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ABSTRACT

The 1974 Survey of Graduating Seniors in the College of Arts and Sciences at the University of Washington is analyzed. Respondents were placed in one of five degree groups (arts, social science, natural science, humanities, and miscellaneous) based upon their major. Differences were noted between male and female graduates in the five degree groups in background characteristics, perceptions of departments, plans following graduation, and occupational expectations. An overview of the university's educational impact is also presented. (Author)

Educational Assessment Center

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April 1975

The 1974 College of Arts and Sciences Survey of Graduating Seniors

Virginia A. de Wolf

An analysis is presented of the 1974 Survey of Graduating Seniors in the College of Arts and Sciences at the University of Washington. Respondents were placed in one of five degree groups--arts, social science, natural science, humanities, and miscellaneous--based upon their major. Differences were noted between male and female graduates in the five degree groups in background characteristics, perceptions of departments, plans following graduation, and occupational expectations. Lastly, an overview of the University's educational impact is presented.

Educational Assessment Center Project: 271

The 1974 College of Arts and Sciences Survey of Graduating Seniors

Virginia A. de Wolf

In June 1974 the 1,845 undergraduate degree candidates in the College of Arts and Sciences (A & S) at the University of Washington (UW) received a copy of a Survey of Graduating Seniors constructed by the Educational Assessment Center. A second mailing was completed in August 1974. The Graduation Office reported that 1,562 A & S baccalaureate degrees (Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, and Bachelor of Science) were actually awarded Spring Quarter 1974. Returns for both mailings can be found in Table 1. Fifty-six percent of the A & S baccalaureate degrees awarded Spring 1974 were accounted for in the returns, i.e., 859 persons having a total of 881 bachelor's degrees. This number was supplemented by 39 persons who were candidates Spring 1974 but who graduated Summer 1974. Combining the responses of these groups provided a total of 898 surveys which total was used in the present analysis.

The various majors were grouped into five categories: arts (A), social science (SS), natural science (NS), humanities (H), and miscellaneous (MISC). See Appendix 1 for the majors included under each of these five groups. In the case of students receiving more than one degree or having more than one major, the major the student selected as most preferred was used in these analyses.

Table 2 lists the frequencies and percentages of male, female, and total graduates in the five groups. Fifty-four percent of the respondents were male graduates comparing closely with 57% males in the entire graduating class. Among males the largest percentage (37%) received their degrees in NS majors, and SS, NS, and H combined accounted for 94% of male graduates. In contrast, among females these three major areas accounted for 75% of graduates with 25% of females in the A and MISC groups. The biggest disparity between the sexes was in the natural sciences.

The information gathered in this survey will be presented in five sections: general background information, majors and major departments, plans one year after graduation, occupational expectations, and educational impact of the University.

Table 1

Summary of Returns for the 1974 Survey of Graduating Seniors

	Degree	Major	Mailing	N Students	N Degrees
Spring 1974 Graduates	1	1	first	492	492
	1	1	second	309	309
	1	2	first	25	25
	1	2	second	11	11
	2	2	first	12	24
	2	2	second	9	18
	2	3	second	1	2
				859	881
Spring 1974 candidates graduated Summer 1974	1	1	first	20	20
	1	1	second	18	18
	2	2	first	1	2
				39	40

Note. There were also 73 candidates who did not graduate Spring or Summer 1974 as well as 25 unusable returns. Included in the returns for the second mailing were all surveys received after August 26, 1974.

Table 2

Male and Female Respondents in Each of the Five Degree Groups

Respondents	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
N	20	139	178	136	10	483
%	4	29	37	28	2	100
Females						
N	48	133	58	122	54	415
%	12	32	14	29	13	100
Total						
N	68	272	236	258	64	898
%	8	30	26	29	7	100

Note. Percentages are based upon the total number of respondents in each row.

General Background Information

Table 3 presents the average ages of the graduates. The A group was oldest (26) with the overall age being 24. Table 4, which is concerned with the timing of college entry, reveals that 86% of the males and 93% of the females began college within a year of completing high school. Taken together, Tables 3 and 4 indicate that for all degree groups students are taking longer than a traditional, uninterrupted four years to get their bachelor's degrees.

Table 3

Average Age at Graduation for the Five Degree Groups

	Degree Groups					
Respondents	A	SS	NS	H	MISC	TOTAL
Males	27	24	24	25	26	24
Females	26	24	23	25	23	24

Table 4

Percentages Responding to "When Did You Begin College?"

	Degree Groups					
Period in which college was begun	A	SS	NS	H	MISC	TOTAL
Males						
One year or less after high school	100	87	89	79	80	86
2-4 years after high school		6	3	8		5
5-10 years after high school		5	6	8	20	6
More than 10 years after high school		2	1	4		2
Females						
One year or less after high school	92	93	95	92	96	93
2-4 years after high school	2	3		3		2
5-10 years after high school		2	3	3	4	2
More than 10 years after high school	6	2	2	2		2

The Registrar's Office codes all students by type of school most recently attended and this information, along with certain other academic data, was gathered from the Registrar's scholarship list for each student in the sample. Table 5 presents the percentages of male and female graduates in each of the degree groups entering UW from these three types of institutions. The largest percentage of students entered from high school, 42% of males and 44% of females. While a slightly greater proportion of males came from community colleges than from 4-year colleges (30% vs. 27%), the reverse was true for females.

Table 5

Type of Sending Institution for the Five Degree Groups

	Degree Groups[a]					
Sending Institution	A	SS	NS	H	MISC	TOTAL
Males						
High school	40(8)	40(55)	54(95)	32(43)	30(3)	42(204)
Community college	15(3)	35(49)	22(39)	35(47)	70(7)	30(145)
4-year college/university	45(9)	25(35)	24(43)	33(45)		27(132)
Females						
High school	40(19)	35(46)	65(37)	47(57)	41(22)	44(181)
Community college	21(10)	35(47)	14(8)	16(19)	17(9)	23(93)
4-year college/university	40(19)	30(40)	21(12)	38(46)	43(23)	34(140)

[a]Percentages followed by numbers in parentheses indicating number of graduates entering UW from the three types of sending institutions.

In addition to noting the type of sending institution, the Registrar records the entering GPA of each student. Table 6 contains the entering GPA for males and females in the five groups according to the type of institution attended prior to entering UW. Women had higher entering GPAs than men in 14 of the 15 possible degree groups, the only deviation being the three male community college transfers in the A group.

Table 6

Mean Entering GPAs by Type of Sending Institution

	Degree Groups					
Sending Institution	A	SS	NS	H	MISC	TOTAL
Males						
High school	3.19	3.21	3.42	3.26	3.39	3.32
Community college	3.42	2.86	2.82	2.83	2.37	2.82
4-year college/university	2.90	2.84	3.02	2.97		2.95
Females						
High school	3.38	3.26	3.53	3.28	3.42	3.35
Community college	2.88	3.14	3.01	3.17	2.89	3.08
4-year college/university	3.04	2.96	3.39	3.11	3.13	3.09

Note. Number of unusable responses was 10.4% of the sample.

Table 7 presents the mean UW GPA at graduation and Table 8 the mean number of credits attempted, both graded and ungraded, at UW at time of graduation for males and females in the five groups by type of sending institution. The credits upon which the Table 7 GPAs were based do not represent the total number of credits attempted, only those which were graded. It would appear from Tables 6 and 7 that the least academically qualified graduates of the University came from community colleges, a result paralleling earlier work with enrolled students (Hodgson and Dickinson, 1974). A second observation is that the entering GPA superiority of women was not repeated in their UW grades. Of the 14 possible comparisons, women were superior in one half.

Table 7

Graduating GPAs for the Five Degree Groups

	Degree Groups					
Sending Institution	A	SS	NS	H	MISC	TOTAL
Males						
High school	3.56	3.24	3.27	3.11	3.29	3.24
Community college	3.24	3.02	2.92	3.03	2.89	2.99
4-year college/university	3.37	3.19	3.27	3.17		3.22
Females						
High school	3.21	3.16	3.14	3.21	3.10	3.17
Community college	3.04	3.33	3.08	3.18	2.93	3.21
4-year college/university	3.19	3.50	3.25	3.27	3.07	3.29

Table 8

Total Credits Attempted at UW at Time of Graduation

	Degree Groups					
Sending Institution	A	SS	NS	H	MISC	TOTAL
Males						
High school	221	180	194	191	201	191
Community college	135	103	116	111	120	111
4-year college/university	101	97	103	105		102
Females						
High school	198	183	186	185	186	186
Community college	109	108	111	113	108	109
4-year college/university	99	96	98	98	91	96

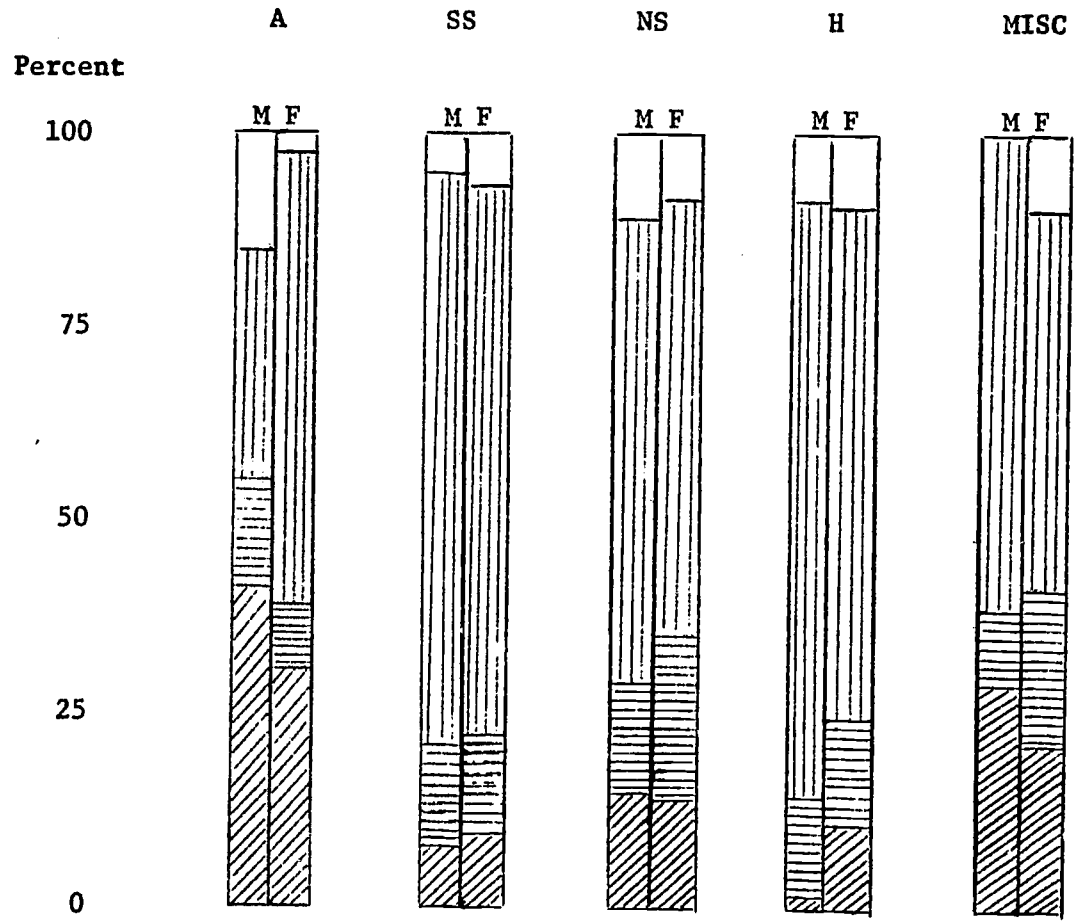
Majors and Major Departments

Table 9 presents a chart illustrating the period during which students decided upon their final major. Once again, the sexes are divided into the five degree groups. Male graduates in the A group seemed to have been the earliest to decide upon major, 55% having decided during the first year of college or in high school. The overwhelming bulk of graduates, however, decided during their second or third year of college: 60% of A females, 74% of SS males and 72% of SS females, 58% of NS males and 53% of NS females, 74% of H males and 65% of H females, 60% of MISC males and 52% of MISC females.

Table 10 presents the reasons for selecting final major of males and females in the five groups. Over 50% of the A, SS, H, and MISC graduates selected their major out of personal interest which included: (1) found I could do well, (2) for interest, no relation to career plans, and (3) for personal growth reasons. In contrast to the other groups, NS graduates selected their major primarily (1) as preparation for a career and further study either at the bachelor's level in an area related to their major, or (2) for graduate study in their major, or (3) for graduate study outside their major. Further, of the NS males (57%) who selected their major as preparation for future education and career only 19% indicated only further study at the

Table 9

Time of Selection of Final Major



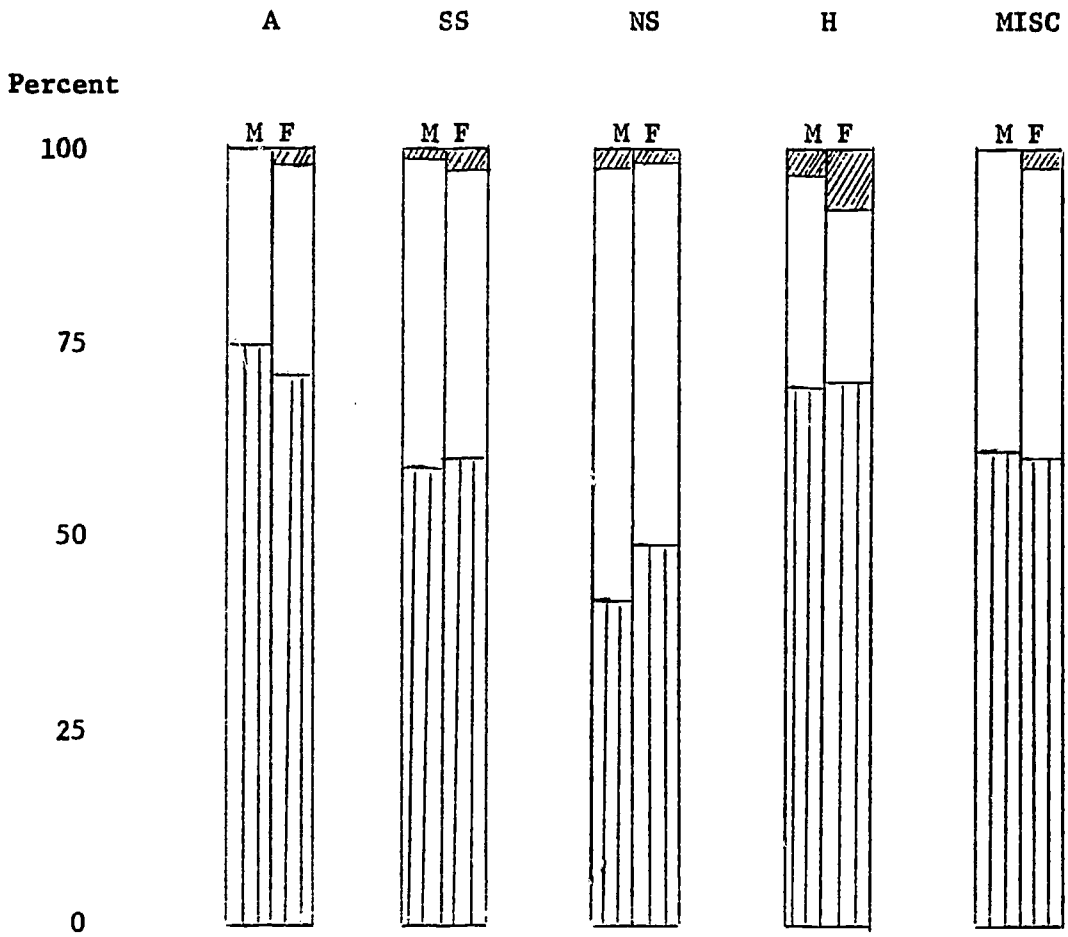
Note. M and F are abbreviations for male and female.

KEY

- senior year or later of college
- second or third year of college
- first year of college
- during high school

Table 10

Reasons for Selecting Major in the Five Degree Groups



Note. M and F are abbreviations for male and female. Unusable responses were found in 2% of the entire sample.

KEY
faculty and department attractive
preparation for further study and career
personal interest

bachelor's level, whereas of the 50% NS women intending further study, 46% indicated only further study at the bachelor's level. Except for the female H graduates, where 8% indicated that they were attracted to their major because of the faculty and department, this seventh alternative was seldom selected.

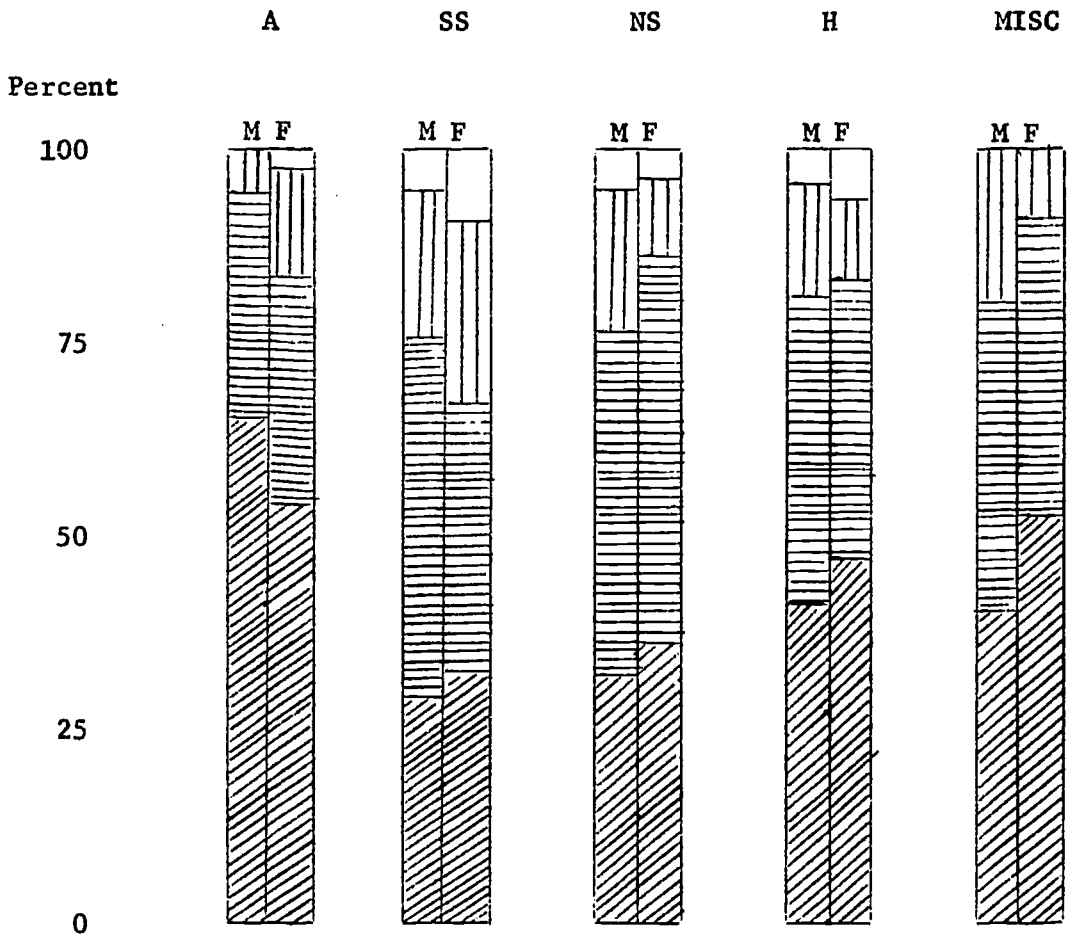
Table 11 relates to satisfaction with choice of major. Social science graduates, both male and female, indicated the least satisfaction. Twenty-five percent of SS males and 34% of SS females were either uncertain or dissatisfied with their majors. As might be expected from Table 11, SS graduates indicated the lowest percentage of affirmative responses among the five groups to the question "If entering college today, would you choose the same major?" Table 12 gives the percent responding to the eight alternatives given in the survey. Close to two-thirds of the group indicated they would select the same major. The most powerful choice of another major was one that would have been of more immediate vocational use.

To the question of "emotional feeling" towards major department, the majority of students had positive feelings ranging from 66-80% for males and 54-91% for females. Again, however, the areas towards which students had the greatest indifference and negative affect were Social Science and Natural Science. Students graduating in the A and MISC groups were the most positive about their majors.

Students were asked to indicate which of the following ten areas could stand the most improvement in their departments: faculty (F), degree requirements (DR), physical facilities (PF), student-faculty interaction (SFI), advising (A), size of class (SOC), variety of courses (VOC), independent study (IS), grading system (GS), and theoretical vs. applied orientation (TAO). Table 13 gives the top ranked area for the five groups divided according to satisfaction with major. For the most part, area of improvement differed for the two satisfaction groups. Among dissatisfied males, the faculty seemed the biggest gripe, while for satisfied males, the theoretical vs. applied orientation (TAO) was of greatest concern. Among dissatisfied females, TAO was again top-ranked, while satisfied females indicated a spread of concerns. Like Table 12 which indicates vocational training is important to today's college students, the theoretical orientation of many departments was seen as undesirable. PF was the number one improvement suggested by the A group; TAO for the SS and NS groups, F for the H group; PF for the MISC group.

Table 11

Satisfaction with Major for the Five Degree Groups



Note. M and F are abbreviations for male and female.

KEY
- dissatisfied
- uncertain
- satisfied
- very satisfied

Table 12

Percentages Responding to "Would you select the same major today?"

Response	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
yes	70	60	67	61	80	64
no, more intellectually challenging major	5	3	1	3		2
no, less pressured major			1			
no, more socially relevant major	10	1	4	4		3
no, a major of more immediate vocational use	5	20	20	22	10	19
no, a more creative major	5	5	4	2		4
no, a more technical major	5	7	3	8	10	6
no, a more humanistic major		4	1	1		2
Females						
yes	65	52	63	62	74	61
no, a more intellectually challenging major	2	8	2	3	2	4
no, less pressured major				1	2	1
no, more socially relevant major	4	1	2	3		2
no, a major of more immediate vocational use	27	30	27	23	17	25
no, a more creative major		5	2	5	6	4
no, a more technical major	2	5	2	3		3
no, a more humanistic major		2	4	1		1

Note. Unusable responses were 16 or 2% of the sample.

Table 13

Top Ranked Area Needing Improvement in Major Departments

Degree of Satisfaction with Major	Degree Groups: A		SS		NS		H		MISC	
	N / TOT N	Area	N / TOT N	Area	N / TOT N	Area	N / TOT N	Area	N / TOT N	Area
Males										
Very satisfied or satisfied	8/16	PF	20/100	TAO	26/128	TAO	16/106	F,SFI	3/6	DR
Uncertain or dissatisfied	1/1	F	15/33	F	13/41	TAO	4/22	F,GS	1/2	F,A
Females										
Very satisfied or satisfied	8/36	PF	19/83	SFI	11/47	VOC	15/93	A	10/45	PF
Uncertain or dissatisfied	3/8	GS	10/42	TAO	4/8	TAO	5/20	F	2/5	VOC

Note. Areas for improvement were: faculty (F), degree requirements (DR), physical facilities (PF), student-faculty interaction (SFI), advising (A), size of class (SOC), variety of courses (VOC), independent study (IS), grading system (GS), and theoretical vs. applied orientation (TAO). The number of individuals in a cell selecting this alternative was (N); the total number of people in a cell, (TOT N). The number of unusable responses was 6.2% of the entire sample.

When asked to pick the best description of faculty in their major departments, these graduates indicated that "intellectual" and "research-oriented" seemed most apt (54% for males, 47% for females). Table 14 presents the percentages of males and females responding in each of the five groups to all the alternatives. There was agreement among males and females in three groups. SS and NS graduates selected "research-oriented" as the top ranking descriptor, while H graduates top-ranked "intellectual."

How did this group feel about the place of undergraduate education in the University system? The graduates were asked both if they felt UW as an institution and their department placed sufficient emphasis on undergraduate education. The percent responses to these two questions can be found in Table 15. Departments came out better than the University as a whole in terms of perceived emphasis on undergraduate education. The "worst" departments were in the SS and NS groups. Women perceived less of an emphasis than men particularly of the University as a whole. And while departments fared better than the University as a whole on this issue, note that less than a half of the entire sample indicated that sufficient emphasis was placed on undergraduate education in their departments, 46% and 44% for males and females respectively.

Tables 16 and 17 show the percent responses within the groups to items which asked about instructional quality. Table 16 illustrates the rating of instruction received in courses within major and Table 17 concerns rating of instruction in courses outside the major.

The percentage of students satisfied with instruction within and outside of major were compared in Table 18. A larger percentage of students indicated satisfaction with the instruction <u>within</u> the major in comparison with outside the major. Returning back to Tables 16 and 17, except for MISC males who did not indicate that any of the instruction they received was excellent, a larger proportion of each group rated instruction as excellent within the major than outside. Similarly, <u>not one</u> student indicated that instruction outside of major was <u>very poor,</u> while a few did rate instruction within their major as very poor.

Table 19 summarizes responses to the survey question asking for the most important contribution to students' education. For the <u>total</u> group "major courses" received the largest percentage, 30% of the males and 31%

Table 14

Adjectives Best Describing Major Faculty

Descriptors	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
Intellectual	11	19	14	32		20
Realistic	21	12	8	12		11
Concerned activist		5	1	2		2
Practical-minded	11	9	11	7	10	10
Innovative	11	3	3	1	10	3
Research-oriented		36	50	14	40	34
Teaching-oriented	11	7	6	14	20	9
Well-known	21	2		2		2
Liberal	5	3	2	6		4
Warm-supportive	11	3	4	10	20	6
Females						
Intellectual	13	13	20	32	8	19
Realistic	11	13	9	8	6	10
Concerned activist	3	7		4		3
Practical-minded	5	4	6	5	19	7
Innovative	18	1	2	5	2	4
Research-oriented	8	42	54	12	21	28
Teaching-oriented	11	7	6	13	19	10
Well-known	11	1		1		2
Liberal	5	9		4		5
Warm, supportive	16	5	4	16	26	12

Note. The number of unusable responses was 7.3% of the entire sample.

Table 15

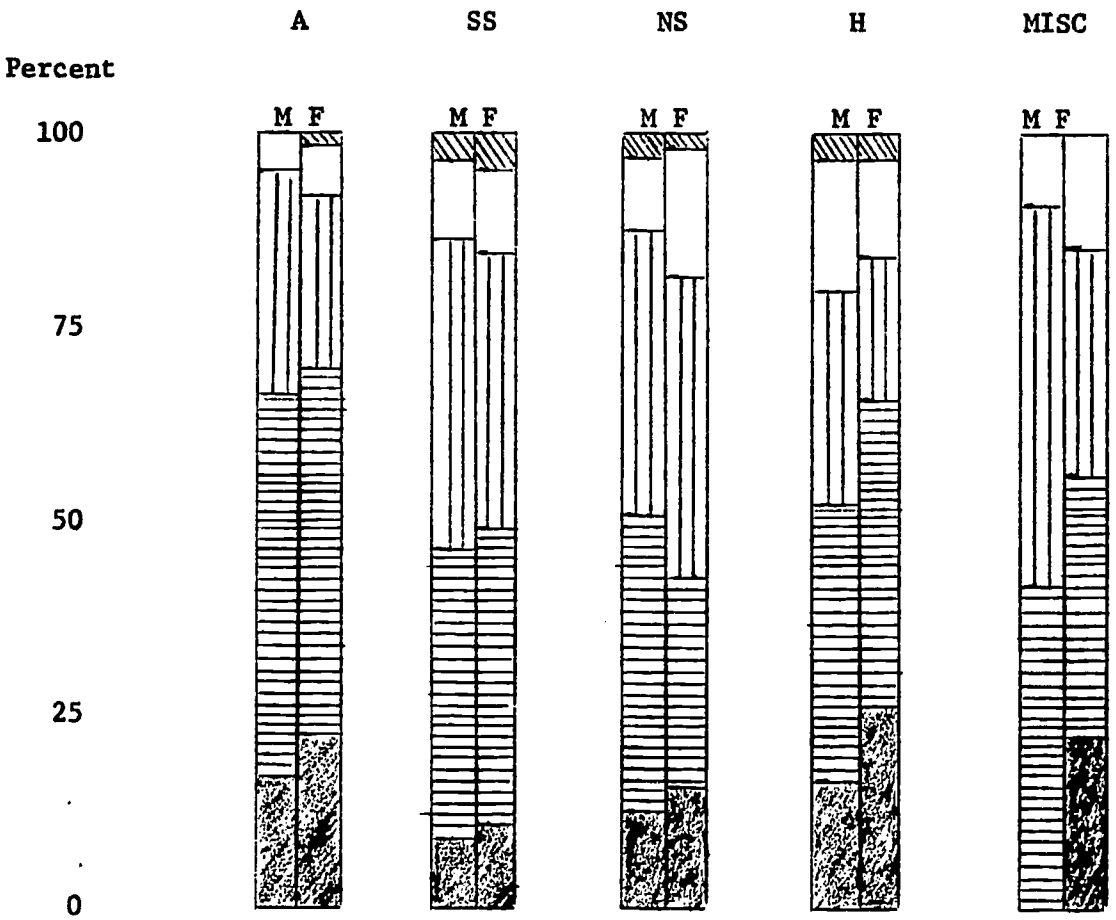
Comparison of Perceived Emphasis on Undergraduate Education

	Degree Groups											
	A		SS		NS		H		MISC		TOTAL	
Sufficient Emphasis?	D	UW	D	UW	D	UW	D	UW	D	UW	D	UW
Males												
Yes	72	47	44	32	45	33	45	29	50	10	46	32
Maybe	17	32	21	23	24	31	29	29	30	50	24	29
No	11	21	36	45	32	36	27	41	20	40	30	39
Females												
Yes	54	35	26	22	39	30	55	25	62	27	44	26
Maybe	21	25	32	32	14	26	24	26	25	27	25	28
No	25	40	42	46	47	44	21	50	13	46	31	46

Note. Each column of departmental (D) and institution-wide (UW) percentages sum to 100% (e.g., for A male graduates the department percentages were 72 + 17 + 11 = 100%).

Table 16

Rating of Instruction within Major



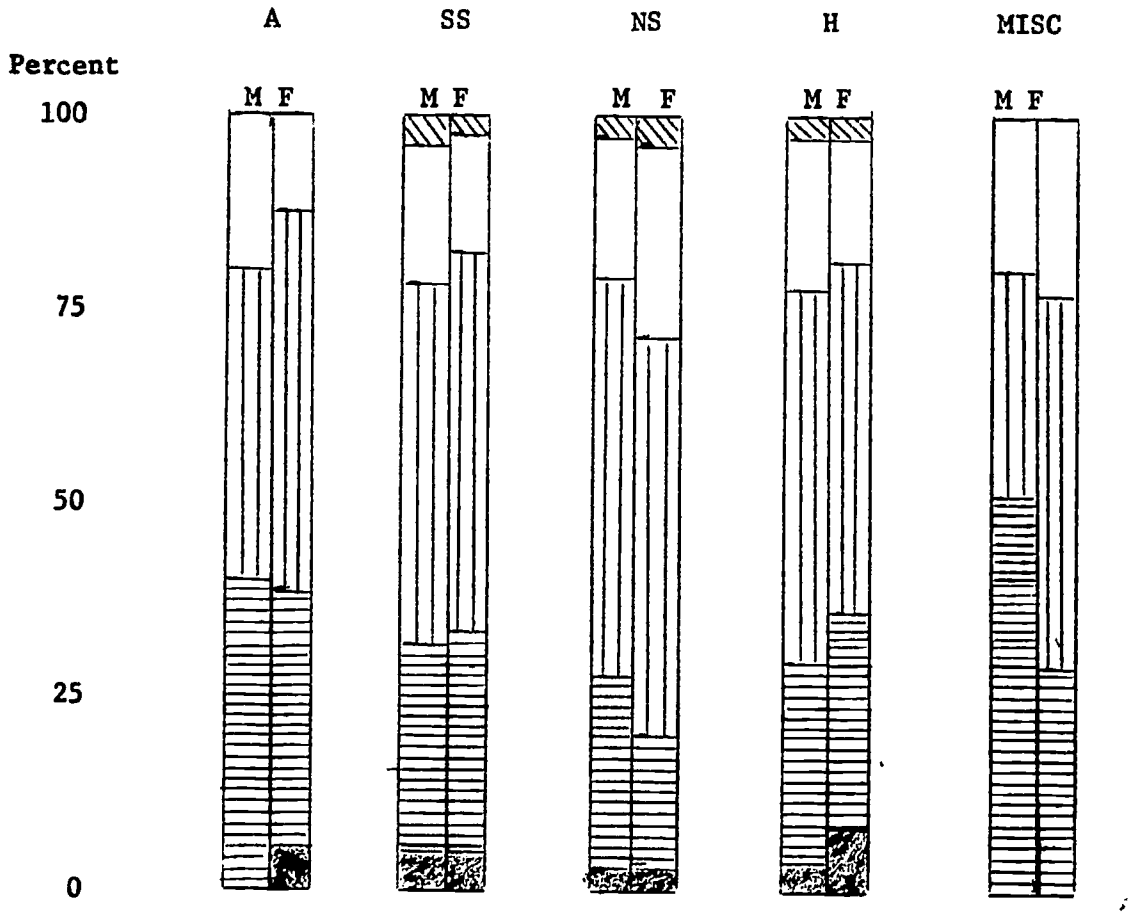
Note. M and F are abbreviations for male and female.

KEY

- poor, very poor
- fair
- good
- very good
- excellent

Table 17

Rating of Instruction Outside of Major



Note. M and F are abbreviations for male and female.

KEY

- poor, very poor
- fair
- good
- very good
- excellent

Table 18

Comparison of Percentages Satisfied with Instruction Within Major with Those Satisfied with Instruction Outside of Major

	Degree Groups				
Instructional Area	A	SS	NS	H	MISC
Males					
Courses within major	95	85	87	79	90
Courses outside of major	80	79	79	78	80
Females					
Courses within major	92	84	81	89	85
Courses outside of major	88	83	72	81	77

Note. "Satisfaction" refers to graduates who indicated that they felt instruction was excellent, very good, or good. The data for this table were taken from Tables 16 and 17.

Table 19

Most Important Contribution to Education

Contributors	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
Major courses	15	32	40	19	20	30
Required courses outside major	10	1	7	1	10	4
Elective courses	10	14	21	19	10	18
Faculty members	30	14	7	18		13
Fellow students		4	5	10	10	6
Directed independent study		11	4	8		7
Field experience	25	8	7	6	30	8
Learning on my own	10	15	9	20	20	14
Females						
Major courses	26	29	27	31	48	31
Required courses outside major		4	4	2	6	3
Elective courses	9	19	21	22	14	18
Faculty members	33	6	13	12	10	12
Fellow students	4	5	9	7	4	6
Directed independent study	7	7	2	5	6	5
Field experience	7	25	13	7	8	14
Learning on my own	15	6	13	13	6	10

of the females, with SS and NS contributing largely to this result. The second ranked choice was again the same for the two sexes, "elective courses." Another similarity between the sexes was that "required courses outside major" received the lowest percentage of votes. In the A groups "faculty members" were most important and in H and MISC groups "learning on my own" was most important.

Plans One Year After Graduation

The most probable activity the year following graduation for male and female graduates in each of the five groups is presented in Table 20. There are three sub-areas: full-time work, further study, and "other." After ranking responses from most to least frequently selected, a parallel was noted in the first-ranked activity for males and females in four groups. In group A working full-time at a career-related job was top ranked with 40% of males and 28% of females selecting it. The same alternative was most selected by MISC graduates. The most selected activity for SS and H graduates was working full-time at a job which would probably not be their career (30% SS males, 35% SS females, and 28% H males, 36% H females). NS graduates were the only group where males and females differed. The most frequently selected choice for males was graduate study in a professional field (24%), while NS females would work full-time at a job related to their major (30%). Overall, half of these liberal arts students were going to work full-time, while almost one-third would be continuing their education. The biggest sex difference was the greater number of males contemplating graduate study.

Students who intended to pursue graduate study outside their major noted which field would be their new major. (The A and MISC groups had too few graduates responding to be meaningful.) Over half of SS males changed their major to law (22/38), whereas SS females were primarily going into education (9/28 or 32%). Both male and female NS graduates were primarily going into the health professions (31/55 of the males and 8/10 of the females). Law was also the primary intended field of H males (12/26), while the most frequently selected category for H females was "other" (5/15).

Table 20

Percentage Responses to Activity Year Following Graduation

Activity	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
Full-time work at a job which is						
Related to major, final career goal	40	11	17	14	50	16
Not related to major, final career goal	10	9	6	10		8
Probably not career field	20	30	21	28	20	26
Sub-total	70	50	44	53	70	50
Further study						
Graduate level, professional field		22	24	15	30	20
Graduate level in major area	10	11	19	9		13
Graduate level in an A & S field which is not major area		5	6	4		5
Vocational training not in graduate school	10	1	3	4		3
Sub-total	20	40	52	31	30	41
Other						
Travel	5	6	3	9		5
Non-career military service		4	2	6		4
Will not work outside home	5			1		0
Sub-total	10	10	5	16		9
Females						
Full-time work at a job which is						
Related to major, final career goal	28	10	30	17	40	21
Not related to major, final career goal	11	8	4	8	6	7
Probably not career field	26	35	25	36	21	31
Sub-total	65	52	58	62	66	59
Further study						
Graduate level, professional field	7	17	18	9	2	12
Graduate level in major area	9	14	9	11	2	10
Graduate level in an A & S field which is not major area	2	5	2	5	2	4
Vocational training not in graduate school	11	3	11	2	17	6
Sub-total	28	39	39	27	23	32
Other						
Travel	2	6	2	7	8	6
Non-career military service		1			2	1
Will not work outside home	4	2	2	4	2	3
Sub-total	7	9	4	12	11	9

Note. Number of unusable responses was 1.1% of the entire sample.

Table 21 presents percentages of males and females in the five groups responding to the question of whether they had applied to graduate school for the next year. A higher percentage of males than females applied to one or more graduate schools: SS group, 46% to 37%; NS group, 53% to 32%; H group, 32% to 25%; and MISC group, 40% to 8% for males and females, respectively. Overall, 43% of males had applied vs. 27% of females. Females more often indicated that they would apply sometime in the future.

The 62% of males and 74% of females indicating that their most probable activity following graduation was not attendance in graduate school checked why they were not going. Table 22 summarizes these results. The most popular two reasons in both sexes and over all groups were "tired of school" and "want practical experience" (48% for males overall, 50% for females overall). Third and fourth among the reasons were the lack of need for further school and family responsibilities.

Occupational Expectations

Students were asked to list their intended occupations which were categorized according to Roe's (1956) schema of occupations. Descriptions and examples of jobs in each of Roe's eight occupational areas may be found in the Vocational Interest Inventory Manual (Lunneborg, 1975). In addition to these eight categories was the additional one of "no occupation listed." Table 23 presents the percent responses of males and females in the five groups. The top ranking job category was the same for males and females in four of the groups: A graduates listed Arts and Entertainment jobs; the SS graduates indicated General Cultural jobs (females tying with Service jobs); the NS group indicated Science occupations; H graduates intended to get General Cultural jobs--all in accord with Roe's theory. Only in the MISC group did the sexes differ with males most often listing General Cultural occupations and females Science. Fifteen percent of the males and 14% of the females did not list any intended occupation.

Because occupational expectations are influenced by work as well as school, the survey inquired about employment. When asked about previous jobs 98% of the sample had worked, however, when asked about paid work related to intended career goal, only 41% of males and 47% of females indicated that they had had such experience.

Table 21

Graduate/Professional School Intentions

	Degree Groups					
Have applied?	A	SS	NS	H	MISC	TOTAL
Males						
No, am not going to graduate school	40	19	22	28	20	24
No, but plan to go a year following graduation	10	7	7	7		7
No, but plan to go sometime in future	40	28	18	34	40	27
Yes, applied to 1 school	5	12	15	15	10	14
Yes, applied to between 2 and 7 schools	5	22	31	13	30	22
Yes, applied to more than 7 schools		12	7	4		7
Females						
No, am not going to graduate school	33	16	35	25	33	26
No, but plan to go a year following graduation	4	11	7	12	11	10
No, but plan to go sometime in future	46	36	28	38	48	38
Yes, applied to one school	15	20	16	12	6	15
Yes, applied to between 2 and 7 schools	2	14	7	13	2	10
Yes, applied to more than 7 schools		3	9			2

Table 22

Percentages for Reasons for Not Going to Graduate School Year After Graduation

Reasons	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
Can get desirable job without further schooling	20	6	14	24	20	16
Tired of school; need a break	20	34	26	25		27
Want some practical experience first	33	20	23	15	40	21
Marriage and family responsibilities	7	11	8	4	20	8
Financial obstacles	13	11	5	11		9
Low grades in college		4	8	2		4
Don't think I have the ability or drive for graduate study	7	5	6	4		5
Military service		6	5	9		6
Will be taking further undergraduate work		1	6	5	20	4
Females						
Can get desirable job without further schooling	14	6	19	12	16	12
Tired of school; need a break	24	40	19	41	16	31
Want some practical experience first	14	18	19	12	35	19
Marriage and family responsibilities	14	12	12	9	10	11
Financial obstacles	27	15	5	14	8	14
Low grades in college	3	1	12	2	4	4
Don't think I have the ability or drive for graduate study	5	4	5	4	4	4
Military service				1	2	1
Will be taking further undergraduate work		4	10	6	4	5

Table 23

Percentages Intending Different Occupations

(Using Roe's Classification System)

	Degree Groups					
Roe Occupational Groups	A	SS	NS	H	MISC	TOTAL
Males						
Service		15	2	6	20	7
Business contact	5	4	1	11		5
Organization		12	4	8		7
Technology	10	4	14	4		8
Outdoor		2	12	1		5
Sciences		8	47	1	20	20
General cultural	5	33	9	43	50	26
Arts and entertainment	70	3		10		6
No occupation listed	10	19	12	16	10	15
Females						
Service	2	29		8	2	12
Business contact	2	2	2	8		3
Organization	4	8	5	6	17	8
Technology			2	1		1
Outdoor			9			1
Sciences		16	55	5	39	19
General cultural	25	29	16	51	26	33
Arts and entertainment	56	1		7	7	10
No occupation listed	10	16	12	15	9	14

Another type of valuable work experience can be gained from volunteer, unpaid, field experience. Students were asked to estimate the amount of volunteer work they had had compared to others--very much, average, below average, or none--and these results are presented in Table 24. Over 80% of the sample indicated that they had had volunteer experience. The largest percentage of graduates having no such experience was the NS group, the largest percentage of such experience was held by MISC graduates.

Table 25 indicates the responses to an item asking about the most important element in one's chosen career. As might be expected, artistic expression was the most important element for the majority of A graduates, 68% of males and 52% of females. Service to clients was the top-ranking alternative for the SS group (27% of males, 43% of females). Research and technical work vied for top choice among NS graduates with research being first for the males and technical work for the females (24% and 29%, respectively). Male H graduates seemed to not have a clear-cut focal point, while teaching was top choice for female H graduates (23%) with service to clients second (21%). For the MISC group teaching got 70% of males responses and 32% of female responses.

The final question regarding intended career was "What type of employer do you expect you will work for throughout most of your career?" Table 26 presents these results. One of the most interesting contrasts of the entire survey between males and females is in this table. The option receiving the highest response for males was self-employment, 20%, while for the females it was rather close between service agency (18%) and school system (17%).

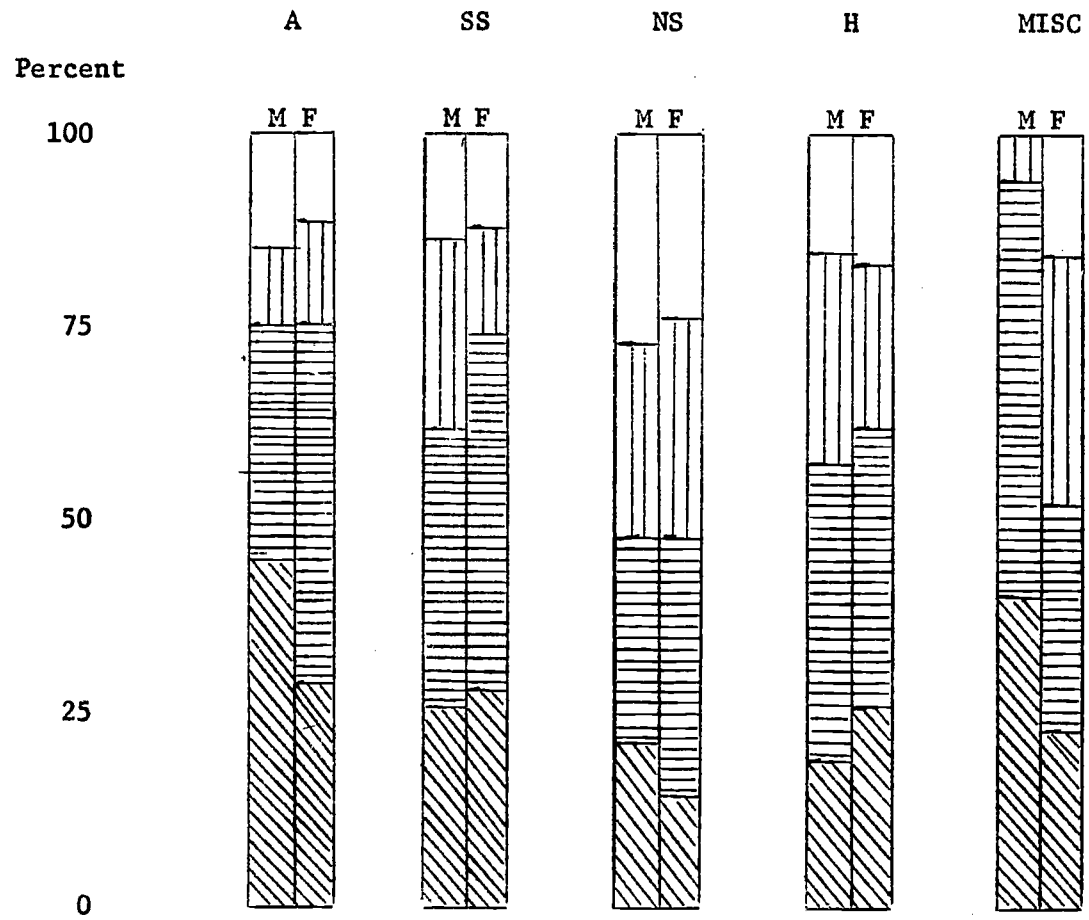
When asked how the University could have been more helpful in making an informed vocational choice, five suggestions were given: improve Career Planning and Placement advising; improve departmental advising; expand counseling and testing services; offer career development classes; and increase employer interview possibilities. Table 27 indicates that three alternatives represented over four-fifths of the students' choices and all are related to career advising.

Summary of the Educational Impact of the University

Looking back over the survey items, what can be said about the global impact of the University upon these students' lives? What did they perceive

Table 24

Amount of Volunteer and Unpaid Field Experience



Note. M and F are abbreviations for male and female.

KEY
- none
- below average in comparison with others
- average in comparison with others
- very much in comparison with others

Table 25

Percentages of Focal Point of Chosen Career

	Degree Groups					
Areas of Focus	A	SS	NS	H	MISC	TOTAL
Males						
Teaching	11	10	11	16	70	13
Sales Persuasion	11	3	2	6		4
Research		13	24	9		15
Administration		16	6	15	20	12
Service to clients		27	18	18	10	20
Technical work	5	2	22	4		10
Artistic expression	68	5	1	14		8
Consulting		6	3	3		4
None of these	5	18	14	15		15
Females						
Teaching	29	17	11	23	32	21
Sales persuasion	2		2	3	4	2
Research		15	25	8	2	11
Administration	4	6	5	7	8	6
Service to clients	4	43	18	21	19	25
Technical work	6	3	29	3	6	8
Artistic expression	52	2		12	9	12
Consulting		6	2	8	11	6
None of these	2	9	9	16	9	10

Note. The number of unusable responses was 28 or 3.1% of the entire sample.

Table 26

Most Probable Type of Employer in Chosen Career

Employers	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
Private company, 100 or more employees	16	14	22	13		16
Private company, less than 100 employees	16	13	8	13		11
Self-employed	32	23	19	18		20
Research organization		2	11			5
College or university	16	6	14	15	10	12
School system	5	8	3	9	60	8
Federal government		13	9	11		10
State or local government		12	2	5		6
Service agency (hospital, clinic, church, etc.)		5	11	7	30	8
Other	16	3	3	9		5
Females						
Private company, 100 or more employees	9	5	13	11	22	11
Private company, less than 100 employees	13	3	11	16	7	10
Self-employed	21	6	4	9	6	8
Research organization	2	3	9	2		3
College or university	17	14	9	15		12
School system	19	16	9	18	20	17
Federal government		8	9	4	7	6
State or local government		17	6	5	4	8
Service agency (hospital, clinic, church, etc.)	4	20	31	10	30	18
Other	15	8		10	4	8

Note. The number of unusable responses was 36 or 4% of the entire sample. Table includes percentage responses.

Table 27

Suggestions for Improving Vocational Opportunities

Suggestions	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
Improve Career Planning and Placement advising	33	26	36	27	13	30
Improve departmental advising	17	29	31	26	38	29
Expand counseling and testing services	11	7	9	7		8
Offer career development classes	11	25	16	27	25	22
Increase employer interview possibilities	28	13	9	12	25	12
Females						
Improve Career Planning and Placement advising	18	29	32	26	28	27
Improve departmental advising	43	26	30	33	31	31
Expand counseling and testing services	3	7	4	14		7
Offer career development classes	20	34	21	19	31	26
Increase employer interview possibilities	18	4	13	9	10	9

Note. The number of unusable responses was 143 or 16% of the entire sample. Table includes percentage responses.

as the most important sources of education at the University, what did they have to say about the functions of the University, and how did they perceive they had changed as a result of University attendance?

First, students perceived an insufficient emphasis on undergraduate education by the University. "Sufficient" emphasis was perceived by only 32% of males and 26% of females (Table 15) and perhaps the personalization that different departments are able to effect accounted for the "Department" being perceived as more concerned that the "University as a whole." In keeping with this result, Table 19 says that very important sources of influence are major courses and faculty members. Least influential were fellow students, directed independent study, and required courses outside the major. So that while this sample perhaps wished the University had placed more emphasis upon their instruction, to the extent that it did it was through the traditional means of instruction, courses and faculty contacts.

Another way of assessing global University effects was the item asking students to say what needed the most improvement in their departments. Summarizing the detailed analysis of Table 13, the top-ranked areas of concern were the amount of student-faculty interaction, theoretical orientation (as opposed to the more preferred-by-students applied orientation), and "faculty." From their comments, what is meant by the latter is a desire for instructors who care principally about teaching, about undergraduate concerns, are personally dynamic and always available. Research should take second place to "enthusiasm."

Universities are supposed to influence ideas among other things and Tables 28 and 29 reveal the differences among groups and sexes with respect to eight major concepts. Looking at Table 28, while the bulk of graduates reported that their ideas about education changed during their University careers (80% of males, 83% of females), other "ideas" were less affected during this time period. Only 40% of the sample claimed that their notions about "nationalism" were influenced, and similarly, the important American concepts of "democracy" and "law" were relatively unaffected. While Table 28 reports whether students' ideas changed during the University career, Table 29 speaks directly to the question of the significance of the role of the University in those changes. Again, "education" was the most affected concept, with "nationalism" and "democracy" least affected in terms of a "significant impact."

Table 28

Percentages of Students Reporting Ideas Changed while at University

	Degree Groups					
Concepts	A	SS	NS	H	MISC	TOTAL
Males						
Law	35	67	41	56	30	52
Reason	55	67	66	65	20	65
Democracy	30	67	42	54	30	52
Education	60	80	78	85	90	80
Nature	50	51	65	46	30	54
Nationalism	30	48	36	42	20	40
Social responsibility	30	63	55	54	60	56
Social equality	55	69	56	60	40	61
Females						
Law	50	59	43	64	28	53
Reason	54	59	53	69	61	61
Democracy	35	51	34	50	37	45
Education	96	82	79	83	78	83
Nature	48	42	59	48	56	48
Nationalism	33	39	38	51	28	40
Social responsibility	46	59	53	68	59	60
Social equality	50	71	56	71	70	67

Table 29

Percentages of Students Reporting Significant Impact of University upon Ideas

Concepts	Degree Groups A	SS	NS	H	MISC	TOTAL
Males						
Law	0	35	10	24	10	21
Reason	20	36	30	35	10	32
Democracy	0	33	14	20	20	21
Education	40	50	43	60	60	50
Nature	25	18	35	18	10	24
Nationalism	0	22	7	23	10	16
Social responsibility	10	27	20	27	30	23
Social equality	15	38	24	30	10	29
Females						
Law	10	28	10	24	7	20
Reason	25	27	22	30	32	28
Democracy	8	22	5	19	11	16
Education	63	50	50	53	52	53
Nature	13	12	33	19	22	18
Nationalism	13	11	3	17	11	12
Social responsibility	15	38	12	37	28	30
Social equality	35	38	17	36	43	35

References

Hodgson, T. F., & Dickinson, C. Upper-division academic performance of native and transfer students at the University of Washington. Seattle: University of Washington, Educational Assessment Center, 1974.

Lunneborg, P. W. Vocational Interest Inventory Manual. Seattle: University of Washington, Educational Assessment Center, 1975.

Roe, A. The psychology of occupations. New York: Wiley, 1956.

Appendix 1

Academic Areas for Graduating Seniors' Majors

1. Arts

art (105)
art history (105)
drama (134)
*GIS--dance (185)
*GIS--children's dance (185)
*GIS--ethnomusicology (185)
*GIS--filmmaking (185)
*GIS--museology (185)
music (217)

2. Social Sciences

anthropology (102)
economics (135)
political science (244)
psychology (262)
society & justice (292)
sociology (293)

3. Natural Sciences

astronomy (107)
atmospheric sciences (108)
biol. oceanography (219)
biology (112)
botany (115)
cell biology (112)
chemistry (117)
geography (188)
geol. oceanography (219)
geology (191)
*GIS--acoustics (185)
mathematics (206)
microbiology (216)
molecular biology (112)
oceanography (219)
phys. oceanography (219)
physics (239)
zoology (297)

4. Humanities

advertising (131)
Asian lang & lit (144)
Black studies (114)
Chinese (145)
Chinese lit. (145)
Chinese regional studies (139)
communications (131)
comparative lit. (132)
East Asia (139)
English (136)
Far East (139)
French (268)
*GIS--unspecified (185)
*GIS--English as a second language (185)
*GIS--Latin American studies (185)
*GIS--medieval studies (185)
*GIS--women's studies (185)
*GIS--urban studies (185)
German (192)
Germanics (192)
Greek (119)
History (193)
Japanese (151)
Japanese regional studies (139)
journalism (131)
Korean (152)
Latin (120)
Near East (123)
Norwegian (289)
philosophy (221)
radio-TV (131)
Russian (171)
Russian regional studies (141)
Russian & E. European studies (141)
Slavic lang. & lit.(163)
Spanish (276)
speech (295)
speech pathology (295)
Swedish (291)

5. Miscellaneous

community health education (225)
*GIS--adm. & management (185)
health education (225)
home economics (198)
physical education (229)
recreation (233)

*GIS majors can be under any of 4 different groupings depending on major emphasis of person's GIS field.