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ABSTRACT

This document provides data on the number of teaching and research personnel in the United States in the fall of 1968 by major academic areas. The data are the results of a sample survey that was conducted to: (1) determine the feasibility of collecting data in the academic fields of professional teaching and/or research personnel in the institutions of higher education in the U.S.; and (2) obtain fall 1968 estimates of the number of full-time and part-time faculty by level of appointment and by function in each of 174 fields that make up the 26 general academic areas. The information as presented has been aggregated according to 3 institutional levels: universities, other 4-year institutions and 2-year institutions. (HS)

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HIGHER EDUCATION

**Teaching and
Research Staff
by Academic
Field in
Institutions of
Higher Education,
Fall 1968**

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Teaching and Research Staff by Academic Field in Institutions of Higher Education, Fall 1968

by

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Higher Education Surveys Branch

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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FOREWORD

This publication derives from the employee questionnaire which was a part of the U. S. Office of Education's third Higher Education General Information Survey (HEGIS), in 1968-69. It provides data on the number of teaching and research personnel in the fall of 1968 by major academic areas, which have been further defined into major teaching or research fields.

This was an experimental survey of faculty, designed as a "field test" of a new taxonomy. It contributed to the development of the new Taxonomy of Instructional Programs in Higher Education published in 1970 and now in general use in HEGIS for 1971-72.

The survey was conducted under the direction of Richard M. Beazley in consultation with Abraham Frankel who designed the sample and provided reliability estimates.

The Office of Education is most appreciative of the cooperation of the institutions of higher education in the sample that furnished data for this report.

Theodore H. Drews
Chief, Higher Education Surveys Branch

CONTENTS

	<u>Page</u>
Foreword	iii
Introduction	1
Survey Methodology	2
Survey Data	2
Data Limitations	4
Appendixes:	
A. Sample Design and Selection	20
B. Reliability of Estimates	23
C. Survey Report Form	25

Tables

1. Full-time and part-time teaching and research staff members in institutions of higher education, by level of appointment and by major academic area and field: Aggregate United States, fall 1968.	5
2. Full-time and part-time teaching and research staff members, by level of appointment and major academic area: All institutions of higher education, aggregate United States, fall 1968.	11
A. Universities	12
B. Other 4-year institutions.	13
C. 2-year institutions	14
3. Senior teaching and research staff members in institutions of higher education, by level of institution, employment status, and institutional control: Aggregate United States, fall 1968.	15
4. Full-time senior staff for teaching and research (combined) in institutions of higher education, by academic area: Aggregate United States, fall 1967 and 1968 and spring 1969	16
5. Ratio of earned degrees conferred to full-time-equivalent senior faculty in universities and other 4-year institutions, by academic area: Aggregate United States, 1967-68 and 1968-69	17

INTRODUCTION

The data in this publication were obtained from a survey of teaching and research staffs in institutions of higher education, conducted in the fall of 1968. The questionnaire, reproduced in appendix C, was one of a group of questionnaires that constituted the Higher Education General Information Survey in the 1968-69 academic year.

The purposes of this sample survey were (1) to determine the feasibility of collecting data on the academic fields of professional teaching and/or research personnel in the institutions of higher education in the United States and (2) to obtain fall 1968 estimates of the number of full-time and part-time faculty by level of appointment (senior staff or junior staff) and by function ("resident instruction and departmental research" and "organized research") in each of 174 fields that make up the 26 general academic areas. Listed below are the 26 general academic areas with a count of the number of fields shown in each area.

<u>Area</u>	<u>Number of fields</u>
Agriculture	13
Architecture	1
Biological sciences	14
Business and commerce	10
City planning	1
Communications	5
Computer sciences	5
Education	25
Engineering	19
English	1
Fine and applied arts	6
Foreign languages	14
Forestry	1
Geography	1
Health professions	16
Home economics	7
Law	1
Library sciences	1
Mathematics	3
Military sciences	1
Philosophy	1
Physical sciences	9
Psychology	5
Religion	1
Social sciences	10
Technologies	3

Several tables in this report present data that have been aggregated according to three institutional levels--universities, other 4-year institutions, and 2-year institutions. Universities are institutions that give considerable stress to graduate instruction, confer advanced degrees as well as bachelor's degrees in a variety of liberal arts fields, and have at least two professional schools that are not exclusively technological. Other 4-year institutions grant bachelor's or higher degrees or some type of recognition equivalent to such degrees (e. g. , ecclesiastical recognition in a theological institution) based on at least 4 academic years beyond high school. Two-year institutions offer at least 2 years but less than 4 years beyond high school.

SURVEY METHODOLOGY

The data in this report are based on 26 independent stratified random samples, where each sample represents one of the academic areas described in the introduction. Individual samples were used rather than one sample covering all areas so that each area would be sampled more efficiently. A total of 595 institutions was selected for this study. A description of the sample design is provided in appendix A, which includes the individual academic area sample sizes and their response rates.

There were two followups for nonresponding institutions, the first by letter and the second by telegram. Telephone calls were then made to obtain additional responses. The data were manually and machine edited, with reconciliation of problems by telephone or mail. The edit process included comparisons with similar information provided in questionnaires for previous survey years.

Sample results were expanded to produce estimated universe totals. Estimated standard errors of universe totals are given in appendix B.

The estimates in this report are presented in unrounded numbers so that the detailed data items might add to the subtotals. It is not intended to imply that the estimates are accurate to the last digit.

SURVEY DATA

Table 1 of this report provides estimates for the aggregate United States of the number of full-time and part-time faculty by level of appointment (senior staff or junior staff) and by function ("resident instruction and departmental research" or "organized research") in each of the academic fields and areas covered by the survey.

Because of differences in the definitions or classifications of academic fields of specialization used in the fall 1968 and fall 1967 Office of Education employees surveys, certain adjustments are

necessary in the presentation of the data. Affecting table 1, as well as tables 2, 4, and 5, was the decision to tabulate "agricultural economics" for 1968 with the area of agriculture rather than with social sciences as shown on the survey form itself (appendix C). This is in conformity with other HEGIS surveys of employees in higher education and with the 1970 Taxonomy of Instructional Programs in Higher Education, to be used in future surveys. Except for agricultural economics, the data in tables 1 and 2 are presented in the same classifications used on the survey form.

Table 2 summarizes the estimates for the 26 academic areas which appear in table 1. Tables 2A, B, and C present estimates for each of the 26 academic areas in universities, other 4-year institutions, and 2-year institutions.

Table 3 shows the estimated number of senior "resident instruction and departmental research" and "organized research" staff members by institutional level and control and by full-time or part-time employment status.

To assess the reasonableness of the data obtained in this sample survey, the estimates were compared in table 4 with data obtained from universe surveys in two other time periods. Two surveys, one conducted by the Office of Education^{1/} in the fall of 1967 and the other conducted by the National Science Foundation^{2/} in the spring of 1969, provide data on the number of teaching and research members by academic area.

In compiling table 4 the data were regrouped as necessary to achieve comparability. First, because the data from the 1967 Office of Education survey represent a combination of resident instruction, departmental research, and organized research, the data for "teaching" and "research" from each of the other two surveys have also been combined. Second, the data for several academic areas had to be regrouped because there were definitional differences between the three surveys; the fields involved were agricultural economics, journalism, and physical education.

In general, the estimates derived from the sample survey represent a reasonable fit with the data from the earlier and later time periods. The most notable exception, however, is the area of agriculture, which appears to be understated. The understatement in the 1968 survey may very well be due to the omission of organized research staff members in agricultural experiment stations. Although the instructions for the 1968 survey stated that they should be included, the questionnaire did not make specific provisions for reporting them as in the 1967 survey.

^{1/} U. S. Office of Education. Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1967 (OE-50057-67). Washington, D. C.: U. S. Government Printing Office, 1970.

^{2/} National Science Foundation. Resources for Scientific Activities at Universities and Colleges, 1969 (NSF 70-16). Washington, D. C.: U. S. Government Printing Office, 1970.

Table 5, also prepared as an indicator of the reasonableness of the estimates obtained from the survey, gives the ratio of earned degrees conferred (bachelor's and higher degrees) to full-time-equivalent senior teaching and research faculty in universities and other 4-year institutions for each academic area for 1967-68 and 1968-69. The ratios are based on total faculty, since the 1967-68 data by academic area did not separate teaching from organized research staff. Although the ratios would be expected to be larger if the teaching staff alone were used, the only significantly larger ratios (based on a study of 1968-69 data) would be for agriculture, biological sciences, engineering, and forestry.

The full-time equivalents were obtained by dividing the number of part-time senior staff by three and adding this to the number of full-time senior teaching and research faculty. The divisor of 3 is based on previous data where both part-time faculty and full-time-equivalent faculty were reported. In general there is close agreement between the ratios for the two years by academic area, with a tendency for the 1968-69 ratios to be slightly higher.

DATA LIMITATIONS

Because the data in this report are estimates derived from a sample, they are subject to sampling variability. They would be expected to differ somewhat from data obtained from a complete count even if the same instruments, instructions, and procedures were used. Approximations of standard errors of estimate, which are measures of sampling variability, are given in table B of appendix B.

As in any survey work, the results are also subject to error from causes other than sampling. Although considerable effort was made to reduce such error, there remain several possible error sources which should be noted. The sampling universe for 23 of the 26 academic areas was limited to those institutions that reported these areas in the fall of 1967. There were problems in definition of academic areas. In the 1967 survey the definitions or descriptions of the academic areas were less explicit than the 1968 survey in terms of the fields of specialization that were to be assigned to them. Also, the source an institution used as a basis for identifying faculty specialties varied: approximately 60 percent used departmental affiliation, 25 percent used titles of individual faculty members, and 15 percent used other bases.

Table 1. -- Full-time and part-time teaching and research staff members in institutions of higher education, by level of appointment and by major academic area and field: Aggregate United States, fall 1968

Major teaching or research field	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Agriculture, total	3,123	360	3,865	192	105	584	631	2,472
Agriculture, general	825	68	386	34	13	49	46	356
Agriculture business	68	7	71	15	1	11	0	67
Agronomy	336	55	689	44	31	112	128	345
Animal science	506	54	554	28	28	123	151	352
Dairy science	131	34	155	2	5	44	50	132
Farm management	40	0	0	3	3	1	0	0
Fish, game, or wildlife management	62	0	34	2	0	1	41	53
Food science	115	15	428	21	0	35	18	213
Horticulture	355	46	397	16	9	83	53	167
Poultry science	61	15	181	5	0	26	12	91
Soil science	77	3	216	5	0	10	22	135
Agricultural economics	355	49	361	15	13	56	43	381
Other	192	14	393	2	2	33	67	180
Architecture, total	1,663	509	23	11	8	180	7	20
Biological sciences, total	19,011	3,453	3,635	425	1,604	5,419	1,882	3,170
Biological sciences, general	8,972	1,436	592	99	524	2,127	393	303
Anatomy, histology, embryology	1,082	192	182	15	81	145	44	44
Biochemistry	1,110	236	514	57	173	301	279	510
Biophysics	267	81	83	6	29	55	41	47
Botany	1,294	88	224	15	92	609	120	346
Entomology	317	40	353	8	24	148	106	401
Genetics	273	47	103	4	17	63	41	41
Microbiology	1,205	260	292	26	149	406	160	278
Nutrition	70	31	82	2	6	27	8	36
Pathology	973	512	420	57	116	137	164	180
Pharmacology	559	170	155	50	120	122	87	26
Physiology	983	153	239	40	96	372	111	90
Zoology	1,559	113	198	22	159	814	164	769
Other	347	94	198	24	18	93	164	99
Business and commerce, total	17,845	7,480	251	85	518	3,877	43	336
Business and commerce, general	6,342	2,747	61	24	183	1,609	6	74
Finance	1,230	314	16	8	60	222	9	16
Accounting	3,580	1,468	5	2	100	719	0	19
Hotel and restaurant administration	206	31	6	0	19	9	0	5
Office management	457	109	0	0	0	74	0	0
Marketing	1,446	470	2	0	38	397	0	15
Management	2,537	1,132	24	0	65	677	3	102
Insurance and actuarial science	166	166	0	0	0	33	0	0
Real estate	130	255	0	0	6	19	0	0
Other	1,751	788	137	51	47	118	25	105

Table 1. -- Full-time and part-time teaching and research staff members in institutions of higher education, by level of appointment and by major academic area and field: Aggregate United States, fall 1968 -- Continued

Major teaching or research field	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
City planning, total	412	163	60	33	29	183	18	50
Communications, total	6,470	2,343	43	15	265	854	164	139
Communications, general	2,571	1,182	5	0	82	59	0	4
Communications	1,698	448	5	0	58	253	5	4
Journalism	1,335	439	22	5	80	344	146	109
Radio/TV	604	188	5	0	38	149	0	0
Other	262	86	6	10	7	49	13	22
Computer sciences, total	4,071	2,885	1,237	154	489	1,009	511	854
Computer sciences, general	1,552	1,285	721	78	155	415	110	179
Computer science	1,129	435	337	33	220	379	285	433
Data processing	1,159	1,097	45	5	102	60	7	11
Systems analysis	71	42	80	15	10	30	35	222
Other	160	26	54	23	2	125	74	9
Education, total	37,099	8,538	662	141	1,066	5,484	959	1,353
Education, general	7,280	1,198	80	50	451	1,342	348	198
Elementary education	4,185	623	20	3	92	440	14	5
Secondary education	2,323	449	7	0	20	328	16	22
Special and remedial education	1,684	427	101	16	48	175	152	107
Higher education	194	41	10	3	0	15	0	10
Adult education	87	2,548	24	0	15	130	8	76
Social foundations	795	145	0	0	8	137	1	18
Educational psychology	1,425	239	31	5	40	280	51	157
Counseling, guidance, or student personnel	1,256	322	38	7	63	219	78	139
Administration or supervision	978	253	53	6	21	187	45	151
Curriculum, instruction, or instructional materials	914	182	67	2	42	233	104	175
Art or music education	934	259	1	2	4	147	1	5
Business or distributive education	603	88	0	2	4	126	0	0
English education	343	71	5	0	1	18	0	10
Foreign language education	126	70	0	1	1	27	0	0
Home economics education	368	35	6	0	1	30	0	1
Industrial arts education	720	52	19	3	0	94	7	2
Library education	139	34	1	1	0	34	5	4
Mathematics education	230	66	5	0	5	31	4	23
Nursing education	536	51	8	0	19	13	0	3
Physical education, health, or recreation	9,255	904	8	1	185	1,141	5	41

Table 1. -- Full-time and part-time teaching and research staff members in institutions of higher education, by level of appointment and by major academic area and field: Aggregate United States, fall 1968--Continued

Major teaching or research field	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Education--Continued								
Religious education	170	68	0	0	13	7	0	0
Science education	877	134	80	17	19	232	7	111
Speech education	131	40	0	0	0	0	0	2
Other	1,546	239	98	22	14	98	113	93
Engineering, total	16,972	2,820	5,766	247	1,600	5,959	1,430	4,637
Engineering, general	1,509	178	965	49	22	485	80	1,332
Aerospace and aeronautical engineering	801	81	225	8	98	210	110	198
Agricultural engineering	444	46	484	5	22	77	63	118
Architectural engineering	161	33	34	0	12	36	0	9
Chemical engineering	1,122	128	347	47	151	730	126	407
Civil engineering	2,288	308	331	24	164	757	63	424
Electrical engineering	3,550	710	1,224	45	483	1,432	285	728
Engineering science	899	130	572	17	46	305	133	162
General engineering	520	159	197	3	13	102	36	236
Geological engineering	72	1	11	0	21	3	0	3
Industrial engineering	743	187	100	6	52	303	25	38
Mechanical engineering	2,890	395	325	18	214	883	153	409
Metallurgical and materials engineering	512	75	308	18	131	173	106	249
Mining engineering	136	17	45	0	1	31	13	23
Naval architectural engineering	37	9	100	2	27	11	4	4
Nuclear engineering	246	51	103	0	57	187	29	81
Petroleum engineering	56	3	3	0	0	8	0	10
Sanitary engineering	45	10	14	0	0	11	0	5
Other	941	299	378	5	86	215	204	201
English, total	28,770	4,961	72	15	1,092	6,310	98	274
Fine and applied arts, total	29,381	8,097	130	20	849	5,345	10	101
Fine and applied arts, general	3,110	1,127	18	3	61	518	5	7
Art	7,357	1,701	3	0	137	1,200	1	0
Music	10,376	3,137	29	3	258	1,881	1	50
Speech and drama	6,693	1,363	43	4	301	1,517	3	38
Applied arts and crafts	469	196	0	6	0	30	0	0
Other	1,376	573	37	4	92	199	0	6
Foreign languages, total	19,100	3,704	91	38	791	5,998	37	155
Foreign languages, general	3,546	691	39	16	172	959	10	25
Linguistics	490	81	8	8	14	146	2	34
Chinese	186	54	0	2	46	62	2	4
French	4,257	725	7	5	204	1,243	4	22
German	3,010	558	5	0	116	864	2	2
Greek	443	113	6	0	15	33	0	0

Table 1. -- Full-time and part-time teaching and research staff members in institutions of higher education, by level of appointment and by major academic area and field: Aggregate United States, fall 1968--Continued

Major teaching or research field	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Foreign languages--Con.								
Hebrew	159	77	0	2	2	68	0	7
Italian	305	122	0	0	6	125	0	5
Japanese	38	7	0	0	13	14	0	0
Latin	630	172	2	0	6	46	0	3
Portuguese	93	12	0	0	2	36	13	4
Spanish	3,692	567	7	4	112	1,142	2	35
Russian	607	210	3	0	9	178	0	0
Other	1,644	315	14	1	74	1,082	2	14
Forestry, total	582	52	277	15	23	128	57	423
Geography, total	2,558	250	27	6	118	994	10	113
Health professions, total	25,328	21,508	5,635	2,675	2,578	3,023	1,100	739
Health professions, general	865	116	1,336	1,673	0	11	0	0
Chiroprody or podiatry	23	187	0	0	0	0	0	0
Dental hygiene	311	221	16	15	0	15	1	1
Dentistry and dental specialties	2,166	4,063	212	140	101	337	20	18
Hospital administration	55	33	8	1	2	3	0	0
Medical records science and medical records librarianship	172	32	0	0	26	4	0	0
Medicine and medical specialties	12,485	13,983	3,154	730	1,908	1,792	881	474
Nursing or public health nursing	5,954	626	90	3	319	162	3	62
Occupational therapy	142	33	2	0	0	2	0	4
Optometry	131	113	8	3	1	63	0	13
Osteopathy	191	207	1	0	50	1	0	0
Pharmacy	915	172	83	22	76	454	25	48
Physical therapy or physiotherapy	180	253	59	21	9	15	5	12
Public health	444	184	236	47	32	40	41	30
Veterinary medicine and veterinary specialties	656	136	330	19	15	37	33	75
Other	638	1,149	100	1	39	87	91	2
Home economics, total	3,639	988	242	23	123	671	67	345
Home economics, general	1,663	318	44	2	68	283	28	37
Equipment and family housing	143	31	10	0	3	19	0	11
Clothing and textiles	488	203	18	2	18	96	9	85
Home management and child development	536	168	72	0	15	146	0	85
Foods and nutrition	483	132	79	12	13	67	30	106
Institutional management or administration	140	80	17	7	0	16	0	13
Other	186	56	2	0	6	44	0	8

Table 1. -- Full-time and part-time teaching and research staff members in institutions of higher education, by level of appointment and by major academic area and field: Aggregate United States, fall 1968--Continued

Major teaching or research field	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Law, total	2,504	956	48	6	60	209	26	26
Library science, total	1,598	372	18	8	105	391	29	66
Mathematics, total	18,909	4,220	1,041	78	612	5,808	180	509
Mathematical subjects, general	4,825	1,811	231	6	162	697	13	58
Mathematics	13,201	2,214	519	60	412	4,787	133	303
Statistics	883	195	291	12	38	324	34	148
Military sciences, total	2,354	41	0	0	294	51	0	0
Philosophy, total	5,368	777	20	6	82	1,117	0	72
Physical sciences, total	24,924	3,876	6,781	252	1,893	12,557	1,483	6,192
Physical sciences, general	2,868	902	459	14	31	591	199	227
Astronomy	356	85	451	21	15	142	59	175
Chemistry	10,086	1,295	2,317	104	1,045	6,386	511	2,528
Metallurgy	114	13	14	0	0	23	0	4
Meteorology	196	23	213	9	42	48	43	220
Physics	8,484	1,174	2,412	47	585	3,912	396	2,345
Geology	2,273	322	193	44	100	1,313	64	288
Oceanography	175	10	148	5	21	46	37	158
Other	372	52	594	8	54	96	174	247
Psychology, total	9,611	3,376	482	150	376	3,445	222	1,133
Psychology, general	5,305	2,082	193	81	191	2,127	157	585
General psychology	2,877	936	84	49	170	697	35	248
Experimental psychology	642	71	84	18	6	249	11	205
Clinical psychology	471	159	75	0	7	188	7	59
Other	316	128	46	2	2	184	12	36
Religion, total	6,333	1,735	11	14	82	390	5	6
Social sciences, total	39,249	9,486	847	167	1,021	9,792	340	1,223
Social sciences, general	4,413	1,812	56	51	37	279	24	116
Anthropology	1,506	361	44	7	31	686	24	59
Economics	6,321	1,430	239	31	163	1,867	124	396
History	12,623	2,208	40	5	294	3,052	8	107
Political science or government	5,930	1,173	61	20	106	1,652	32	89
Sociology	5,476	1,691	184	30	151	1,579	100	250
Public administration	213	94	11	0	10	40	0	14
Industrial relations	206	25	67	5	0	100	0	41
Social work	1,868	499	87	6	174	316	17	48
Other	693	193	58	12	55	221	11	103

Table 1. -- Full-time and part-time teaching and research staff members in institutions of higher education, by level of appointment and by major academic area and field: Aggregate United States, fall 1968--Continued

Major teaching or research field	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Technologies, total	7,102	3,114	26	0	215	418	0	67
Technologies, general	1,604	1,384	11	0	19	117	0	10
Engineering and industrial technology	3,157	821	13	0	143	173	0	8
Other technologies	2,341	909	2	0	53	128	0	49
TOTAL, all fields	333,976	96,064	31,290	4,776	15,998	80,196	9,309	24,475

Table 2. -- Full-time and part-time teaching and research staff members, by level of appointment and major academic area:
All institutions of higher education, aggregate United States, fall 1968

Academic area	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Agriculture	3,123	360	3,865	192	105	584	631	2,472
Architecture	1,663	509	23	11	8	180	7	20
Biological sciences	19,011	3,453	3,635	425	1,604	5,419	1,882	3,170
Business and commerce	17,845	7,480	251	85	518	3,877	43	336
City planning	412	163	60	33	29	183	18	50
Communications	6,470	2,343	43	15	265	854	164	139
Computer sciences	4,071	2,885	1,237	154	489	1,009	511	854
Education	37,099	8,538	662	141	1,066	5,484	959	1,353
Engineering	16,972	2,820	5,766	247	1,600	5,959	1,430	4,637
English	28,770	4,961	72	15	1,092	6,310	98	274
Fine and applied arts	29,381	8,097	130	20	849	5,345	10	101
Foreign languages	19,100	3,704	91	38	791	5,998	37	155
Forestry	582	52	277	15	23	128	57	423
Geography	2,558	250	27	6	118	994	10	113
Health professions	25,328	21,508	5,635	2,675	2,578	3,023	1,100	739
Home economics	3,639	988	242	23	123	671	67	345
Law	2,504	956	48	6	60	209	26	26
Library science	1,598	372	18	8	105	391	29	66
Mathematics	18,909	4,220	1,041	78	612	5,808	180	509
Military sciences	2,354	41	0	0	294	51	0	0
Philosophy	5,368	777	20	6	82	1,117	0	72
Physical sciences	24,924	3,876	6,781	252	1,893	12,557	1,483	6,192
Psychology	9,611	3,376	482	150	376	3,445	222	1,133
Religion	6,333	1,735	11	14	82	390	5	6
Social sciences	39,249	9,486	847	167	1,021	9,792	340	1,223
Technologies	7,102	3,114	26	0	215	418	0	67
Total	333,976	96,064	31,290	4,776	15,998	80,196	9,309	24,475

Table 2A. -- Full-time and part-time teaching and research staff members, by level of appointment and major academic area: Universities, aggregate United States, fall 1968

Academic area	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Agriculture	2,020	272	3,863	191	80	562	631	2,472
Architecture	1,325	346	23	11	8	168	1	18
Biological sciences	8,683	1,379	3,544	387	1,190	4,159	1,753	3,095
Business and commerce	5,996	1,828	197	85	227	2,615	43	336
City planning	287	114	34	14	29	181	18	48
Communications	1,582	464	43	15	208	557	164	139
Computer sciences	716	532	455	69	64	522	410	631
Education	11,688	2,425	562	114	819	4,159	958	1,292
Engineering	11,008	1,690	4,414	231	1,235	4,978	1,149	4,267
English	8,207	964	65	13	861	5,175	98	274
Fine and applied arts	9,128	2,040	94	18	566	4,077	10	61
Foreign languages	7,822	1,137	88	28	582	5,340	37	151
Forestry	468	12	259	4	23	109	45	410
Geography	919	87	23	2	60	752	10	113
Health professions	18,870	17,598	5,493	2,613	2,084	2,458	1,052	730
Home economics	1,639	234	242	23	77	498	59	345
Law	1,928	642	48	6	57	198	26	26
Library science	673	196	18	8	44	309	3	66
Mathematics	6,589	933	830	68	389	4,896	165	500
Military sciences	1,113	8	0	0	189	0	0	0
Philosophy	1,970	160	12	2	60	981	0	17
Physical sciences	9,835	1,088	6,223	231	1,278	10,619	1,254	5,769
Psychology	3,185	712	391	99	340	2,772	177	1,073
Religion	934	203	5	2	22	242	5	6
Social sciences	14,643	2,438	746	141	824	8,293	317	1,136
Technologies	1,014	77	26	0	63	278	0	67
Total	132,242	37,579	27,698	4,375	11,379	64,898	8,385	23,042

Table 2B. -- Full-time and part-time teaching and research staff members, by level of appointment and major academic area: Other 4-year institutions, aggregate United States, fall 1968

Academic area	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Agriculture	632	54	2	1	12	20	0	0
Architecture	210	61	0	0	0	12	6	2
Biological sciences	7,704	1,427	91	38	369	1,247	129	75
Business and commerce	6,899	2,790	54	0	236	980	0	0
City planning	115	49	26	19	0	2	0	2
Communications	1,909	610	0	0	57	281	0	0
Computer sciences	1,812	1,048	782	85	260	437	101	223
Education	21,839	5,165	100	27	231	1,312	1	61
Engineering	4,826	961	1,352	16	326	962	281	370
English	13,756	1,821	7	2	219	1,080	0	0
Fine and applied arts	15,925	3,914	36	2	266	1,151	0	40
Foreign languages	9,562	1,795	3	10	181	559	0	4
Forestry	77	13	18	11	0	19	12	13
Geography	1,473	105	4	4	58	242	0	0
Health professions	4,380	3,711	142	62	450	532	48	9
Home economics	1,686	422	0	0	46	148	8	0
Law	539	277	0	0	3	11	0	0
Library science	782	118	0	0	61	41	26	0
Mathematics	8,642	1,582	211	10	223	854	15	9
Military sciences	1,196	33	0	0	105	51	0	0
Philosophy	3,037	421	8	4	22	136	0	55
Physical sciences	11,377	1,553	558	21	546	1,883	229	423
Psychology	4,991	1,491	91	51	36	645	45	60
Religion	5,098	1,462	6	12	60	148	0	0
Social sciences	19,038	3,706	101	26	193	1,296	23	87
Technologies	1,035	104	0	0	4	55	0	0
Total	148,540	34,693	3,592	401	3,964	14,104	924	1,433

Table 2C. -- Full-time and part-time teaching and research staff members, by level of appointment and major academic area: 2-year institutions, aggregate United States, fall 1968

Academic area	Senior staff				Junior staff			
	Resident instruction and departmental research		Organized research		Resident instruction and departmental research		Organized research	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Agriculture	471	34	0	0	13	2	0	0
Architecture	128	102	0	0	0	0	0	0
Biological sciences	2,624	647	0	0	45	13	0	0
Business and commerce	4,950	2,862	0	0	55	282	0	0
City planning	10	0	0	0	0	0	0	0
Communications	2,979	1,269	0	0	0	16	0	0
Computer sciences	1,543	1,305	0	0	165	50	0	0
Education	3,572	948	0	0	16	13	0	0
Engineering	1,138	169	0	0	39	19	0	0
English	6,807	2,176	0	0	12	55	0	0
Fine and applied arts	4,328	2,143	0	0	17	117	0	0
Foreign languages	1,716	772	0	0	28	99	0	0
Forestry	37	27	0	0	0	0	0	0
Geography	166	58	0	0	0	0	0	0
Health professions	2,078	199	0	0	44	33	0	0
Home economics	314	332	0	0	0	25	0	0
Law	37	37	0	0	0	0	0	0
Library science	143	58	0	0	0	41	0	0
Mathematics	3,678	1,705	0	0	0	58	0	0
Military sciences	45	0	0	0	0	0	0	0
Philosophy	361	196	0	0	0	0	0	0
Physical sciences	3,712	1,235	0	0	69	55	0	0
Psychology	1,435	1,173	0	0	0	28	0	0
Religion	301	70	0	0	0	0	0	0
Social sciences	5,568	3,342	0	0	4	203	0	0
Technologies	5,053	2,933	0	0	148	85	0	0
Total	53,194	23,792	0	0	655	1,194	0	0

Table 3. --Senior teaching and research staff members in institutions of higher education, by level of institution, employment status, and institutional control: Aggregate United States, fall 1968

Teaching and research staffs, employment status, and institutional control	All institutions	Universities	Other 4-year	2-year
Resident instruction and departmental research:				
Full-time	<u>333,976</u>	<u>132,242</u>	<u>148,540</u>	<u>53,194</u>
Public	216,156	91,554	77,611	46,991
Private	117,820	40,688	70,929	6,203
Part-time	<u>96,064</u>	<u>37,579</u>	<u>34,693</u>	<u>23,792</u>
Public	46,426	14,994	10,991	20,441
Private	49,638	22,585	23,702	3,351
Organized research:				
Full-time	<u>31,290</u>	<u>27,698</u>	<u>3,592</u>	0
Public	19,212	18,505	707	0
Private	12,078	9,193	2,885	0
Part-time	<u>4,776</u>	<u>4,375</u>	<u>401</u>	0
Public	1,914	1,737	177	0
Private	2,862	2,638	224	0

Table 4. -- Full-time senior staff for teaching and research (combined) in institutions of higher education, by academic area: Aggregate United States, fall 1967 and 1968 and spring 1969

Academic area	OE fall 1967	OE fall 1968	NSF spring 1969
Agriculture	<u>1</u> /7,962	<u>1</u> /6,988	<u>1</u> /7,447
Architecture	1,668	1,686	
Biological sciences	19,124	22,646	24,975
Business and commerce	18,793	18,096	
City planning		472	
Communications subjects (excludes journalism)		5,156	
Computer sciences		5,308	
Education (includes physical education)	36,847	37,761	
Engineering	18,151	22,738	25,416
English (includes journalism)	29,465	30,199	
Fine and applied arts	28,616	29,511	
Foreign languages	17,950	19,191	
Forestry	924	859	
Geography	2,278	2,585	
Health professions	30,044	30,963	28,475
Home economics	3,501	3,881	
Law	2,840	2,552	
Library science	1,625	1,616	
Mathematics..	16,535	19,950	19,085
Military sciences	2,282	2,354	
Philosophy	5,024	5,388	
Physical sciences	24,822	31,705	33,478
Psychology	8,729	10,093	10,823
Religion	6,180	6,344	
Social sciences	<u>2</u> /36,274	<u>2</u> /40,096	<u>1</u> /40,937
Technologies	6,546	7,128	
Other	4,386		
Total	330,566	365,266	<u>3</u>/

1/ Includes agricultural economics.

2/ Excludes agricultural economics.

3/ Total not applicable. The National Science Foundation only surveys the sciences.

Table 5.--Ratio of earned degrees conferred to full-time-equivalent senior faculty in universities and other 4-year institutions, by academic area: Aggregate United States, for 1967-68 and 1968-69

Academic area ^{1/}	1968-69	1967-68
Agriculture	1.6	1.1
Architecture	2.3	2.0
Biological sciences	2.1	2.3
Business and commerce	7.8	6.1
City planning	1.4	--
Computer sciences	0.5	--
Education	6.2	5.8
Engineering	2.7	3.1
English and journalism	2.8	2.5
Fine and applied arts	1.5	1.2
Foreign languages	1.5	1.4
Forestry	2.9	2.2
Geography	1.6	1.4
Health professions	0.7	0.6
Home economics	2.7	2.5
Law	0.4	0.4
Library science	4.4	3.9
Mathematics	2.0	2.1
Military sciences	0.8	0.9
Philosophy	1.4	1.3
Physical sciences	1.1	1.2
Psychology	3.7	3.5
Religion	1.3	1.2
Social sciences	4.6	4.3
Technologies	2.1	1.5
All areas	2.8	2.7

^{1/} Excludes "communications," an area not separately identified in the surveys of earned degrees.

A P P E N D I X E S

A. Sample Design and Selection

B. Reliability of Estimates

C. Survey Report Form

APPENDIX A

SAMPLE DESIGN AND SELECTION

The basic population of inquiry comprised the 2,495 institutions of higher education which formed the universe on which the 1968 survey of Opening Fall Enrollment was based.^{1/} The source of this universe was the Education Directory, 1966-67, Part 3, Higher Education (OE-50000-67), with such additions, deletions, mergers, and separations as were known to the Office of Education in the fall of 1968.

The population of inquiry for each of the 26 academic areas was a subset of the basic population. The frames used to draw the samples for 23 of the 26 areas (city planning, communications, and computer science were excluded) were developed by obtaining a listing of all the institutions that reported having faculty in an academic area in the HEGIS II (1967) survey. For institutions new to the 1968 listing, a review of their catalogs provided the information necessary to determine the academic areas in which they had faculty. These institutions were then added to the listings in the appropriate areas. The frames do not include, for individual institutions, new areas reportable for the first time in 1968. Since the number of faculty that may be added in a new academic area in an institution is usually small, the effect of this form of bias is considered negligible.

Since there was no prior information available regarding the institutions that had faculty in the areas of city planning, communications, and computer sciences, the total universe of institutions was used as the frame for drawing these samples.

To reduce the burden on respondents, an administrative decision was made to limit to 10 the maximum of academic areas to be reported by any institution.

The sample design used in all areas was a single-stage stratified simple random sample. The institutions in each academic-area frame were stratified by control (public or private) and by level (university, other 4-year, or 2-year institutions). Institutions with faculty in fields of study for which degrees were awarded by 10 or fewer institutions were selected to fall in the sample with certainty (e. g., farm management

^{1/} U. S. Office of Education. Opening Fall Enrollment in Higher Education, 1968: Part B--Institutional Data (OE-54003-68 Part B). Washington, D. C.: U. S. Government Printing Office, 1969. This publication lists the institutions in the universe of higher education.

in agriculture, optometry in health professions, and metallurgy and oceanography in physical sciences). The remaining institutions in the strata were ranked by size of total faculty in the area based on data from HEGIS II or on the numbers reported in the catalogs for the new institutions.

The size of the sample required to provide an estimate of the total number of faculty in each academic area with a relative error of 10 percent at the 95 percent confidence level was computed. This number was then allocated among the six strata in the area in proportion to the number of faculty in the stratum to the total number of faculty in the area. Institutions were further stratified within each stratum based upon the number of faculty. In general, the sample included, with certainty, those institutions with a faculty size greater than the total number of faculty in a stratum divided by twice the sample number. For the remaining institutions, depending upon the degree of skewness in the distribution in the stratum, other strata were defined so that the aggregate number of faculty of the respective strata were about the same. After a random start, a systematic sample of institutions was selected in each of these strata with the sampling fraction being dependent upon the number of institutions in the stratum.

For city planning, communications, and computer science, student enrollment was used as the measure of size to determine the allocation of the number in the sample in these areas. No additional stratification was attempted in the basic strata. After a random start, a systematic random sample was selected in each of the six strata.

After the 26 different samples were selected, they were reviewed to determine if the administrative requirements of not more than 10 areas in any one institution had been met. If an institution appeared in more than 10 areas the procedure used was to select, in a random manner, the area or areas necessary to reduce the institution's participation to no more than 10 areas.

Table A gives the details of the sample selection and response for each of the academic areas.

Population estimates were obtained by multiplying the edited sample stratum data by the inflation factor (reciprocal of the sampling fraction), although the actual factors used reflected adjustment for nonresponses. Aggregate United States figures and other summaries were obtained by summing over the appropriate expanded strata.

Table A. --Number of institutions of higher education in the population and in the sample, number responding, and response rate, by academic area: Aggregate United States, fall 1968

Academic area	Number of institutions in population	Number of institutions in sample	Number of institutions responding	Response rate
Agriculture	285	107	104	97.2
Architecture	148	71	65	91.5
Biological sciences	1,918	426	418	98.1
Business and commerce	1,651	361	351	97.2
City planning	^{1/} 148	48	48	100.0
Communications	^{1/} 1,033	251	251	100.0
Computer sciences	^{1/} 1,751	184	184	100.0
Education	1,956	410	405	98.8
Engineering	665	200	192	96.0
English	2,163	453	445	98.2
Fine and applied arts	2,032	437	428	97.9
Foreign languages	1,912	374	366	97.9
Forestry	78	38	37	97.4
Geography	541	165	159	97.0
Health professions	709	217	211	97.2
Home economics	600	161	159	98.8
Law	218	103	100	97.1
Library science	365	122	121	99.2
Mathematics	2,016	419	402	95.9
Military sciences	263	132	129	97.7
Philosophy	1,255	264	259	98.1
Physical sciences	1,943	404	398	98.5
Psychology	1,606	369	365	98.9
Religion	1,155	229	227	99.6
Social sciences	2,143	487	478	98.2
Technologies	610	144	141	97.9

^{1/} These are estimates of the number of institutions in the population that were obtained by a random sample selected from all institutions.

APPENDIX B

RELIABILITY OF ESTIMATES

Since the estimates are based upon samples, they may differ somewhat from figures that would have been obtained if a complete count had been taken using the same schedules, instructions, and procedures. As in any survey, the results are subject to errors of response and of reporting as well as being subject to sampling variability.

The standard error is primarily a measure of sampling variability, that is, of the variations that occur by chance because a sample rather than the whole of the population is surveyed. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error.

The figures presented in table B are approximations of the standard errors of various estimates shown in this report. In order to derive standard errors that would be applicable to a wide variety of items and could be prepared at a moderate cost, a number of approximations were required. As a result, the table of standard errors provides an indication of the order of magnitude of the standard errors rather than the precise standard error for any specific item. These standard errors are to be used for the data reported in tables 1 and 2.

Table B. --Standard errors of estimated numbers of faculty teaching and research staff in institutions of higher education: Aggregate United States, fall 1968

Estimated number of faculty	68 chances out of 100	
	Resident instruction and departmental research	Organized research
50	10	7
100	16	12
250	30	30
500	50	50
750	70	75
1,000	85	95
2,500	170	220
5,000	285	410
7,500	385	590
10,000	475	765
15,000	640	1,100
20,000	795	1,425
25,000	935	1,740
50,000	1,650	3,245
100,000	2,595	6,040
200,000	4,325	--
300,000	5,825	--
350,000	6,530	--
400,000	7,215	--
500,000	8,500	--
600,000	9,725	--

Illustration of the use of the table of standard errors. The estimated number of full-time senior staff resident instruction and departmental research faculty in education is shown in table 1 of this report as being 37,099. Table B shows the standard error of an estimate of this size to be approximately 1,235. The chances are 68 out of 100 that the estimate would have been a figure differing from a complete count by less than 1,235. The chances are 95 out of 100 that the estimate would have been a figure differing from a complete count by less than 2,470 (twice the standard error).

The estimated number of part-time junior staff organized research faculty in education is shown in table 1 of this report as being 1,353. Table B shows the standard error of an estimate of this size to be approximately 125. The chances are 68 out of 100 that the estimate would have been a figure differing from a complete count by less than 125. The chances are 95 out of 100 that the estimate would have been a figure differing from a complete count by less than 250 (twice the standard error).

APPENDIX C

BUDGET BUREAU NO. 51-RO567
APPROVAL EXPIRES: 6-30-69

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY

INSTRUCTIONS AND DEFINITIONS FOR OE FORM 2300-3

FULL-TIME AND PART-TIME FACULTY BY MAJOR FIELD OF TEACHING AND RESEARCH, FALL TERM 1968

SCOPE

Responses to the survey should include all organizational units of your institution; i.e., campuses, branches, Agricultural Experiment Stations, and Federal Contract Research Centers. The survey only covers professional staff holding regular positions in which the primary function is Resident Instruction and Departmental Research or Organized Research. Administrative personnel and those performing a service function within the institution are excluded from the survey unless they perform a dual function with resident instruction or research being their major role. For example, Deans of Instruction, Deans of Schools, Heads of Schools, and Directors of Research should be excluded unless the major portion of their time is devoted to instruction or research. Similarly, computer programmers, librarians, and food service personnel should be excluded unless their primary function is instruction or research. Student employees should be included if they perform an instructional or research function on a professional level.

The survey includes professional resident instruction and departmental research, or organized research personnel who:

- 1.) are salaried, or paid on an hourly basis,
- 2) contribute their services (e.g., members of religious orders, or members of military organizations),
- 3) are on sabbatical leave.

The survey excludes professional resident instruction and departmental research, or organized research personnel who are:

- 1) on leave without pay,
- 2) on overseas service,
- 3) on temporary assignment for less than 1 full term,
- 4) on retirement or emeriti status,
- 5) cooperating with, but not employed by your institution.

DEFINITIONS

REGULAR POSITION—a position which functions for at least 1 full term. Exclude persons hired only for peak periods, or for brief periods of consultation.

PROFESSIONAL STAFF—those holding positions which normally require a bachelor's or higher degree. Exclude personnel employed in clerical or other nonprofessional positions even though the persons may hold a degree.

SENIOR STAFF—persons holding ranks of Professor through Instructor, or the equivalent. Ranks such as Lecturer, Adjunct Professor, Interim Professor, Associate Instructor, etc., should be reported as senior staff if these ranks are judged to be comparable to those of Professor or Instructor. If ranks held by the organized research staff do not correspond, please equate those ranks, as closely as possible, to the ranks of Professor through Instructor. Exclude Deans and Directors of Research and all staff whose primary function is administration rather than instruction or research. Institutions with faculty of undesignated ranks should report their staff according to the appropriate equivalent rank.

JUNIOR STAFF—professional personnel holding positions below the rank of instructor. Junior staff members are usually students holding positions with titles such as Teaching Assistant, Teaching Fellow,

Research Assistant, and Research Fellow. It should be noted that the distinction between senior and junior staff is one of rank not tenure. (*Institutions with faculty of undesignated rank, see Senior Staff.*)

RESIDENT INSTRUCTION AND DEPARTMENTAL RESEARCH—formal classroom instruction or research related to the instructional process as conducted on the main or branch campus of an institution. Exclude all personnel who offer instruction in extension. Include instructional personnel in the evening school if the evening school is not operated as a part of the extension division in your institution.

ORGANIZED RESEARCH—separately budgeted or sponsored research. Exclude departmental research which should be reported under Resident Instruction and Departmental Research.

TEACHING OR RESEARCH FIELD—the academic specialty with which a teacher or researcher is presently identified as an employee of your institution. This specialty is not necessarily the field in which a staff member received a degree, the field of his greatest interest, or the field of his greatest competence.

(Please see reverse for Instructions)

INSTRUCTIONS

1. Please report the number of staff members, defined under **DEFINITIONS**, according to their teaching or research field. If staff members at your institution are identified with a field which is not included in the list of fields within the areas to which you are responding, please write the name of the field in the space provided at the end of that area.

Institutions in which staff members are identified by academic area, rather than by field, should report their staff on the line beside the appropriate area. Examples of academic areas are Agriculture, Architecture, Biological Sciences, Business and Commerce, etc.

2. Report each person once. Persons performing two functions (*resident instruction and organized research*) or in more than one field should be reported under the function or field that occupies the greater portion of their time. If each function or field

occupies an equal amount of time, make an arbitrary decision as to where he should be reported.

3. "Full-time" and "part-time" refer to status of employment. A full-time employee engaged in more than one function or field should be reported only once as full-time in his primary function or field. Similarly a part-time employee should be counted only once in his primary function or field.
4. Your comments will be very helpful when evaluating the information reported in this survey. We would appreciate your response to the questions contained on Page 11 of OE Form 2300-3. Thank you for your cooperation.
5. If you need additional clarification on any of the items, please call Mr. Richard M. Beazley, Area Code 202, 962-7301, in Washington, D.C.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, O. C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY
FULL- AND PART-TIME FACULTY BY MAJOR FIELD
OF TEACHING AND RESEARCH, FALL TERM 1968

BUDGET BUREAU NO. 51-R0567
APPROVAL EXPIRES: 6-30-69

REPORTING DATE
NOT LATER THAN 11-1-68

1. INSTITUTION CODE NUMBER

Please read Instructions and Definitions before completing this form.

- A. This is a survey to determine the feasibility of collecting data on the academic fields of professional teaching or research personnel in institutions of higher education. Since this is a sample survey, it is very important that we receive a complete and accurate response from all institutions in the sample.
- B. Although your institution's response is limited to the academic areas specified in paragraph D, it is advisable to refer to the entire list before responding.
- C. In addition to your report of faculty in the selected areas specified in paragraph D, please report the total numbers of professional personnel in Resident Instruction and Departmental Research, and Organized Research in ALL academic fields. These totals include all personnel reported on the questionnaire, plus the appropriate personnel in ALL other academic fields at your institution. These totals are reported on Line 1.

D. Each institution is asked to respond to only a few selected academic areas. Please provide data on the fields of your teaching and research staff within the following academic areas:

2. CORPORATE NAME AND ADDRESS OF INSTITUTION (Include ZIP code)

3. NAME AND TITLE OF RESPONDENT

4. AREA CODE - TELEPHONE NUMBER - EXTENSION

LINE NO.	MAJOR TEACHING OR RESEARCH FIELD (1)		SENIOR STAFF				JUNIOR STAFF				
			RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		
			FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)	
1.	TOTAL PROFESSIONAL PERSONNEL IN ALL ACADEMIC FIELDS (See paragraph C above)										
2.	1000	AGRICULTURE									
3.	1003	AGRICULTURE BUSINESS									
4.	1002	AGRONOMY									
5.	1004	ANIMAL SCIENCE									
6.	1007	DAIRY SCIENCE									
7.	1013	FARM MANAGEMENT									
8.	1014	FISH, GAME OR WILDLIFE MANAGEMENT									
9.	1016	FOOD SCIENCE									
10.	1019	HORTICULTURE									

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

L I N E NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
	1000 AGRICULTURE (Continued)								
11.	1025 POULTRY SCIENCE								
12.	1028 SOIL SCIENCE								
13.	1037 OTHER (Specify)								
14.									
15.									
16.									
17.									
18.	1400 ARCHITECTURE								
19.	1700 BIOLOGICAL SCIENCES								
20.	1714 ANATOMY, HISTOLOGY, EMBRYOLOGY								
21.	1721 BIOCHEMISTRY								
22.	1724 BIOPHYSICS								
23.	1707 BOTANY								
24.	1733 ENTOMOLOGY								
25.	1736 GENETICS								
26.	1716 MICROBIOLOGY								
27.	1737 NUTRITION								
28.	1742 PATHOLOGY								
29.	1745 PHARMACOLOGY								
30.	1747 PHYSIOLOGY								
31.	1710 ZOOLOGY								
32.	1757 OTHER (Specify)								
33.									
34.									
35.									

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

LINE NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
36.	2000	BUSINESS AND COMMERCE							
37.	2003	FINANCE							
38.	2002	ACCOUNTING							
39.	2004	HOTEL AND RESTAURANT ADMINISTRATION							
40.	2005	OFFICE MANAGEMENT							
41.	2006	MARKETING (include Retail Sales, Advertising, Wholesaling & Purchasing)							
42.	2007	MANAGEMENT (administration, production, personnel)							
43.	2008	INSURANCE AND ACTUARIAL SCIENCE							
44.	2009	REAL ESTATE							
45.	2020	OTHER (Specify)							
46.									
47.									
48.									
49.	1500	CITY PLANNING							
50.	1600	COMMUNICATIONS SUBJECTS							
51.	1601	COMMUNICATIONS							
52.	1602	JOURNALISM							
53.	1603	RADIO/TV							
54.	1610	OTHER (Specify)							
55.									
56.									
57.									
58.	2100	COMPUTER SCIENCE, DATA PROCESSING, OR SYSTEMS ANALYSIS							
59.	2110	COMPUTER SCIENCE							
60.	2105	DATA PROCESSING							

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

LINE NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
	2100	COMPUTER SCIENCE, DATA PROCESSING, OR SYSTEMS ANALYSIS (Continued)							
61.	2120	SYSTEMS ANALYSIS							
62.	2130	OTHER (Specify)							
63.									
64.									
65.									
66.	2300	EDUCATION							
67.	2356	ELEMENTARY EDUCATION							
68.	2359	SECONDARY EDUCATION (include junior high school)							
69.	2302	SPECIAL & REMEDIAL EDUCATION							
70.	2303	HIGHER EDUCATION (include junior college)							
71.	2365	ADULT EDUCATION							
72.	2374	SOCIAL FOUNDATIONS (comparative, historical, & philosophical)							
73.	2377	EDUCATIONAL PSYCHOLOGY							
74.	2372	COUNSELING, GUIDANCE, OR STUDENT PERSONNEL							
75.	2371	ADMINISTRATION OR SUPERVISION							
76.	2375	CURRICULUM, INSTRUCTION, OR INSTRUCTIONAL MATERIALS							
77.		SPECIALIZED TEACHING FIELDS							
78.	2322	ART OR MUSIC EDUCATION							
79.	2325	BUSINESS OR DISTRIBUTIVE EDUCATION							
80.	2304	ENGLISH EDUCATION							
81.	2305	FOREIGN LANGUAGE EDUCATION							
82.	2306	HOME ECONOMICS EDUCATION							
83.	2333	INDUSTRIAL ARTS EDUCATION							
84.	2308	LIBRARY EDUCATION							
85.	2309	MATHEMATICS EDUCATION							

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

LINE NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF					
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH			
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)		
	2300	EDUCATION (Continued) SPECIALIZED TEACHING FIELDS (Cont'd)									
86.	2318	NURSING EDUCATION									
87.	2301	PHYSICAL EDUCATION, HEALTH OR RECREATION									
88.	2320	RELIGIOUS EDUCATION									
89.	2321	SCIENCE EDUCATION (include Agriculture, Biology, Physical & Social Sciences)									
90.	2323	SPEECH EDUCATION (report Speech Correction under Special and Remedial Education, Line 69)									
91.	2382	OTHER (Specify)									
92.											
93.											
94.											
95.	2600	ENGINEERING									
96.	2602	AEROSPACE AND AERONAUTICAL ENGINEERING									
97.	2607	AGRICULTURAL ENGINEERING									
98.	2608	ARCHITECTURAL ENGINEERING									
99.	2614	CHEMICAL ENGINEERING									
100.	2621	CIVIL ENGINEERING									
101.	2632	ELECTRICAL ENGINEERING									
102.	2645	ENGINEERING SCIENCE (include Engineering Mechanics)									
103.	2647	GENERAL ENGINEERING									
104.	2649	GEOLOGICAL ENGINEERING									
105.	2653	INDUSTRIAL ENGINEERING									
106.	2660	MECHANICAL ENGINEERING									
107.	2670	METALLURGICAL AND MATERIALS ENGINEERING									
108.	2672	MINING ENGINEERING									
109.	2674	NAVAL ARCHITECTURAL ENGINEERING									
110.	2675	NUCLEAR ENGINEERING									

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

L I N E NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
	2600 ENGINEERING (Continued)								
111.	2678 PETROLEUM ENGINEERING								
112.	2680 SANITARY ENGINEERING								
113.	2681 OTHER (Specify)								
114.									
115.									
116.									
117.	2900 ENGLISH								
118.	(Specify)								
119.									
120.									
121.	3200 FINE AND APPLIED ARTS								
122.	3201 ART								
123.	3204 MUSIC								
124.	3207 SPEECH AND DRAMA (report Speech Correction on Line 69)								
125.	3208 APPLIED ARTS AND CRAFTS								
126.	3213 OTHER (Specify)								
127.									
128.									
129.									
130.	3500 FOREIGN LANGUAGES								
131.	3501 LINGUISTICS								
132.	3564 CHINESE								
133.	3520 FRENCH								
134.	3540 GERMAN								
135.	3511 GREEK								

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

LINE NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
	3500 FOREIGN LANGUAGES (Continued)								
136.	3568 HEBREW								
137.	3522 ITALIAN								
138.	3576 JAPANESE								
139.	3512 LATIN								
140.	3524 PORTUGUESE								
141.	3526 SPANISH								
142.	3580 RUSSIAN								
143.	3590 OTHER (Specify)								
144.									
145.									
146.									
147.	3800 FORESTRY								
148.	(Specify)								
149.									
150.									
151.	4100 GEOGRAPHY								
152.	4400 HEALTH PROFESSIONS								
153.	4401 CHIROPODY OR PODIATRY								
154.	4404 DENTAL HYGIENE								
155.	4407 DENTISTRY AND DENTAL SPECIALTIES								
156.	4410 HOSPITAL ADMINISTRATION								
157.	4412 MEDICAL RECORDS SCIENCE AND MEDICAL RECORDS LIBRARIANSHIP								
158.	4416 MEDICINE AND MEDICAL SPECIALTIES								
159.	4419 NURSING OR PUBLIC HEALTH NURSING								
160.	4422 OCCUPATIONAL THERAPY								

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

LINE NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
	4400 HEALTH PROFESSIONS (Continued)								
161.	4425 OPTOMETRY								
162.	4428 OSTEOPATHY								
163.	4431 PHARMACY								
164.	4434 PHYSICAL THERAPY OR PHYSIOTHERAPY								
165.	4437 PUBLIC HEALTH								
166.	4443 VETERINARY MEDICINE AND VETERINARY SPECIALTIES								
167.	4455 OTHER (Specify)								
168.									
169.									
170.									
171.	4700 HOME ECONOMICS								
172.	4702 EQUIPMENT AND FAMILY HOUSING								
173.	4707 CLOTHING AND TEXTILES								
174.	4705 HOME MANAGEMENT AND CHILD DEVELOPMENT								
175.	4710 FOODS AND NUTRITION								
176.	4713 INSTITUTIONAL MANAGEMENT OR ADMINISTRATION								
177.	4719 OTHER (Specify)								
178.									
179.									
180.									
181.	5000 LAW								
182.	(Specify)								
183.									
184.									

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

L I N E N O	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
185.	S300 LIBRARY SCIENCE (include School Librarianship)								
186.	5600 MATHEMATICAL SUBJECTS								
187.	5601 MATHEMATICS								
188.	5607 STATISTICS								
189.	5900 MILITARY SCIENCES								
190.	6500 PHILOSOPHY								
191.	6800 PHYSICAL SCIENCES								
192.	6804 ASTRONOMY								
193.	6807 CHEMISTRY								
194.	6810 METALLURGY								
195.	6813 METEOROLOGY								
196.	6816 PHYSICS								
197.	6819 GEOLOGY (include Geophysics)								
198.	6825 OCEANOGRAPHY								
199.	6831 OTHER (Specify)								
200.									
201.									
202.									
203.	7100 PSYCHOLOGY (report Educational Psychology on Line 73)								
204.	7101 GENERAL PSYCHOLOGY								
205.	7107 EXPERIMENTAL PSYCHOLOGY								
206.	7102 CLINICAL PSYCHOLOGY								
207.	7110 OTHER (Specify)								
208.									
209.									

CORPORATE NAME OF INSTITUTION

1. INSTITUTION CODE NUMBER

L I N E NO.	MAJOR TEACHING OR RESEARCH FIELD (1)	SENIOR STAFF				JUNIOR STAFF			
		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH		RESIDENT INSTRUCTION & DEPARTMENTAL RESEARCH		ORGANIZED RESEARCH	
		FULL-TIME (2)	PART-TIME (3)	FULL-TIME (4)	PART-TIME (5)	FULL-TIME (6)	PART-TIME (7)	FULL-TIME (8)	PART-TIME (9)
210.	7400 RELIGION								
211.	(Specify)								
212.									
213.									
214.	7700 SOCIAL SCIENCES								
215.	7707 ANTHROPOLOGY								
216.	7713 ECONOMICS								
217.	7731 AGRICULTURAL ECONOMICS								
218.	7716 HISTORY								
219.	7722 POLITICAL SCIENCE OR GOVERNMENT								
220.	7725 SOCIOLOGY								
221.	7740 PUBLIC ADMINISTRATION								
222.	7737 INDUSTRIAL RELATIONS								
223.	7743 SOCIAL WORK								
224.	7746 OTHER (Specify)								
225.									
226.									
227.									
228.	8400 TECHNOLOGIES								
229.	8401 ENGINEERING AND INDUSTRIAL TECHNOLOGY								
230.	8402 OTHER TECHNOLOGIES								
231.	9800 TOTAL (Sum of Lines 2 through 230)								

REMARKS

CORPORATE NAME OF INSTITUTION	1. INSTITUTION CODE NUMBER
-------------------------------	----------------------------

WHICH OF THE FOLLOWING WERE USED AS A BASIS FOR THE IDENTIFICATION OF THE ACADEMIC FIELDS OF FACULTY MEMBERS AT YOUR INSTITUTION?

- TITLES OF INDIVIDUAL FACULTY MEMBERS
 DEPARTMENTAL AFFILIATION
 OTHER (*Specify*)

WHEN DEPARTMENTAL AFFILIATION IS USED AS A BASIS FOR REPORTING FACULTY BY FIELD, THIS MAY RESULT IN OVERREPORTING IN THE FIELD CORRESPONDING TO THE DEPARTMENT AND UNDERREPORTING IN ANOTHER FIELD LISTED ON THE QUESTIONNAIRE. FOR EXAMPLE, IF ARCHITECTURAL ENGINEERING IS A PART OF THE DEPARTMENT OF ARCHITECTURE, AND THE ARCHITECTURAL ENGINEERING FACULTY CANNOT BE IDENTIFIED IN YOUR RECORDS, A REPORT BY DEPARTMENT WOULD OVERSTATE ARCHITECTURE AND UNDERSTATE ARCHITECTURAL ENGINEERING. BELOW, PLEASE INDICATE THE FIELD OF FACULTY THAT CANNOT BE SEPARATELY ENUMERATED, AND INDICATE THE FIELD IN WHICH THEY ARE INCLUDED. USING THE EXAMPLE ABOVE, "ARCHITECTURAL ENGINEERING" WOULD BE WRITTEN IN "FIELD OF ACTUAL SPECIALIZATION" COLUMN, AND "ARCHITECTURE" IN "FIELD WHERE REPORTED" COLUMN.

FIELD OF ACTUAL SPECIALIZATION	FIELD WHERE REPORTED	FIELD OF ACTUAL SPECIALIZATION	FIELD WHERE REPORTED

DO YOU FEEL THAT REPORTING INDIVIDUALS ONLY ONCE ACCORDING TO THEIR PRIMARY FUNCTION AND ACADEMIC FIELD GIVES A DISTORTED PICTURE OF YOUR STAFFS' EFFORTS? YES NO IF "YES", COMPLETE FOLLOWING STATEMENT(S).

THESE FIGURES TEND TO OVERSTATE YOUR STAFFS' EFFORTS IN:

- RESIDENT INSTRUCTION AND DEPARTMENTAL RESEARCH (*Specify fields*)
 ORGANIZED RESEARCH (*Specify fields*)

THESE FIGURES TEND TO UNDERSTATE YOUR STAFFS' EFFORTS IN:

- RESIDENT INSTRUCTION AND DEPARTMENTAL RESEARCH (*Specify fields*)
 ORGANIZED RESEARCH (*Specify fields*)

ADDITIONAL COMMENTS REGARDING THIS SURVEY (*If necessary, continue on plain paper.*)

RELATED NCES PUBLICATIONS

- OE-50057-67 Numbers and Characteristics of Employees in
 Institutions of Higher Education, Fall 1967
- OE-50057-66 Numbers and Characteristics of Employees in
 Institutions of Higher Education, Fall 1966
- OE-53015-68 Higher Education Salaries, 1967-68
- OE-53015-67 Higher Education Salaries, 1966-67
- OE-54003-68A Opening Fall Enrollment in Higher Education,
 1968: Part A - Summary Data
- OE-54003-68B Opening Fall Enrollment in Higher Education,
 1968: Part B - Institutional Data
- OE-54003-67 Opening Fall Enrollment in Higher Education,
 1967
- OE-54013-69A Earned Degrees Conferred, 1968-69:
 Part A - Summary Data
- OE-54013-69B Earned Degrees Conferred, 1968-69:
 Part B - Institutional Data
- OE-54013-68A Earned Degrees Conferred, 1967-68:
 Part A - Summary Data
- OE-54013-68B* Earned Degrees Conferred, 1967-68:
 Part B - Institutional Data
- OE-50000-67 Education Directory, 1966-67, Part 3,
 Higher Education

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