutions should refrain from determining what experiences would benefit which students. Student self-selection of personally relevant experiences is the most crucial factor. Pine, Walnut, and Maple Universities specifically mentioned student self-selection as the most relevant variable. Good self-selection of participation experiences requires accurate knowledge about the self and the available opportunities. The role of the University should be one of providing this information and encouraging students to decide on the basis of this information. Individual interviews, use of ACT profiles showing group characteristics of entering freshman, and determining which students are currently benefiting from specific types of participation are other possibilities. Social service and leadership scores from Freshman Orientation data at Oak University are possible means whereby students could be recruited for activities which complement their interest patterns.

Additional suggestions from Walnut University point out that participation can result in learning only when the students' natural feelings of inferiority and defensiveness are removed. This suggests that "the type of participation which is most useful to students involves contact with faculty and administration simultaneously in an atmosphere of equality and respect". Willow University

listed three interrelated approaches to the problem: 1) a priori judgment based on the limited data currently available; 2) gathering more data from students concerning their satisfaction and involvement in current participation; and 3) developing a much larger number of participatory alternatives to meet varying student needs. Suggestions from Linden University reemphasize the importance of individual differences, personal relevance, and basing current activities on the student's past experience. For example, involving students who have become trapped in current curriculum requirements in curricular reform utilizes their motivations and experiences and provides them with feelings of accomplishment in personally meaningful areas.

The best criteria for evaluating participation experiences should be based on students' evaluations rather than on rigid institutional criteria. Concerns for past experiences and individual differences are necessary for program evaluation within each of the ten institutions. Participation can be examined profitably only within the context of a specific University with its unique student body.

3. How are appropriate students influenced to become participants in your campus governance?

Student self-selection, and more importantly, peer group influence and interpersonal communication within student subgroups, are the major determinants of participation in campus governance. At Pine University, this peer group influence is centered in the Undergraduate and Graduate Student Associations which recruit and appoint student committee members. Opportunities for participation at all levels, such as in living units and general campus affairs, exist at Birch University; the students are not actively sought out, but are "expected to show initiative". Interest, knowledge of what is involved in a given program, self-selection, and influence of friends were among the factors influencing participation at Spruce University. Personal dissatisfaction with present conditions and affiliation with other action groups such as SDS determine which students will become involved. Attempts should be made to "recruit" campus leaders through personal activities such as Human Relations Labs and similar group experiences.

At Cedar University, self-selection is the primary factor determining participants; no deliberate attempts are made to recruit new students. During Freshman Orientation at Oak University, students nominate others to become leaders in their orientation groups; students later nominate themselves to be on various freshman cabinets in the University. Writing local high schools in the state and asking for nominations of potential participants could be one basis for the recruitment of students. Participation at Walnut University is open to all students with no attempts being made to "influence appropriate students". Stressing the fact that participation is a great learning experience, evidenced by having academic credit being offered by the appropriate department, and "giving campus governance agencies real responsibility for taking care of themselves" are prerequisites for meaningful participation. Influences at Willow University include peer groups, faculty and student personnel staff support; no deliberate University attempts are made to recruit student participants.

At Maple University, formal and informal leaders are known by the interested departments or by the personnel officers; officers then attempt to "choose

representative students from among those which have been classified as leaders". As in the other institutions, no attempt is made to influence the majority of "invisible students" to become participants nor are any efforts made prior to the students' arrival at the institution. Although the usual channels of influence at Linden University are through the efforts of students currently involved in campus governance, faculty and administration suggestion or nomination sometimes influences who becomes participants.

4. What have you done to increase the percentage of participating students on your campus?

Encouraging students to become involved and expanding students' opportunities for participation are the two major emphases in responses to this question. Little mention was made regarding deliberate attempts to involve more students on the campus. In response to student initiated requests and pressure at Pine University, student membership on faculty senate, administration, and college committees has been substantially increased. Current student participants at Birch University try to increase the percentage of participants by making participation more appealing. Spruce University uses tables at registration and an Activities Carnival to increase the percentage of participants.

At Oak University 400 student groups of two or more students are organized around varied kinds of interests; personal contact by telephone or letter are sometimes used to recruit participants for specific positions. Students concerned about changing certain situations at Walnut University are encouraged to become involved on the appropriate ad hoc or permanent committees. Encouragement does not occur in any systematic fashion and is frequently limited to a small number of students. Decision making faculty bodies have been opened to students, students have been placed on the Board of Regents, and student membership in each major faculty committee has been increased to assure students that participation can be meaningful. Walnut University also has established a "responsible, representative agency for finding interested and competent students" to serve on each of these committees.

Willow University surveyed the extent of student participation throughout the University at the college level and has responded to student requests for participation as a means of increasing the overall extent of participation. At Maple University, attempts to increase the percentage of participants have been in the form of opportunities on student advisory councils in all schools and the creation of numerous ad hoc committees to advise on specific areas. Circulation of information on the availability of opportunities to become involved has been the major means of increasing participation at Linden University.

5. Describe methods used on your campus to keep records concerning participation of individual students.

A general lack of systematic record keeping on student participation is present in all institutions. When such records are kept, they are usually minimal and incomplete; several respondents noted that extensive record keeping would fail to insure individual privacy. No overall records are kept at Birch University, Spruce University, Cedar University, Oak University, and Maple University.

Some individual clubs and groups maintain records of their participants. The Graduate and Undergraduate Student Association at Pine University do have files on their appointies and others who have participated.

Walnut University uses a "Student Personnel Card" to record names of participants submitted by various organizations excluding campus political organizations. Record keeping in the different colleges at Linden University varies extensively in terms of quantity and quality; registration forms also provide the opportunity to indicate current participation. Students at Willow University may volunteer information on their participation in non-course activities at the end of each quarter; this information is kept in personnel folders in the Office of the Dean of Students for 9 years after graduation. In addition to this volunteered information, all officers of student organizations and students on university and college committees must be registered by the proper administrative units.

The general reaction to this question suggests that systematic record keeping of a student's college experiences may be impossible and undesirable. In the context of research investigations concerning participation, it may be possible to examine only the results of specific experiences rather than longitudinal development.

6. Describe attempts made by the Student Personnel program on your campus to help students become more influential aspects of constructive campus change.

The main role of Student Personnel staff has been that of serving as advisors in all areas of campus and residence groups. The Office of Student Programs and Services provides such advisory services for student organizations at Pine University; similar advisory bodies exist at Birch University, Walnut University and Willow University. Structured and well-defined leadership training programs, designed to increase the students' competence and ability to influence, are not presently available in most institutions. Some organizations at Cedar University are attempting to develop leadership training programs.

At Spruce University the Office of Student Affairs is re-evaluating its "long term counseling objectives of making students more influential agents in governing the university". The development of Human Relations Labs and having Student Personnel staff serve as "models of effective influence" are also concerns at Spruce University. The Student Personnel program at Oak University has been instrumental in opening up opportunities in governance such as the inclusion of students on the University Senate. Student decision making cannot become a reality without changing the attitudes of segments of the campus community nor can students become influential change agents until they are recognized and given legitimate power. Although the idea of student involvement at Maple University is generally accepted, a newly approved Student Bill of Rights calls for "appropriate student participation whenever possible". For the majority of institutions, no structured programs exist for the training of students as effective agents of change.

7. Describe the actions of your campus leaders in developing additional student participation programs.

Actions on the part of student leaders at various institutions range from confrontation-demands situations to working within the established system to voice additional participation requests. A general attempt by campus leaders to initiate new participation programs and to persuade the faculty and administration is taking place. Initiative taken by student government leaders at Pine University, Walnut University, Willow University, Maple University and Linden University has resulted in increased participation in several areas of university life. A report by the Undergraduate Student Association at Pine University outlines attempts by student leaders to involve students on more committees; the attempts are so recent that there has been no real test of whether committees are truly effective means for change.

Leadership seminars conducted by student leaders at Birch University have been somewhat successful in drawing in new participants. Use of good public relations at Spruce University to let students know that there is room for them and work to be done has resulted in somewhat increased student participation. Training programs conducted by Student Affairs staff, and intern positions within some organizations at Cedar University reflect the concerns of student leaders in developing additional participation programs. Student leaders at Walnut University have initiated committees on student appointments, parking, and curriculum. Student governments at Linden University have insisted on "more meaningful" participation by more students at more levels.

8. Describe any recent actions by the faculty on your campus to extend student participation.

The present situation at most institutions makes it difficult for students, faculty, and administration to work closely together. Generally, faculty members are more involved and concerned with their academic and research activities since these activities determine advancement. Faculties are often uninterested in student participation activities since they take valuable time; individual faculty members are not rewarded for participation. The status of many existing Student - Faculty Committees is poor since most such committees are advisory rather than decision making; hence, many students see such committees as attempts to placate student criticisms.

Faculty related actions are slowly increasing. For example, the faculty senate at Pine University gradually has expanded student membership on senate committees in the last three years. At Walnut University, students are attending faculty meetings and steering committees; students are being involved in the planning of several departments, especially sociology and history. Oak University has included 50 student votes in the Campus Assembly and additional votes on the University Senate. Although Student-Faculty Committees do exist at Spruce University, "no real community atmosphere can exist until the role of the student changes to the point where students have a viable voice in University policy-making". Extensive student inclusion on department and University committees at Cedar University has come primarily from student initiative. The faculties have made no concerted actions to extend student participation.

Other actions include recently created committees at Willow University which include voting students on committees such as "Open Housing Panel" and "University Judicial Panel". Faculty at Maple University has recently accepted students as

full voting members on the Faculty Senate Committee on Student Affairs. Faculty policy committees at Linden University have expanded student membership and the College of Letters and Sciences has included students on curriculum committees; more than 100 departmental and college committees currently involve students.

9. What attempts have been made by the administration on your campus to encourage participation?

With some exceptions to be noted later, the role of the administration appears to be one of "encouraging student inclusion on committees". This was the overall tone of the responses given by Birch University, Cedar University, Oak University, Willow University, and Linden University. None of the institutions noted any direct actions on the part of the administration to restructure university governance so that students have equal representation on decision making committees.

At Pine University, the Chancellor and others in his office meet regularly with elected student leaders; many of the administrative committees have recently added student members. The Office for Student Affairs at Spruce University is re-evaluating the progress being made in obtaining an equal voice for students on committees. Students at Walnut University have been invited to meetings of the Board of Trustees and on the Presidential Search Committee. The Student Body President at Maple University attends Trustees' Meetings and students have also been involved in budget hearings; on occasion, students are "allowed" to make presentations at Trustees' Meetings.

10. What actions have students on your campus taken to influence decisions made in the university?

Student's methods of influence are as varied as the institutions themselves--ranging from violent demonstrations to orderly campus elections. To give the unique characteristics of the influence process on each campus, answers to this question will be reproduced as originally given.

At Pine University, "students have, almost exclusively, carried their proposals for change through tortuous, official routes for approval, often to be rebuffed, delayed or ignored at one or more point". Students at Birch University have "requested committee appointments and increases on student advisory boards". At Spruce University, students have used "campaigning and disruption, boycotting of the Committee on Student Conduct, and experimenting with student power to back their Student Senate in presenting arguments to the faculty and administration". "Sit-ins to control the bookstore, strong stances to control student affairs and bargaining by teaching assistants" are some of the recent actions at Cedar University. At Oak University, "students have been active primarily through membership on committees".

Student action at Walnut University has varied from organizing protests to passing committee resolutions; "students have tried to affect numerous things in one way or another, although not always successfully". Students at Willow University are primarily influencers as committee members although "they demonstrate,

write to the student newspaper, and organize themselves to influence decisions by lobbying". At Maple University "there have been some verbal demands, but these have largely been through appropriate channels". Student actions at Linden University have included "discussion, demonstrations, conversation, coercion and a presently threatened strike".

11. Describe the involvement of students on your campus in the operation of Student Personnel offices.

No real student involvement within the operation of Student Personnel offices as full or part-time student employees exists. The staff in Student Personnel offices serve on student advisory committees and work with special groups such as married students, veterans, or the educationally disadvantaged. At Pine University, students serve with varying degrees of effectiveness and usefulness in Student Personnel offices such as the Dean of Students, Director of Financial Aids, Dean of Student Programs and Services, and the Director of Housing. At Birch University, students often meet with Student Personnel representatives to discuss changes in policies and services.

At Spruce University, student government has little communication with the formal Office of Student Affairs; until recently that office has been seen as a disciplinary organ of the administration. Students in an advisory role on policy committees at Cedar University is seen as their primary input into Student Personnel offices. Students at Oak University participate in the selection of dormitory and union directors and also take an active role in the Freshman Orientation program. At Walnut University, graduate students serve as interns within Student Personnel offices and undergraduates frequently take part in work study programs. Student Personnel staff interaction with students on committees, revolving around concern for student needs and desires, are the primary means of communication at Willow University and Maple University. At Linden University little formal contact occurs; new kinds of input are being sought to replace the old "student activities adviser" philosophy.

12. What means are available to assess the impact of the student participation on your institution?

Although the news media generally publicizes major campus disturbances, faculty and other constituencies have no real means by which student participation can be honestly and objectively evaluated. Other than informal qualitative impression, none of the institutions currently provide for systematic means to assess the impact of student participation on the institution as a whole. More student involvement is present today but no research has been done on its institutional impact. A 1966 survey at Linden University was mentioned as one attempt taken by an institution to provide such information. Two of the respondents mentioned the need for more research facilities in the form of a Student Life Studies division of the Office of Student Affairs.

13. How could the impact of participation experience on students themselves be assessed?

The responses to this question are similar to those given for question 12; a need exists for student assessment of participation experiences but no well-organized evaluations exist at any of the institutions. The perennial question of "what activities affect what kinds of changes in which students?" has been the goal of a few research projects. Studies which have looked at "the college experience" or "student involvement" too frequently have been concerned with participation as a largely global and unspecified experience. More meaningful research must be based on the evaluation of relatively specific experiences such as a three month assignment on an ad hoc committee.

As noted by Pine University, the additional need exists to survey students over time to assess the impact of their participation. Personnel evaluations, academic progress of participants, nature of post graduate study, and careers of student participants were mentioned as possible criteria in evaluating such experiences. The ubiquitous psychology surveys at Cedar University, and Office of Student Affairs surveys at Birch University, Maple University, and Willow University, are some of the other survey attempts mentioned. An additional suggestion from Walnut University, based on interviews in which students are asked how they have gained or learned from participation and why, provides the opportunities for students to give relevant feedback. Such an approach could be used quarterly as a means of program evaluation and increased student - faculty - administration communication.

14. What are the major obstacles to increased student participation on your campus?

Lack of student interest in structured activities, administration reluctance, and faculty opposition to real power sharing are the three major obstacles. At least one of these obstacles were mentioned by each of the institutions; all were noted by Spruce University, Oak University, Maple University, Linden University, and Walnut University. This is not to imply, however, that these three obstacles are independently affecting the low level of student participation. Students are often disinterested in student participation because it is seen as tokenism with no real power or responsibility being present. Students are justifiably unwilling to spend the time and energy on something unless they think it is in some way going to be meaningful.

Some respondents mentioned more specific obstacles and suggestions. The lack of a centralized Student - University Center at Walnut University, problems with trustees and state legislatures at Willow University, and certain state legal restraints at Maple University were some of the specific obstacles. Although student apathy due to the token characteristics of participation is an important factor, lack of student time should also be considered. Students are often reluctant to use study time or free time to become involved in University governance. To remedy this problem, Cedar University mentioned the possible use of credit or money to reward student participation. Meaningful student participation, with real power and responsibility, may provide its own intrinsic rewards.

15. What research has been conducted on student involvement on your campus?

Isolated surveys, occasional head counts, and periodical reports on student involvement were the only "research" studies mentioned by any of the institutions. An Office for Student Affairs review at Spruce University, a Dean of Students survey of participation on college and University committees at Willow University, and a participation review and directory at Linden University are examples of these periodical reports. Little systematic research exists on crucial questions such as "What are the changes in students as a result of participation?"

16. Describe innovations in student participation programs which have occurred in the last two years on your campus.

Innovations on the part of faculty, administration and students have been somewhat limited. The innovations which have taken place have been in the form of incremental increases of students on permanent and especially on ad hoc committees. Changes in the structure of student government at Walnut University have enabled more students to become involved. Incremental increases on committees at Pine University and student advisory boards in the separate colleges and departments at Birch University are two specific examples. At Oak University, the major "innovation" has been student participation in previous faculty committees; exceptions are faculty tenure and faculty judiciary committees. The recency of such programs varies from institution to institution. At Cedar University, for example, most of the committees have come into existence in the past two years.

A general trend away from traditional types of participation is evident at most of the institutions. This trend was specifically mentioned and summarized by Spruce University: "Student Government has made a huge break from the old Greek, all-American type of participation and has begun to involve a much wider spectrum of people. It has begun to break away from maintaining the "status quo" and to work for student rights, educational reform and to bring about a community atmosphere in the University". A comparable trend was also noted at Maple University: "Students are more positive, more militant, more articulate and more sophisticated about real power positions on campus".

17. What changes in participation opportunities do you anticipate will occur on your campus within the next year?

The general trend is in the direction of student initiated changes as student-faculty-administration communication increases. "Increased student action" at Birch University, "student policy boards on student affairs" at Cedar University, "student involvement in departmental committees throughout the University" at Oak University, and "increasing participation on committees mostly through pressure" at Linden University are some of the projected changes. Student requests for increased quantitative participation are generally being met; the trend now is to make this participation more qualitatively meaningful. This issue was noted at Willow University: "Students, faculty and staff are asking for more qualitatively meaningful participation as the quantitative issue has been resolved in many instances".

The response from Walnut University was as follows: "The situation will eventually open up during the course of time. As new administrators come and a new generation of faculty members assumes the position of primary importance, student participation will generally increase on all levels. It is, however, primarily a matter of time and continued efforts on the part of students to become a factor in the life of the community".

The response from Maple University was: "Students in some representative form will be consulted and informed in both formal and informal ways about practically everything at the University. The next issue should be how to consistently and effectively involve representative students in the decision making process".

More specific changes were noted from Pine University: "Within the next year the following are possible (though perhaps not probable): 1) creation of a campus senate with substantial student membership (25-50%); 2) student governance of fee-supported buildings (e.g. Illini Union, Assembly Hall, and Intramural Building); 3) use of binding referenda to make some campus policies".

The response from Spruce University was as follows: "In addition to a reorganization of the Office of Student Affairs, hopefully, the administration will give students a viable voice in the policy-making decisions of the University. If students become involved and interested in something relevant to their future such as the possibility of a tuition increase, it will be more likely that they will remain involved and interested".

Part II

Part II is a modified version of a participation questionnaire developed by Golden and Rosen (1966). This section of the questionnaire presented the respondent with 25 different student participation activities under two different sets. The first set in each item asked for the respondent's attitudes as to how frequently students Should Play an important part in the given activity. The second set asked for the respondent's perceptions as to current availability in terms of how frequently students Actually Do Play an important part in the specified activity. The five possible response options in each set of 25 items are: 5 = always, 4 = usually, 3 = seldom and 1 = never. Since the two different instructions were given for all items, it was possible to calculate a discrepancy score for each item. The discrepancy scores were calculated by subtracting the response on the Actually Do Play section from the response on the Should Play section. Each individual had three separate scores for each of the 25 items. Items were examined across institutions and institutions were examined across items.

The item means across the ten Big Ten schools are listed in Table 1. The Should Play means across the institutions range from a high of 4.90 for "training student leaders" and "executing freshman orientation" to a low of 3.78 for "establishing physical education programs"; the average of these 25 items is 4.25. The Actually Do Play means range from a high of 4.30 for "executing freshman orientation" to a low of 2.00 for "establishing tuition policy"; the mean was 3.00. The calculated differences for the items ranged from a high of 2.20

for "planning the academic calendar" to a low of .40 for "programming foreign student activities" and "establishing library policies"; the mean calculated difference across the 25 items was 1.25.

The means across items for each of the Big Ten schools are given in Table 2. Mean Should Play responses ranged from 4.91 for Cedar University to 3.54 for Birch University with a mean across schools of 4.24. Mean Actually Do Play responses ranged from 3.76 for Willow University to 2.28 for Elm University with a mean across schools of 2.96. The calculated discrepancies ranged from a high of 2.00 for Pine University to a low of .34 for Birch University; the mean discrepancy across schools was 1.28. None of the mean discrepancy scores across items were less than or equal to zero for the Big Ten Schools. The respondents felt that there should be more frequent student participation than currently exists. That none of the mean item discrepancies across institutions was zero or less indicates that discrepancy existed in all institutions but differed as to level.

These results are completely descriptive with no attempts at inference. Some differences between schools do exist in terms of their mean "should", "actually do", and "calculated differences" but these differences can be due to several factors such as individual differences in respondents or differences in terms of administrative level and do not necessarily reflect the true situation at the institution.

Part III

This section of the questionnaire examined criteria for institutional evaluation of student participation and involvement programs. Each representative was asked to indicate the degree of importance which he would place on several different criteria. The five response choices for each of the twenty criteria and the numerical weighting are as follows: 5 = very important, 4 = somewhat important, 3 = slightly important, 2 = neither important nor unimportant, and 1 = unimportant. The item content and item means for these twenty criteria are given in Table 3. The item seen as having the greatest relevance as a criterion was "student expectations and perceptions of participation" which had a mean of 5.00; all ten of the respondents saw this as being very important in evaluating programs. The least important criteria was "growth in size and assets of the institution" which had a mean of 2.50.

The "criterion problem" in research investigations has been a perennial difficulty in psychological research. In the evaluation of participation experiences, the need for research specificity is great: "What participation experiences have what outcomes for what students?" It is absolutely necessary to supplement subjective impressions of faculty and administration. Criteria such as "impact in relation to institutional objectives" and "shared institutional responsibility" possibly may be evaluated in an objective manner by faculty and administration. Other student centered criteria such as student expectations, perceptions, and satisfaction cannot be measured without direct communication with students. This section of the questionnaire points to the necessity for conducting well-designed studies which compare students before and after certain experiences.

The difficulties in conducting this research are numerous. Students no longer are willing to be research subjects unless there is some type of meaningful return for them. Closely connected to this is an unwillingness to give up a limited amount of their individual freedom which is sometimes necessary in research. The lack of any refined instruments which are sensitive to the impact of college experiences presents an additional difficulty. These problems are formidable, but they must not be used as an excuse for not attempting future scientific research.

Discussion

The information contained in this report will be used by the Committee on Student Participation and Leadership as a partial basis for making the necessary recommendations. Respondents frequently noted that research was essential but had not been conducted. Subjective impressions and student-faculty-administration proclamations regarding University governance are incomplete. Committee recommendations must develop from asking "What are the data?"

The responses to the seventeen questions in Part I illustrate the scope of administrative concern for student participation in University governance. The discrepancy scores for all of the items in Part II were all positive indicating that there should be more frequent student participation than currently exists. Students and administrators agree in principle but disagree on the methods and contents of student participation movements. Part III suggests that administrators view student-related criteria as more important than criteria such as "minimization of campus disorders". The questionnaire results suggest that increased communication between campus groups is essential.

This report raises more new questions than it has answered old ones: "How can participation be increased when any type of campus activism is identified with campus violence to destroy our institutions?" "How can violence be averted?" "How can students be taught to communicate with faculty, administration and fellow students in ways which do not alienate individuals?" Human Relations Laboratories, Living - Learning Centers and sensitivity training will become more prominent on many campuses.

Student participation in University governance is a reality but often a very unequal and meaningless reality. The impetus for more qualitatively meaningful experiences is growing as students become more visible participants. Such initiative calls for increased University responsiveness to the needs and realities of a student's daily experiences.

Table 1
Means Across Institutions For Each of the 25 Items on Part II

	"Should" Responses		"Actually Do" Responses		Calculated Differences	
	N	Mean	N	Mean	N	Mean
1. Selecting sites for new buildings	10	4.20	10	2.40	10	1.80
2. Regulating college placement programs	10	4.20	10	2.40	10	1.80
3. Planning charity campaigns	10	4.70	10	4.10	10	.50
4. Establishing grading policy and procedure	10	4.10	10	2.50	10	1.60
5. Selecting speakers and lecturers	10	4.40	10	3.80	10	.60
6. Establishing tuition policy	10	3.80	10	2.00	10	1.80
7. Planning the academic calendar	10	4.50	10	2.30	10	2.20
8. Establishing vacation policies	10	4.40	10	2.30	10	2.10
9. Developing campus safety programs	10	4.50	10	3.10	10	1.40
10. Planning the curriculum	10	3.90	10	2.50	10	1.40
11. Regulating scholarship and loan policies	10	3.80	10	2.90	10	.90
12. Coordinating religious activities	8	4.00	8	3.12	8	.88
13. Establishing admissions policies	10	4.00	10	2.20	10	1.80
14. Regulating inter-collegiate athletics	9	4.11	9	2.67	9	1.44
15. Meeting with the college trustees or regents	10	4.10	10	2.70	10	1.40
16. Training student leaders	10	4.90	10	3.90	10	1.00
17. Executing freshman orientation	10	4.90	10	4.30	10	.60
18. Establishing physical education programs	9	3.78	9	2.67	9	1.11
19. Controlling dormitory policies	10	4.50	10	3.40	10	1.10
20. Establishing academic policy	10	3.90	10	2.50	10	1.40
21. Handling commuter problems	9	4.11	9	2.78	9	1.33
22. Programming foreign student activities	10	4.30	10	3.90	10	.40
23. Establishing off-campus housing policies	9	4.55	9	3.22	9	1.33
24. Establishing library policies	10	4.30	10	3.90	10	.40
25. Establishing intellectual programs	10	4.50	10	3.40	10	1.10

Table 2
Means For Each of the Ten Institutions Across the 25 Items on Part II

<u>Institution</u>	<u>"Should"</u>	<u>Responses</u>	<u>"Actually Do"</u>	<u>Responses</u>	<u>Calculated</u>	<u>Differences</u>
	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>	<u>Mean</u>
Pine University	24	4.70	24	2.70	24	2.00
Birch University	25	3.54	25	3.20	25	.34
Spruce University	23	4.60	23	3.04	23	1.56
Cedar University	24	4.91	24	3.58	24	1.33
Elm University	24	3.56	24	2.28	24	1.28
Oak University	25	4.44	25	2.68	25	1.76
Walnut University	25	4.30	25	2.78	25	1.52
Willow University	24	4.80	24	3.76	24	1.04
Maple University	25	3.80	25	2.88	25	.92
Linden University	25	3.70	25	2.70	25	1.00

Table 3
 Mean Criterion Value
 Across Institutions For Each of the 20 Items on Part III

<u>Item</u>	<u>N</u>	<u>Mean</u>
1. Student expectations and perceptions of participation.	10	5.00
2. Student satisfaction with participation experiences.	10	4.90
3. Shared institutional responsibility.	10	4.90
4. Impact in relation to institutional objectives.	9	4.89
5. Increased faculty, administration, student interaction.	10	4.80
6. Students' willingness to devote time and energy.	10	4.70
7. Development of patterns of accountability.	10	4.70
8. Increased student comitment to benefit society.	10	4.60
9. Bringing formal and informal structures together.	10	4.60
10. Involvement of a larger percentage of students.	10	4.40
11. Development of informal structure of University community.	10	4.40
12. Increased student involvement in post-college society.	10	4.20
13. Student attendance rates at meetings.	10	3.90
14. Decentralization of influence within the institution.	9	3.78
15. Cost per student per period of time.	9	3.78
16. Increased numbers of campus student leaders.	9	3.78
17. Development of formal structure of University community.	10	3.70
18. Minimization of campus disorders.	10	3.70
19. Decentralization of power within the institution.	9	3.67
20. Growth in size and assests of institution.	10	2.50

Footnote

¹ Appreciation is expressed to the following individuals for their assistance in gathering this research information: Stanley R. Levy, Associate Dean of Students, University of Illinois - Urbana Campus; Thomas C. Schreck, Dean of Students, Indiana University; Roger Augustine, Dean of Students and Randee Fieselmann, Student Activities Adviser, University of Iowa; Barbara Newell, Acting Vice President of Student Affairs, University of Michigan; Eldon R. Nonnamaker, Associate Dean of Students, Michigan State University; Donald R. Zander, Assistant Vice President for Student Affairs, University of Minnesota; Patricia A. Thrash, Associate Dean of Students, Northwestern University; Elaine Naramoto, Administrative Assistant to the Dean of Students, Ohio State University; Barbara Cook, Associate Dean of Women, Purdue University; and Steven R. Saffian and Peter Bunn, Assistants to the Vice Chancellor of Students Affairs, University of Wisconsin-Madison.

References

Golden, Patricia M., and Rosen, Ned A. Student attitudes toward participation in university administration: An empirical study related to managerial prerogatives. College Student Personnel, Vol. 7, No. 6, 1966, pp. 323-331.