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ABSTRACT

Characteristics and perceptions of nonreturning students for the spring 1973 semester at Arkansas State University were determined by mailed questionnaires, and the College and University Environment Scales (CUES), Second Edition (Modified), and comparison data. The sample group of 585 academically qualified students, was compared to the fall semester 1972 student population with respect to sex, academic classification, academic major, degree program, and grade-point average. Data indicated: (1) There were 1,381 students enrolled during the fall semester of 1972 who did not re-enter the university in the spring of 1973. (2) More than half of the 914 eligible nonreturning students were classified in the lower division and 361 were freshmen. (3) The mean grade-point average for nonreturning eligible students was equal to or greater than the grade-point average required for satisfactory progress toward the degree. (4) There was no significant difference between the grade-point average of those eligible students who did not return in the spring semester of 1973 and those who made up the fall 1972 student population. (5) The descriptive statistics and treatment of the data by means of the normal deviate test led to the conclusion that attrition was independent of academic classification, college, major, and degree. (6) The number of nonreturning students who were undecided with respect to college, major, and degree was disproportionate to the number of enrolled undecided students in the fall semester of 1972. Additional findings and statistical data are included. (MJM)

**CHARACTERISTICS AND PERCEPTIONS
OF NON-RETURNING STUDENTS AT
ARKANSAS STATE UNIVERSITY
SPRING 1973**



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INTRODUCTION

This study was designed to determine the extent and causes of attrition of students at Arkansas State University from the fall to spring semester of the 1972-73 academic year. Each student who failed to return to the University in the spring semester of 1973, but who had been enrolled during the fall semester of 1972, was identified and categorized into one of four broad groups of non-returning students. These four categories included students who did not reenter the University because (1) they had completed all requirements for a degree, (2) they had been dismissed by the University for poor scholarship, (3) they had dropped out of school prior to the close of the fall semester, or (4) they were eligible to return but no reason was known for their having not reentered.

Limitations of the Study

Since the first three groups did not return for rather obvious reasons, they were not considered a part of the study beyond the descriptive data disclosed in Table I. The last group (those students who were eligible to return but did not do so) was studied in detail with respect to a wide variety of characteristics, perceptions, and interests. Table I discloses the four groups with respect to sex, classification, and grade point average.

Non-returning students accounted for 20.8 percent of the 6624 students who made up the fall 1972 student population. This percentage represented a slight decline from the 22.1 percent attrition ratio reported in the study last year. Of the 1381 students who did not return, 201 (representing 14.5 percent) had completed all requirements for a degree with a grade point

TABLE I

SUMMARY OF NON-RETURNING
STUDENTS BY TYPE

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REASONS FOR NOT RETURNING	SEX		CLASSIFICATION					TOTAL	GPA	
	Men	Women	Fr.	So.	Jr.	Sr.	Un.			Grad.
Graduated	108	93				201			201	2.75
Dismissed	52	9	24	24	19	2			61	1.49
Dropped-Out	131	74	100	100	19	19		16	205	2.09
Eligible to Return But Did Not	451	463	361	361	66	101	66	196	914	2.28
TOTAL	742	639	485	485	104	323	66	212	1381	2.40



average of 2.75. The 61 students who were dismissed for poor scholarship represented 4.4 percent and their grade point average was 1.49. Freshmen and sophomores accounted for almost two-thirds of the total number dismissed for academic reasons. Approximately half of the 205 students who dropped out during the semester were freshmen, and 73.6 percent were lower division students. Almost two-thirds of all non-returning students fell into the category of students eligible to return but did not elect to do so. Over half of the 914 in this group were lower division students and 39.5 percent were freshmen. The grade point average of this group was 2.28, second only to the group graduating. When the grades of the 196 graduate students were excluded, the grade point average remained at 2.27. Freshmen and sophomores accounted for 49 percent of all non-returning students while they represented 56.7 percent of the fall 1972 population. The 742 men among the 1381 non-returning students represented 53.7 percent, while men represented 55.7 percent of the fall 1972 student population. More women than men were eligible to return to the University, but did not do so. A very small proportion of those dismissed for poor scholarship were female.

The 914 students who were eligible to return but did not do so included 196 graduate students who were in-service teachers in the fall semester and 133 students who were enrolled for one three-hour course designed to provide a specific competency in banking. Thus, 329 of those eligible to return did not do so for discernable reasons. The remaining 585 were considered to be legitimate sources for inquiry regarding attrition causes.

Methods and Procedures

The sample of 585 academically qualified students was compared to the fall semester 1972 student population with respect to sex, academic

classification, academic major, degree program, and grade point average. A short questionnaire was mailed to each member of the sample requesting that they indicate their reasons for not having reentered. At the same time the College and University Environment Scales (CUES), Second Edition (Modified) was mailed to them. Responses to the questionnaire and the CUES instrument were reduced to tabulating cards for machine processing. Data were presented in tabular form descriptively and further analyzed by statistical methods to determine whether significant differences existed between groups and within the group.

Organization of the Study

The remainder of the study is divided into three sections. Section I deals exclusively with a variety of comparisons between the sample and the fall 1972 student population. Section II presents the results obtained from responses to the questionnaires that each of the 585 non-returning students received. Section III discloses the comparative data with respect to perceptions of the University environment between the sample of non-returning students and a randomized cluster sample of fall 1972 students as measured by CUES, Second Edition (Modified).

SECTION I

PRESENTATION AND ANALYSIS OF DEMOGRAPHIC DATA

The remainder of the study concentrated upon the 585 students who were eligible to reenter but did not do so. It excludes the 196 part-time graduate students and 133 special students who were also eligible to return but did not for reasons already known to the University administration and faculty.

Sex, classification, and grade point average data by college or division within the University were disclosed in Table II. These were compared to the fall 1972 student population to obtain a measure of the degree of difference which existed. The statistical technique employed to analyze the differences was the normal deviate test, or z score. The z score represented the deviation of the grade point average of the entire fall 1972 student population within a given college or division. The probability of a given z score being significantly different from the population was determined by using a normal curve table.

It was interesting to note that the grade point average for non-returning students from each college or division was greater than 2.0, but that it was lower than the grade point average of the fall population within each college. An examination of the z scores and corresponding probabilities revealed that there was no significant difference between the grade point average of those students who did not return and the fall 1972 population. The largest single group of non-returning students were undecided regarding a college. These 188 undecided students represented 32.1 percent of the sample, while only 20 percent of the fall 1972 population of students was undecided. The

T:BLE II

ELIGIBLE NON-RETURNING STUDENTS
BY COLLEGE/DIVISION

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COLLEGE	SEX		CLASSIFICATION						FALL 1972 STUDENTS		SAMPLE		2 SCORE	PROBA- BILITY	
	Men	Women	Fr	So	Jr	Sr	Un	GPA	Std Dev	N	GPA	n			
Undecided	95	93	115	28	7	4	34		2.41	1.01	1349	2.21	188	20	.84
Agriculture	26	3	14	5	5	5			2.42	.70	360	2.21	29	30	.76
Business	91	28	41	22	28	26	2		2.39	.79	1333	2.18	119	27	.75
Education	24	50	30	19	8	15	2		2.62	1.22	324	2.31	74	25	.80
Fine Arts	11	13	15	4		5			2.64	.85	395	2.46	24	21	.83
Liberal Arts	30	27	16	11	7	23			2.62	.91	728	2.44	57	20	.84
Nursing	2	25	15	7	4		1		2.39	.70	286	2.09	27	43	.67
RTV-J	12	3	6	3		6			2.40	.66	233	2.17	15	35	.73
Science	38	14	17	18	4	11	2		2.65	.92	741	2.35	52	33	.74

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percentage of the sample by colleges was 32.1, undecided; 5.0, Agriculture; 20.3, Business; 12.7, Education; 4.1, Fine Arts; 9.7, Liberal Arts; 4.6, Nursing; 2.6, Radio-TV; and 8.9, Science. Except for the disproportionate attrition rate among undecided students, the percentages from each college or division were not significantly different from the percentage each college or division represented in the fall semester population.

Demographic data by academic classification was disclosed in Table III. An analysis of the grade point average for each classification reflected that there was no significant difference in the academic performance of those students who did not return and the fall 1972 population. There was a slightly lower average grade point for those students who did not return and the normative group, but the difference was small enough not to be significant. Only non-returning freshmen students had an average grade point below 2.0. Freshmen represented 45.9 percent of all non-returning students while their representation in the fall population was 37.6 percent. Non-returning sophomores represented 20 percent; juniors, 10.8 percent; seniors, 16.2 percent; and unclassified, 7 percent. Sophomores made up 23.6 percent of the 1972 fall semester enrollment; juniors, 19.1 percent; seniors, 17.9 percent; and unclassified, 1.8 percent. It was interesting to observe that the percent of non-returning juniors was slightly over half the percent juniors represented in the fall population, but that the percent of non-returning seniors almost equaled their proportion in the fall population. The attrition rate by men and women approximated the proportions each had represented in the fall population. The descriptive statistics and treatment of the data by means of the normal deviate test led to the conclusion that classification was independent of attrition.

TABLE III

ELIGIBLE NON-RETURNING STUDENTS
BY CLASSIFICATION

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CLASSIFICATION	SEX		CLASSIFICATION				FALL 1972 STUDENTS			SAMPLE		Z SCORE	PROBABILITY	
	Men	Women	Fr	So	Jr	Sr	Un	GPA	Std.Dev	N	GPA			n
Freshmen	148	121	269					2.17	.91	2323 316	1.78	269 459	43	.67
Sophomores	62	55	117					2.43	.62	1457 236	2.29	117 200	23	.82
Juniors	40	23			63			2.55	.55	1178 19.1	2.38	63 10.8	31	.76
Seniors	65	30				95		2.65	.49	1105 17.9	2.42	95 16.2	47	.62
Unclassified	14	27				41		2.84	1.08	114 1.8	2.66	41 7.0	17	.87

Classification, sex, and grade point average data by academic major were disclosed in Table IV together with comparisons between the sample and the fall 1972 population in each academic major. In almost every instance, the grade point average of non-returning students was lower than the average grade point of all students within that major during the fall semester. However, there were only two instances in which the actual difference was significant, and in both of these the number in each group was extremely small. Non-returning students who were undecided about a major made up the largest single group followed by general business, nursing, physical education, accounting, and elementary education. The remaining academic categories had fewer than 20 students who did not return. When these data were compared with the data shown in Table II, the pattern of disproportionate dropout rates among students who were undecided about a college and/or an academic major became apparent. While freshmen make up the single largest group in the undecided category and freshmen often have not developed firm educational plans, the number of upperclassmen who were undecided and who failed to reenter was somewhat larger than expected. The descriptive data and the results of the statistical analysis presented in Table IV led to the conclusion that the choice of an academic major was independent of attrition.

Eligible non-returning students by degree were shown in Table V. Their grade point average was compared to the fall 1972 population in each degree category. The sample of non-returning students was not significantly different from the fall population in any category. In almost all cases, the average grade point of the non-returning students was lower than the fall group, but in no case was this difference large enough to approach significance. Non-returning students who were undecided about a degree made up the largest

TABLE IV
 ELIGIBLE NON-RETURNING STUDENTS
 BY MAJOR
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MAJOR	SEX		CLASSIFICATION					FALL 1972 STUDENTS		SAMPLE		z SCORE	PROBA-BILITY	
	Men	Women	Fr	So.	Jr.	Sr.	Un.	GPA	Std Dev.	N	GPA			n
												GPA	Std Dev.	
Undecided	92	89	113	28	7	4	29	2.36	1.02	1313	2.17	181	.19	.85
Non-Degree	3	3	1				5	2.65	1.19	36	2.52	6	.11	.91
Accounting	20	4	7	8	7	2		2.60	.71	310	2.28	24	.45	.65
Agri - Gen	6	1	4	1	1	1		2.43	.68	64	2.02	7	.60	.55
Agri - Bus.	2		2					2.29	.60	49	1.49	2	1.33	.18
Agri - Ed	1	2	3					2.46	.79	46	1.13	3	1.68	.09
Agri - Engr.	7		2	2	1	2		2.54	.60	63	2.82	7	-.47	.64
Pl Sci - Agrn	1				1			2.53	.40	18	1.88	1	1.63	.10
Pl Sci - Hort	1			1				2.26	.56	3	2.72	1	-.82	.41
Animal Science	4		1		2	1		2.37	.51	56	1.95	4	.82	.41
Art - BS	5	5	7	1		2		2.54	.76	88	2.29	10	.33	.74
Art - BFA	1	1	2					2.50	.96	29	.91	2	1.66	.10
Art Education	1	2	1	1	1	1		2.73	.63	56	3.01	3	-.44	.66
Biology	1	2	1	1	1	1		2.56	.59	57	2.44	3	.20	.84
Botany	1		1					2.71	.46	3	2.13	1	1.26	.21
Bus. - Ed.	1	7	1	2	5			2.69	.60	164	2.61	8	.13	.90
Bus. - Gen.	47	4	18	5	12	15	1	2.19	.63	491	2.04	51	.24	.81
Chemistry	3		2	1				2.73	.91	44	1.64	3	1.20	.23
Drama	1	1	1	1				2.34	.62	21	2.36	2	-.03	.98

TABLE IV (CONTINUED)

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MA OR	SEX		CLASSIFICATION					FALL 1972 STUDENTS			SAMPLE		z SCORE	PROBA-BILITY	
	Men	Women	Fr.	So.	Jr	Sr	Un	GPA	Std Dev.	N	GPA	n			
													GPA	z	
Ed Education	2	22	7	6	3	8			2.69	.64	387	2.54	24	.23	.82
Sp Education	4	13	6	5	2	2	2		2.64	.73	196	2.09	17	.75	.45
Early Childhood Education		4	2	1		1			2.81	.53	79	2.45	4	.68	.50
Sp Pathology	1	2	1	2					2.67	.54	52	1.97	3	1.30	.19
English - BSE		11	3	1	2	5			2.93	.76	104	2.68	11	.33	.74
English - BA	1	1	1	1					2.78	.85	17	2.44	2	.40	.69
Entomology		1	1						2.71	.00	1	2.71	1	.00	1.00
History	4	3	1	4		2			2.39	.60	53	2.18	7	.35	.73
Journalism	5	3	2	1	5				2.46	.66	82	2.20	8	.39	.70
Math - BS	7		2	2		1	2		2.69	.83	90	2.17	7	.63	.53
Math - BSE	2	2	1		3				2.86	.52	29	2.75	4	.21	.83
Mus - Instr	2	2	2			2			2.62	.96	80	2.64	4	-.02	.98
Mus - Choral		1							2.63	.96	25	1.72	1	.95	.34
Mus - Vocal		1	1						2.87	.83	55	2.67	1	.24	.81
Nursing	2	25	15	7	4		1		2.39	.70	286	2.09	27	.43	.67
Philosophy		1				1			2.31	1.10	4	2.98	1	-.61	.54
Phys Education	17	9	14	5	3	4			2.41	.71	267	2.16	26	.35	.73
Pol. Science	6	2	6	1		1			2.35	.73	135	1.79	8	.77	.44
Pre-Dental	8	4	6	5	1				2.47	.78	60	2.31	12	.21	.83
Pre-Engineering	4		2	1		1			2.30	.72	43	2.02	4	.39	.70
Pre-Law	2		1	1					2.40	.64	32	2.00	2	.63	.53

TABLE IV (CONTINUED)

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MAJOR	SEX		CLASSIFICATION					FALL 1972 STUDENTS		SAMPLE		2 SCORE	PROBA- BILITY		
	Men	Women	Fr	So	Jr.	Sr.	Un	GPA	Std.Dev.	N	GPA			n	
Pre-Medical	2	1	2	1					2.92	.89	103	2.72	3	.22	.83
Med Tech	2	3	2	2		1			2.69	.68	67	2.19	5	.74	.46
Pre-Nursing		1	1						2.36	1.26	7	.50	1	1.48	.14
Pre-Optometry	1			1					2.52	.46	18	2.48	1	.09	.93
Pre-Pharmacy	1			1					2.49	.65	55	3.41	1	-1.42	.16
Pre-Social Work	1		1						2.60	1.16	10		1	2.24	.03
Radio-TV	7		4	2		1			2.33	.67	112	2.11	7	.53	.74
Sec Training			7	3	1				2.47	.68	67	2.44	11	.04	.97
Soc Science	9	2	1	2	3	5			2.75	.70	148	2.75	11	.00	1.00
Sociology	5	5	2	1	1	6			2.49	.63	146	2.21	10	.44	.66
Spanish		1	1						2.97	1.04	10		1	2.86	.01
Speech	1		1						2.69	.29	18	2.87	1	-.62	.54
Zoology	3	1		1		3			2.73	.68	72	2.21	4	.76	.45
Management	12		3	4	1	4			2.29	.60	144	2.20	12	.15	.88
Geography	1	1				2			2.62	.33	6	2.37	2	.76	.45
Marketing	8	2	5		2	2	1		2.32	.61	87	2.12	10	.33	.74
Wildlife Mgmt.	7		2	1	2	2			2.26	.54	55	2.21	7	.09	.93
Economics	3					3			2.25	.44	13	2.54	3	-.66	.51
French	1					1			2.97	.37	5	3.04	1	.19	.85

TABLE V
 ELIGIBLE NON-RETURNING STUDENTS
 BY DEGREE

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DEGREE	SEX		CLASSIFICATION						FALL 1972 STUDENTS		SAMPLE		z SCORE	PROBA-BILITY
	Men	Women	Fr.	So.	Jr.	Sr.	Un.	GPA	Std.Dev.	N	GPA	n		
Undecided	92	89	113	28	7	4	29	2.36	1.02	1313	2.17	181	.19	.85
Non-Degree	22	10	12	11	2	1	6	2.59	.85	378	2.38	32	.25	.80
Certificate of Proficiency		11	7	3	1			2.45	.67	68	2.44	11	.01	.99
AAS	2	25	15	7	4		1	2.39	.70	286	2.09	27	.43	.67
BA	19	15	12	8	2	12		2.47	.69	423	2.21	34	.38	.70
BFA	5	5	7	1		2		2.53	.75	94	2.29	10	.32	.75
BME	2	4	3	1		2		2.71	.91	159	2.48	6	.25	.90
BS	127	20	51	28	24	40	4	2.41	.69	1718	2.15	147	.38	.70
BSA	15	3	10	2	4	2		2.40	.64	236	1.95	18	.70	.48
BSE	38	73	36	26	18	30	1	2.67	.68	1509	2.49	111	.26	.79
BSAE	7	1	3	2	1	2		2.54	.60	63	3.02	8	-.76	.45

single category followed by students who were seeking a Bachelor of Science degree and a Bachelor of Science in Education degree. The remaining degree categories contained somewhat smaller numbers. Freshmen made up the largest group of students who were undecided as well as the largest number in the two degree categories with substantial representation. However, attrition of upperclassmen who were pursuing a Bachelor of Science degree or a Bachelor of Science in Education degree was substantially larger than expected, especially at the junior and senior classification. Since no degree category was statistically different from the fall 1972 population, it was concluded that degree selection was independent of attrition.

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SECTION II

QUESTIONNAIRE RESULTS

This section and Section III report the results obtained from the questionnaire and the College and University Environment Scales, Second Edition (Modified). The 585 non-returning students who were considered legitimate sources for inquiry made up the initial sample. The statement of limitation described the rationale for determining the sample. Of the 585 non-returning students in the mailed sample, 239 produced data on the questionnaire while 228 produced a complete data set from the CUES instrument. The CUES data will be reported in Section III

Since the number of data producing responses accounted for 40 percent of the total number of students surveyed, an analysis was undertaken to determine whether or not the responding students differed significantly from the non-responding students with respect to academic classification and grade point average. These two analyses were selected since they represented categories sufficiently large to be responsive to dependency tests, and because academic classification and grade point average are areas of particular interest regarding attrition

Table VI contains the number of students who responded and who did not respond by academic classification. The Chi-squared test was employed to determine independence. A Chi-square of 11.77 was obtained which was significant beyond the .05 level. It was concluded that whether or not an individual responded was not independent of classification. However, an examination of the contribution of each cell to the overall Chi-squared

TABLE VI
 COMPARISON OF RESPONDING AND NON-RESPONDING
 STUDENTS BY CLASSIFICATION

	Freshmen	Sophomores	Juniors	Seniors	Unclassified	TOTAL
Return	94	61	26	34	13	228
Non-Return	175	56	37	61	28	357
TOTAL	269	117	63	95	41	585

$$\chi^2 = 11.77$$

$$.05 \chi^2 \geq 9.49$$

value revealed that the sophomore classification produced the greatest deviation and that this deviation was in a positive direction. In other words, the number of sophomores who returned the questionnaire was larger than would be expected under the null hypothesis. It was concluded that this would not be prejudicial to the results and would, if anything, increase reliability.

Since it had been shown in Section II that no significant difference existed between the academic classification and grade point average of the 585 non-returning eligible students and the fall 1972 population, a test was undertaken to determine if the data producing sample of 228 differed in this dimension from the fall population. The results reported in Table VII reflect that there was no difference in the two groups. Based upon the results reported in Tables VI and VII, it was concluded that the sample was sufficiently representative of the initial sample of 585 to warrant utilizing the responses.

Students were asked to indicate why they failed to reenroll at Arkansas State University in the spring of 1973. Table VIII reflects the number of students who transferred to other institutions. The 42 who transferred represented 18 percent of the total number responding. Eleven transferred to one of the institutions in the University of Arkansas system while the remaining 31 transferred to 24 separate institutions. The transfer rate did not appear to be inordinately large. Moreover, no meaningful pattern of transfer emerged.

Thirty students representing 13 percent reported that they could not afford to return to school for financial reasons. Nine joined a branch of the military service. The remaining 152 respondents gave other reasons for not returning. These are shown in Table IX. Almost one-third of

TABLE VII

COMPARISON OF GRADE POINT AVERAGE OF RESPONDING STUDENTS AND FALL 1972 POPULATION

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CLASSIFICATION	POP GPA	POP STD. DEV.	N	RESPONDENTS GPA	n	z	PROBA- BILITY
Freshmen	2.17	.91	2323	1.76	94	.45	.65
Sophomores	2.43	.62	1457	2.34	61	.15	.88
Juniors	2.55	.55	1178	2.44	26	.20	.84
Seniors	2.65	.49	1105	2.49	34	.33	.74
Unclassified	2.84	1.08	114	2.78	13	.06	.95

TABLE VIII
INSTITUTIONS TO WHICH STUDENTS TRANSFERRED

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INSTITUTION	NUMBER
Arkansas State University - Beebe	1
Black River Vocational Technical School	1
Gem City College - Quincy, Ill.	1
Hinds Junior College - Raymond, Miss.	1
Louisiana State University	1
Maysville Community College	1
Memphis State University	3
Miller-Hawkins Business School - Memphis, Tenn.	1
Mississippi State University	1
Ouachita Baptist University	1
Phillips County Community College	1
School of Pharmacy	1
Southeast Missouri State University	4
State College of Arkansas	3
University of Arkansas - Fayetteville	5
University of Arkansas - Little Rock	6
University of Tennessee - Medical Units	1
Valencia Junior College - Florida	1
William Jewell College	1
Other	7
TOTAL	42

TABLE IX
NON-TRANSFER STUDENTS' REASONS FOR
NOT RETURNING TO ASU

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REASON	NUMBER
Could not find out about requirements	1
Could not decide on major	2
Debts	1
Distance	3
Fed up with treatment at ASU	4
Graduated	17
Job	48
Married	18
Mental Rest	1
Moving	4
Needed course not offered	6
No interest	6
Not making grades	8
Not ready for college	1
Not satisfied with major	1
Only extension	2
Personal or family illness	3
Personal reasons	11
Pregnancy	6
Residence work completed	1
Time not convenient	3
Too much work	1
Other	4
TOTAL	152

the 152 reported that their jobs were instrumental in the decision not to return. This category and those who did not return for financial reasons make up the largest single response patterns. A wide variety of reasons were reported, but none of these seemed to warrant further analysis. Fifty-three percent of the respondents expected to reenter Arkansas State University at a later date. Most, however, were undecided as to the approximate date they might return.

Student perceptions of strengths and weaknesses of the University were tabulated. No pattern appeared to develop with respect to students' opinion of strengths or weaknesses. The faculty was considered a strength by 22 percent while 25 percent thought the social environment was poor.

ENVIRONMENTAL PERCEPTIONS

Introduction

An environmental study was conducted in the fall of 1972 at Arkansas State University.¹ A random sample of three hundred sophomores, juniors, and seniors were administered an abridged version of the College and University Environment Scales (CUES), Second Edition which was developed by Dr. C. Robert Pace. The purpose of the environment study in 1972 was to describe the environment at Arkansas State University as perceived by students (excluding freshmen and graduate students) and to ascertain whether these students agreed or disagreed with the environmental perception of a similar sample of students who served as reporters in an environment study which was conducted in the fall of 1969 at Arkansas State University.² Both the 1969 and 1972 studies are available in the Arkansas Room of the Dean B. Ellis Library at Arkansas State University.

CUES, Second Edition (Modified) was an added dimension to the present attrition study. The purpose was to determine if the CUES scales could help identify areas of discrimination between enrolled students (based on the environmental study in the fall of 1972) and academically eligible students who chose not to reenroll in the University in the spring of 1973

¹Farris Womack and Jimmy McCluskey, "An Environmental Study of Arkansas State University As Perceived By Students - Fall 1972" (unpublished study conducted jointly by the offices of Institutional Research and University College, 1972) (Mimeographed)

²Jimmy McCluskey, "An Environmental Study of Arkansas State University as Perceived by Students and Faculty" (unpublished doctoral dissertation, University of Mississippi, 1970).

Definition of Environment Scales

Dr. C. Robert Pace defined the seven scales on the College and University Environment Scales, Second Edition as follows:

Scale 1 Practicality - The items that contribute to the score for this scale describe an environment characterized by enterprise, organization, material benefits, and social activities. There are both vocational and collegiate emphases. A kind of orderly supervision is evident in the administration and the classwork. As in many organized societies there is also some personal benefit and prestige to be obtained by operating in the system--knowing the right people, being in the right clubs, becoming a leader, respecting one's superiors, and so forth. The environment, though structured, is not repressive because it responds to entrepreneurial activities and is generally characterized by good fun and school spirit.

Scale 2. Community - The items in this scale describe a friendly, cohesive, group-oriented campus. There is a feeling of group welfare and group loyalty that encompasses the college as a whole. The atmosphere is congenial; the campus is a community. Faculty members know the students, are interested in their problems, and go out of their way to be helpful. Student life is characterized by togetherness and sharing rather than by privacy and cool detachment.

Scale 3. Awareness - The items in this scale seem to reflect a concern about and emphasis upon three sorts of meaning--personal, poetic, and political. An emphasis upon self-understanding, reflectiveness, and identity suggests the search for personal meaning. A wide range of opportunities for creative and appreciative relationships to painting, music, drama, poetry, sculpture, architecture, and the like suggests the search for poetic meaning. A concern about events around the world, the welfare of mankind, and the present and future condition of man suggests the search for political meaning and idealistic commitment. What seems to be evident in this sort of environment is a stress on awareness, an awareness of self, of society, and of aesthetic stimuli. Along with this push toward expansion, and perhaps as a necessary condition for it, there is an encouragement of questioning and dissent and a tolerance of non-conformity and personal expressiveness.

Scale 4. Propriety - These items describe an environment that is polite and considerate. Caution and thoughtfulness are evident. Group standards of decorum are important. There is an absence of demonstrative, assertive, argumentative, risk-taking activities. In general, the campus atmosphere is mannerly, considerate, proper, and conventional.

Scale 5. Scholarship - The items in this scale describe an environment characterized by intellectuality and scholastic discipline. The emphasis is on competitively high academic achievement and a serious interest in scholarship. The pursuit of knowledge and theories, scientific or philosophical, is carried on rigorously and vigorously. Intellectual speculation, and interest in ideas, knowledge for its own sake, and intellectual discipline--all these are characteristic of the environment.

Scale 6. Campus Morale - The items in this scale describe an environment characterized by acceptance of social norms, and, at the same time, a commitment to intellectual pursuits and freedom of expression. Intellectual goals are exemplified and widely shared in an atmosphere of personal and social relationships that are both supportive and spirited.

Scale 7. The Professors - This scale defines an atmosphere in which professors are perceived to be scholarly, to set high standards, to be clear, adaptive, and flexible. At the same time, this academic quality of teaching is infused with warmth, interest, and helpfulness toward students.³

Scoring Rationale for CUES, Second Edition (Modified)

Pace described the scoring of CUES, Second Edition as follows:

Students who are familiar with the environment from having lived in it for more than a year serve as reporters, indicating if, in their experience and perception, the condition or event described by each of the statements is "true" about their college. When there is a division of opinion among the reporters about a particular statement, it is not counted in the CUES score, but when there is consensus among the reporters by a margin of two to one or greater, the statement is regarded as being "characteristic" of the campus. The score for the institution is based on the number of statements in each scale reaching this level of consensus.

To obtain the institution's score on each scale 1) count the number items answered in the keyed directions by 66 percent or more of the students sampled, 2) subtract the number of items answered in the keyed direction by 33 percent or fewer

³C. Robert Pace, CUES, Second Edition. College and University Environment Scales--Technical Manual (Princeton: Educational Testing Service, 1969), p. 11

of the students sampled, 3) and then add 4 points. Since each scale consists of 4 items, the score on the scale can range from 0 to 8 points. Note that in four of the scales the keyed response is always (T); but that the items in the Propriety Scale are keyed (F). The score is computed in the same way. The only difference is that a high score is in the direction of non-propriety and a low score is indicative of propriety.⁴

The Professors Scale and the Campus Morale Scale are scored in the same manner as described above except with respect to the number (number equal to the number of items on each scale) which is added to each respective scale.

A high score (raw or percentile) on a scale indicates that a particular group of reporters perceive a high degree of environmental press as characterized by the part of the environment that scale measures. Conversely, a low score indicates the perception of a low degree of press as characterized by the environment measured by that scale. An exception to this pattern regarding the Propriety Scale is discussed above.

In order to determine whether or not the perceptions of the two samples differed significantly with respect to each item, proportions in each sample answering in the direction of the key were statistically analyzed as two independent proportions. The following formula was employed.⁵

$$z = \frac{P_1 - P_2}{\sqrt{Pq[(1/N_1) + (1/N_2)]}}$$

The value z was interpreted as a deviate of the unit normal curve with the null hypotheses assumed. The probability of a given z was

⁴C. Robert Pace, Higher Education Measurement and Evaluation Kit, Field Edition, Center for the Study of Evaluation (Los Angeles: UCLA, 1971).

⁵George Ferguson, Statistical Analysis in Psychology and Education (McGraw-Hill Book Company, New York, 1966), p. 177.

obtained from a normal curve table. Since significance is a function of sample size, the strength of association was computed to obtain a measure of the relationship of the proportions in terms of the maximum possible relationship, thus, eliminating the effect of large samples. As the strength of association increases, the confidence in the magnitude of the differences also increases.

Scoring Keys and Norm Tables

Tables X and XI depict the scoring keys for CUES, Second Edition (Modified). Table X displays the scoring key for the five basic scales--Practicality, Community, Awareness, Propriety, and Scholarship--which were reduced from twenty items in the CUES, Second Edition to four items each on CUES, Second Edition (Modified). The scoring keys for the sixth scale, Campus Morale, and the seventh scale, The Professors, are revealed in Table XI. The items in these scales were retained intact from CUES, Second Edition.

Norm tables for the seven scales on CUES, Second Edition (Modified) are depicted in Tables XII and XIII. These norm tables are based on a reference group of one hundred colleges and universities.

Enrolled and Non-Returning Students' Perception of Environment

Table XIV depicts the results of the enrolled and non-returning students' responses to the Practicality Scale on CUES, Second Edition (Modified). A differential of one scale score or ten percentile points was reached between the two groups of environment reporters. The higher score was made by the non-returning students, thus, indicating that they (non-returning students) perceived a more practical environment at the University than did the enrolled students. A significantly larger

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TABLE X

SCORING KEY FOR FIVE BASIC SCALES ON
CUES, SECOND EDITION (MODIFIED)

(I=TRUE and F=FALSE)

PRACTICALITY		COMMUNITY		AWARENESS		PROPRIETY		SCHOLARSHIP	
Item	Key	Item	Key	Item	Key	Item	Key	Item	Key
1.	T	5.	T	9	T	13	F	17.	T
2.	T	6.	T	10.	T	14.	F	18.	T
3.	T	7.	T	11	T	15	F	19	T
4.	T	8.	T	12	T	16	F	20.	T

Source: Adapted from C Robert Pace, Higher Education Measurement and Evaluation Kit, Field Edition, Center for the Study of Evaluation (Los Angeles: UCLA, 1971).

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TABLE XI

SCORING KEYS FOR CAMPUS MORALE AND THE PROFESSORS
 SCALES ON CUES, SECOND EDITION (MODIFIED)

(T=TRUE and F=FALSE)

THE PROFESSORS		CAMPUS MORALE		CAMPUS MORALE	
Item	Key	Item	Key	Item	Key
1.	T	1.	T	12.	T
2.	T	2.	F	13.	T
3.	F	3.	T	14.	F
4.	T	4.	T	15.	T
5.	T	5.	T	16.	T
6.	F	6.	T	17.	F
7.	T	7.	T	18.	F
8.	F	8.	T	19.	T
9.	F	9.	F	20.	T
10.	F	10.	T	21.	T
11.	T	11.	T	22.	T

Source: Adapted from C. Robert Pace, Higher Education Measurement and Evaluation Kit, Field Edition, Center for the Study of Evaluation, (Los Angeles: UCLA, 1971)

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TABLE XII

PERCENTILE EQUIVALENTS FOR CUES, SECOND EDITION (MODIFIED)
 STUDENT NORMS BASED ON REFERENCE GROUP OF
 100 COLLEGES AND UNIVERSITIES

SCORES	PERCENTILES				
	PRACTICALITY	COMMUNITY	AWARENESS	PROPRIETY	SCHOLARSHIP
8.	100	100	100	100	100
7.	94	79	92	90	84
6.	84	61	82	70	64
5.	64	36	71	48	43
4.	45	19	55	32	28
3.	28	12	39	19	18
2.	12	8	24	6	10
1.	4	1	8	2	1
0.	1		1		

Source: Adapted from C. Robert Pace, Higher Education Measurement and Evaluation Kit, Field Edition, Center for the Study of Evaluation (Los Angeles: UCLA, 1971).

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TABLE XIII

**PERCENTILE EQUIVALENTS FOR THE CAMPUS MORALE
 SCALE SCORES AND THE PROFESSORS
 SCALE SCORE - STUDENT NORMS
 BASED ON REFERENCE GROUP
 OF 100 COLLEGES AND
 UNIVERSITIES**

CAMPUS MORALE		THE PROFESSORS	
SCORE	PERCENTILE	SCORE	PERCENTILE
44		22	100
43	100	21	99
42		20	98
41	98	19	89
40	96	18	82
39		17	80
38	95	16	72
37	94	15	68
36	91	14	62
35		13	55
34	90	12	45
33	85	11	29
32	84	10	17
31	82	9	8
30		8	5
29	78	7	
28	74	6	1
27	72	5	
26	65	4	
25	57	3	
24	49	2	
23	46	1	
22	40	0	
21	35		
20	22		
19	21		
18	17		
17	12		
16	11		
15			
14	8		
13			
12	6		
11	5		
10			
9			
8	2		

Source: Adapted from C. Robert Pace, Higher Education Measurement and Evaluation Kit, Field Edition, Center for the Study of Evaluation (Los Angeles: UCLA, 1971).

TABLE XIV

COMPARISON OF CUES, SECOND EDITION (MODIFIED)
RESULTS OBTAINED FROM FALL 1972 ENROLLED
STUDENTS AND NON-RETURNING STUDENTS

SCALE ONE--PRACTICALITY

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ITEM	STATEMENT	KEY	ENROLLED		NON-RETURNEES		DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO.
			NO.	%	NO.	%				
1.	Frequent tests are given in most classes.	T	174	58	151	68+	10	-2.32	0.02	.10
2.	The college offers many really practical courses such as typing, report writing, etc.	T	219	73+a	172	77+	4	-1.03	0.30	.05
3.	The most important people at the school expect others to show proper respect for them.	T	247	82+	179	81+	- 1	0.29	0.77	.01
4.	There is a recognized group of student leaders on campus.	T	195	65	145	65	0	0.00	1.00	.00
	SCALE SCORE			6		7				
	PERCENTILE EQUIVALENT--BASED ON REFERENCE GROUP OF 100 COLLEGES AND UNIVERSITIES			84		94				

^aThe plus sign in this table and in subsequent tables indicates that the item has met the 66+ percent scoring criterion. That is, 66 percent or more of the reporters have answered the item in the direction of the key.

percentage of students marked true (keyed direction) to item one than did the enrolled students. There were no significant differences between the two groups of reporters with respect to items two, three, and four.

Table XV identifies the results of the enrolled and non-returning students' responses to the Community Scale on CUES, Second Edition (Modified). The scale scores and percentile scores were the same for both groups of reporters. No significant differences were recorded between the two groups of reporters on any of the CUES items.

Shown in Table XVI are the results of the enrolled and non-returning students' responses to the Awareness Scale on CUES, Second Edition (Modified). A differential of three scale scores or forty-three percentile scores was reached between the two groups of reporters. The higher score was made by the non-returning students, thus, indicating that they (non-returning students) perceived a higher degree of awareness press at the University than did the enrolled students. Significant differences were recorded between the two groups of reporters on items nine and ten. Although no significant differences were recorded between the two groups of reporters on items eleven and twelve, item twelve was scored as a consensus for the non-returning students.

Table XVII reveals the results of enrolled and non-returning students' responses to the Propriety Scale on CUES, Second Edition (Modified). A differential of one scale score or thirteen percentile scores was reached between the two groups of reporters. The higher score was made by the enrolled students, thus, indicating that they (enrolled students) perceived a lower propriety press at the University than did the non-returning students. Significant differences were recorded between the two groups of reporters on items thirteen, fourteen, and sixteen. On item thirteen, the higher percentage

TABLE XV

COMPARISON OF CUES, SECOND EDITION (MODIFIED)
 RESULTS OBTAINED FROM FALL 1972 ENROLLED
 STUDENTS AND NON-RETURNING STUDENTS

SCALE TWO--COMMUNITY

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ITEM	STATEMENT	KEY	ENROLLED		NON-RETURNEES		DIFFERENCE	NORMAL DEVIATE	PROBABILITY	STRENGTH OF ASSO.
			NO	%	NO	%				
5	Many upperclassmen play an active role in helping new students adjust to campus life	T	92	31-b	77	35	4	-0.96	0.66	.04
6	The professors go out of their way to help you	T	152	51	100	45	-6	1.34	0.17	.06
7	The school has a reputation for being friendly	T	217	72+	146	66+	-6	1.46	0.14	.06
8	It's easy to get a group together for card games, singing, going to the movies, etc.	T	213	71+	144	65	-6	1.45	0.14	.06
	SCALE SCORE		5		5		0			
	PERCENTILE EQUIVALENT--BASED ON REFERENCE GROUP OF 100 COLLEGES AND UNIVERSITIES		36		36		0			

^bThe minus sign in this table and in subsequent tables indicates that 66 percent or more of the reporters have answered the item in the opposite direction of the key.

TABLE XVI

COMPARISON OF CUES, SECOND EDITION (MODIFIED)
 RESULTS OBTAINED FROM FALL 1972 ENROLLED
 STUDENTS AND NON-RETURNING STUDENTS

SCALE THREE--AWARENESS

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ITEM	STATEMENT	KEY	ENROLLED (FALL 1972) NO	NON-RETURNEES (SPRING 1973) NO	DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO	
9	Students are encouraged to criticize administrative policies and teaching practices	T	93	96	43	12	-2.80	0.01	.12
10	The school offers many opportunities for students to understand and criticize important works in art, music, and drama	T	168	149	67+	11	-2.53	0.01	.11
11	Students are actively concerned about national and international affairs	T	163	136	61	7	-1.59	0.11	.07
12	Many famous people are brought to the campus for lectures, concerts, and student discussions.	T	191	147	66+	2	-0.47	0.64	.02
	SCALE SCORE		3	6	3				
	PERCENTILE EQUIVALENT--BASED ON REFERENCE GROUP OF 100 COLLEGES AND UNIVERSITIES		39	82	43				34

TABLE XVII

COMPARISON OF CUES, SECOND EDITION (MODIFIED)
RESULTS OBTAINED FROM FALL 1972 ENROLLED
STUDENTS AND NON-RETURNING STUDENTS

SCALE FOUR--PROPRIETY

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ITEM	STATEMENT	KEY	ENROLLED (FALL 1972) NO	NON-RETURNEES (SPRING 1973) NO	DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO.
13	Students are conscientious about taking good care of school property.	F	104	116	17	-3.87	0.00	.17
14	Students are expected to report any violation of rules and regulations.	F	137	74	-13	2.98	0.00	.13
15	Students ask permission before deviating from common policies and practices.	F	115	103	8	-1.83	0.06	.08
16	Student publications never lampoon dignified people or institutions.	F	156	89	-12	2.70	0.00	.12
	SCALE SCORE		4	3	-1			
	PERCENTILE EQUIVALENT--BASED ON REFERENCE GROUP OF 100 COLLEGES AND UNIVERSITIES		32	19	-13			

score (indicating non-propristy) was recorded for the non-returning students. On items fourteen and sixteen, the higher percentage score (indicating non-propristy) was recorded for the enrolled students. The difference in percentage between the two groups of reporters on item fifteen was almost significant (.06).

Table XVIII shows the results of the enrolled and non-returning students' responses to the Scholarship Scale on CIIES, Second Edition (Modified). A differential of one scale score or fifteen percentile points was reached between the two groups of environment reporters. The higher score was made by the non-returning students, thus, indicating that they (non-returning students) perceived a more scholarly environment at the University than did the enrolled students. The difference in percentage of responses in the direction of the key between the two groups of reporters was significant on item eighteen. No significant differences were recorded for items seventeen, nineteen, and twenty.

Table XIX depicts the results of the enrolled and non-returning students' responses to the Campus Morale Scale on CUES, Second Edition (Modified). A differential of one scale score or five percentile points was reached between the two groups of environment reporters. The higher score was made by the non-returning students, but the difference does not appear high enough to be meaningful. On items fourteen, fifteen, sixteen, seventeen, twenty, and twenty-one, a significantly larger percentage of the non-returning students than enrolled students responded in the direction of the key. Whereas, on items two and eighteen, a significantly larger percentage of enrolled students than non-returning students responded in the direction of the key. There were no significant differences in responses on the remaining items.

TABLE XVIII

COMPARISON OF CUES, SECOND EDITION (MODIFIED)
 RESULTS OBTAINED FROM FALL 1972 ENROLLED
 STUDENTS AND NON-RETURNING STUDENTS

SCALE FIVE--SCHOLARSHIP

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ITEM	STATEMENT	KEY	ENROLLED		NON-RETURNING		DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO
			NO.	%	(FALL 1972)	(SPRING 1973)				
1	Most courses are a real intellectual challenge	T	151	50	128	58	8	-1.80	0.07	.08
18	Students set high standards of achievement for themselves	T	136	45	122	55	10	-2.25	0.02	.10
19	Most courses require intensive study and preparation out of class	T	181	60	149	57+	7	-1.63	0.10	.07
20	Careful reasoning and clear logic are valued most highly in grading student papers, reports, or discussion.	T	159	53	123	55	2	-0.45	0.66	.02
	SCALE SCORE			4		5				1
	PERCENTILE EQUIVALENT--BASED ON REFERENCE GROUP OF 100 COLLEGES AND UNIVERSITIES			28		43				15

TABLE XIX

COMPARISON OF CUES, SECOND EDITION (MODIFIED)
RESULTS OBTAINED FROM FALL 1972 ENROLLED
STUDENTS AND NON-RETURNING STUDENTS

SCALE SIX--CAMPUS MORALE

BEST COPY AVAILABLE

ITEM	STATEMENT	KEY	ENROLLED (FALL 1972) NO. \bar{x}	NON-RETURNEES (SPRING 1973) NO. \bar{x}	DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO.
1	The big college events draw a lot of student enthusiasm and support	T	225 75+	162 74+	- 1	0.26	0.79	.01
2	Anyone who knows the right people in the faculty or administration can get a better break here.	F	212 71+	62 28-	-43	9.68	0.00	.39
3	The professors go out of their way to help you	T	143 48	96 44	- 4	0.90	0.63	.04
4	Students have many opportunities to develop skill in organizing and directing the work of others.	T	126 42	103 47	5	-1.13	0.26	.05
5	Many upperclassmen play an active role in helping new students adjust to campus life.	T	89 30-	76 35	5	-1.20	0.23	.05
6	When students run a project or put on a show everybody knows about it.	T	121 40	106 48	8	-1.81	0.07	.08
7	Students exert considerable pressure on one another to live up to the expected codes of conduct.	T	50 17-	45 20-	3	-0.87	0.61	.04

TABLE XIX (CONTINUED)

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ITEM	STATEMENT	KEY	ENROLLED (FALL 1972) NO	NON-RETURNEES (SPRING 1973) NO	DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO
8	There is a lot of group spirit	I	158	125	33	-0.90	0.63	.04
9	Most of the faculty are not interested in students' personal problems	F	193	76	117	-0.23	0.81	.01
10	The school helps everyone get acquainted	I	109	84	25	-0.47	0.65	.02
11	Channels for expressing students' complaints are readily accessible	T	126	107	19	-1.58	0.11	.07
12	A controversial speaker always stirs up a lot of student discussion	T	154	123	31	-1.13	0.26	.05
13	Many students here develop a strong sense of responsibility about their role in contemporary social and political life	T	157	133	24	-1.80	0.07	.08
14	The expression of strong personal belief or conviction is pretty rare around here.	F	139	132	7	-3.15	0.00	.14
15.	There is considerable interest in the analysis of value systems, and the relativity of societies and ethics	T	134	122	12	-2.25	0.02	.10
16.	Students are conscientious about taking good care of school property	T	94	90	4	-2.35	0.02	.10

39

TABLE XIX (CONTINUED)

BEST COPY AVAILABLE

ITEM	STATEMENT	KEY	ENROLLED (FALL 1972) NO. \bar{x}	NON-RETURNEES (SPRING 1973) NO. \bar{x}	DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO.
17	Students pay little attention to rules and regulations	F	123 41	127 58	17	-3.82	0.00	.17
18	Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others	F	211 70+	85 39	-31	7.04	0.00	.30
19	Most of the professors are very thorough, teachers and really probe into the fundamentals of their subjects.	T	190 63	145 66+	3	-0.70	0.51	.03
20	Students set high standards of achievement for themselves.	T	114 38	114 52	14	-3.17	0.00	.14
21	Students put a lot of energy into everything they do in class and out.	T	80 27-	104 47	20	-4.70	0.00	.20
22	Most courses are a real intellectual challenge.	T	148 49	122 55	6	-1.35	0.17	.06
	SCALE SCORE		21	22	1			
	PERCENTILE EQUIVALENT--BASED ON REFERENCE GROUP OF 100 COLLEGES AND UNIVERSITIES		35	40	5			

Table XX reflects the results of the enrolled and non-returning students' responses to The Professors Scale on CUES, Second Edition (Modified). A differential of two scale scores or seventeen percentile scores was reached between the two groups of environment reporters. The higher score was made by the non-returning students. However, when the individual items were observed on which there was a significant difference, it appears that the non-returning students viewed the professors in less high esteem than did the enrolled students. The perceptions of the two groups of reporters were significantly different on items three, six, eight, ten, and eleven.

Figure 1 shows the environment profiles of Arkansas State University as perceived by enrolled students in the fall of 1972 and the eligible but non-returning students in the spring of 1973. The percentile equivalents are based on a stratified random sample of one hundred colleges and universities in the United States. According to the percentile equivalent scores, the non-returning students perceived six out of seven dimensions of the University's environment to be higher than did the enrolled students. The two groups of reporters perceived the dimension of community environment similarly.

TABLE XX

COMPARISON OF CUES, SECOND EDITION (MODIFIED)
RESULTS OBTAINED FROM FALL 1972 ENROLLED
STUDENTS AND NON-RETURNING STUDENTS

SCALE SEVEN--THE PROFESSORS

BEST COPY AVAILABLE

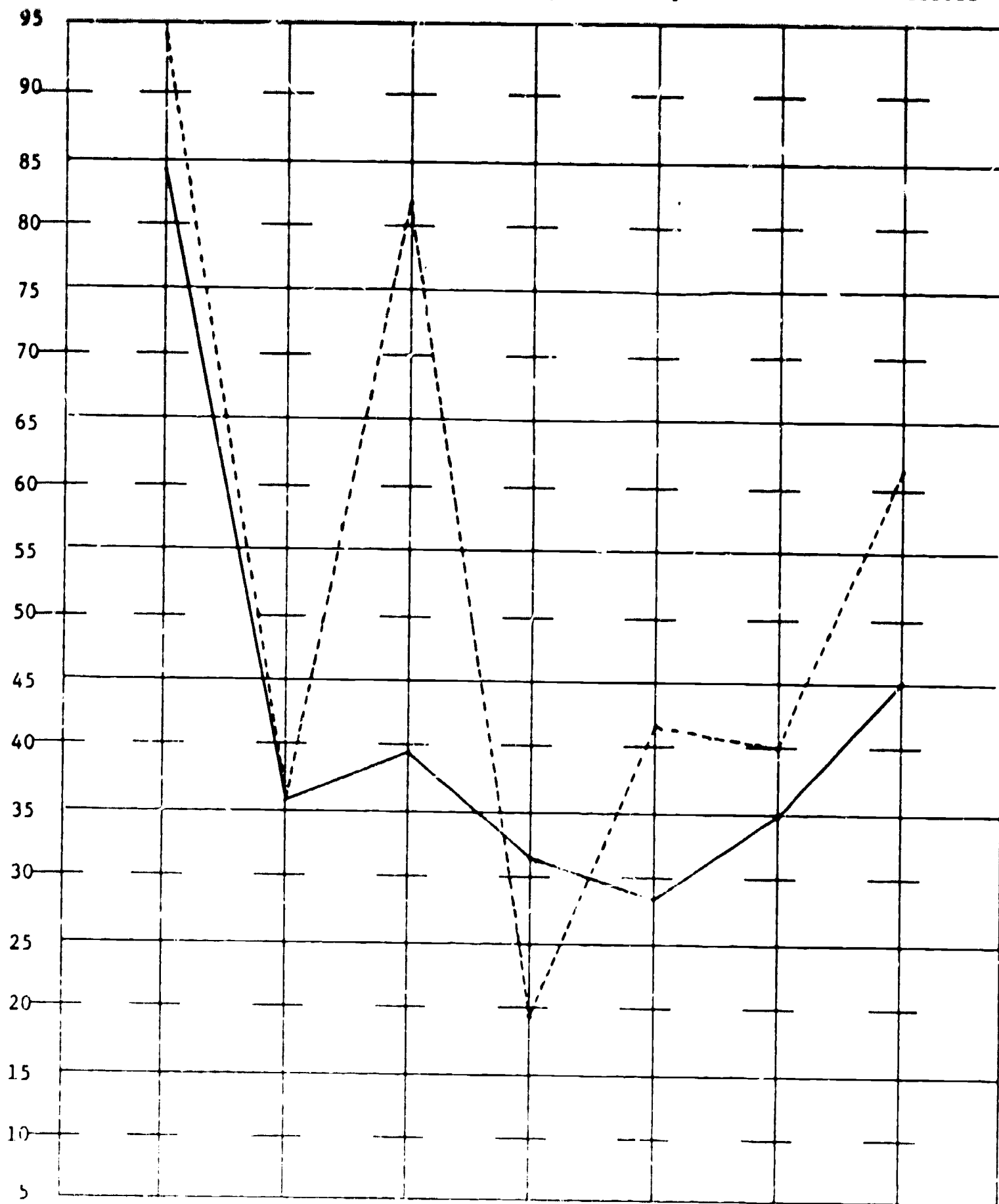
ITEM	STATEMENT	KEY	ENROLLED (FALL 1972)		NON-RETURNEES (SPRING 1973)		DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO
			NO	Z	NO	Z				
1	Most of the professors are dedi- cated scholars in their field.	T	251	84+	185	84+	0	0.00	1.00	.00
2	Courses, examinations, and readings are frequently revised.	T	195	65	150	68+	3	-0.71	0.52	.03
3	Personality, pull, and bluft get you through many courses	F	167	56	92	42	-14	3.15	0.00	.14
4	The professors go out of their way to help you.	T	146	49	100	45	-4	0.90	0.63	.04
5	Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects.	T	193	65	155	70+	5	-1.20	0.23	.05
6	Faculty members rarely or never call students by their first names.	F	182	61	87	40	-19	4.72	0.00	.20

TABLE XX (CONTINUED)

BEST COPY AVAILABLE

ITEM	STATEMENT	KEY	ENROLLED (FALL 1972) NO. \bar{x}	NON-RETURNEES (SPRING 1973) NO. \bar{x}	DIFFERENCE	NORMAL DEVIATE	PROBA- BILITY	STRENGTH OF ASSO.
7	Instructors clearly explain the goals and purposes of their courses.	T	155 52	125 57	5	-1.13	0.26	.05
8.	Most of the faculty are not interested in students' personal problems.	F	204 68+	79 36	-32	7.22	0.00	.30
9	Standards set by the professors are not particularly hard to achieve.	F	151 51	104 47	- 4	0.90	0.63	.04
10.	Students almost always wait to be called on before speaking in class.	F	185 62	80 36	-26	5.84	0.00	.25
11.	Class discussions are typically vigorous and intense.	T	70 23-	89 40	-17	-4.16	0.00	.18
	SCALE SCORE		12	14	2			
	PERCENTILE EQUIVALENT--BASED ON REFERENCE GROUP OF 100 COLLEGES AND UNIVERSITIES		45	62	17			

Percentiles Practi- Commu- Aware- Propri- Scholar- Campus The
 tiles cality nity ness ety ship Morale Professors



— Arkansas State University (Enrolled Students - Fall 1972)
 - - - Non-Returning Students (Spring - 1973)

FIGURE 1

ENVIRONMENTAL PROFILES FOR ARKANSAS STATE UNIVERSITY
 ENROLLED STUDENTS, FALL 1972, AND NON-RETURNING
 STUDENTS, SPRING 1973

SUMMARY AND CONCLUSIONS

This study was designed to determine the extent and causes of attrition of students at Arkansas State University from the fall to spring semester of the 1972-73 academic year. Each student who failed to return to the University in the spring semester of 1973, but who had been enrolled during the fall semester of 1972, was identified and categorized into one of four broad groups of non-returning students. These four categories included students who did not reenter the University because (1) they had completed all requirements for a degree, (2) they had been dismissed by the University for poor scholarship, (3) they had dropped out of school prior to the close of the fall semester, or (4) they were eligible to return but no reason was known for their having not reentered.

A sample of 585 academically qualified students was compared to the fall 1972 student population with respect to sex, academic classification, academic major, degree program, and grade point average. A short questionnaire was mailed to each member of the sample requesting that they indicate their reasons for not having reentered. The College and University Environment Scales (CUES), Second Edition (Modified) was also mailed to them at the same time. Responses to the questionnaire and the CUES instrument were reduced to tabulating cards for machine processing. Data were presented in tabular form descriptively and further analyzed by statistical methods to determine whether significant differences existed between groups and within the group.

The presentation and analysis of the data led to the following conclusions:

1. There were 1381 students enrolled during the fall semester of 1972 who did not reenter the University in the spring of 1973. This represented 20.8 percent of the fall 1972 student population. Two hundred one students graduated, 61 students were dismissed for poor scholarship, 205 withdrew during the semester, and 914 were eligible to return but elected not to do so.
2. More than half of the 914 eligible non-returning students were classified in the lower division and 361 representing 39.5 percent were freshmen.
3. The mean grade point average for non-returning eligible students was equal to or greater than the grade point average required for satisfactory progress toward the degree.
4. There was no significant difference between the grade point average of those eligible students who did not return in the spring semester of 1973 and those students who made up the fall 1972 student population.
5. The descriptive statistics and treatment of the data by means of the normal deviate test led to the conclusion that attrition was independent of academic classification, college, major, and degree.
6. The number of non-returning students who were undecided with respect to college, major, and degree was disproportionate to the number of enrolled undecided students in the fall semester of 1972. Thus, the absence of a clearly defined academic goal appears to be substantially related to attrition.
7. Five hundred eighty-five non-returning students were invited to respond to a questionnaire and the College and University

Environment Scales There were 239 data producing observations obtained from the questionnaire while 228 participants produced a complete data set from the CUES instrument. Since the response rate was approximately 40 percent, a Chi-squared technique was employed to determine whether or not the responding students differed significantly from the non-responding students with respect to academic ability and classification. The results indicated that the responding students were sufficiently representative of the 585 students in the limited sample, thus, warranting the utilization of their responses.

8. Eighteen percent transferred to other institutions. The transfer rate did not appear to be excessive.
9. Concern about a job and financial considerations was the most often reported reason for not returning.
10. Fifty-three percent of the non-returning students expected to reenter the University at a future date.
11. Non-returning students perceived the Arkansas State University environment to be more practical than did the enrolled students.
12. There was no difference in the perception of the community environment between enrolled students and non-returning students.
13. The environmental scale on which the greatest difference existed between non-returning and enrolled students was the scale, Awareness. The non-returning students perceived a significantly higher awareness press than did the enrolled students.
14. The non-returning students perceived an environment characterized by a higher degree of propriety than did the enrolled students.

15. The enrolled students perceived the environment to be less scholarly than did the non-returning students
16. While the overall percentile difference between the two groups of reporters on the Campus Morale Scale was 5 centiles, 8 of the 22 items on the scale produced significantly different proportions.
17. Individual item differences on The Professors Scale led to the conclusion that non-returning students viewed the professors in less high esteem than did the enrolled students.

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APPENDIXES

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APPENDIX A

FOLLOW-UP QUESTIONNAIRE ON UNDERGRADUATE
STUDENTS WHO WERE ELIGIBLE BUT
DID NOT REENROLL AT ASU IN
THE SPRING OF 1973

APPENDIX A

FOLLOW-UP QUESTIONNAIRE ON UNDERGRADUATE
STUDENTS WHO WERE ELIGIBLE BUT DID
NOT REENROLL AT ASU IN THE
SPRING OF 1973

BEST COPY AVAILABLE

Our records indicate that you did not reenroll at Arkansas State University this spring. It is our sincere desire that you will take a few moments to respond to this questionnaire. In an attempt to better serve the enrolled students, former students, and future students, Arkansas State University is conducting a study to determine why students do not reenroll when they are, in fact, eligible to reenroll. We are also very interested in knowing your views on the living and learning environment at Arkansas State University; thus, we are sending you a three-part (The College Environment, The Professors, and Campus Morale) environment measuring instrument with instructions at the top of each. Thank you for your valuable time in responding to these follow-up materials.

QUESTIONS

1. Please place a check by the most appropriate reason why you did not reenroll at Arkansas State University for the spring semester of 1973.
 - a. I transferred to another college, university, or other post high school program. The name of the institution to which I transferred is _____
Please give brief reason for transferring. _____
 - b. I could not financially afford to return to college.
 - c. I joined a branch of the military service.
 - d. Other--explain briefly. _____

2. Do you plan to reenroll at ASU? Yes No
If yes, approximately when? _____

3. Please place an (S) by the one characteristic which you believe to be ASU's greatest strength, and place a (W) by the one characteristic which you believe to be ASU's greatest weakness.

<input type="checkbox"/> a. Administration	<input type="checkbox"/> e. Facilities
<input type="checkbox"/> b. Faculty	<input type="checkbox"/> f. Social Environment
<input type="checkbox"/> c. Students	<input type="checkbox"/> g. Community
<input type="checkbox"/> d. Curricula	<input type="checkbox"/> h. Other _____

4. Arkansas State University can more adequately serve students if the faculty and administration are fully aware of student needs, opinions, and suggestions. Please use the space below to indicate your thoughts on areas of concern not addressed above.

APPENDIX B
COLLEGE AND UNIVERSITY ENVIRONMENT
SCALES (MODIFIED)

APPENDIX B

THE COLLEGE ENVIRONMENT

BEST COPY AVAILABLE

Directions: Facilities, procedures, policies, requirements, attitudes, etc. differ from one campus to another. What is characteristic of your campus? As you read each of the statements below, check the space under the TRUE (T), if the statement describes a condition, event, attitude, etc. that is generally characteristic of your college; or under FALSE (F) if it is not generally characteristic of the college. Please answer every statement.

Generally

- | T | F | |
|-----|-----|---|
| ___ | ___ | 1. Frequent tests are given in most courses. |
| ___ | ___ | 2. The college offers many really practical courses such as typing, report writing, etc. |
| ___ | ___ | 3. The most important people at the school expect others to show proper respect for them. |
| ___ | ___ | 4. There is a recognized group of student leaders on campus. |
| ___ | ___ | 5. Many upperclassmen play an active role in helping new students adjust to campus life. |
| ___ | ___ | 6. The professors go out of their way to help you. |
| ___ | ___ | 7. The school has a reputation for being friendly. |
| ___ | ___ | 8. It's easy to get a group together for card games, singing, going to the movies, etc. |
| ___ | ___ | 9. Students are encouraged to criticize administrative policies and teaching practices. |
| ___ | ___ | 10. The school offers many opportunities for students to understand and criticize important works in art, music, and drama. |
| ___ | ___ | 11. Students are actively concerned about national and international affairs. |
| ___ | ___ | 12. Many famous people are brought to the campus for lectures, concerts, student discussions, etc. |
| ___ | ___ | 13. Students are conscientious about taking good care of school property. |
| ___ | ___ | 14. Students are expected to report any violation of rules and regulations. |
| ___ | ___ | 15. Students ask permission before deviating from common policies or practices. |
| ___ | ___ | 16. Student publications never lampoon dignified people or institutions. |
| ___ | ___ | 17. Most courses are a real intellectual challenge. |
| ___ | ___ | 18. Students set high standards of achievement for themselves. |
| ___ | ___ | 19. Most courses require intensive study and preparation out of class. |
| ___ | ___ | 20. Careful reasoning and clear logic are valued most highly in grading student papers, reports, or discussions. |

THE PROFESSORS

BEST COPY AVAILABLE

Directions: As you read each of the statements below, think of yourself as a reporter. What is generally characteristic about the professors and courses at your college? Check the space under TRUE (T), if the statement describes a condition, event, or activity that is generally characteristic of your college; or under FALSE (F) if it is not generally characteristic of the college. Please answer every statement.

Generally

- | T | F | |
|-----|-----|---|
| ___ | ___ | 1. Most of the professors are dedicated scholars in their field. |
| ___ | ___ | 2. Courses, examinations, and readings are frequently revised |
| ___ | ___ | 3. Personality, pull, and bluff get students through many courses |
| ___ | ___ | 4. The professors go out of their way to help you |
| ___ | ___ | 5. Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects |
| ___ | ___ | 6. Faculty members rarely or never call students by their first names |
| ___ | ___ | 7. Instructors clearly explain the goals and purposes of their courses |
| ___ | ___ | 8. Most of the faculty are not interested in students' personal problems |
| ___ | ___ | 9. Standards set by the professors are not particularly hard to achieve |
| ___ | ___ | 10. Students almost always wait to be called on before speaking in class |
| ___ | ___ | 11. Class discussions are typically vigorous and intense |

CAMPUS MORALE

BEST COPY AVAILABLE

Directions: Facilities, procedures, policies, requirements, attitudes, etc., differ from one campus to another. What is characteristic of your campus? As you read each of the statements below, check the space under TRUE (T), if the statement describes a condition, event, attitude, etc., that is generally characteristic of your college; or under FALSE (F) if it is not generally characteristic of the college. Please answer every statement.

Generally

- | T | F | |
|-----|-----|---|
| ___ | ___ | 1. The big college events draw a lot of student enthusiasm and support. |
| ___ | ___ | 2. Anyone who knows the right people in the faculty or administration can get a better break here. |
| ___ | ___ | 3. The professors go out of their way to help you |
| ___ | ___ | 4. Students have many opportunities to develop skill in organizing and directing the work of others. |
| ___ | ___ | 5. Many upperclassmen play an active role in helping new students adjust to campus life. |
| ___ | ___ | 6. When students run a project or put on a show everybody knows about it. |
| ___ | ___ | 7. Students exert considerable pressure on one another to live up to the expected codes of conduct. |
| ___ | ___ | 8. There is a lot of group spirit. |
| ___ | ___ | 9. Most of the faculty are not interested in students' personal problems. |
| ___ | ___ | 10. The school helps everyone get acquainted |
| ___ | ___ | 11. Channels for expressing students' complaints are readily accessible |
| ___ | ___ | 12. A controversial speaker always stirs up a lot of student discussion |
| ___ | ___ | 13. Many students here develop a strong sense of responsibility about their role in contemporary social and political life. |
| ___ | ___ | 14. The expression of strong personal belief or conviction is pretty rare around here. |

CAMPUS MORALE (CONTINUED)

Generally

BEST COPY AVAILABLE

- | T | F | |
|-----|-----|--|
| ___ | ___ | 15. There is considerable interest in the analysis of value systems, and the relativity of societies and ethics. |
| ___ | ___ | 16. Students are conscientious about taking good care of school property. |
| ___ | ___ | 17. Students pay little attention to rules and regulations. |
| ___ | ___ | 18. Many students seem to expect other people to adapt to them rather than trying to adapt themselves to others. |
| ___ | ___ | 19. Most of the professors are very thorough teachers and really probe into the fundamentals of their subjects. |
| ___ | ___ | 20. Students set high standards of achievement for themselves. |
| ___ | ___ | 21. Students put a lot of energy into everything they do - in class and out. |
| ___ | ___ | 22. Most courses are a real intellectual challenge. |

Source: Adapted from C. Robert Pace, Higher Education Measurement and Evaluation Kit, Field Edition, Center for the Study of Evaluation (Los Angeles: UCLA, 1971).

APPENDIX C

LIST OF COLLEGES IN EACH OF EIGHT DIFFERENT TYPES
OF INSTITUTIONS WHICH CONSTITUTE THE
NORMS FOR THE COLLEGE AND
UNIVERSITY ENVIRONMENT
SCALES, SECOND
EDITION

APPENDIX C

TEN HIGHLY SELECTIVE LIBERAL ARTS COLLEGES:

Pomona College - California
 Earlham College - Indiana
 Cornell College - Iowa
 Radcliffe College - Massachusetts
 Williams College - Massachusetts
 Antioch College - Ohio
 Oberlin College - Ohio
 Reed College - Oregon
 Chatham College - Pennsylvania
 Beloit College - Wisconsin

TEN HIGHLY SELECTIVE UNIVERSITIES--PUBLIC AND PRIVATE:

University of California - Los Angeles
 Stanford University - California
 Johns Hopkins University - Maryland
 Clark University - Massachusetts
 University of Michigan - Ann Arbor
 Washington University - St. Louis, Mo.
 Princeton University - New Jersey
 University of North Carolina - Chapel Hill
 University of Pennsylvania - Philadelphia
 University of Wisconsin - Madison

TWENTY GENERAL LIBERAL ARTS COLLEGES:

Birmingham-Southern College - Alabama
 Westmont College - California
 Rollins College - Florida
 Oglethorpe College - Georgia
 Blackburn College - Illinois
 Knox College - Illinois
 Monmouth College - Illinois
 Colby College - Maine
 Simmons College - Massachusetts
 Albion College - Michigan
 Colgate University - New York
 Denison University - Ohio
 Lake Erie College - Ohio
 Wittenberg University - Ohio
 Lafayette College - Pennsylvania
 Lycoming College - Pennsylvania
 Washington and Jefferson College - Pennsylvania
 Lambuth College - Tennessee
 Ripon College - Wisconsin
 Mary Washington College - Virginia

TWENTY GENERAL UNIVERSITIES--PUBLIC AND PRIVATE:

University of Alabama - Tuscaloosa
 University of Colorado - Boulder
 Howard University - Washington, D. C.
 University of Georgia - Athens
 Northwestern University - Illinois
 Kansas State University - Manhattan
 Tulane University - Louisiana
 Michigan State University - East Lansing
 Wayne State University - Michigan
 St. Louis University - Missouri
 University of Nebraska - Lincoln
 Rutgers--The State University - New Jersey
 University of New Hampshire - Durham
 St. Lawrence University - New York
 University of Oregon - Eugene
 Pennsylvania State University - University Park
 University of South Carolina - Columbia
 Texas Christian University - Fort Worth
 University of Utah - Salt Lake City
 University of Wyoming - Laramie

TEN STATE COLLEGES AND OTHER UNIVERSITIES:

San Diego State College - California
 San Francisco State College - California
 Western Michigan University - Kalamazoo
 Mississippi State University - Starkville
 Brooklyn College - New York
 Oregon State University - Corvallis
 La Salle College - Pennsylvania
 Memphis State University - Tennessee
 Texas Technological College - Lubbock
 Texas Western College (University of Texas at El Paso)

**TEN TEACHERS COLLEGES AND OTHERS WITH MAJOR EMPHASIS
ON TEACHER EDUCATION:**

Troy State College - Alabama
 Central Connecticut State College - New Britain
 Ball State University - Indiana
 State College of Iowa (University of Northern Iowa) - Cedar Falls
 Kansas State Teachers College - Emporia
 Montclair State College - New Jersey
 Southeastern State College - Oklahoma
 Eastern Oregon College - La Grande
 Slippery Rock State College - Pennsylvania
 Marshall University - West Virginia

TEN STRONGLY DENOMINATIONAL LIBERAL ARTS COLLEGES:

Spring Hill College - Alabama
Mount St. Mary's College - California
Pepperdine College - California
Manchester College - Indiana
College of St. Catherine - Minnesota
Carroll College - Montana
Manhattanville College - New York
Bluffton College - Ohio
Oklahoma Baptist University - Shawnee
Susquehanna University - Pennsylvania

**TEN COLLEGES AND UNIVERSITIES EMPHASIZING
ENGINEERING AND THE SCIENCES:**

Harvey Mudd College - California
Illinois Institute of Technology - Chicago
Purdue University - Indiana
Rose Polytechnic Institute - Indiana
Wabash College - Indiana
Iowa State University - Ames
Polytechnic Institute of Brooklyn - New York
Rensselaer Polytechnic Institute - New York
Carnegie Institute of Technology (Carnegie-Mellon Univ.) - Pa.
South Dakota School of Mines and Technology - Rapid City

Source: Adapted from C. Robert Pace, College and University
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