

FACULTY OUTPUT AND SALARY COSTS OF STATE RELATED UNIVERSITIES
ANALYSIS OF REPORTS SUBMITTED UNDER 1974 ACTS 46A, 47A, 48A, 61A

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GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA
JOINT STATE GOVERNMENT COMMISSION

Although the data of the four universities presented in this report are in tabular form conducive to comparisons, the data in the different tables present factors which are interrelated and should be considered as a whole in any comparative analysis. Rigorous comparisons require adjustments reflecting the differences in the faculty members included in the reports, the differences in the methods of assigning credits to faculty members, as well as the differences in the characteristics of members of the student body and the mix in levels of instruction. However, within the universities, efforts to economize can be observed on the basis of changes in class size, contact hours and student credit hour production, as well as expansion or retraction in programs and the magnitude of salary increases.

Table 1 presents the production of student credit hours, shows the wide range in overall magnitudes at the four universities, and the percentage increases in production both at the undergraduate and graduate level. Although Temple shows the greatest increase, part of the increase is due to revised reporting of student credit hours in 1974-1975. The three universities having a summer term continue to show a small production in this term. Seven percent at Penn State, 16% at Pitt and 13% at Temple of the total student credit hour production are summer student credit hours.

The data provided in the Snyder Report for 1974-1975 furnishes benchmarks for evaluation of the total student credit hours estimated for 1976-1977 in the budget requests:

	<u>Snyder Report</u> <u>1974-1975</u>	<u>Budget Request</u> <u>1976-1977</u>	<u>Percent</u> <u>Difference</u>
Penn State	1,576,000	1,794,000	14%
Pitt	816,000	830,000	2
Temple	747,000	738,000	- 1
Lincoln	35,000	41,000	17

These percentage increases cover a two-year span while the increases shown on Table 1 (first column) cover a one-year period.

The aggregate student credit hours represent different mixes in levels of instruction at the four universities. An idea of the differences can be obtained by consideration of the distribution of the degrees awarded in 1974-1975 (Table 4). While 85% of the degrees awarded at Penn State are A.B. degrees, only 57% and 59% of the degrees awarded at Pitt and Temple respectively are bachelor degrees. On the other hand, considering only the degrees higher than A.B., 27% of Penn State's are Ph.D's while 16% of Pitt's, and 10% of Temple's are Ph.D's. Thus, of the graduate student credit hours shown at Penn State and Pitt, a larger percent of them can be assumed to be at the graduate 2 level and the average graduate student credit hour should be expected to cost more than at Temple where only a small portion would be at the graduate 2 level. (For unit costs see Table 5) The 1976-1977 Budget Request data show the percentage of graduate credit hours at the graduate 2 level to be 20% for Penn State, 45% for Pitt and 10% for Temple.

The graduate student credit hours, as estimated in the budget, may also be compared for purposes of evaluation to those provided in the Snyder Report for 1974-1975!

	<u>Snyder Report</u> <u>1974-1975</u>	<u>Budget Request</u> <u>1976-1977</u>	<u>Percent</u> <u>Difference</u>
Penn State	139,000	212,000	53%
Pitt	197,000	211,000	7
Temple	212,000	199,000	- 6

Table 2. While Table 2 shows the total time spent per week, on the average, by full-time faculty members, an indication of the typical total workload can be obtained by observing the category of hours spent which has the largest number of faculty members. For example, in the Science Department the largest number--119 of Penn State faculty in Science reported spending altogether between 40 and 49 hours each week, while the largest number in Pitt, 63, and Temple, 23, reported spending 50 to 59 hours. It should be noted that the faculty at the branch campuses at Pitt and Temple are not included in the departmental distribution.

The last two columns were included to demonstrate the wide variation in working habits of members within the same department. The greatest ranges at Pitt and Temple were in the Science Department, at Penn State in the English Department with the Mathematics Department a close second.

Table 2A is based on the same data as Table 2. The third column shows ← the total average number of hours ^{per week} spent in university-related work for fall 1973 and 1974. Penn State faculty reported an average of 51.3 total hours per week, Pitt 55.1, and Temple 55.6, an average for the three universities of 53.4 as compared to an overall average of 54 last year (using Penn State's revised report). These hours as indicated on the table include the time spent in research and public and university service as well as the time spent in

instructional support and contact hours. The table shows the percentage distribution of the hours spent in each type of activity for all universities except Lincoln. The distribution indicates that the average faculty member spends 4 to 5 hours on university-related work for every hour spent in the classroom.

The data for Penn State (1973 revised and 1974) differ from the original 1973 data since about 500 of those reporting originally in 1973 were dropped and some of those who were categorized as "part-time" previously due to their temporary status were added to the full-time set. Since those who were dropped were faculty members active in research and public service these percentages in the distribution fell, the average total hours worked per week increased slightly and the percentage of time spent in contact hours increased. A comparison of the distributions indicates that the characteristics of the faculty members reporting from Penn State for 1974-1975 differ from those reporting from Pitt and Temple. Temple's full-time faculty response to reporting activities fell from 82% in fall 1973 to 78% in fall 1974.

Table 3 shows the average contact hours per week of the same departments included in Table 2. However, the faculty included in the department averages are only main campus for each of the universities. The averages indicate very little effort on the part of the individual departments to increase the contact hours of their faculty members. Specifically, of the eleven departments under observation 3 at Penn State, 4 at Pitt, and 6 at Temple showed any increase in average contact hours ^{from} ~~for~~ fall 1973 to 1974.

Comparison of overall averages ^{among} ~~between~~ universities may be misleading since the averages are partially dependent upon the characteristics of the faculty members who filled out individual activity reports and there are indications that they may vary among universities. A comparison of the number of those

who reported with the number of the full-time faculty members shown on the summary tables, indicates that 153 academic administrators did not fill in the Penn State activity reports while an estimated 115 of the 129 academic administrators at Pitt did report activity schedules and are included in the average contact hours. Temple did not provide a comparable breakdown, however, on the basis of their reported full-time faculty members 324 full-time faculty members at Temple did not report. This poor response may explain the volatile nature of the average contact hours over all and within departments ← from year to year at Temple.

Table 4. A significant increase in either the contact hours or the class size could provide for a faculty salary increase while maintaining a level unit cost. However, increases in both variables are slight. Although averages of class size include the large introductory courses, the largest average class size in 1974-1975 was 25.5 at both Penn State and Pitt. As is to be expected, the class sizes in the summer are smaller, the largest average for 1974-1975 being 17.3 at Pittsburgh.

Table 4 also shows a general expansion in the number of courses offered in the fall term. Both Penn State and University of Pittsburgh increased the number of courses offered from 1972 to 1973 slightly and by 121 and 134 respectively between the fall of 1973 and 1974. Lincoln too increased the number of courses.

Table 5 presents data for full-time teaching faculty only, and shows the average student credit hour production in the academic year only and, separately, the summer production. In the aggregate the average increased for Penn State and Temple. Pitt showed a slight decrease. In an attempt to account for some of the

different characteristics of the universities, where possible, both the average student credit hour, ^{production and the unit costs are} to shown separately for those faculty members teaching undergraduate only, graduate only, or teaching both undergraduate and graduate courses. Since Temple's report does not separate the credit hours and salaries of full-time and part-time faculty members, ^{in the manner} the average production of the composite of full and part-time faculty was adjusted to reflect the estimated full-time faculty member's production. Temple's overall cost per student credit hour was considered comparable and not adjusted. Their academic year salary cost, which is greater than Penn State's and Pitt's increased 7% from 1973-1974 to 1974-1975. These data may be compared with the data furnished in the budget. The data may also be used in conjunction with the indicated distribution of students by level of instruction to calculate expected relative unit costs at the four universities in evaluating appropriation requests per student credit hour.

The average unit salary cost in the budget shows an increase over last year of 6% to 10% except for Lincoln which shows a decrease, partially attributable to the drastic increase from 1973 to 1974. (See Table 7) In the Snyder Report (Table 5) the unit costs for the academic year increased from 1973 to 1974 by 6% at Penn State, 3% at Pitt and 7% at Temple.

Table 6 shows the average total salary of full-time teaching faculty members by rank and the salary cost per contact hour for the fall terms 1973 and 1974, as well as the percentage increases.

A comparison of the salary increases and the increases in the cost per contact hour provides an indication of where contact hour increases have partially balanced salary increases. The differences, of course, are due to a certain extent to shifting of faculty members within the ranks. In order to make Penn State salary dollars comparable to those of Pitt and Lincoln whose

fall terms represent half of the academic year, the fall term salaries for Penn State have been increased by fifty percent. The resulting salary cost per contact hour therefore represents dollars paid for one contact hour a week for 15 weeks. According to Table 2A, the average faculty member reports spending roughly four to five hours on other related university work for every hour spent in the classroom.

No data is included for Temple since there is no means of estimating the salary paid by rank to the full-time faculty members.

Table 7 shows the salary costs per student credit hour as reported in the university budget reports by level of instruction and overall averages. There is a significant difference at each level of instruction in the unit costs among the universities. This difference reflects the differences in the average student credit hour production of full-time teaching faculty (Table 5) at the separate universities. The unit costs at different educational levels may be compared roughly with the units costs for faculty teaching undergraduate only, for faculty teaching both graduate and undergraduate and for faculty teaching graduate only. While, as was noted earlier, there is a difference in the product mix in the universities, which could result in different overall unit costs, the unit costs at the different educational levels themselves both in the budget requests and in the Snyder data are significantly different, again reflecting the different averages in production of full-time faculty, both anticipated and reported. The increases in estimated unit costs at each level do not indicate plans to increase faculty production anywhere except at Lincoln.

The last three columns of Table 7 show the unit costs as calculated from the Snyder Report on the basis of the university-funded salary for teaching faculty only, the total salary for teaching faculty only and the total salary

of all reported faculty. The unit costs based on the Snyder Report provide a basis for evaluation of the unit costs in the budget requests which incorporate the universities' anticipated faculty workloads and salaries.

In general, the actual costs shown in the budget approximate the unit cost on the basis of the university-funded direct teaching salaries. (The first of the last three columns) The greatest discrepancy falls in the case of Temple as the budget requests are significantly greater than the Snyder data would indicate. The second of the last three columns is the unit cost in terms of total dollars paid to the teaching faculty. The increase over the cost based on university funds represents the dollars paid to the teaching faculty through Federal funds, endowment, gifts and other sources. The last column presents the unit costs related to the total faculty salary including instructional support and administration. One would expect these costs to be a uniform increase over the unit costs based on the total salary for direct teaching, however, the increases range from five percent at Lincoln and Temple to 17 percent at Penn State.

Conclusion

The four universities showed very little attempt to economize on faculty costs in 1974. The number of courses offered was expanded and there were only slight increases in some instances in the average class size and in the average contact hours.

Furthermore, the proposed unit costs in the budget requests indicate that the universities do not plan any significant economies in the area of faculty production in 1976-1977.

SUMMARY TABLES

Table 1

SCHOOL OUTPUT
1972-73, 1973-74, 1974-75
(In thousands)

	Student Credit Hours		Undergraduate Student Credit Hours		Graduate Student Credit Hours		Undergraduate Student Credit Hours		Graduate Student Credit Hours	
	Total	Undergraduate	Graduate	Fall	Summer	Fall	Summer	Fall	Summer	
Pennsylvania State University										
1972-73	1,424	1,291	133	424	64	36	30			
1973-74	1,495	1,361	134	469	72	36	31			
Revised 1973-74	1,495	1,355	140	447	71	38	32			
1974-75	1,576	1,437	139	471	78	38	31			
% increase from 1973-74 to 1974-75	+6%	+6%	-5%	+5%	+10%	0%	-4%			
University of Pittsburgh										
1972-73	777	578	199	265	72	77	47			
1973-74	803	603	200	270	77	79	46			
1974-75	816	619	197	268	83	78	44			
% increase from 1973-74 to 1974-75	+2%	+3%	-2%	-1%	+8%	-1%	-5%			
Temple University										
1972-73	695	510	185	236	52	81	28			
1973-74	693	505	188	238	40	84	24			
1974-75	767	535	212	243	52	85	46			
% increase from 1973-74 to 1974-75	+8%	+6%	+13%	+2%	+31%	+2%	+94%			
Lincorn University										
1973-74	36	36	no	17	no	no	graduate school			
1974-75	35	35	graduate school	18	summer school					
% increase from 1973-74 to 1974-75	-3%	0%		+5%						

a. Large percentage increase in Temple's summer student credit hour production from summer, 1974 are due to a strike during the summer sessions of 1974 and a different method of reporting graduate student credit hours for 1975.

SOURCE: Reports provided by the individual universities.

Table 2

DISTRIBUTION OF FULL-TIME FACULTY BY REPORTED WORK-RELATED¹ HOURS PER WEEK FOR
SPECIFIED COLLEGES AND DEPARTMENTS AND UNIVERSITY AVERAGES
FALL 1974

College or Department ²	Distribution of Faculty by Average Total Hours per Week							Number of Faculty	Range of Hours per Week	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	Low
									(10)	(11)
<u>Liberal Arts and Sciences</u>										
<u>Science Courses</u>										
Penn State	1	6	119	83	36	9	4	258	27	81
Pitt	1	-	55	63	34	11	4	168	13	97
Temple	6	2	12	23	16	11	-	70	20	79
<u>Foreign Languages</u>										
Penn State	-	1	24	31	11	6	-	73	35	79
Pitt	1	-	11	14	15	5	1	47	26	80
Temple	2	4	8	9	7	10	-	40	20	79
<u>Mathematics</u>										
Penn State	4	6	56	32	7	3	-	108	15	76
Pitt	-	-	17	18	8	2	2	47	40	87
Temple	-	3	13	11	5	1	-	33	34	77

1. Includes time spent in preparation, research and public service, as well as classroom contact hours.

2. Distribution of total hours per week for full-time faculty for specified colleges includes hours of faculty at Penn State main and branch campuses, and of faculty at Pitt and Temple main campuses; University Averages and Ranges include all full-time faculty reporting from the three universities. Due to a misunderstanding concerning reporting, it was too late for faculty at Lincoln University to furnish complete activity reports for the 1974-75 reporting period.

Table 2 (cont.)

College or Department (1)	Distribution of Faculty by Average Total Hours per Week							Number of Faculty (9)	Range of Hours per Week	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)		Low (10)	High (11)
Political Science										
Penn State	-	3	3	16	5	2	-	29	36	77
Pitt	-	-	6	9	5	2	-	22	43	78
Temple	-	-	7	7	8	-	-	22	40	66
English										
Penn State	6	5	31	98	23	6	1	170	18	80
Pitt	-	-	5	20	10	4	5	44	40	101
Temple	-	4	9	27	22	6	-	68	32	79
History										
Penn State	-	-	35	20	5	1	-	61	41	78
Pitt	-	-	5	10	7	3	-	25	41	77
Temple	3	6	12	14	15	-	-	50	22	66
Department of Education										
Vocational Education										
Penn State	-	-	-	2	-	-	-	2	53	55
Pitt	-	-	1	5	1	-	-	7	46	64
Temple	-	-	2	4	2	2	-	10	40	79
Counselor Education										
Penn State	-	-	10	6	1	-	-	17	40	60
Pitt	-	-	7	4	3	1	-	15	40	75
Temple	-	-	2	5	2	-	-	9	42	68
Special Education										
Penn State	-	-	14	13	1	-	-	28	40	60
Pitt	-	1	1	4	4	-	1	11	39	84
Temple	-	1	2	5	1	2	-	11	38	79

Table 2 (cont.)

(1) College or Department	(2) Distribution of Faculty by Average Total Hours per Week										Range of Hours per Week	
	Less than 30	30-39	40-49	50-59	60-69	70-79	80 or more	Number of Faculty	Low	High	(10)	(11)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(10)	(11)
<u>Curriculum and Instruction</u>												
Penn State	-	1	4	18	5	-	-	28	37	64		
Pitt	-	-	1	8	1	-	-	10	45	60		
Temple	1	-	1	1	2	1	-	6	20	76		
<u>School of Engineering</u>												
Penn State	-	3	155	109	29	8	1	305	37	88		
Pitt	-	2	21	44	18	4	5	94	34	86		
Temple	3	1	5	9	4	-	-	22	20	69		
<u>University Averages and Ranges</u>												
Penn State	13	49	1,015	1,013	299	82	8	2,479	15	88		
Pitt	3	55	438	566	303	108	56	1,529	13	113		
Temple	45	63	237	368	246	163	9	1,131	18	80		

SOURCE: Information furnished by full-time faculty members, Fall 1974.

Table 2A

NUMBER OF FULL-TIME FACULTY, AVERAGE TOTAL HOURS PER WEEK WORKED AND
 PERCENTAGE DISTRIBUTION OF TIME SPENT ON UNIVERSITY RELATED ACTIVITIES, FALL 1973, 1974

	Number of Faculty	Total Hours per week	Average Total Hours per week	Contact	Percent of time spent in		
					Instructional Support ^a	Research ^b	Public and University Service
Pennsylvania State University							
Fall 1973	2,798	140,531	50.2	18%	46%	13%	23%
Revised Fall 1973	2,429	124,437	51.2	21	54	9	16
Fall 1974	2,479	127,182	51.3	21	56	9	14
University of Pittsburgh							
Fall 1973	1,489	81,993	55.1	16%	38%	24%	22%
Fall 1974	1,529	84,317	55.1	17	37	24	22
Temple University							
Fall 1973	1,226	71,462	58.3	15%	45%	22%	18%
Fall 1974	1,131	62,850	55.6	16	45	21	18

a. Includes Department Research hours in the case of Penn State.

b. Includes only Organized Research hours in the case of Penn State.

Note: Due to a misunderstanding, it was too late for full-time faculty from Lincoln to furnish complete activity reports for the 1974-75 reporting period.

SOURCE: Activity Reports furnished by full-time faculty members, Fall 1973, 1974.

Table 3

AVERAGE CONTACT HOURS SPENT PER WEEK BY FULL-TIME FACULTY MEMBERS IN
SPECIFIED DEPARTMENTS OR COLLEGES AND UNIVERSITY AVERAGES
FALL, 1972, 1973, 1974

Department or College	Pennsylvania State University			University of Pittsburgh			Temple University			Lincoln University		
	Fall 1972	Fall 1973	Fall 1974	Fall 1972	Fall 1973	Fall 1974	Fall 1972	Fall 1973	Fall 1974	Fall 1972	Fall 1973	Fall 1974
Revised												
Main Campus:												
<u>Liberal Arts and Sciences</u>												
Science Courses	8.6	8.8	8.9	8.7	8.5	4.5	8.0	5.7	6.1	7.2		
Foreign Languages	9.7	9.8	9.7	9.5	9.2	9.2	10.5	8.0	8.9	10.9		
Mathematics	9.6	8.3	8.3	8.6	7.9	7.9	9.6	7.8	7.3	10.3		
Political Science	9.6	8.3	8.2	6.1	6.5	6.5	8.8	7.3	6.5	12.0		
English	9.7	8.5	8.5	7.8	8.5	8.5	9.5	7.8	7.1	6.7		
History	11.2	9.7	9.7	8.5	7.4	7.4	9.3	6.5	6.8	10.4		
<u>Department of Education</u>												
Vocational Education	6.7	7.5	7.1	5.0		9.4	8.1	6.1	8.4			
Counselor Education	11.1	14.2	13.4	7.7		15.0	7.5	7.4	8.3			
Special Education	8.8	14.0	15.2	8.3		12.2	8.6	6.0	7.0			
Curriculum & Instruction	13.7	11.0	10.8	12.2		5.4	8.9	N.A.	9.8			
School of Engineering	8.0	8.4	9.3	9.5		8.7	11.4	11.1	10.0			
<u>University Averages for Full-Time Faculty</u>												
Main Campus	7.9	7.0	9.3	9.2		8.6	N.A.	N.A.	8.8			N.A.
Branch Campus	13.9	13.0	13.4	13.4		13.7	N.A.	N.A.	11.1			N.A.
Total	9.6	8.8	10.7	10.7		9.2	9.2	8.5	8.8			8.4

SOURCE: Information furnished by full-time faculty members.

Table 4

NUMBER OF COURSES OFFERED, AVERAGE CLASS SIZE, NUMBER OF DEGREES GRANTED

	Number of Courses Offered		Average Class Size		A.B.	Degrees Granted		Ph.D.
	Fall	Summer	Fall	Summer		M.A.	1st Prof.	
Pennsylvania State University								
1972-73	3,697	1,541	28.2	16.3	7,879	1,533		425
1973-74	3,762	1,595	25.0	15.2	7,647	1,582	not	376
1974-75	3,883	1,595	25.5 ^a	16.3 ^a	7,758	1,524	applicable	404
University of Pittsburgh								
1972-73	3,411	2,272	23.9	14.2	3,701	2,300	332	420
1973-74	3,447	2,095	27.3 ^a	19.0 ^a	3,951	2,038	254	411
1974-75	3,581	2,154	25.5	17.3	3,601	2,026	264	422
Temple University								
1972-73	2,475*	1,006*	21.3	14.9	3,301	1,588	595	166
1973-74	2,433*	1,095*	21.6	14.7	3,350	1,600	610	160
1974-75	2,674*	1,165*	21.7	15.1	3,400	1,400	700	250
Lincoln University								
1973-74	164	not	19.3	not	172		not applicable	
1974-75	176	applicable	20.1	applicable	206			

* Number of courses of professional schools not included.

a. Average class size excluding sections of individual instruction.

SOURCE: Reports provided by the individual universities.

Table 5

PRODUCTION AND SALARY COSTS FOR FULL-TIME TEACHING FACULTY

Type of Teaching	Year	Academic Year		Summer		
		Average No. of Faculty	Average Salary Cost/SCH	Number of Faculty	Average Salary Cost/SCH	
<u>Teaching Undergraduate Only</u>						
Penn State	1973-74	1,136	520	341	78	\$44
	Revised					
Pittsburgh	1973-74	1,234	525	205	103	44
	1974-75	1,254	542	180	100	50
Temple ¹	1973-74	454	441	95	85	61
	1974-75	475	432	103	93	58
Lincoln	1973-74	536	325	172	31	83
	1974-75	656	366	260	73	29
	1974-75	92	358	no	summer	school
<u>Teaching Graduate Only</u>						
Penn State	1973-74	332	101	609	27	192
	Revised					
Pittsburgh	1973-74	314	104	480	30	211
	1974-75	309	107	457	27	263
Temple ¹	1973-74	412	198	405	65	111
	1974-75	409	210	433	59	127
	1973-74	552	270	200	34	88
	1974-75	648	238	352	98	27
<u>Teaching Both Undergraduate and Graduate</u>						
Penn State	1973-74	822	503	355	85	61
	Revised					
Temple ¹	1973-74	847	505	317	89	63
	1974-75	861	517	310	102	62

Table 5 (cont.)

Type of Teaching	Year	Academic Year				Summer	
		Average No. of Faculty	Average SCH	Salary Cost/ SCH	Number of Faculty	Average SCH	Salary Cost/ SCH
Pittsburgh	1973-74	535	489	33	169	88	79
	1974-75	558	464	36	199	93	78
Temple ¹	1973-74	1,071	434	44	343	150	17
	1974-75	850	486	37	353	126	18
<u>All Teaching</u>							
Penn State	1973-74	2,290	453	32	1,305	56	84
	Revised						
	1973-74	2,394	463	31	1,387	46	90
	1974-75	2,424	478	33	947	65	98
Pittsburgh	1973-74	1,400	388	39	669	74	93
	1974-75	1,442	381	40	735	73	98
Temple ¹	1973-74	2,159	365	42	715	89	31
	1974-75	2,153	376	45	965	102	23
Lincoln	1974-75	92	358	38	no	summer	school

1. The data furnished by Temple University was not separated by part-time and full-time so that the calculations for Temple are based on all faculty members. As a result, the average number of student credit hours including the part-time production has been adjusted to reflect ~~the~~ full-time average. The cost per student credit hour, however, should be comparable and was not adjusted. *production*

SOURCE: Information furnished by individual universities.

Table 1

SCHOOL OUTPUT
1972-73, 1973-74, 1974-75
(In thousands)

	Student Credit Hours		Undergraduate Student Credit Hours		Graduate Student Credit Hours		
	Total	Undergraduate	Graduate	Fall	Summer	Fall	Summer
Pennsylvania State University							
1972-73	1,674	1,291	133	424	2,182	36	30
1973-74	1,695	1,361	134	449	2,049	36	31
Revised 1973-74	1,695	1,355	140	447	2,009	38	32
1974-75	1,576	1,437	139	471	2,064	38	31
% increase from 1973-74 to 1974-75	1,609	1,462	132	483	2,064	0%	-4%
	1,482	1,162	134	452	1,982		
	1,606						
University of Pittsburgh							
1972-73	777	578	199	265	2,212	77	47
1973-74	803	603	200	270	2,212	79	46
1974-75	816	619	197	268	2,347	78	44
% increase from 1973-74 to 1974-75	816	619	197	274	2,405	-1%	-5%
	777	578	199	272			
	793						
Temple University							
1972-73	695	510	185	236	1,497	81	28
1973-74	693	503	188	238	1,511	84	24
1974-75	747	535	212	243	1,525	85	46
% increase from 1973-74 to 1974-75	747	535	212	262	1,525	+2%	+94%
	785	462	132	272	1,552		
Lincoln University							
1973-74	335	335	no graduate school	17	164	no graduate school	
1974-75	354	354	graduate school	18	176	summer school	
% increase from 1973-74 to 1974-75	354	354	16%	18	176		
	23	162		18	115		
	36			43	180		

n. Large percentage increases in Temple's summer student credit hour production from summer, 1974 are due to a strike during the summer sessions of 1974 and a different method of reporting graduate student credit hours for 1975.

SOURCE: Reports provided by the individual universities.

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Table 1

SCHOOL OUTPUT
1972-73, 1973-74, 1974-75
(in thousands)

	Total Student Credit Hours		Undergraduate		Graduate		Undergraduate Student Credit Hours		Graduate Student Credit Hours	
	1972-73	1973-74	1972-73	1973-74	1972-73	1973-74	Fall	Summer	Fall	Summer
Pennsylvania State University										
1972-73	1,424	1,291	133				424	64	36	30
1973-74	1,495	1,361	134				449	72	36	31
Revised 1973-74	1,495	1,355	160				447	71	38	32
1974-75	1,576	1,417	139				471	78	38	31
% increase from 1973-74 to 1974-75	+6%	+6%	-5%				+5%	+10%	0%	-6%
University of Pittsburgh										
1972-73	777	578	199				265	72	77	47
1973-74	803	603	200				270	77	79	46
1974-75	816	619	197				268	83	78	44
% increase from 1973-74 to 1974-75	+2%	+3%	-2%				-1%	+8%	-1%	-5%
Temple University										
1972-73	695	510	185				236	52	81	28
1973-74	693	505	188				238	40	84	24
1974-75	747	535	212				243	52	85	46
% increase from 1973-74 to 1974-75	+8%	+6%	+13%				+2%	+31%	+2%	+94%
Lincoln University										
1973-74	39.5	33.5	no				17	no	no	graduate school
1974-75	35.4	35.4	graduate school				18	summer school	no	graduate school
% increase from 1973-74 to 1974-75	+6%	+6%					+5%			

a. Large percentage increases in Temple's summer student credit hour production from summer, 1974 are due to a strike during the summer sessions of 1974 and a different method of reporting graduate student credit hours for 1975.

SOURCE: Reports provided by the individual universities.

Table 2

DISTRIBUTION OF FULL-TIME FACULTY BY REPORTED WORK-RELATED¹ HOURS PER WEEK FOR SPECIFIED COLLEGES AND DEPARTMENTS AND UNIVERSITY AVERAGES
FALL 1974

College or Department ² (1)	Distribution of Faculty by Average Total Hours per Week							Number of Faculty (9)	Range of Hours per Week	
	Less than 30 (2)	30-39 (3)	40-49 (4)	50-59 (5)	60-69 (6)	70-79 (7)	80 or more (8)		Low (10)	High (11)
Liberal Arts and Sciences										
Science Courses										
Penn State	1	6	119	83	36	9	4	258	27	81
Pitt	1	2	2655	63	2734	711	34	14/168	13	97 8/
Temple	26	4	12	23	16	11	-	70	20	79
Foreign Languages										
Penn State	-	1	24	31	11	6	-	73	35	79
Pitt	1	2	11	14	15	5	1	47	26	80
Temple	2	4	8	9	7	10	-	40	20	79
Mathematics										
Penn State	4	6	56	32	7	3	-	108	15	76
Pitt	-	-	17	18	8	2	2	47	40	87
Temple	-	3	13	11	5	1	-	33	34	77

1. Includes time spent in preparation, research and public service, as well as classroom contact hours.

2. Distribution of total hours per week for full-time faculty for specified colleges includes hours of faculty at Penn State main and branch campuses; and of faculty at Pitt and Temple main campuses; University Averages and Ranges include all full-time faculty reporting from the three universities. Due to a misunderstanding concerning reporting, it was too late for faculty at Lincoln University to furnish complete activity reports for the 1974-75 reporting period.

Table 2 (cont.)

College or Department	Distribution of Faculty by Average Total Hours per Week							Number of Faculty	Range of Hours per Week			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)	Low	High
											(10)	(11)
Political Science												
Penn State	-	-	3	3	16	5	2	-	29	36	77	
Pitt	-	-	-	6	9	9	2	-	21	40	78	
Temple	-	-	-	7	7	8	-	-	21	40	66	
English												
Penn State	6	-	5	31	98	23	6	1	170	18	80	
Pitt	-	-	-	5	20	10	4	5	44	40	101	
Temple	-	-	4	9	27	22	6	-	68	32	79	
History												
Penn State	-	-	-	35	20	5	1	-	61	41	78	
Pitt	-	-	-	5	10	7	3	-	25	41	77	
Temple	3	-	6	12	14	15	-	-	50	22	66	
Department of Education												
Vocational Education												
Penn State	-	-	-	-	2	-	-	-	2	53	55	
Pitt	-	-	-	1	5	1	-	-	7	46	64	
Temple	-	-	-	2	4	2	2	-	10	40	79	
Counselor Education												
Penn State	-	-	-	10	6	1	-	-	17	40	60	
Pitt	-	-	-	7	4	3	1	-	15	40	75	
Temple	-	-	-	2	5	2	-	-	9	42	68	
Special Education												
Penn State	-	-	-	14	13	1	-	-	28	40	60	
Pitt	-	-	1	1	4	4	-	1	11	39	84	
Temple	-	-	1	2	5	1	2	-	11	38	79	

Table 2 (cont.)

(1) College or Department	(2) Distribution of Faculty by Average Total Hours per Week										(9) Number of Faculty	(10) Range of Hours per Week	
	(3) Less than 30	(4) 30-39	(5) 40-49	(6) 50-59	(7) 60-69	(8) 70-79	(8) 80 or more	(10) Low	(11) High				
<u>Curriculum and Instruction</u>													
Penn State	-	1	4	18	5	-	-	-	28	37	64		
Pitt	-	-	1	8	1	-	-	-	10	45	60		
Temple	1	-	1	1	2	1	-	-	6	20	76		
<u>School of Engineering</u>													
Penn State	-	3	155	109	29	8	1	305	37	88			
Pitt	-	2	21	44	18	4	5	94	34	86			
Temple	3	1	5	9	4	-	-	22	20	69			
<u>University Averages and Ranges</u>													
Penn State	13	49	1,015	1,013	299	82	8	2,479	15	88			
Pitt	3	55	438	566	303	108	56	1,529	13	113			
Temple	45	63	237	368	246	163	9	1,131	18	80			

SOURCE: Information furnished by full-time faculty members, Fall 1974.

147
 579 258.00
 247.9 109
 10
 1529 151.00
 151.00

Table 2 (cont.)

College or Department (1)	Distribution of Faculty by Average Total Hours per Week							Number of Faculty (9)	Range of Hours per Week	
	Less than 30 (2)	30-39 (3)	40-49 (4)	50-59 (5)	60-69 (6)	70-79 (7)	80 or more (8)		Low (10)	High (11)
Curriculum and Instruction										
Penn State	-	1	4	18	5	-	-	28	37	64
Pitt	-	-	1	8	1	-	-	10	45	60
Temple	1	-	1	1	2	1	-	6	20	76
School of Engineering										
Penn State	-	3	155	109	29	8	1	305	37	88
Pitt	0	2	21	44	18	4	5	94	34	86
Temple	3	1	25	59	4	-	-	22	20	69
University Averages and Ranges										
Penn State	13	49	1,015	1,013	299	82	8	2,479	15	88
Pitt	7	55	6438	566	303	108	4056	1,529	13	113
Temple	1145	63	237	368	246	163	9	1,131	18	80

SOURCE: Information furnished by full-time faculty members, Fall 1974.

Sample *University of Pennsylvania* *1974*

Table 2A

NUMBER OF FULL-TIME FACULTY, AVERAGE TOTAL HOURS PER WEEK WORKED AND PERCENTAGE DISTRIBUTION OF TIME SPENT ON UNIVERSITY RELATED ACTIVITIES, FALL 1973, 1974

	Number of Faculty	Total Hours per week	Average Total Hours per week	Percent of time spent in			Public and University Service
				Contact	Instructional Support ^a	Research ^b	
Pennsylvania State University							
Fall 1973	2,798	140,531	50.2	18%	46%	13%	23%
Revised Fall 1973	2,429	124,437	51.2	21	54	9	16
Fall 1974	2,479	127,182	51.3	21	56	9	14
University of Pittsburgh							
Fall 1973	1,489	81,993	55.1	16%	38%	24%	22%
Fall 1974	1,529	84,317	55.1	17	37	24	22
Temple University							
Fall 1973	1,226	71,462	58.3	15%	45%	22%	18%
Fall 1974	1,131	62,850	55.6	16	45	21	18

a. Includes Department Research hours in the case of Penn State. *75 52.3*
47

b. Includes only Organized Research hours in the case of Penn State.

Note: Due to a misunderstanding, it was too late for full-time faculty from Lincoln to furnish complete activity reports for the 1974-75 reporting period.

SOURCE: Activity Reports furnished by full-time faculty members, Fall 1973, 1974.

Table 2A

NUMBER OF FULL-TIME FACULTY, AVERAGE TOTAL HOURS PER WEEK WORKED AND
 PERCENTAGE DISTRIBUTION OF TIME SPENT ON UNIVERSITY RELATED ACTIVITIES, FALL 1973, 1974

	Number of Faculty	Total Hours per week	Average Total Hours per week	Percent of time spent in			
				Contact	Instructional Support ^a	Research ^b	Public and University Service
Pennsylvania State University							
Fall 1973	2,798	140,531	50.2	18%	46%	13%	23%
Revised Fall 1973	2,429	124,437	51.2	21	54	9	16
Fall 1974	2,479	127,182	51.3	21	56	9	14
University of Pittsburgh							
Fall 1973	1,489	81,993	55.1	16%	38%	24%	22%
Fall 1974	1,529	84,317	55.1	17	37	24	22
Temple University							
Fall 1973	1,226	71,462	58.3	15%	45%	22%	18%
Fall 1974	1,131	62,850	55.6	16	45	21	18

a. Includes Department Research hours in the case of Penn State.

b. Includes only Organized Research hours in the case of Penn State.

Note: Due to a misunderstanding, it was too late for full-time faculty from Lincoln to furnish complete activity reports for the 1974-75 reporting period.

SOURCE: Activity Reports furnished by full-time faculty members, Fall 1973, 1974.

*Temple activity 10.5
 6 6 2
 other 12.0
 and 10.1
 Research 20.4
 P.S.U. 30.9*

Table 3

AVERAGE CONTACT HOURS SPENT PER WEEK BY FULL-TIME FACULTY MEMBERS IN SPECIFIED DEPARTMENTS OR COLLEGES AND UNIVERSITY AVERAGES FALL, 1972, 1973, 1974

Department or College	Pennsylvania State University			University of Pittsburgh			Temple University			Lincoln University		
	Fall 1972	Fall 1973	Fall 1974	Fall 1972	Fall 1973	Fall 1974	Fall 1972	Fall 1973	Fall 1974	Fall 1972	Fall 1973	Fall 1974
<u>Main Campus</u>												
<u>Liberal Arts and Sciences</u>												
Science Courses	8.6	8.8	8.7	4.8	4.6	4.5	8.0	5.7	6.1	6.1	7.2	
Foreign Languages	9.7	9.8	9.5	7.6	9.6	9.2	10.5	8.0	8.9	8.9	10.9	
Mathematics	9.6	8.3	8.6	6.7	8.0	7.9	9.4	7.8	7.3	7.3	10.3	
Political Science	9.7	8.3	6.1	5.9	7.5	6.5	8.8	7.3	6.5	6.5	12.0	
English	9.7	8.5	7.8	9.6	9.3	8.5	9.5	7.8	7.1	7.1	6.7	
History	11.2	9.7	8.5	6.9	6.8	7.4	9.3	6.5	6.8	6.8	10.6	
<u>Department of Education</u>												
Vocational Education	6.7	7.5	5.0	6.7	12.4	9.4	8.1	6.1	8.4	8.4		
Counselor Education	11.1	14.2	7.7	12.6	12.8	15.0	7.5	7.4	8.3	7.4		
Special Education	8.8	14.0	8.3	7.6	10.8	12.2	8.6	6.0	7.0	6.0		
Curriculum & Instruction	13.7	11.0	12.2	4.2	7.5	5.4	8.9	N.A.	9.8	N.A.		
<u>School of Engineering</u>	8.0	8.4	9.5	7.8	8.2	8.7	11.4	11.1	10.0	11.1		
<u>University Averages for Full-Time Faculty</u>												
Main Campus	7.9	7.0	9.2	7.1	8.3	8.6	N.A.	N.A.	8.8	N.A.	N.A.	
Branch Campus	13.6	11.0	11.4	12.4	13.6	11.7	N.A.	N.A.	11.1	N.A.	N.A.	
Total	9.6	8.8	10.7	7.7	8.9	9.2	9.2	8.5	8.8	8.5	8.4	

SOURCE: Information furnished by full-time faculty members.

Table 4

NUMBER OF COURSES OFFERED, AVERAGE CLASS SIZE, NUMBER OF DEGREES GRANTED

	Number of Courses Offered		Average Class Size		Degrees Granted		
	Fall	Summer	Fall	Summer	A.B.	M.A.	Ph.D.
Pennsylvania State University							
1972-73	3,697	1,541	28.2	16.3	7,879	1,533	425
1973-74	3,762	1,595	25.0	15.2	7,647	1,582	376
1974-75	3,883	1,595	25.5 ^a	16.3 ^a	7,758	1,524	404
University of Pittsburgh							
1972-73	3,411	2,272	23.9 ^a	14.2	3,701	2,300	420
1973-74	3,447	2,095	27.3 ^a	19.0 ^a	3,951	2,038	411
1974-75	3,581	2,154	25.5 ^a	17.3	3,601	2,026	422
Temple University							
1972-73	2,475*	1,006*	21.3	14.9	3,301	1,588	166
1973-74	2,433*	1,095*	21.6	14.7	3,350	1,600	160
1974-75	2,474*	1,165*	21.7	15.1	3,400	1,400	250
Lincoln University							
1973-74	164	not applicable	19.3	not applicable	172	not applicable	not applicable
1974-75	176	not applicable	20.1	not applicable	206	not applicable	not applicable

* Number of courses of professional schools not included.

a. Average class size excluding sections of individual instruction.

SOURCE: Reports provided by the individual universities.

Table 5

PRODUCTION AND SALARY COSTS FOR FULL-TIME TEACHING FACULTY

Type of Teaching	Year	Academic Year			Summer		
		Average No. of Faculty	Average Salary SCH	Number of Faculty	Average Salary SCH	Number of Faculty	Average Salary SCH
<u>Teaching Undergraduate Only</u>							
Penn State	1973-74	1,136	520	341	78	\$44	
	Revised						
	1973-74	1,234	525	205	103	44	
	1974-75	1,254	542	180	100	50	
Pittsburgh	1973-74	454	441	95	85	61	
	1974-75	475	432	103	93	58	
Temple ¹	1973-74	536	325	172	31	83	
	1974-75	656	366	260	73	29	
Lincoln	1974-75	92	358	no	summer	school	
<u>Teaching Graduate Only</u>							
Penn State	1973-74	332	101	609	27	192	
	Revised						
	1973-74	314	104	480	30	211	
	1974-75	309	107	457	27	263	
Pittsburgh	1973-74	412	198	405	65	111	
	1974-75	409	210	433	59	127	
Temple ¹	1973-74	552	270	200	34	88	
	1974-75	648	238	352	98	27	
<u>Teaching Both Undergraduate and Graduate</u>							
Penn State	1973-74	822	503	355	85	61	
	Revised						
	1973-74	847	505	317	89	63	
	1974-75	861	517	310	102	62	

Table 5 (cont.)

Type of Teaching	Year	Academic Year			Summer		
		Average No. of Faculty	Average Salary SCH	Salary Cost/ SCH	Number of Faculty	Average SCH	Salary Cost/ SCH
Pittsburgh	1973-74	535	489	33	169	88	79
	1974-75	558	464	36	199	93	78
Temple ¹	1973-74	1,071	434	44	343	150	17
	1974-75	850	486	37	353	126	18
<u>All Teaching</u>							
Penn State	1973-74	2,290	453	32	1,305	56	84
	Revised						
Pittsburgh	1973-74	2,394	463	31	1,387	46	90
	1974-75	2,424	478	33	947	65	98
Temple ¹	1973-74	1,400	388	39	669	74	93
	1974-75	1,442	381	40	735	73	98
Lincoln	1973-74	2,159	365	42	715	89	31
	1974-75	2,153	376	45	965	102	23
	1974-75	92	358	38	no	summer	school

1. The data furnished by Temple University was not separated by part-time and full-time so that the calculations for Temple are based on all faculty members. As a result, the average number of student credit hours including the part-time production has been adjusted to reflect the full-time production. The cost per student credit hour, however, should be comparable and was not adjusted.

SOURCE: Information furnished by individual universities.

Table 6

AVERAGE TOTAL SALARY OF FULL-TIME TEACHING FACULTY MEMBERS,
BY RANK AND SALARY COST PER CONTACT HOUR FOR FALL, 1973 AND 1974

	Professor			Associate Professor			Assistant Professor			Instructor		
	No.	Average Salary	Salary Cost/Contact Hour	No.	Average Salary	Salary Cost/Contact Hour	No.	Average Salary	Salary Cost/Contact Hour	No.	Average Salary	Salary Cost/Contact Hour
Penn State												
Fall 1973	420	\$ 9,567	\$1,028	526	\$7,592	\$722	825	\$6,303	\$524	378	\$5,152	\$382
Revised Fall, 1973	411	9,810	1,036	520	7,679	722	849	6,294	524	446	4,969	359
Fall 1974	436	10,661	1,147	557	8,309	759	850	6,777	558	408	5,316	400
X increase from Fall 1973 to Fall 1974		8%	11%		8%	5%		8%	6%		7%	11%
Pittsburgh												
Fall 1973	252	10,115	1,124	350	7,321	706	451	6,915	669	171	4,558	333
Fall 1974	276	10,962	1,229	370	7,850	771	456	6,316	568	152	4,744	360
X increase from Fall 1973 to Fall 1974		8%	9%		7%	12%		-9%	-15%		4%	2%
Lincoln												
Fall 1974	21	9,532	1,144	11	7,687	742	29	6,514	628	26	5,306	621

Notes: Salaries at Penn State have been inflated to reflect a 15 week period comparable to a semester.

Data by rank were not available for Temple. The average salary of all teaching full-time faculty members Fall 1974 at Temple was \$8,462 as compared to \$7,771 at Penn State, \$7,646 at Pitt and \$6,863 at Lincoln.

SOURCE: Information furnished by individual universities and information furnished by full-time faculty members.

Table 7

FACULTY SALARY COSTS PER STUDENT CREDIT HOUR - BUDGET REQUESTS AND SNYDER REPORT

	Budget Request Salary Costs/SCW				Total		Grand Total		Snyder Report Salary Costs/SCW	
	Lower Division	Upper Division	Undergraduate	Graduate	Graduate I	Graduate II	Graduate	Total	Direct University	Teaching Salary
	\$	\$	\$	\$	\$	\$		\$	\$	\$
Penn State										
1972-73 (actual)	18.77	24.85	\$22.47	\$	\$56.24		\$25.82	\$26.79	\$29.57	\$43.33
1973-74 (final budget)	18.25	22.50	19.94	52.24	85.47		27.17	26.86	29.39	34.64
1974-75 (final budget)	19.42	23.96	21.22	55.95	75.06	169.47	26.65	27.57	30.70	35.91
1975-76 (budgeted)	20.76	25.36	22.59	59.45	80.41	180.34	28.27			
1976-77 (proposed)					85.19	189.50	30.01			
Pittsburgh										
1972-73	18.45	27.89	22.53		64.92		33.11	32.38*	41.42*	44.06
1973-74 (estimated actual)	18.33	28.99	22.88	57.74	73.57	93.05	35.65	32.90	38.31	41.37
1974-75 (actual)	19.69	31.13	24.62	61.62	78.82	99.97	38.33	34.69	40.54	43.32
1975-76 (budgeted)	21.69	34.25	27.13	68.03	86.94	110.17	42.31			
1976-77 (proposed)										
Temple										
1972-73	21.97	35.73	28.09		67.03		38.64	30.05*	31.28*	32.92
1973-74 (actual)	26.61	34.91	31.47	72.55	75.64	101.05	43.27	37.61*	38.93*	40.97
1974-75 (actual)	28.21	38.36	33.06	74.27	78.04	111.40	45.23	39.72*	40.15*	42.26
1975-76 (budgeted)	29.87	40.70	35.04	78.74	82.45	114.80	47.79			
1976-77 (proposed)										
Lincoln										
1973-74 (actual)	26.80	32.70	28.74		school	graduate	28.74			
1974-75 (actual)	38.73	38.42	38.62		school	graduate	38.62	27.13	37.49	39.31
1975-76 (budgeted)	38.87	33.41	36.96		school	graduate	36.96			
1976-77 (proposed)	37.83	32.46	35.94		school	graduate	35.94			

* Estimated salary cost per student credit hour due to provision of incomplete data.

SOURCES: Budget Requests of the State-related universities.

Data provided by the State-related universities in accordance with Snyder Amendments to Appropriations Act.

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