

INSTRUCTIONAL OUTPUT
AND FACULTY SALARY COSTS
OF THE STATE-RELATED
AND STATE-OWNED UNIVERSITIES

Analysis of 1997-98 Data
Reported Under 1997 Appropriations Acts
and Public School Code

Staff Report
General Assembly of the Commonwealth of Pennsylvania
JOINT STATE GOVERNMENT COMMISSION
108 Finance Building
Harrisburg, Pennsylvania 17120
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The cover displays the reverse of the State Seal of the Commonwealth of Pennsylvania. The reverse of this seal shows a woman, who represents liberty. Her left hand holds a wand topped by a liberty cap, a French symbol of liberty. In her right hand is drawn sword. She is trampling upon Tyranny, represented by a lion. The entire design is encircled by the legend "Both Can't Survive."

The release of this report should not be construed as an indication that the members of the Executive Committee of the Joint State Government Commission endorse all of the report's findings, recommendations or conclusions.

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STATE-RELATED AND STATE-OWNED UNIVERSITIES
AND BRANCH CAMPUSES
(WITH COUNTIES)

State-Related Universities

Lincoln (Chester)

Penn State University Park (Centre)

Commonwealth College

Beaver (Beaver)

Delaware (Delaware)

DuBois (Clearfield)

Fayette (Fayette)

Hazleton (Luzerne)

Mont Alto (Franklin)

McKeesport (Allegheny)

New Kensington (Westmoreland)

Shenango (Mercer)

Wilkes-Barre (Luzerne)

Worthington Scranton (Lackawanna)

York (York)

Other Colleges

Abington (Montgomery)

Altoona (Blair)

Berks (Berks)

Erie (Erie)

Great Valley (Chester)

Harrisburg (Dauphin)

Lehigh Valley (Lehigh)

Schuylkill (Schuylkill)

Milton S. Hershey Medical Center (Dauphin)*

Pennsylvania College of Technology (Lycoming)**

Pittsburgh (Allegheny)*

Bradford Campus (McKean)

Greensburg Campus (Westmoreland)

Johnstown Campus (Cambria)

Titusville Campus (Crawford)

Temple (Philadelphia)*

Ambler Campus (Montgomery)

Harrisburg Center (Dauphin)

State-Owned Universities

Bloomsburg (Columbia)

California (Washington)

Cheyney (Delaware)

Clarion (Clarion)

Venango Campus (Venango)

East Stroudsburg (Monroe)

Edinboro (Erie)

Indiana (Indiana)

Armstrong Campus (Armstrong)

Punxsutawney Campus (Jefferson)

Kutztown (Berks)

Lock Haven (Clinton)

Clearfield Campus (Clearfield)

Mansfield (Tioga)

Millersville (Lancaster)

Shippensburg (Cumberland)

Slippery Rock (Butler)

West Chester (Chester)

*Medical School data not included in this report.

**Not included in this report.

FOREWORD

This 26th annual report summarizes the instructional outputs, instructional faculty salary costs, tuitions and Commonwealth instructional appropriations for Pennsylvania's State-related and State-owned universities--the Commonwealth's public universities.

The report is based primarily on data reported by Pennsylvania's public universities to the Pennsylvania General Assembly, as required by the annual appropriation acts for the State-related universities, and the Public School Code for the State-owned universities. These data include student credit hours and degrees, and faculty salaries and workweek activities. The report includes instructional faculty salaries, but does not include noninstructional faculty salaries. Therefore, *average faculty salaries in the report cannot be compared to those reported in other places*. In addition, since the university data do not include nonsalary expenditures, the report does not summarize total instructional costs for the universities. Data on tuitions, Commonwealth instructional appropriations, and student aid from other sources supplement the university data.

Levels of data for 1997-98 and data trends for 1992-93 to 1997-98 are presented. *Readers are cautioned to use the current historical tables for prior years' data, as some previous data have been revised in these tables.*

Student credit-hour and salary data are combined for the computation of a measure of cost efficiency: instructional faculty salary cost per full-time equivalent student. Tuition and instructional appropriation data are combined for the computation of a measure of cost sharing: the percentage of total instructional revenues covered by instructional appropriations.

This report is intended for use by a variety of persons or groups: by legislators for making appropriation decisions; by university administrators for evaluating policies related to faculty outputs, salaries and workloads; and by Pennsylvania citizens, for making informed judgments about the levels and shares of costs related to public higher education in the Commonwealth.



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I. DATA HIGHLIGHTS

1. In Fall 1997, a total of 572,559 full- and part-time students were enrolled in the 144 public and private colleges and universities in Pennsylvania. Of this total, 229,700 students (40 percent) were enrolled in the Commonwealth's public universities: 135,461 students (24 percent) in the 4 State-related universities, and 94,239 (16 percent) in the 14 State-owned universities. The main and branch campuses of Pennsylvania's public universities are listed on page iii. Compared to Fall 1996, overall student enrollments in all of Pennsylvania's colleges and universities, including the Commonwealth's public universities, increased by 1 percent.¹
2. During the 1997-98 school year,² 6 million undergraduate and graduate student credit hours (SCH) were generated by the public universities. These SCH were equivalent to 208,566 full-time students: 120,998 full-time equivalent (FTE) students (58 percent) for the State-related universities, and 87,568 (42 percent) for the State-owned universities.³ (Table 1) FTE students at the State-related universities increased by 2 percent, and at the State-owned universities by 1 percent from the previous year. FTE students vary considerably by academic level at the individual universities. At Pittsburgh and Temple, almost three-quarters of the FTE students are undergraduates; both universities have first professional programs in dentistry and law. In contrast, the proportion of undergraduate FTE students is 80 percent for Lincoln, and 91 percent for both Penn State and the State-owned group.⁴ (Table 2) Likewise, the public universities offer diverse programs to students. Most of these universities continue to have large programs in business and education, in

¹Pennsylvania Department of Education, *Colleges and Universities Education Digest, 1997-98*.

²Unless otherwise noted, all data in this report apply to the indicated school year, which includes the summer term preceding the academic year, plus the fall and spring terms of the academic year. For example, the 1997-98 school year includes the summer and fall terms of 1997 plus the spring term of 1998.

³Full-time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24.

⁴Since 1993-94, Indiana University has reported separate data for the doctor's level (previously data for this level were combined with the master's level). In 1996-97, for the first time, Slippery Rock University reported data for the first-professional level; in 1997-98 the level of these data were changed to the doctor's level. Comparisons with previous years must take these changes into account.

addition to letters and the social sciences. The State-owned universities each have specialized program missions. (Tables 3A through 3E)⁵

3. During the 1997-98 school year, the public universities conferred 41,343 bachelor's and graduate degrees (*not including medical degrees*): 24,052 degrees (58 percent) by the State-related universities, and 17,291 (42 percent) by the State-owned universities. Total degrees for the State-related and State-owned universities changed little from the preceding year.⁶ (Table 4)
4. Over the past five years (since 1992-93), Pennsylvania's population of 18- to 24-year-olds decreased by 14 percent, while FTE enrollments in the Commonwealth's public universities increased slightly. The nondecrease in total FTE enrollments in the public universities would appear to be attributable to an increase in the percentage of traditional students, plus an increase in the number of nontraditional students, attending these universities.
5. In Fall 1997, 10,513 teaching and research faculty were *employed full-time* by Pennsylvania's public universities: 5,882 full-time faculty (56 percent) by the State-related universities and 4,631 (44 percent) by the State-owned universities.⁷ The overall workweek reported by these faculty averaged 53.9 hours: 52.9 total hours for the State-related universities, and 55.3 total hours for the State-owned universities. Hours spent in undergraduate and graduate classroom and individual instruction contact with students averaged 8.5 per week for the State-related group, and 11.6 per week for the State-owned group. (Table 5) Since 1992-93, average total workweek hours for the State-related universities increased by 2 percent but average student contact hours decreased by 1 percent; over

⁵Tables 3A through 3E employ the Classification of Instructional Programs (CIP) taxonomy. The CIP taxonomy was introduced by the U.S. Department of Education's National Center for Education Statistics in 1981, and revised in 1985 and 1990. This report utilizes an aggregation of two-digit CIP, each of which corresponds to one or more academic departments or program areas within individual universities. The CIP groupings are used to facilitate comparisons in this report, given the large array of departments and programs which exist in the Commonwealth's public universities.

⁶The public universities also award associate degrees; these degrees are not included in this report.

⁷Faculty who are employed full-time by the public universities, and who are engaged in teaching, research or both, comprise the set of faculty whose workweek activities are reported by the universities, and summarized in table 5. Note that this is *not* the same set of faculty whose headcounts and instructional salaries are included in table 6.

the same years, the average total workweek and student contact hours at the State-owned universities remained nearly constant.

6. During the 1997-98 school year, the *full- and part-time instructional faculty employed* by the public universities were the equivalent of 11,908 full-time faculty: 6,987 FTE instructional faculty (59 percent) for the State-related universities, and 4,921 (41 percent) for the State-owned universities.⁸ The combined FTE instructional faculty increased by 1 percent from the previous year. The instructional salary for these faculty averaged \$47,500 and \$53,500 for the two public university groups, respectively.⁹ The average instructional salary for the State-related universities increased by 5 percent, but for the State-owned universities remained constant from the previous year.¹⁰ The State-owned universities tend to utilize relatively more higher-ranked FTE faculty--professors and associate professors--in instruction than do the larger State-related universities. In contrast, Penn State, Pittsburgh and Temple provide a significant amount of instruction using instructors and nonranked faculty (largely graduate teaching assistants); the lower instructional salaries of the nonranked faculty tend to lower the average instructional salary for the State-related group relative to the State-owned group. (Table 6)

7. Since 1992-93, the average instructional salary for the FTE instructional faculty for both the State-related and State-owned universities increased by \$7,600. However, this represents a 19 percent increase for the State-related group, and a 17 percent increase for the State-owned group. The relative increase in average instructional salary for the State-owned group has tended to widen the gap in average instructional salaries between the two groups of FTE faculty.

8. During the 1997-98 school year, the ratio of FTE students to FTE instructional faculty averaged 17.3 for the State-related universities, and

⁸Full-time instructional faculty, plus the full-time equivalency of part-time instructional faculty, comprise the set of faculty whose instructional salaries are reported by the universities and summarized in table 6. Note that this is *not* the same set of faculty whose workweek activities are included in table 5.

⁹This report does not include the noninstructional salaries of instructional faculty members. Therefore, *average faculty salaries cannot be compared to those reported in other places.*

¹⁰*Caveat:* Average instructional salaries are computed by dividing each university's total instructional salaries for each academic rank by the respective number of FTE instructional faculty. Therefore, changes in average instructional salaries do *not* necessarily correspond to general salary changes for all faculty members in a given university. Average instructional salary changes also reflect changes in the rank distribution of faculty.

17.8 for the State-owned universities; both ratios remained largely unchanged from the previous year. (Tables 1 and 6)

9. During the 1997-98 school year, the average instructional faculty salary costs per FTE student for the State-related group were: \$2,100 for the undergraduate level, and \$4,556 for the master's level. For the State-owned group the FTE instructional salary costs for these levels were \$2,907 and \$4,039, respectively. (Table 7) First professional FTE instructional salary costs averaged \$1,721 for Pittsburgh and \$3,958 for Temple; doctoral FTE instructional salary costs averaged \$12,897 for Penn State, \$12,024 for Pittsburgh, \$8,475 for Temple and \$3,786 for the State-owned universities. Statistical analysis has shown that FTE instructional salary costs vary directly with FTE instructional faculty salaries, and inversely with both average class (section) sizes and the number of classes (sections) offered per course. Since 1992-93, undergraduate FTE instructional salary costs increased by 21 percent for the State-related group, and by 23 percent for the State-owned group. FTE instructional salary costs also vary considerably by program area. (Table 8A through 8E)

10. Regression analysis applied to 1997-98 lower and upper division undergraduate FTE instructional salary cost, class size and instructional faculty salary data for the public universities indicates that the total annual cost savings to be expected from *decreasing* average FTE instructional faculty salaries by \$1,000 at these universities would be almost \$10 million, and from *increasing* average class (section) sizes by one student about \$18 million.¹¹

11. The average undergraduate class (section) size is 19 for Lincoln, 29 for Penn State, 27 for Pittsburgh, 24 for Temple, and 22 for the State-owned universities. Since 1992-93, average undergraduate class sizes declined by about 4 percent at both the State-related and State-owned universities. (Table 9)

12. During the 1997-98 school year, the tuition and required fees for full-time in-State undergraduate students averaged \$5,634 for the State-related universities, and \$4,265 for the State-owned universities. These tuition and fees increased by 5 percent from the previous year for the State-related universities and 3 percent for the State-owned universities.

¹¹The regression details are not included in this report; these details are available from the staff of the Joint State Government Commission. The model for the regression equation is given in the Appendix.

Lincoln's tuition and fees for nonresidents exceeded those for residents by 57 percent for full-time undergraduate students, and by 65 percent for full-time graduate students. Penn State's tuition and fees for nonresident full-time undergraduates were 113 percent higher, and those for graduate students 103 percent higher than the tuition and fees for residents. Pittsburgh's nonresident tuition and fees were approximately double those for residents for both levels. For Temple, the out-of-state premium was almost 80 percent for full-time undergraduates and 38 percent for full-time graduate students. For the State-owned group, tuition and fees for nonresident undergraduates exceeded those for residents by 126 percent; nonresident graduate students paid 66 percent more than Pennsylvania residents. (Table 10)

13. For fiscal year 1997-98, the public universities collected 1.3 billion dollars in tuition and fee revenues. FTE student revenues averaged \$6,030 for Lincoln, \$6,930 for Penn State, \$8,440 for Pittsburgh, \$7,920 for Temple, and \$4,570 for the State-owned group. Since 1992-93, FTE student revenues increased by 31 percent for the State-related universities and 28 percent for the State-owned universities. (Table 11)

14. For fiscal year 1997-98, the Commonwealth's instructional appropriations to the public universities totaled \$906.6 million: \$505.6 million (56 percent) to the State-related universities and \$401.0 million (44 percent) to the State-owned universities.¹² ¹³ These appropriations represent 85 percent of the total appropriations made specifically for instruction to the public universities *and community colleges*, and 71 percent of the total appropriations made for all purposes to all public and private colleges and universities in the Commonwealth. Total instructional appropriations remained virtually unchanged for the Commonwealth's public universities from the previous year. The average appropriation per FTE student was \$4,180 for the State-related group and \$4,580 for the State-owned group. (Table 12) In addition to the instructional appropriations made directly to the public universities, monies appropriated from the General Fund to the Pennsylvania Higher Education Assistance Agency totaling \$114 million went to students at the public universities through various PHEAA grant and matching-fund programs.¹⁴

¹²The Commonwealth instructional appropriation to the State System of Higher Education does *not* include amounts allocated to the Office of the Chancellor, McKeever Center, Faculty Professional Development, University Center and System Reserve.

¹³In this report, total educational and general appropriations and Tuition Challenge Grants are regarded as "instructional" and used for comparisons. Over the years, educational and general appropriations have been expanded to include expenditure categories which previously were separate line items in General Fund Budgets.

¹⁴Data provided by the Pennsylvania Higher Education Assistance Agency.

15. For 1997-98 total instructional revenues per FTE student--tuition and fees plus the Commonwealth's instructional appropriations--averaged \$11,640 for the State-related universities and \$9,150 for the State-owned universities. (Table 13) Per student instructional revenues for the State-related universities were more than those for the State-owned universities, even though per student undergraduate instructional faculty salary costs for the State-related group were less than those for the State-owned group. (Table 7) The analysis of *total* instructional costs is beyond the scope of this report.
16. During the 1997-98 school year, on an FTE student basis, the ratio of Commonwealth instructional appropriations to tuition and fee revenues *plus* Commonwealth instructional appropriations averaged 36 percent for the State-related university group, and 50 percent for the State-owned university group. (Table 13) Since 1992-93, average FTE student tuition and fee revenues collected by the public universities increased, on a percentage basis, more than twice as much as the average direct FTE student appropriations from the Commonwealth to these institutions. Hence, the percentage of total instructional revenues from Commonwealth appropriations has *decreased*, causing the student share of instructional cost to *increase* for all of the public universities.

II. CURRENT YEAR DATA

Table 1

FULL-TIME EQUIVALENT STUDENTS BY ACADEMIC LEVEL ¹
 1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Total				Undergraduate				FTE students	One students
	FTE students	Oneyear change	Percentage change		FTE students	Oneyear change	Percentage change			
			One year	Five-year average			One year	Five-year average		
State-related										
Lincoln	2,064	199	11%	7%	1,641	68	4%	5%	423	
Penn State	67,456	1,645	2	1	61,110	1,793	3	2	6,346	-1
Pittsburgh	28,489	751	3	-1	20,457	528	3	-1	8,032	2
Temple	22,989	-466	-2	-2	16,643	-296	-2	-2	6,346	-1
Total	120,998	2,129	2	a	99,851	2,093	2	a	21,147	
State-owned										
Bloomsburg	7,338	113	2	a	6,902	109	2	a	436	
California	5,422	196	4	-2	4,654	181	4	-2	768	
Cheyney	1,313	20	2	-2	1,025	-54	-5	-4	288	
Clarion	5,695	90	2	-1	5,416	116	2	a	279	-
East Stroudsburg	5,514	189	4	1	4,857	153	3	1	657	
Edinboro	6,525	-153	-2	-3	6,132	-126	-2	-3	393	-
Indiana	12,954	95	1	-1	11,805	66	1	-1	1,149	
Kutztown	6,892	101	1	a	6,461	78	1	a	431	
Lock Haven	3,403	120	4	-1	3,300	77	2	-2	103	
Mansfield	2,757	-44	-2	-2	2,620	-33	-1	-2	137	-
Millersville	6,944	102	1	a	6,130	84	1	a	814	
Shippensburg	6,089	32	1	a	5,561	42	1	a	528	-
Slippery Rock	6,667	-50	-1	-2	6,066	-64	-1	-2	601	
West Chester	10,055	331	3	a	9,021	256	3	a	1,034	
Total	87,568	1,142	1	-1	79,950	885	1	-1	7,618	2
All universities	208,566	3,271	2	a	179,801	2,978	2	a	28,765	2

1. Data for each year represent the summer term preceding the academic year plus the academic year. ~~FTE~~ Full-time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24.

2. In addition to master's level, graduate for Penn State, Pittsburgh, Temple, Indiana and Slippery Rock includes first-professional (e.g., nursing, education) and/or doctor's levels.

a. Rounds to less than 1 percent.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Table 2

FULL-TIME EQUIVALENT STUDENTS BY ACADEMIC DIVISION AND LEVEL¹
 1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Lower division			Upper division			Master's			First-time
	FTE students	Percentage change		FTE students	Percentage change		FTE students	Percentage change		
		One year	Five-year average		One year	Five-year average		One year	Five-year average	
State-related										
Lincoln	1,280	3%	6%	361	9%	2%	423	45%	20%	1
Penn State	38,662	-1	1	22,448	11	2	3,552	-4	a	
Pittsburgh	14,045	5	a	6,412	-1	-2	5,257	3	a	2,7
Temple	7,427	-4	-3	9,216	1	-2	3,457	-2	-1	2,8
Total	61,414	a	a	38,437	6	a	12,689	a	a	8,4
State-owned										
Bloomsburg	4,915	1	1	1,987	3	-2	436	1	2	
California	3,168	7	-3	1,486	-1	-2	768	2	1	
Cheyney	731	-4	-4	294	-7	-1	288	35	13	
Clarion	3,901	2	a	1,515	3	-2	279	-9	-2	
East Stroudsburg	3,436	3	1	1,421	3	1	657	6	2	
Edinboro	4,027	-2	-4	2,105	-2	-1	393	-6	-1	
Indiana	8,126	a	a	3,679	1	-3	875	5	b	2
Kutztown	4,261	2	1	2,200	0	-1	431	6	1	
Lock Haven	2,283	3	-3	1,017	2	1	103	72	238	
Mansfield	1,604	1	-4	1,016	-4	2	137	-7	-6	
Millersville	3,863	a	-1	2,267	3	2	814	2	a	
Shippensburg	3,959	-1	a	1,602	7	a	528	-2	1	
Slippery Rock	4,249	-1	-2	1,817	-2	-2	360	-3	b	2
West Chester	6,123	6	1	2,898	-2	-2	1,034	8	a	
Total	54,646	1	-1	25,304	1	-1	7,103	4	b	5
All universities	116,060	1	a	63,741	4	a	19,792	1	a	8,9

1. Data for each year represent the summer term preceding the academic year plus the academic year. ~~FTE~~ Full-time equivalent students are undergraduate student credit hours by 30 and graduate student credit hours by 24.

2. Excludes medical school data.

a. Rounds to less than 1 percent.

b. The doctor's level was included in master's level in 1992-93.

na. Not applicable.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Table 3A

LINCOLN UNIVERSITY
 NUMBER AND PERCENTAGE DISTRIBUTION OF FULL-TIME EQUIVALENT STUDENTS ¹
 BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
 1997-98

CIP Classification	Total	Percentage of total	Undergraduate				Graduate ²	Percentage of total
			Lower division	Percentage of total	Upper division	Percentage of total		
Agriculture	--	--	--	--	--	--	--	--
Architecture and environmental design	--	--	--	--	--	--	--	--
Area and ethnic studies	--	--	--	--	--	--	--	--
Business	132	6%	48	4%	46	13%	38	9%
Communications	--	--	--	--	--	--	--	--
Computer and information sciences	37	2	31	2	6	2	--	--
Consumer, personal and miscellaneous services	--	--	--	--	--	--	--	--
Education	397	19	289	23	81	22	27	6
Engineering	--	--	--	--	--	--	--	--
Foreign languages	105	5	92	7	13	4	--	--
Health	--	--	--	--	--	--	--	--
Home economics	--	--	--	--	--	--	--	--
Industrial arts	--	--	--	--	--	--	--	--
Law	--	--	--	--	--	--	--	--
Letters	228	11	207	16	21	6	--	--
Liberal/general studies	--	--	--	--	--	--	--	--
Library and archival sciences	--	--	--	--	--	--	--	--
Life sciences	130	6	114	9	16	4	--	--
Mathematics	147	7	139	11	8	2	--	--
Military sciences	--	--	--	--	--	--	--	--
Multi/interdisciplinary studies	4	a	4	a	--	--	--	--
Parks and recreation	--	--	--	--	--	--	--	--
Personal and social development	--	--	--	--	--	--	--	--
Philosophy, religion and theology	71	3	64	5	7	2	--	--
Physical sciences	123	6	84	7	39	11	--	--
Psychology	79	4	55	4	24	7	--	--
Public affairs and protective services	338	16	--	--	--	--	338	80
Social sciences	276	13	153	12	102	28	21	5
Trade and industrial	--	--	--	--	--	--	--	--
Visual and performing arts	--	--	--	--	--	--	--	--
Other	--	--	--	--	--	--	--	--
Total ³	2,064	100	1,280	100	361	100	423	100

1. Data represent the summer term preceding the academic year plus the academic year. Full-time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24.

2. Graduate includes master's level only.

3. Because of rounding, CIP detail may not sum to total.

a. Rounds to less than 1 percent.

SOURCE: Data provided by Lincoln University, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* 1991.

Table 3B

PENNSYLVANIA STATE UNIVERSITY
NUMBER AND PERCENTAGE DISTRIBUTION OF FULL-TIME EQUIVALENT STUDENTS ¹
BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
1997-98

CIP Classification	Total	Percentage of total	Undergraduate				Graduate ²	Percentage of total
			Lower division	Percentage of total	Upper division	Percentage of total		
Agriculture	1,199	2%	229	1%	843	4%	127	2%
Architecture and environmental design	540	1	322	1	204	1	14	a
Area and ethnic studies	744	1	556	1	156	1	32	1
Business	7,453	11	2,545	7	3,965	18	943	15
Communications	1,198	2	463	1	698	3	37	1
Computer and information sciences	1,837	3	1,332	3	305	1	200	3
Consumer, personal and miscellaneous services	--	--	--	--	--	--	--	--
Education	3,801	6	830	2	1,371	6	1,600	25
Engineering	4,749	7	1,152	3	2,692	12	905	14
Foreign languages	2,408	4	1,739	4	560	2	109	2
Health	1,973	3	673	2	1,079	5	221	3
Home economics	1,879	3	966	2	807	4	106	2
Industrial arts	--	--	--	--	--	--	--	--
Law	--	--	--	--	--	--	--	--
Letters	6,370	9	4,388	11	1,692	8	290	5
Liberal/general studies	125	a	13	a	98	a	14	a
Library and archival sciences	21	a	15	a	6	a	--	--
Life sciences	3,537	5	2,463	6	842	4	232	4
Mathematics	6,053	9	5,362	14	547	2	144	2
Military sciences	101	a	59	a	42	a	--	--
Multi/interdisciplinary studies	2,325	3	902	2	1,314	6	109	2
Parks and recreation	381	1	84	a	275	1	22	a
Personal and social development	--	--	--	--	--	--	--	--
Philosophy, religion and theology	1,310	2	1,127	3	141	1	42	1
Physical sciences	5,377	8	3,987	10	918	4	472	7
Psychology	2,307	3	1,327	3	762	3	218	3
Public affairs and protective services	869	1	214	1	564	3	91	1
Social sciences	7,011	10	4,936	13	1,766	8	309	5
Trade and industrial	286	a	285	1	1	a	--	--
Visual and performing arts	3,600	5	2,693	7	801	4	106	2
Other	--	--	--	--	--	--	--	--
Total ³	67,456	100	38,662	100	22,448	100	6,346	100

1. Data represent the summer term preceding the academic year plus the academic year. Full-time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24.

2. Graduate includes master's and/or doctor's levels, and excludes medical school data.

3. Because of rounding, CIP detail may not sum to total.

a. Rounds to less than 1 percent.

SOURCE: Data provided by Pennsylvania State University, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* 1991.

Table 3C

UNIVERSITY OF PITTSBURGH
NUMBER AND PERCENTAGE DISTRIBUTION OF FULL-TIME EQUIVALENT STUDENTS¹
BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
1997-98

CIP Classification	Total	Percentage of total	Undergraduate				Graduate ²	Percentage of total
			Lower division	Percentage of total	Upper division	Percentage of total		
Agriculture	--	--	--	--	--	--	--	--
Architecture and environmental design	--	--	--	--	--	--	--	--
Area and ethnic studies	125	a	76	1%	45	1%	4	a
Business	2,196	8%	364	3	626	10	1,206	15%
Communications	103	a	12	a	22	a	69	1
Computer and information sciences	1,101	4	640	5	196	3	265	3
Consumer, personal and miscellaneous services	--	--	--	--	--	--	--	--
Education	1,981	7	340	2	382	6	1,259	16
Engineering	1,350	5	387	3	517	8	446	6
Foreign languages	1,572	6	1,111	8	364	6	97	1
Health	3,108	11	249	2	883	14	1,976	25
Home economics	40	a	--	--	39	1	1	a
Industrial arts	--	--	--	--	--	--	--	--
Law	834	3	--	--	--	--	834	10
Letters	2,622	9	1,835	13	655	10	132	2
Liberal/general studies	--	--	--	--	--	--	--	--
Library and archival sciences	181	1	--	--	14	a	167	2
Life sciences	1,105	4	717	5	313	5	75	1
Mathematics	1,793	6	1,489	11	222	3	82	1
Military sciences	12	a	7	a	5	a	--	--
Multi/interdisciplinary studies	223	1	186	1	34	1	3	a
Parks and recreation	--	--	--	--	--	--	--	--
Personal and social development	--	--	--	--	--	--	--	--
Philosophy, religion and theology	887	3	692	5	130	2	65	1
Physical sciences	2,072	7	1,719	12	128	2	225	3
Psychology	1,393	5	1,020	7	282	4	91	1
Public affairs and protective services	1,386	5	131	1	452	7	803	10
Social sciences	3,353	12	2,221	16	948	15	184	2
Trade and industrial	--	--	--	--	--	--	--	--
Visual and performing arts	1,051	4	849	6	154	2	48	1
Other	--	--	--	--	--	--	--	--
Total ³	28,489	100	14,045	100	6,412	100	8,032	100

1. Data represent the summer term preceding the academic year plus the academic year. **Full** time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24.

2. Graduate includes master's, first-professional (excluding medical school) and/or doctor's levels.

3. Because of rounding, CIP detail may not sum to total.

a. Rounds to less than 1 percent.

SOURCE: Data provided by University of Pittsburgh, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* 1991.

Table 3D

TEMPLE UNIVERSITY
 NUMBER AND PERCENTAGE DISTRIBUTION OF FULL-TIME EQUIVALENT STUDENTS ¹
 BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
 1997-98

CIP Classification	Total	Percentage of total	Undergraduate				Graduate ²	Percentage of total
			Lower division	Percentage of total	Upper division	Percentage of total		
Agriculture	84	a	43	1%	40	a	1	a
Architecture and environmental design	223	1%	77	1	145	2%	1	a
Area and ethnic studies	307	1	130	2	115	1	62	1%
Business	2,384	10	611	8	1,146	12	627	10
Communications	499	2	171	2	241	3	87	1
Computer and information sciences	526	2	183	2	224	2	119	2
Consumer, personal and miscellaneous services	--	--	--	--	--	--	--	--
Education	2,143	9	408	5	1,063	12	672	11
Engineering	466	2	106	1	312	3	48	1
Foreign languages	643	3	323	4	281	3	39	1
Health	2,610	11	98	1	943	10	1,569	25
Home economics	--	--	--	--	--	--	--	--
Industrial arts	--	--	--	--	--	--	--	--
Law	1,597	7	137	2	126	1	1,334	21
Letters	1,136	5	685	9	394	4	57	1
Liberal/general studies	503	2	352	5	150	2	1	a
Library and archival sciences	--	--	--	--	--	--	--	--
Life sciences	433	2	180	2	216	2	37	1
Mathematics	1,248	5	757	10	399	4	92	1
Military sciences	6	a	2	a	4	a	--	--
Multi/interdisciplinary studies	3	a	3	a	--	--	--	--
Parks and recreation	153	1	37	a	80	1	36	1
Personal and social development	--	--	--	--	--	--	--	--
Philosophy, religion and theology	401	2	187	3	163	2	51	1
Physical sciences	892	4	474	6	357	4	61	1
Psychology	1,272	6	356	5	466	5	450	7
Public affairs and protective services	1,035	5	163	2	413	4	459	7
Social sciences	2,506	11	1,138	15	1,106	12	262	4
Trade and industrial	--	--	--	--	--	--	--	--
Visual and performing arts	1,919	8	805	11	833	9	281	4
Other	--	--	--	--	--	--	--	--
Total ³	22,989	100	7,427	100	9,216	100	6,346	100

1. Data represent the summer term preceding the academic year plus the academic year. Full-time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24.

2. Graduate includes master's, first-professional (excluding medical school) and/or doctor's levels.

3. Because of rounding, CIP detail may not sum to total.

a. Rounds to less than 1 percent.

SOURCE: Data provided by Temple University, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* 1991.

Table 3E

STATE-OWNED UNIVERSITIES
NUMBER AND PERCENTAGE DISTRIBUTION OF FULL-TIME EQUIVALENT STUDENTS ¹
BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
1997-98

CIP Classification	Total	Percentage of total	Undergraduate				Graduate ²	Percentage of total
			Lower division	Percentage of total	Upper division	Percentage of total		
Agriculture	100	a	96	a	4	a	--	--
Architecture and environmental design	18	a	2	a	12	a	4	a
Area and ethnic studies	353	a	188	a	151	1%	14	a
Business	7,321	8%	2,991	5%	3,763	15	567	7%
Communications	2,346	3	1,305	2	928	4	113	1
Computer and information sciences	2,247	3	1,724	3	435	2	88	1
Consumer, personal and miscellaneous services	--	--	--	--	--	--	--	--
Education	15,933	18	5,045	9	7,073	28	3,815	50
Engineering	221	a	77	a	110	a	34	a
Foreign languages	2,303	3	1,938	4	317	1	48	1
Health	2,976	3	894	2	1,442	6	640	8
Home economics	537	1	283	1	242	1	12	a
Industrial arts	537	1	190	a	179	1	168	2
Law	125	a	64	a	45	a	16	a
Letters	8,638	10	6,805	12	1,540	6	293	4
Liberal/general studies	216	a	198	a	18	a	--	--
Library and archival sciences	161	a	21	a	34	a	106	1
Life sciences	3,935	4	2,988	5	763	3	184	2
Mathematics	5,184	6	4,552	8	494	2	138	2
Military sciences	122	a	102	a	20	a	--	--
Multi/interdisciplinary studies	289	a	217	a	50	a	22	a
Parks and recreation	737	1	372	1	326	1	39	1
Personal and social development	760	1	588	1	133	1	39	1
Philosophy, religion and theology	1,982	2	1,665	3	287	1	30	a
Physical sciences	4,622	5	4,026	7	541	2	55	1
Psychology	5,283	6	3,136	6	1,568	6	579	8
Public affairs and protective services	1,651	2	726	1	829	3	96	1
Social sciences	12,662	14	9,653	18	2,640	10	369	5
Trade and industrial	44	a	33	a	11	a	--	--
Visual and performing arts	6,124	7	4,636	8	1,349	5	139	2
Other	160	a	144	a	1	a	15	a
Total ³	87,568	100	54,646	100	25,304	100	7,618	100

1. Data represent the summer term preceding the academic year plus the academic year. Full-time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24.

2. Graduate includes master's level for all universities and doctor's level for Indiana and Slippery Rock.

3. Because of rounding, CIP detail may not sum to total.

a. Rounds to less than 1 percent.

SOURCE: Data provided by the individual State-owned universities, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics *Classification of Instructional Programs* 1991.

Table 4

DEGREES CONFERRED¹
 1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Total				Bachelor's				One Degrees
	Degrees	Oneyear change	Percentage change		Degrees	Oneyear change	Percentage change		
			One year	Five-year average			One year	Five-year average	
State-related									
Lincoln	318	-10	-3%	5%	185	-34	-16%	a	133
Penn State	11,686	202	2	a	9,059	66	1	-1%	2,627
Pittsburgh	6,514	-154	-2	-1	3,854	-108	-3	-2	2,660
Temple	5,534	62	1	-1	3,212	142	5	-2	2,322
Total	24,052	100	a	a	16,310	66	a	-1	7,742
State-owned									
Bloomsburg	1,464	-5	a	-1	1,239	8	1	-2	225
California	1,238	-17	-1	a	921	15	2	-1	317
Cheyney	274	11	4	3	178	31	21	4	96
Clarion	1,010	6	1	-2	850	-13	-2	-3	160
East Stroudsburg	1,047	13	1	a	821	33	4	-1	226
Edinboro	1,251	-47	-4	-2	1,066	-28	-3	-3	185
Indiana	2,604	158	6	-1	2,060	104	5	-2	544
Kutztown	1,313	-49	-4	-2	1,111	-36	-3	-2	202
Lock Haven	582	-4	-1	a	557	-26	-4	a	25
Mansfield	540	-41	-7	-3	456	-34	-7	-3	84
Millersville	1,439	41	3	a	1,257	38	3	a	182
Shippensburg	1,362	-109	-7	-2	1,058	-103	-9	-3	304
Slippery Rock	1,264	-102	-7	-3	1,107	-46	-4	-3	157
West Chester	1,903	62	3	-2	1,509	20	1	-2	394
Total	17,291	-83	a	-1	14,190	-37	a	-2	3,101
All universities	41,343	17	a	-1	30,500	29	a	-2	10,843

1. Data for each year represent the summer term preceding the academic year plus the academic year.

2. Graduate includes master's at all universities, first professional (excluding medical schools) at Pittsburgh and Temple, and doctor's at Temple, Indiana and Slippery Rock.

a. Rounds to less than 1 percent.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Table 5

NUMBER AND WORKWEEKS OF FULL-TIME EMPLOYED FACULTY BY TYPE OF ACTIVITY
FALL 1997, AND PERCENTAGE CHANGE FROM FALL 1996

University	Full-time employed faculty ¹	Average weekly hours ²							
		Student contact				Instruc- tional support ³	Research		O unive rser
		Under graduate	Percentage change	Graduate	Percentage change		Percentage change	Percentage change	
State-related									
Lincoln	94	10.4	1%	.9	0%	20.2	3%	11.5	11%
Penn State	2,975	6.8	1	1.7	-6	19.4	0	16.9	-1
Pittsburgh	1,780	4.4	0	3.8	-5	13.8	-1	18.4	-1
Temple	1,033	5.4	-4	3.7	-5	18.8	2	13.7	-1
Total	5,882	5.9	0	2.6	-7	17.6	0	16.7	-1
State-owned									
Bloomsburg	372	11.2	-1	.8	0	17.3	-1	8.8	-2
California	257	10.5	5	1.7	6	17.9	3	7.4	1
Cheyney	87	11.0	0	1.0	0	15.6	0	6.6	0
Clarion	339	10.5	-4	.8	0	18.4	3	8.2	-4
East Stroudsburg	246	11.2	3	1.1	0	18.2	7	8.2	-9
Edinboro	345	13.2	3	1.0	11	17.6	3	8.7	4
Indiana	726	10.1	-1	1.1	-8	16.8	-2	9.1	-8
Kutztown	364	11.3	3	.6	20	16.7	3	8.4	0
Lock Haven	197	11.1	2	.1	0	17.9	-1	6.7	-4
Mansfield	161	11.1	5	.1	-75	20.6	-3	9.6	1
Millersville	324	10.6	5	.7	-12	16.4	5	9.5	-8
Shippensburg	299	9.8	-4	1.0	11	17.5	-2	7.7	-4
Slippery Rock	371	9.4	-5	.8	0	18.5	1	8.7	0
West Chester	543	10.3	-3	1.5	0	17.3	-2	12.0	-2
Total	4,631	10.7	0	.9	0	17.5	1	8.8	-4
All universities	10,513	7.9	0	1.9	-5	17.6	1	13.3	-1

1. The number of fulltime employed faculty represents those reported by each university for the fall term; sabbatical and other on-leave faculty
2. Averages calculated for the fulltime employed faculty who reported complete workweeks of 100 hours or less for the fall term.
3. Includes course preparation and evaluation.
4. Includes public service, institutional support and student services.
 - a. Rounds to less than 1 percent.

SOURCE: Data provided by the individual universities, 1997 and 1998.

Table 6

NUMBER AND AVERAGE INSTRUCTIONAL SALARIES OF FULL-TIME EQUIVALENT INSTRUCTIONAL FACULTY AND PERCENTAGE
1997-98
(Dollars in thousands)

University	FTE		Average		Professor		Associate professor		Assistant professor	
	Number	instructional faculty	instructional salary	instructional salary	Average	Percent-	Average	Percent-	Average	Percent-
		Percentage		Percentage						
		change		change	ional	age of	ional	age of	ional	age of
		199697 to		199697 to	salary	faculty	salary	faculty	salary	faculty
		199798	Amount	199798						
State-related										
Lincoln	135	12%	\$32.4	-2%	\$54.1	15%	\$39.8	14%	\$29.8	33%
Penn State	3,654	3	48.1	6	83.6	16	56.7	19	46.3	22
Pittsburgh	1,833	-1	47.8	6	75.0	21	52.0	25	41.0	19
Temple	1,365	-4	47.1	2	72.0	30	56.1	23	41.0	15
Total	6,987	a	47.5	5	77.5	20	54.9	21	43.7	20
State-owned										
Bloomsburg	405	2	52.7	2	67.7	27	54.7	35	42.5	29
California	279	3	53.4	-1	66.8	40	54.8	29	44.8	13
Cheyney	103	4	51.0	2	63.4	30	54.0	27	45.3	25
Clarion	326	a	53.9	2	69.4	32	58.0	26	42.6	31
East Stroudsburg	277	4	55.4	-2	68.8	37	59.6	28	44.2	24
Edinboro	387	-2	53.1	3	68.9	26	55.6	25	45.2	42
Indiana	742	2	54.4	1	71.2	33	56.4	27	44.0	27
Kutztown	374	2	55.0	1	72.0	30	57.9	29	44.0	28
Lock Haven	194	5	50.0	-3	74.0	20	55.8	29	44.8	27
Mansfield	171	-2	51.7	-6	68.5	31	51.1	33	41.7	26
Millersville	406	2	52.7	1	67.4	35	55.5	24	42.4	28
Shippensburg	308	0	56.2	-1	71.6	38	58.5	17	43.8	41
Slippery Rock	358	-1	57.1	1	68.8	33	60.6	27	47.1	31
West Chester	591	3	49.9	1	68.0	25	55.8	29	45.4	21
Total	4,921	1	53.5	a	69.3	32	56.4	27	44.1	28
All universities	11,908	1	50.0	3	73.2	25	55.6	24	43.9	23

1. Average instructional salaries are calculated by dividing the total instructional salaries paid to all staff members in the respective ranks by their full-time function. One full-time equivalent faculty represents one full-time workload for two terms (one academic year). The summer term is treated as one term each year representing the summer term preceding the academic year plus the academic year.

2. The full-time equivalency of nonranked faculty members is based on the time spent in instruction by nonranked personnel, including lecturers, adjunct graduate assistants and volunteers.

a. Rounds to less than 1 percent.

na. Not applicable.

SOURCE: Data provided by the individual universities, 1997 and 1998.

Table 7

AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER FULL-TIME EQUIVALENT STUDENT BY ACADEMIC DIVISION
1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Undergraduate			Undergraduate			Total under graduate	Percentage change		Total
	Lower division	Percentage change		Upper division	Percentage change			One- year	Five-year average	
		One year	Five-year average		One- year	Five-year average		One- year	Five-year average	
State-related										
Lincoln	\$1,773	0%	3%	\$3,738	-3%	7%	\$2,205	a	4%	
Penn State	1,519	4	3	2,816	3	5	1,995	5%	4	5,
Pittsburgh	1,724	2	3	3,359	8	6	2,237	4	4	5,
Temple	1,939	2	7	2,603	a	5	2,307	1	6	3,
Total	1,622	3	3	2,864	3	5	2,100	4	4	4,
State-owned										
Bloomsburg	2,221	a	4	4,226	3	8	2,798	2	5	4,
California	2,207	-1	5	3,626	2	3	2,660	-1	4	3,
Cheyney	3,674	9	9	6,165	17	10	4,388	11	10	2,
Clarion	2,259	-1	2	4,769	a	6	2,961	a	4	5,
East Stroudsburg	2,300	2	3	3,972	-6	2	2,789	-2	2	2,
Edinboro	2,453	4	6	4,176	5	5	3,044	4	6	4,
Indiana	2,062	2	5	4,535	3	8	2,832	2	6	6,
Kutztown	2,056	2	2	4,566	1	6	2,910	1	4	4,
Lock Haven	2,049	-12	1	4,638	18	7	2,847	1	4	2,
Mansfield	2,170	-3	4	4,717	-6	3	3,158	-5	5	4,
Millersville	2,776	3	7	3,661	1	3	3,103	2	6	2,
Shippensburg	2,263	-4	3	3,984	1	2	2,758	-1	2	3,
Slippery Rock	2,482	a	5	4,359	4	5	3,044	2	5	4,
West Chester	2,291	-2	2	3,872	6	5	2,799	a	3	4,
Total	2,289	a	4	4,241	2	5	2,907	1	5	4,
All universities	1,936	2	3	3,411	2	5	2,459	2	4	4,

1. The average instructional faculty salary cost per full-time equivalent student for each level is calculated as follows: the instructional salary assigned by level according to the percentage distribution of the course (assigned) credits within each rank. The salary for each rank is divided by the total full-time equivalent students for that level. For individual instruction, one course (assigned) credit is attributed to every three students.

a. Rounds to less than 1 percent.

b. The master's level included the doctor's level in 1992-93.

SOURCE: Data provided by the individual universities, 1996 to 1998.

Table 8A

LINCOLN UNIVERSITY
 AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER FULL-TIME EQUIVALENT STUDENT¹
 BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
 1997-98

CIP classification	Undergraduate			Graduate		
	Lower division	Upper division	Total under graduate	Master's	First professional	Doctor's
Agriculture	--	--	--	--	--	--
Architecture and environmental design	--	--	--	--	--	--
Area and ethnic studies	--	--	--	--	--	--
Business	\$1,228	\$3,943	\$2,550	\$2,775	--	--
Communications	--	--	--	--	--	--
Computer and information sciences	1,612	3,592	1,927	--	--	--
Consumer, personal and miscellaneous services	--	--	--	--	--	--
Education	1,752	2,691	1,958	2,479	--	--
Engineering	--	--	--	--	--	--
Foreign languages	2,132	6,659	2,675	--	--	--
Health	--	--	--	--	--	--
Home economics	--	--	--	--	--	--
Industrial arts	--	--	--	--	--	--
Law	--	--	--	--	--	--
Letters	1,684	5,353	2,020	--	--	--
Liberal/general studies	--	--	--	--	--	--
Library and archival sciences	--	--	--	--	--	--
Life sciences	1,045	5,150	1,541	--	--	--
Mathematics	1,885	5,938	2,093	--	--	--
Military sciences	--	--	--	--	--	--
Multi/interdisciplinary studies	1,331	--	1,331	--	--	--
Parks and recreation	--	--	--	--	--	--
Personal and social development	--	--	--	--	--	--
Philosophy, religion and theology	1,274	4,337	1,557	--	--	--
Physical sciences	3,154	4,007	3,426	--	--	--
Psychology	1,801	4,559	2,644	--	--	--
Public affairs and protective services	--	--	--	1,560	--	--
Social sciences	1,813	3,082	2,321	2,404	--	--
Trade and industrial	--	--	--	--	--	--
Visual and performing arts	--	--	--	--	--	--
Other	--	--	--	--	--	--
Total	1,773	3,738	2,205	1,767	--	--

1. The average instructional faculty salary cost per full-time equivalent student for each level is calculated as follows: the instructional salary for each rank is assigned by level according to the percentage distribution of the course (assigned) credits within each rank. The salary for each rank is summed by level and divided by total full-time equivalent students for that level. For individual instruction, one course (assigned) credit is attributed to every three student credit hours generated.

SOURCE: Data provided by Lincoln University, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics *Classification of Instructional Programs* 1991.

Table 8B

PENNSYLVANIA STATE UNIVERSITY
 AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER FULL-TIME EQUIVALENT STUDENT¹
 BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
 1997-98

CIP classification	Undergraduate			Graduate		
	Lower division	Upper division	Total under graduate	Master's	First professional ²	Doctor's
Agriculture	\$2,156	\$2,276	\$2,250	\$8,754	--	\$10,000
Architecture and environmental design	1,170	4,616	2,506	14,671	--	14,670
Area and ethnic studies	1,612	4,457	2,235	7,793	--	10,095
Business	1,519	2,389	2,049	5,005	--	28,334
Communications	897	2,593	1,917	13,004	--	14,930
Computer and information sciences	1,991	3,613	2,293	2,740	--	17,846
Consumer, personal and miscellaneous services	--	--	--	--	--	--
Education	1,519	3,068	2,484	2,063	--	6,613
Engineering	3,548	4,065	3,910	9,042	--	16,184
Foreign languages	1,588	2,268	1,754	6,529	--	12,618
Health	1,501	2,893	2,358	6,461	--	15,755
Home economics	671	2,029	1,289	3,512	--	11,307
Industrial arts	--	--	--	--	--	--
Law	--	--	--	--	--	--
Letters	1,793	2,235	1,916	6,656	--	11,181
Liberal/general studies	2,954	2,637	2,673	4,806	--	--
Library and archival sciences	1,556	604	1,294	--	--	--
Life sciences	1,267	2,434	1,564	7,439	--	13,650
Mathematics	1,765	3,620	1,936	2,649	--	14,148
Military sciences	--	--	--	--	--	--
Multi/interdisciplinary studies	1,528	2,232	1,944	5,568	--	7,236
Parks and recreation	678	1,349	1,191	11,919	--	12,206
Personal and social development	--	--	--	--	--	--
Philosophy, religion and theology	1,103	3,543	1,374	7,120	--	14,328
Physical sciences	1,566	3,768	1,978	10,340	--	16,531
Psychology	614	2,181	1,186	6,236	--	7,464
Public affairs and protective services	1,098	2,032	1,775	4,552	--	15,354
Social sciences	1,101	2,635	1,505	9,165	--	14,657
Trade and industrial	3,380	--	3,380	--	--	--
Visual and performing arts	1,253	4,058	1,896	9,486	--	9,332
Other	--	--	--	--	--	--
Total	1,519	2,816	1,995	5,048	--	12,897

1. The average instructional faculty salary cost per full-time equivalent student for each level is calculated as follows: the instructional salary for each rank is assigned by level according to the percentage distribution of the course (assigned) credits within each rank. The salary for each rank is summed by level and divided by total full-time equivalent students for that level. For individual instruction, one course (assigned) credit is attributed to every three student credit hours generated.

2. Excludes medical school data.

SOURCE: Data provided by Pennsylvania State University, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs*, 1991.

Table 8C

UNIVERSITY OF PITTSBURGH
 AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER FULL-TIME EQUIVALENT STUDENT¹
 BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
 1997-98

CIP classification	Undergraduate			Graduate		
	Lower division	Upper division	Total under graduate	Master's	First professional ²	Doctor's
Agriculture	--	--	--	--	--	--
Architecture and environmental design	--	--	--	--	--	--
Area and ethnic studies	\$1,757	\$4,310	\$2,704	\$3,636	--	\$24,392
Business	2,112	2,273	2,214	3,074	--	31,470
Communications	1,971	5,132	4,027	2,704	--	13,821
Computer and information sciences	1,302	3,407	1,795	3,368	--	13,859
Consumer, personal and miscellaneous services	--	--	--	--	--	--
Education	1,564	2,455	2,036	2,921	--	8,145
Engineering	3,409	3,854	3,664	8,096	--	13,556
Foreign languages	2,106	2,890	2,299	8,005	--	16,347
Health	2,117	4,087	3,653	8,420	\$1,214	10,491
Home economics	--	2,900	2,900	10,448	--	--
Industrial arts	--	--	--	--	--	--
Law	--	--	--	--	2,356	--
Letters	1,915	2,822	2,154	4,487	--	13,394
Liberal/general studies	--	--	--	--	--	--
Library and archival sciences	--	1,777	1,777	2,903	--	12,830
Life sciences	1,889	4,370	2,643	15,743	--	25,189
Mathematics	1,667	3,445	1,897	7,702	--	16,674
Military sciences	--	--	--	--	--	--
Multi/interdisciplinary studies	1,399	5,203	1,991	1,891	--	--
Parks and recreation	--	--	--	--	--	--
Personal and social development	--	--	--	--	--	--
Philosophy, religion and theology	1,765	4,056	2,127	12,385	--	23,732
Physical sciences	1,755	7,543	2,156	12,822	--	12,003
Psychology	930	2,374	1,243	11,064	--	12,910
Public affairs and protective services	1,712	2,063	1,984	3,627	--	6,849
Social sciences	1,586	3,569	2,179	10,520	--	16,905
Trade and industrial	--	--	--	--	--	--
Visual and performing arts	1,410	5,018	1,963	8,087	--	16,744
Other	--	--	--	--	--	--
Total	1,724	3,359	2,237	5,287	1,721	12,024

1. The average instructional faculty salary cost per full-time equivalent student for each level is calculated as follows: the instructional salary for each rank is assigned by level according to the percentage distribution of the course (assigned) credits within each rank. The salary for each rank is summed by level and divided by total full-time equivalent students for that level. For individual instruction, one course (assigned) credit is attributed to every three student credit hours generated.

2. Excludes medical school data.

SOURCE: Data provided by University of Pittsburgh, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs* 1991.

Table 8D

TEMPLE UNIVERSITY
 AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER FULL-TIME EQUIVALENT STUDENT¹
 BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
 1997-98

CIP classification	Undergraduate			Graduate		
	Lower division	Upper division	Total under graduate	Master's	First professional ²	Doctor's
Agriculture	\$2,255	\$3,094	\$2,661	\$2,510	--	--
Architecture and environmental design	2,481	3,874	3,390	3,432	--	--
Area and ethnic studies	2,016	2,787	2,378	5,140	--	\$6,420
Business	1,743	2,429	2,191	2,487	--	12,850
Communications	1,623	3,051	2,458	4,357	--	7,421
Computer and information sciences	1,705	3,351	2,611	3,108	--	8,732
Consumer, personal and miscellaneous services	--	--	--	--	--	--
Education	1,638	2,262	2,089	2,552	--	5,077
Engineering	3,585	4,051	3,933	7,659	--	25,314
Foreign languages	2,316	3,217	2,735	2,899	--	6,997
Health	1,562	1,374	1,392	2,694	\$4,633	7,523
Home economics	--	--	--	--	--	--
Industrial arts	--	--	--	--	--	--
Law	1,693	3,324	2,473	3,895	3,416	--
Letters	2,207	2,748	2,405	8,666	--	6,634
Liberal/general studies	1,198	1,111	1,172	3,417	--	--
Library and archival sciences	--	--	--	--	--	--
Life sciences	843	2,166	1,565	3,977	--	8,684
Mathematics	2,169	2,802	2,388	3,436	--	20,496
Military sciences	--	--	--	--	--	--
Multi/interdisciplinary studies	802	--	802	--	--	--
Parks and recreation	1,969	4,239	3,516	3,407	--	9,942
Personal and social development	--	--	--	--	--	--
Philosophy, religion and theology	2,561	3,729	3,104	8,825	--	13,432
Physical sciences	1,869	2,670	2,213	4,274	--	12,183
Psychology	1,210	1,944	1,626	3,066	--	8,051
Public affairs and protective services	1,469	2,241	2,023	2,738	--	7,009
Social sciences	1,819	2,585	2,196	3,574	--	8,465
Trade and industrial	--	--	--	--	--	--
Visual and performing arts	2,615	3,606	3,119	6,082	--	9,942
Other	--	--	--	--	--	--
Total	1,939	2,603	2,307	3,280	3,958	8,475

1. The average instructional faculty salary cost per full-time equivalent student for each level is calculated as follows: the instructional salary for each rank is assigned by level according to the percentage distribution of the course (assigned) credits within each rank. The salary for each rank is summed by level and divided by total full-time equivalent students for that level. For individual instruction, one course (assigned) credit is attributed to every three student credit hours generated.

2. Excludes medical school data.

SOURCE: Data provided by Temple University, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics *Classification of Instructional Programs* 1991.

Table 8E

STATE-OWNED UNIVERSITIES
 AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER FULL-TIME EQUIVALENT STUDENT¹
 BY ACADEMIC DIVISION AND LEVEL AND CIP CLASSIFICATION
 1997-98

CIP classification	Undergraduate			Graduate		
	Lower division	Upper division	Total under graduate	Master's	Firstprofessional	Doctor's
Agriculture	\$2,383	\$3,703	\$2,436	--	--	--
Architecture and environmental design	3,968	2,878	3,033	\$3,376	--	--
Area and ethnic studies	2,278	3,782	2,948	4,173	--	--
Business	2,235	3,513	2,947	3,820	--	--
Communications	2,042	3,926	2,825	5,581	--	--
Computer and information sciences	2,578	4,533	2,972	4,273	--	--
Consumer, personal and miscellaneous services	--	--	--	--	--	--
Education ²	1,860	3,684	2,925	2,958	--	\$5,789
Engineering	5,421	5,933	5,722	3,877	--	--
Foreign languages	3,106	6,352	3,563	4,704	--	--
Health ³	2,859	5,019	4,192	4,927	--	1,259
Home economics	1,740	3,683	2,636	15,833	--	--
Industrial arts	4,645	5,747	5,180	2,677	--	--
Law	2,139	2,438	2,263	3,211	--	--
Letters ²	2,319	3,863	2,604	6,683	--	5,644
Liberal/general studies	1,196	1,424	1,215	--	--	--
Library and archival sciences	2,441	4,403	3,654	3,919	--	--
Life sciences	2,573	6,243	3,320	7,232	--	--
Mathematics	2,487	4,942	2,727	6,040	--	--
Military sciences	--	--	--	--	--	--
Multi/interdisciplinary studies	2,077	5,142	2,651	5,344	--	--
Parks and recreation	2,542	3,643	3,056	7,527	--	--
Personal and social development	2,644	5,327	3,139	4,013	--	--
Philosophy, religion and theology	2,107	3,646	2,333	5,396	--	--
Physical sciences	3,018	9,981	3,843	13,133	--	--
Psychology ²	1,726	3,451	2,301	3,606	--	7,165
Public affairs and protective services	1,852	3,451	2,704	3,564	--	--
Social sciences ²	1,758	4,053	2,250	6,520	--	5,996
Trade and industrial	4,927	9,232	6,003	--	--	--
Visual and performing arts	2,676	6,567	3,553	11,824	--	--
Other	5,412	9,112	5,437	1,736	--	--
Total	2,289	4,241	2,907	4,039	--	3,786

1. The average instructional faculty salary cost per fulltime equivalent student for each level is calculated as follows: the instructional salary for each rank is assigned by level according to the percentage distribution of the course (assigned) credits within each rank. The salary for each rank is summed by level and divided by total fulltime equivalent students for that level. For individual instruction, one course (assigned) credit is attributed to every three student credit hours generated.

2. Doctor's level for Indiana University only.

3. Doctor's level for Slippery Rock University only.

SOURCE: Data provided by the individual State-owned universities, 1998; CIP classifications - U.S. Department of Education, National Center for Education Statistics, *Classification of Instructional Programs*, 1991.

Table 9

AVERAGE CLASS SIZES IN CLASSROOM INSTRUCTION BY ACADEMIC DIVISION AND LEVEL¹
 1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Undergraduate								
	Lower division			Upper division			Total undergraduate		
	Class size	Percentage change		Class size	Percentage change		Class size	Percentage change	
	One year	Five-year average		One year	Five-year average		One year	Five-year average	
State-related									
Lincoln	22	-4%	-2%	12	0%	-4%	19	0%	-2%
Penn State	31	3	0	27	4	0	29	0	-1
Pittsburgh	30	3	-1	22	-4	-4	27	0	-1
Temple	26	0	-1	22	0	-2	24	0	-1
Total	29	0	-1	24	0	-2	27	0	-1
State-owned									
Bloomsburg	24	4	-1	15	0	-3	20	0	-2
California	29	-3	0	17	0	-1	24	0	0
Cheyney	17	-6	-5	11	0	-4	15	0	-5
Clarion	33	0	0	14	-7	-4	24	-4	-2
East Stroudsburg	29	0	1	19	6	2	25	4	2
Edinboro	25	0	-2	17	0	-1	22	0	-2
Indiana	28	0	-1	13	-7	-5	21	0	-2
Kutztown	29	-3	1	16	7	-1	22	-4	-1
Lock Haven	30	0	1	18	-18	1	25	-7	1
Mansfield	26	0	-1	9	12	-2	15	7	-2
Millersville	25	0	-1	20	0	4	23	0	1
Shippensburg	29	4	1	21	5	6	26	4	3
Slippery Rock	31	0	0	16	0	0	24	0	-1
West Chester	24	0	0	14	0	-1	20	0	0
Total	27	0	-1	15	0	-1	22	0	-1
All universities	28	0	-1	19	0	-2	24	0	-1

1. Average class size for each level is calculated by dividing total classroom student credit hours by total classroom course (assigned). The master's level included the doctor's level prior to 1996-97.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Table 10

ACADEMIC YEAR TUITION AND REQUIRED FEES FOR FULL-TIME STUDENTS BY ACADEMIC LEVEL AND RESIDENCY
1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Undergraduate						Graduate			
	In-State			Out-of-State			In-State			
	Tuition and required fees	Percentage change		Tuition and required fees	Percentage change		Tuition and required fees	Percentage change		
	One year	Five-year average		One year	Five-year average		One year	Five-year average		
State-related										
Lincoln	\$4,392	5%	10%	\$6,910	6%	12%	\$5,576	a	5%	9
Penn State ²	5,832	4	5	12,406	4	6	6,502	4%	5	7
Pittsburgh ²	6,164	5	5	12,928	6	6	8,154	5	5	16,
Temple	6,150	6	5	11,032	3	4	7,672	8	6	10,
Average	5,634	5	6	10,819	5	6	6,976	4	6	12,
State-owned										
Bloomsburg	4,278	3	8	9,634	3	10	4,133	3	8	6,
California	4,475	4	6	9,831	3	9	4,377	4	7	7,
Cheyney	4,023	3	7	9,379	3	10	3,850	3	7	6,
Clarion	4,378	3	6	9,734	3	9	4,278	3	6	7,
East Stroudsburg	4,322	3	6	9,678	3	9	4,166	3	6	6,
Edinboro	4,193	3	7	9,549	3	9	4,366	7	8	7,
Indiana	4,204	3	7	9,560	3	9	4,093	3	8	6,
Kutztown	4,219	2	7	9,575	3	9	4,089	3	8	6,
Lock Haven	4,062	2	5	9,418	3	8	4,062	2	5	6,
Mansfield	4,354	8	7	9,710	5	10	3,944	3	6	6,
Millersville	4,400	3	5	9,756	3	8	4,400	3	5	7,
Shippensburg	4,344	3	6	9,700	3	9	4,144	3	5	6,
Slippery Rock	4,302	3	6	9,658	3	9	4,475	7	7	7,
West Chester	4,162	3	6	9,518	3	9	4,044	3	7	6,
Average	4,265	3	6	9,621	3	9	4,173	4	7	6,

1. Excludes first-professional level.

2. Main campus data only.

a. Rounds to less than 1 percent.

SOURCE: Pennsylvania Department of Education *Colleges and Universities Basic Student Charges, 1992-93 to 1995-96*; Pennsylvania *Colleges and Universities-Education Digest 1996-97 and 1997-98*.

Table 11

TUITION AND FEE REVENUES RELATED TO FULL-TIME EQUIVALENT STUDENTS¹
 1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Total tuition and fee revenues			Tuition and fee revenues per FTE student			
	Amount (000s)	Percentage change		Amount	One-year change	Percentage change	
		One year	Five-year average			One- year	Five-year average
State-related							
Lincoln	\$12,447	17%	22%	\$6,030	\$320	6%	11%
Penn State	467,588	-1	9	6,930	-260	-4	7
Pittsburgh	240,564	7	4	8,440	350	4	5
Temple	181,984	5	3	7,920	530	7	6
Total	902,583	2	6	7,460	40	1	6
State-owned							
Bloomsburg	32,704	4	8	4,460	130	3	8
California	23,534	5	3	4,340	40	1	6
Cheyney	6,265	5	3	4,770	160	3	5
Clarion	23,715	3	5	4,160	70	2	5
East Stroudsburg	27,189	7	6	4,930	150	3	5
Edinboro	29,390	2	2	4,500	180	4	5
Indiana	61,789	4	6	4,770	160	3	7
Kutztown	31,151	5	6	4,520	140	3	6
Lock Haven	14,841	4	2	4,360	10	a	4
Mansfield	12,807	3	1	4,650	210	5	4
Millersville	32,578	4	4	4,690	120	3	4
Shippensburg	27,206	3	5	4,470	90	2	5
Slippery Rock	28,922	2	2	4,340	110	3	5
West Chester	47,995	5	6	4,770	90	2	6
Total	400,086	4	5	4,570	120	3	6
All universities	1,302,669	3	6	6,250	80	1	6

1. Tuition and fee revenues are based on collections by the individual universities. FTE students include State and out-of-State undergraduate and graduate students. Excludes medical school data.

a. Rounds to less than 1 percent.

SOURCE: Tuition and fee revenues- data provided by the individual State-related universities and the State System of Higher Education, Commonwealth of Pennsylvania, 1993 to 1998; FTE students data provided by the individual universities, 1993 to 1998.

Table 12

COMMONWEALTH INSTRUCTIONAL APPROPRIATIONS RELATED TO FULL -TIME EQUIVALENT STUDENTS ¹
 1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Total instructional appropriations			Instructional appropriations per FTE student			
	Amount (000s)	Percentage change		Amount	One-year change	Percentage change	
		One year	Five-year average			One year	Five-year average
State-related							
Lincoln	\$9,958	2%	1%	\$4,820	-\$410	-8%	-4%
Penn State	218,984	2	3	3,250	-10	a	2
Pittsburgh	134,880	2	3	4,730	-40	-1	3
Temple	141,767	2	2	6,170	240	4	5
Total	505,589	2	3	4,180	10	a	2
State-owned							
Bloomsburg	30,519	2	2	4,160	30	1	2
California	27,909	1	4	5,150	-120	-2	7
Cheyney	13,248	2	2	10,090	0	0	3
Clarion	28,689	1	3	5,040	-10	a	4
East Stroudsburg	21,135	4	1	3,830	10	a	a
Edinboro	29,652	3	3	4,540	210	5	7
Indiana	57,230	1	3	4,420	30	1	5
Kutztown	29,315	2	2	4,250	30	1	3
Lock Haven	17,501	4	4	5,140	10	a	5
Mansfield	16,595	3	3	6,020	280	5	6
Millersville	31,315	1	3	4,510	-10	a	3
Shippensburg	27,343	3	3	4,490	100	2	3
Slippery Rock	31,498	3	3	4,720	150	3	5
West Chester	39,083	1	1	3,890	-80	-2	1
Total ²	401,032	2	3	4,580	40	1	4
All universities ²	906,621	2	3	4,350	20	a	3

1. Instructional appropriations include educational and general appropriations and, for 1993-94 to 1995-96, Tuition Challenge Grants. FTE students include in-State and out-of-State undergraduate and graduate students. Excludes medical school data.

2. Excludes amount of instructional appropriation allocated to Office of the Chancellor, McKee Center, Faculty Professional Development, University Center and System Reserve of the State System of Higher Education.

a. Rounds to less than 1 percent.

SOURCE: Instructional appropriations- *Governor's Executive Budget* 1994-95 to 1998-99; data provided by the individual State-related universities and the State System of Higher Education, Commonwealth of Pennsylvania, 1993 to 1998. FTE students- data provided by the individual universities, 1993 to 1998.

Table 13

TUITION AND FEE REVENUES, COMMONWEALTH INSTRUCTIONAL APPROPRIATIONS AND STUDENT AID
RELATED TO FULL-TIME EQUIVALENT STUDENTS ¹
1997-98, CHANGE FROM 1996-97 AND FIVE-YEAR AVERAGE ANNUAL RATE OF CHANGE (1992-93 to 1997-98)

University	Per FTE student		Total instructional revenues	Ratio of instructional appropriations to total instructional revenues			Student aid per FTE student ²
	Tuition and fee revenues	Instructional appropriations		Percentage	Percentage change		
				One year	Five-year average		
State-related							
Lincoln	\$6,030	\$4,820	\$10,850	44%	-8%	-6%	\$550
Penn State	6,930	3,250	10,180	32	3	-2	506
Pittsburgh	8,440	4,730	13,170	36	-3	-1	526
Temple	7,920	6,170	14,090	44	-2	a	533
Total	7,460	4,180	11,640	36	0	-1	517
State-owned							
Bloomsburg	4,460	4,160	8,620	48	-2	-2	542
California	4,340	5,150	9,490	54	-2	0	640
Cheyney	4,770	10,090	14,860	68	-1	a	856
Clarion	4,160	5,040	9,200	55	0	a	724
East Stroudsburg	4,930	3,830	8,760	44	0	-2	476
Edinboro	4,500	4,540	9,040	50	0	1	720
Indiana	4,770	4,420	9,190	48	-2	-1	718
Kutztown	4,520	4,250	8,770	48	-2	-2	471
Lock Haven	4,360	5,140	9,500	54	0	a	743
Mansfield	4,650	6,020	10,670	56	0	a	754
Millersville	4,690	4,510	9,200	49	-2	a	479
Shippensburg	4,470	4,490	8,960	50	0	-1	489
Slippery Rock	4,340	4,720	9,060	52	0	a	624
West Chester	4,770	3,890	8,660	45	-2	-2	416
Total ³	4,570	4,580	9,150	50	-2	-1	592
All universities ³	6,250	4,350	10,600	41	0	-1	548

1. Tuition and fee revenues are based on collections by the individual universities. Instructional appropriations include educational and general appropriations and, for 1993-94 to 1995-96, Tuition Challenge Grants. FTE students include State and out-of-State undergraduate and graduate students. Excludes medical school data.

2. Includes grants and matching funds. Does not include student loans.

3. Instructional appropriations exclude amount allocated to Office of the Chancellor, McKee Center, Faculty Professional Development, University Center and System Reserve of the State System of Higher Education.

a. Rounds to less than 1 percent.

SOURCE: Tuition and fee revenues- data provided by the individual State-related universities and the State System of Higher Education, Commonwealth of Pennsylvania, 1993 to 1998; instructional appropriations- Governor's Executive Budget 1994-95 to 1998-99; data provided by the individual State-related universities and the State System of Higher Education, Commonwealth of Pennsylvania, 1993 to 1998; FTE students data provided by the individual universities, 1993 to 1998; student aid - data provided by the Pennsylvania Higher Education Assistance Agency, August 1998.

III. HISTORICAL DATA

Historical Table 1

FULL-TIME EQUIVALENT STUDENTS BY ACADEMIC LEVEL¹
1992-93 to 1997-98

University	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
State-related						
Lincoln						
Total	1,531	1,496	1,416	1,546	1,865	2,064
Undergraduate	1,321	1,272	1,217	1,317	1,573	1,641
Graduate	210	224	199	229	292	423
Penn State						
Total	63,161	61,170	61,082	64,137	65,811	67,456
Undergraduate	56,739	54,879	54,725	57,601	59,317	61,110
Graduate	6,422	6,291	6,357	6,536	6,494	6,346
Pittsburgh						
Total	29,405	28,865	28,290	27,565	27,738	28,489
Undergraduate	21,638	20,998	20,478	20,040	19,929	20,457
Graduate	7,767	7,867	7,812	7,525	7,809	8,032
Temple						
Total	25,773	25,349	25,078	24,399	23,455	22,989
Undergraduate	18,910	18,340	18,087	17,711	16,939	16,643
Graduate	6,863	7,009	6,991	6,688	6,516	6,346
State-owned						
Bloomsburg						
Total	7,379	7,159	7,040	7,026	7,225	7,338
Undergraduate	6,984	6,782	6,628	6,582	6,793	6,902
Graduate	395	377	412	444	432	436
California						
Total	6,044	5,804	5,733	5,547	5,226	5,422
Undergraduate	5,307	5,047	4,982	4,690	4,473	4,654
Graduate	737	757	751	857	753	768
Cheyney						
Total	1,423	1,412	1,278	1,303	1,293	1,313
Undergraduate	1,247	1,206	1,084	1,099	1,079	1,025
Graduate	176	206	194	204	214	288
Clarion						
Total	5,863	5,633	5,409	5,534	5,605	5,695
Undergraduate	5,546	5,312	5,133	5,234	5,300	5,416
Graduate	317	321	276	300	305	279
East Stroudsburg						
Total	5,251	5,277	5,317	5,263	5,325	5,514
Undergraduate	4,645	4,629	4,655	4,597	4,704	4,857
Graduate	606	648	662	666	621	657
Edinboro						
Total	7,637	7,271	6,971	6,840	6,678	6,525
Undergraduate	7,231	6,883	6,556	6,393	6,258	6,132
Graduate	406	388	415	447	420	393
Indiana						
Total	13,696	13,249	12,841	12,764	12,859	12,954
Undergraduate	12,541	12,241	11,795	11,729	11,739	11,805
Graduate	1,155	1,008	1,046	1,035	1,120	1,149
Kutztown						
Total	6,926	6,865	6,909	6,758	6,791	6,892
Undergraduate	6,524	6,476	6,485	6,326	6,383	6,461
Graduate	402	389	424	432	408	431
Lock Haven						
Total	3,669	3,520	3,431	3,243	3,283	3,403
Undergraduate	3,661	3,511	3,413	3,236	3,223	3,300
Graduate	8	9	18	7	60	103
Mansfield						
Total	3,142	3,089	2,893	2,810	2,801	2,757
Undergraduate	2,953	2,914	2,744	2,658	2,653	2,620
Graduate	189	175	149	152	148	137
Millersville						
Total	6,919	6,510	6,711	6,920	6,842	6,944
Undergraduate	6,093	5,710	5,957	6,100	6,046	6,130
Graduate	826	800	754	820	796	814
Shippensburg						
Total	6,096	5,974	5,950	5,989	6,057	6,089
Undergraduate	5,597	5,467	5,449	5,459	5,519	5,561
Graduate	499	507	501	530	538	528
Slippery Rock						
Total	7,358	7,167	7,005	6,908	6,717	6,667
Undergraduate	6,738	6,553	6,382	6,317	6,130	6,066
Graduate	620	614	623	591	587	601
West Chester						
Total	10,048	9,715	9,502	9,578	9,724	10,055
Undergraduate	9,003	8,702	8,565	8,653	8,765	9,021
Graduate	1,045	1,013	937	925	959	1,034

1. Data for each year represent the summer term preceding the academic year plus the academic year. Full-time equivalent students are calculated by dividing undergraduate student credit hours by 30 and graduate student credit hours by 24. In addition to master's level, graduate for Penn State, Pittsburgh, Temple, Indiana and Slippery Rock includes first-professional (excluding medical schools) and/or doctor's levels.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 2

STUDENT CREDIT HOURS BY ACADEMIC DIVISION AND LEVEL¹
 TOTAL YEAR AND SUMMER 1992-93 to 1997-98
 (in thousands)

University	Total year						Total graduate	Grand total	Tc g
	Lower division	Upper division	Total under-graduate	Master's	First professional	Doctor's			
State-related									
Lincoln									
1992-93	30	10	40	5	na	na	5	45	
1993-94	28	10	38	5	na	na	5	43	
1994-95	26	10	36	5	na	na	5	41	
1995-96	30	10	40	6	na	na	6	46	
1996-97	37	10	47	7	na	na	7	54	
1997-98	38	11	49	10	na	na	10	59	
Penn State									
1992-93	1,092	611	1,703	85	na	69	154	1,857	
1993-94	1,029	618	1,647	81	na	70	151	1,798	
1994-95	1,040	601	1,641	85	na	68	153	1,794	
1995-96	1,131	597	1,728	90	na	67	157	1,885	
1996-97	1,171	608	1,779	89	na	67	156	1,935	
1997-98	1,160	673	1,833	85	na	67	152	1,985	
Pittsburgh									
1992-93	431	218	649	129	36	22	187	836	
1993-94	415	215	630	129	38	22	189	819	
1994-95	405	209	614	128	38	22	188	802	
1995-96	398	203	601	120	39	22	181	782	
1996-97	403	195	598	123	43	22	188	786	
1997-98	421	192	613	126	45	22	193	806	
Temple									
1992-93	262	305	567	87	54	24	165	732	
1993-94	262	288	550	91	54	23	168	718	
1994-95	261	282	543	90	56	22	168	711	
1995-96	251	280	531	86	54	20	160	691	
1996-97	233	275	508	85	53	18	156	664	
1997-98	223	276	499	83	52	17	152	651	
State-owned									
Bloomsburg									
1992-93	143	66	209	9	na	na	9	218	
1993-94	139	64	203	9	na	na	9	212	
1994-95	136	63	199	10	na	na	10	209	
1995-96	137	61	198	11	na	na	11	209	
1996-97	146	58	204	10	na	na	10	214	
1997-98	147	60	207	10	na	na	10	217	
California									
1992-93	109	50	159	18	na	na	18	177	
1993-94	104	47	151	18	na	na	18	169	
1994-95	103	46	149	18	na	na	18	167	
1995-96	100	41	141	21	na	na	21	162	
1996-97	89	45	134	18	na	na	18	152	
1997-98	95	45	140	18	na	na	18	158	
Cheyney									
1992-93	28	9	37	4	na	na	4	41	
1993-94	27	10	37	5	na	na	5	42	
1994-95	23	9	32	5	na	na	5	37	
1995-96	24	9	33	5	na	na	5	38	
1996-97	23	9	32	5	na	na	5	37	
1997-98	22	9	31	7	na	na	7	38	
Clarion									
1992-93	116	50	166	8	na	na	8	174	
1993-94	111	48	159	8	na	na	8	167	
1994-95	108	46	154	7	na	na	7	161	
1995-96	111	46	157	7	na	na	7	164	
1996-97	115	44	159	7	na	na	7	166	
1997-98	117	45	162	7	na	na	7	169	
East Stroudsburg									
1992-93	100	40	140	15	na	na	15	155	
1993-94	97	42	139	16	na	na	16	155	
1994-95	98	42	140	16	na	na	16	156	
1995-96	101	37	138	16	na	na	16	154	
1996-97	100	41	141	15	na	na	15	156	
1997-98	103	43	146	16	na	na	16	162	

Edinboro								
1992-93	150	67	217	10	na	na	10	227
1993-94	142	65	207	9	na	na	9	216
1994-95	135	62	197	10	na	na	10	207
1995-96	129	63	192	11	na	na	11	203
1996-97	123	64	187	10	na	na	10	197
1997-98	121	63	184	9	na	na	9	193
Indiana								
1992-93	250	126	376	28	na	b	28	404
1993-94	244	123	367	19	na	5	24	391
1994-95	239	115	354	20	na	5	25	379
1995-96	242	110	352	20	na	5	25	377
1996-97	243	109	352	20	na	7	27	379
1997-98	244	110	354	21	na	7	28	382
Kutztown								
1992-93	125	71	196	10	na	na	10	206
1993-94	125	69	194	9	na	na	9	203
1994-95	128	66	194	10	na	na	10	204
1995-96	125	65	190	10	na	na	10	200
1996-97	125	66	191	10	na	na	10	201
1997-98	128	66	194	10	na	na	10	204
Lock Haven								
1992-93	80	30	110	a	na	na	a	110
1993-94	74	32	106	a	na	na	a	106
1994-95	71	31	102	a	na	na	a	102
1995-96	67	30	97	a	na	na	a	97
1996-97	67	30	97	1	na	na	1	98
1997-98	68	31	99	2	na	na	2	101
Mansfield								
1992-93	61	28	89	5	na	na	5	94
1993-94	55	32	87	4	na	na	4	91
1994-95	51	31	82	4	na	na	4	86
1995-96	48	31	79	4	na	na	4	83
1996-97	48	32	80	3	na	na	3	83
1997-98	48	31	79	3	na	na	3	82
Millersville								
1992-93	121	62	183	20	na	na	20	203
1993-94	114	57	171	19	na	na	19	190
1994-95	114	64	178	18	na	na	18	196
1995-96	116	67	183	20	na	na	20	203
1996-97	115	66	181	19	na	na	19	200
1997-98	116	68	184	19	na	na	19	203
Shippensburg								
1992-93	119	49	168	12	na	na	12	180
1993-94	118	46	164	12	na	na	12	176
1994-95	117	46	163	12	na	na	12	175
1995-96	118	46	164	13	na	na	13	177
1996-97	121	45	166	13	na	na	13	179
1997-98	119	48	167	13	na	na	13	180
Slippery Rock								
1992-93	141	61	202	15	na	b	15	217
1993-94	138	59	197	15	na	b	15	212
1994-95	135	56	191	15	na	b	15	206
1995-96	133	56	189	14	na	b	14	203
1996-97	128	56	184	9	na	5	14	198
1997-98	127	55	182	9	na	6	15	197
West Chester								
1992-93	175	95	270	25	na	na	25	295
1993-94	166	95	261	24	na	na	24	285
1994-95	165	92	257	22	na	na	22	279
1995-96	169	91	260	22	na	na	22	282
1996-97	174	89	263	23	na	na	23	286
1997-98	184	87	271	25	na	na	25	296

1. Data for each year represent the summer term preceding the academic year plus the academic year. The first-professional level excludes medical school data for all universities.
a. Rounds to less than one thousand student credit hours.
b. Included in master's level.
na. Not applicable.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 3
DEGREES CONFERRED¹
1992-93 to 1997-98

University	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
State-related						
Lincoln						
Total	250	313	298	310	328	318
Bachelor's	188	220	224	240	219	185
Graduate	62	93	74	70	109	133
Penn State						
Total	11,452	11,510	11,292	11,049	11,484	11,686
Bachelor's	9,387	9,231	8,981	8,716	8,993	9,059
Graduate	2,065	2,279	2,311	2,333	2,491	2,627
Pittsburgh						
Total	6,761	6,872	6,993	6,543	6,668	6,514
Bachelor's	4,185	4,065	4,020	3,885	3,962	3,854
Graduate	2,576	2,807	2,973	2,658	2,706	2,660
Temple						
Total	5,804	5,748	5,768	5,538	5,472	5,534
Bachelor's	3,660	3,382	3,299	3,162	3,070	3,212
Graduate	2,144	2,366	2,469	2,376	2,402	2,322
State-owned						
Bloomsburg						
Total	1,568	1,593	1,543	1,553	1,469	1,464
Bachelor's	1,347	1,368	1,354	1,323	1,231	1,239
Graduate	221	225	189	230	238	225
California						
Total	1,241	1,194	1,133	1,235	1,255	1,238
Bachelor's	976	923	865	911	906	921
Graduate	265	271	268	324	349	317
Cheyney						
Total	238	251	268	223	263	274
Bachelor's	151	173	189	132	147	178
Graduate	87	78	79	91	116	96
Clarion						
Total	1,146	1,195	1,025	1,039	1,004	1,010
Bachelor's	972	1,014	858	890	863	850
Graduate	174	181	167	149	141	160
East Stroudsburg						
Total	1,057	1,023	1,075	1,068	1,034	1,047
Bachelor's	864	826	852	824	788	821
Graduate	193	197	223	244	246	226
Edinboro						
Total	1,399	1,453	1,401	1,312	1,298	1,251
Bachelor's	1,230	1,284	1,191	1,131	1,094	1,066
Graduate	169	169	210	181	204	185
Indiana						
Total	2,756	2,742	2,591	2,656	2,446	2,604
Bachelor's	2,293	2,254	2,116	2,110	1,956	2,060
Graduate	463	488	475	546	490	544
Kutztown						
Total	1,440	1,382	1,351	1,310	1,362	1,313
Bachelor's	1,204	1,199	1,154	1,086	1,147	1,111
Graduate	236	183	197	224	215	202
Lock Haven						
Total	568	646	625	584	586	582
Bachelor's	564	645	624	582	583	557
Graduate	4	1	1	2	3	25
Mansfield						
Total	632	656	611	528	581	540
Bachelor's	548	564	538	467	490	456
Graduate	84	92	73	61	91	84
Millersville						
Total	1,438	1,468	1,367	1,380	1,398	1,439
Bachelor's	1,266	1,293	1,215	1,229	1,219	1,257
Graduate	172	175	152	151	179	182
Shippensburg						
Total	1,543	1,546	1,435	1,422	1,471	1,362
Bachelor's	1,247	1,230	1,114	1,139	1,161	1,058
Graduate	296	316	321	283	310	304
Slippery Rock						
Total	1,478	1,374	1,381	1,362	1,366	1,264
Bachelor's	1,311	1,242	1,195	1,151	1,153	1,107
Graduate	167	132	186	211	213	157
West Chester						
Total	2,088	1,964	2,001	1,877	1,841	1,903
Bachelor's	1,718	1,666	1,620	1,492	1,489	1,509
Graduate	370	298	381	385	352	394

1. Data for each year represent the summer term preceding the academic year plus the academic year. Graduate include master's at all universities, first professional (excluding medical schools) at Pittsburgh and Temple, and doctor's at Penn State, Pittsburgh, Temple, Indiana and Slippery Rock.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 4

NUMBER AND AVERAGE WEEKLY STUDENT CONTACT HOURS OF FULL-TIME EMPLOYED FACULTY BY ACADEMIC YEAR
FALL 1992 to FALL 1997

University	Fulltime employed faculty ²						Undergraduate average weekly student contact hours						av 19
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997	
State-related													
Lincoln	77	81	83	81	86	94	9.7	9.5	9.9	9.7	10.3	10.4	1.1
Penn State	2,947	2,954	2,943	3,000	3,026	2,975	6.7	6.7	6.7	6.6	6.7	6.8	1.8
Pittsburgh	1,735	1,739	1,770	1,721	1,733	1,780	4.6	4.5	4.4	4.8	4.4	4.4	3.9
Temple	1,151	1,129	1,137	1,088	1,078	1,033	5.0	4.9	5.0	5.3	5.6	5.4	3.9
Total	5,910	5,903	5,933	5,890	5,923	5,882	5.8	5.7	5.7	5.9	5.9	5.9	2.8
State-owned													
Bloomsburg	359	360	355	366	368	372	11.1	11.2	11.4	11.1	11.3	11.2	.9
California	330	285	279	286	259	257	9.9	9.2	10.0	10.2	10.0	10.5	1.2
Cheyney	73	87	92	90	91	87	11.6	10.5	10.2	10.5	11.0	11.0	1.1
Clarion	341	333	340	346	340	339	10.7	10.9	11.2	10.5	10.9	10.5	.7
East Stroudsburg	260	257	258	263	251	246	11.1	10.9	10.9	10.9	10.9	11.2	.9
Edinboro	383	375	373	363	380	345	12.3	12.5	12.8	12.8	12.8	13.2	.7
Indiana	702	692	712	715	720	726	9.9	10.2	9.8	9.8	10.2	10.1	1.2
Kutztown	345	352	358	357	373	364	11.5	11.5	11.4	11.4	11.0	11.3	.6
Lock Haven	205	200	200	202	185	197	12.5	11.8	11.5	11.8	10.9	11.1	.1
Mansfield	171	175	174	176	167	161	10.5	10.8	11.2	10.6	10.6	11.1	.3
Millersville ³	290	294	305	332	328	324	10.8	11.2	11.6	10.3	10.1	10.6	.8
Shippensburg	310	311	317	312	308	299	9.7	9.5	9.4	10.4	10.2	9.8	.9
Slippery Rock	366	383	378	378	369	371	11.0	11.0	10.8	10.4	9.9	9.4	.7
West Chester	548	540	538	541	530	543	10.6	10.8	10.8	10.6	10.6	10.3	1.6
Total	4,683	4,644	4,679	4,727	4,669	4,631	10.8	10.8	10.9	10.8	10.7	10.7	.9
All universities	10,593	10,547	10,612	10,617	10,592	10,513	7.9	7.9	7.9	8.0	7.9	7.9	2.0

1. Averages calculated for the fulltime employed faculty who reported complete workweeks of 100 hours or less for the fall term.
2. The number of fulltime employed faculty represents those reported by each university for the fall term; sabbatical and other on-leave faculty are excluded.
3. In Fall 1995 there were changes in definitions and procedures used to gather workweek data making prior years incomparable.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 5

NUMBER AND AVERAGE INSTRUCTIONAL SALARIES OF FULL-TIME EQUIVALENT INSTRUCTIONAL FACULTY BY RANK¹
 1992-93 to 1997-98
 (Dollars in thousands)

University	FTE instructional faculty	Average instructional salaries				In
		All faculty	Professor	Associate professor	Assistant professor	
State-related						
Lincoln						
1992-93	95	\$29.8	\$37.7	\$33.9	\$28.3	\$
1993-94	98	31.8	43.9	34.6	28.9	
1994-95	99	33.0	47.4	37.8	29.6	
1995-96	104	33.7	47.3	40.0	31.2	
1996-97	121	33.2	51.8	42.2	31.0	
1997-98	135	32.4	54.1	39.8	29.8	
Penn State						
1992-93	3,456	40.0	66.3	48.0	39.1	
1993-94	3,445	42.7	69.0	49.8	41.2	
1994-95	3,395	43.9	71.5	51.6	41.7	
1995-96	3,482	45.1	75.4	52.6	42.6	
1996-97	3,557	45.5	76.4	53.8	43.8	
1997-98	3,654	48.1	83.6	56.7	46.3	
Pittsburgh						
1992-93	1,877	41.5	65.1	45.3	36.2	
1993-94	1,838	42.8	67.1	47.9	37.1	
1994-95	1,865	43.9	70.3	48.1	38.4	
1995-96	1,907	43.8	70.6	48.4	37.6	
1996-97	1,855	44.9	71.7	49.6	38.4	
1997-98	1,833	47.8	75.0	52.0	41.0	
Temple						
1992-93	1,532	38.2	58.5	45.7	36.9	
1993-94	1,504	39.7	61.9	48.3	38.3	
1994-95	1,537	42.4	66.4	51.9	40.2	
1995-96	1,445	45.4	70.4	54.7	38.7	
1996-97	1,426	46.0	71.3	54.9	39.3	
1997-98	1,365	47.1	72.0	56.1	41.0	
State-owned						
Bloomsburg						
1992-93	389	43.3	56.0	45.1	35.7	
1993-94	393	47.5	61.2	49.1	39.3	
1994-95	389	50.2	63.8	51.9	40.6	
1995-96	392	52.4	66.1	53.4	42.0	
1996-97	397	51.7	65.1	53.7	43.1	
1997-98	405	52.7	67.7	54.7	42.5	
California						
1992-93	309	45.3	59.8	47.7	37.6	
1993-94	280	53.4	64.6	55.1	43.6	
1994-95	284	52.7	66.0	53.2	44.1	
1995-96	285	54.7	68.6	56.4	44.0	
1996-97	272	54.0	66.8	53.8	43.3	
1997-98	279	53.4	66.8	54.8	44.8	
Cheyney						
1992-93	87	46.8	58.1	45.6	40.1	
1993-94	95	46.3	57.0	44.1	40.8	
1994-95	93	49.8	60.8	47.8	44.3	
1995-96	96	52.9	69.2	54.1	43.1	
1996-97	99	50.0	64.2	50.6	41.1	
1997-98	103	51.0	63.4	54.0	45.3	
Clarion						
1992-93	333	45.6	58.8	47.4	37.8	
1993-94	329	49.8	63.7	52.2	40.6	
1994-95	330	51.1	66.2	53.5	42.5	
1995-96	327	53.4	68.4	56.1	43.1	
1996-97	327	53.0	69.2	55.5	42.6	
1997-98	326	53.9	69.4	58.0	42.6	
East Stroudsburg						
1992-93	294	44.1	54.9	43.9	33.6	
1993-94	292	47.7	57.9	49.6	38.0	
1994-95	293	49.9	60.4	51.1	40.2	
1995-96	302	51.5	63.4	52.5	42.0	
1996-97 ^a	266	56.6	70.4	58.1	46.2	
1997-98	277	55.4	68.8	59.6	44.2	

Edinboro					
1992-93	416	44.4	56.8	46.3	36.6
1993-94	416	47.4	60.9	49.1	39.3
1994-95	409	49.9	64.5	51.4	41.3
1995-96	401	51.3	65.3	51.7	43.4
1996-97	393	51.8	67.2	54.3	43.5
1997-98	387	53.1	68.9	55.6	45.2
Indiana					
1992-93	713	46.3	56.2	47.4	38.8
1993-94	721	50.4	62.1	50.4	41.0
1994-95	726	52.3	64.9	52.6	42.5
1995-96	701	55.3	67.9	55.2	44.5
1996-97	729	54.0	67.2	54.7	43.0
1997-98	742	54.4	71.2	56.4	44.0
Kutztown					
1992-93	363	47.9	59.6	48.5	38.5
1993-94	367	50.9	64.5	51.9	41.3
1994-95	373	52.6	67.1	54.7	42.2
1995-96	371	55.0	70.6	56.6	43.9
1996-97	368	54.6	71.1	55.9	43.2
1997-98	374	55.0	72.0	57.9	44.0
Lock Haven					
1992-93	194	44.6	60.8	49.4	37.5
1993-94	185	49.3	65.5	53.4	42.4
1994-95	183	51.4	67.8	55.6	43.5
1995-96	181	52.9	68.9	59.1	43.2
1996-97	185	51.5	68.4	57.5	44.2
1997-98	194	50.0	74.0	55.8	44.8
Mansfield					
1992-93	175	46.7	61.8	49.9	40.2
1993-94	181	49.1	64.4	52.0	41.5
1994-95	184	51.4	67.7	55.0	44.1
1995-96	177	54.6	70.6	57.5	45.2
1996-97	175	54.8	70.7	55.3	45.2
1997-98	171	51.7	68.5	51.1	41.7
Millersville					
1992-93	355	47.2	60.7	49.6	38.6
1993-94	361	50.8	64.6	52.7	41.9
1994-95	394	50.9	63.8	53.4	41.5
1995-96	407	51.7	65.9	53.7	41.6
1996-97	397	52.2	66.5	54.2	41.3
1997-98	406	52.7	67.4	55.5	42.4
Shippensburg					
1992-93	311	49.9	58.8	48.0	38.2
1993-94	304	54.1	64.3	52.7	41.5
1994-95	307	55.9	67.8	55.4	42.4
1995-96	309	57.6	70.1	58.3	44.2
1996-97	308	56.8	69.7	57.1	44.6
1997-98	308	56.2	71.6	58.5	43.8
Slippery Rock					
1992-93	384	47.3	58.4	45.9	39.4
1993-94	381	49.7	61.7	49.0	40.5
1994-95	380	52.8	64.9	51.9	42.7
1995-96	371	54.5	67.1	54.7	44.2
1996-97	360	56.5	70.3	57.7	45.5
1997-98	358	57.1	68.8	60.6	47.1
West Chester					
1992-93	576	45.0	60.8	49.8	38.9
1993-94	571	49.4	66.0	54.4	43.5
1994-95	560	49.0	64.4	54.7	43.1
1995-96	577	50.0	67.1	55.1	44.3
1996-97	575	49.4	67.0	55.0	43.8
1997-98	591	49.9	68.0	55.8	45.4

1. Average instructional salaries are calculated by dividing the total instructional salaries paid to all staff members in the respective ranks by their total full-time equivalency in the instructional ranks. Full-time equivalent faculty represents one full-time workload for two terms (one academic year). The summer term is treated as one term or one-half of the academic year. Data for each term precedes the academic year plus the academic year.

2. The full-time equivalency of nonranked faculty members is based on the time spent in instruction by nonranked personnel, including lecturers, administrators, librarians, research and volunteers.

a. FTE instructional faculty and average instructional salaries reflect a correction in the computational method used for determining full-time equivalent instructional faculty.
na. Not applicable.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 6

AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER FULL-TIME EQUIVALENT STUDENT BY ACADEMIC DIVISION AND LEVEL
1992-93 to 1997-98

University	Lower division						Upper division						Total undergraduate					
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
State-related																		
Lincoln	\$1,533	\$1,843	\$2,028	\$1,910	\$1,773	\$1,773	\$2,719	\$3,005	\$3,268	\$3,573	\$3,865	\$3,738	\$1,821	\$2,146	\$2,367	\$2,323	\$2,214	\$2,200
Penn State	1,328	1,439	1,488	1,454	1,456	1,519	2,283	2,518	2,600	2,691	2,731	2,816	1,670	1,844	1,895	1,881	1,892	1,95
Pittsburgh	1,491	1,536	1,567	1,709	1,686	1,724	2,580	2,856	3,025	2,964	3,124	3,359	1,858	1,985	2,063	2,132	2,154	2,23
Temple	1,454	1,510	1,656	1,733	1,906	1,939	2,108	2,258	2,470	2,533	2,605	2,603	1,805	1,902	2,079	2,155	2,284	2,30
Total	1,388	1,479	1,540	1,556	1,569	1,622	2,296	2,520	2,653	2,709	2,780	2,864	1,739	1,890	1,973	1,990	2,019	2,10
State-owned																		
Bloomsburg	1,851	2,119	2,243	2,298	2,215	2,221	2,971	3,385	3,747	4,069	4,120	4,226	2,206	2,518	2,717	2,843	2,754	2,79
California	1,790	2,000	2,041	2,243	2,235	2,207	3,095	3,365	3,488	3,872	3,571	3,626	2,198	2,426	2,491	2,713	2,685	2,66
Cheyney	2,521	2,725	3,206	3,349	3,382	3,674	4,126	4,639	5,172	5,977	5,285	6,165	2,916	3,230	3,776	4,057	3,941	4,38
Clarion	2,034	2,309	2,308	2,351	2,276	2,259	3,603	4,072	4,610	4,760	4,761	4,769	2,510	2,843	2,997	3,062	2,966	2,96
East Stroudsburg	2,039	2,162	2,251	2,438	2,254	2,300	3,605	3,825	3,963	4,305	4,241	3,972	2,484	2,661	2,760	2,937	2,835	2,78
Edinboro	1,879	2,058	2,288	2,354	2,361	2,453	3,289	3,833	4,001	4,113	3,990	4,176	2,317	2,613	2,826	2,934	2,920	3,04
Indiana ²	1,649	1,919	1,959	2,036	2,015	2,062	3,207	3,623	4,134	4,373	4,419	4,535	2,173	2,489	2,667	2,763	2,763	2,83
Kutztown	1,849	1,954	1,972	2,136	2,017	2,056	3,458	3,924	4,250	4,473	4,508	4,566	2,435	2,655	2,747	2,937	2,876	2,91
Lock Haven	1,955	2,019	2,131	2,335	2,320	2,049	3,404	3,846	4,054	4,238	3,915	4,638	2,344	2,568	2,719	2,924	2,814	2,84
Mansfield	1,822	1,811	2,164	2,243	2,235	2,170	4,098	4,547	4,940	5,153	5,004	4,717	2,537	2,821	3,222	3,385	3,338	3,15
Millersville	2,036	2,429	2,554	2,591	2,695	2,776	3,123	3,341	3,548	3,732	3,633	3,661	2,406	2,732	2,912	3,010	3,036	3,10
Shippensburg	2,004	2,243	2,277	2,358	2,353	2,263	3,611	3,894	4,076	4,305	3,937	3,984	2,471	2,705	2,788	2,899	2,784	2,75
Slippery Rock ³	2,009	2,144	2,385	2,380	2,478	2,482	3,499	3,764	3,987	4,120	4,199	4,359	2,456	2,626	2,854	2,897	2,998	3,04
West Chester	2,117	2,319	2,315	2,426	2,349	2,291	3,081	3,433	3,551	3,741	3,660	3,872	2,456	2,723	2,756	2,885	2,793	2,79
Total	1,922	2,127	2,225	2,321	2,290	2,289	3,328	3,712	3,992	4,218	4,139	4,241	2,370	2,638	2,794	2,922	2,879	2,90
All universities	1,648	1,796	1,872	1,917	1,906	1,936	2,722	3,009	3,204	3,325	3,337	3,411	2,030	2,234	2,349	2,409	2,403	2,45

1. The average instructional faculty salary cost per full-time equivalent student for each level is calculated as follows: the instructional salary for each rank is assigned by course (assigned) credits within each rank. The salary for each rank is summed by level and divided by total full-time equivalent students for that level. For individual instructional three student credit hours generated.

2. The master's level included the doctor's level in 1992-93.
3. The master's level included the doctor's level prior to 1997-98.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 7

AVERAGE INSTRUCTIONAL FACULTY SALARY COST PER STUDENT CREDIT HOUR BY ACADEMIC DIVISION AND LEVEL
1992-93 to 1997-98

University	Lower division						Upper division						Total undergraduate					
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
State-related																		
Lincoln	\$51	\$61	\$68	\$64	\$59	\$59	\$91	\$100	\$109	\$119	\$129	\$125	\$61	\$72	\$79	\$77	\$74	\$7
Penn State	44	48	50	48	49	51	76	84	87	90	91	94	56	61	63	63	63	6
Pittsburgh	50	51	52	57	56	57	86	95	101	99	104	112	62	66	69	71	72	7
Temple	48	50	55	58	64	65	70	75	82	84	87	87	60	64	69	72	76	7
Total	46	49	51	52	52	54	77	84	88	90	93	95	58	63	66	66	67	7
State-owned																		
Bloomsburg	62	71	75	77	74	74	99	113	125	136	137	141	74	84	91	95	92	9
California	60	67	68	75	74	74	103	112	116	129	119	121	73	81	83	90	90	8
Cheyney	84	91	107	112	113	122	137	155	172	199	176	206	97	108	126	135	131	14
Clarion	68	77	77	78	76	75	120	136	154	159	159	159	84	95	100	102	99	9
East Stroudsburg	68	72	75	81	75	77	120	127	132	144	141	132	83	89	92	98	94	9
Edinboro	63	69	76	78	79	82	110	128	133	137	133	139	77	87	94	98	97	10
Indiana ²	55	64	65	68	67	69	107	121	138	146	147	151	72	83	89	92	92	9
Kutztown	62	65	66	71	67	69	115	131	142	149	150	152	81	89	92	98	96	9
Lock Haven	65	67	71	78	77	68	113	128	135	141	130	155	78	86	91	97	94	9
Mansfield	61	60	72	75	74	72	137	152	165	172	167	157	85	94	107	113	111	10
Millersville	68	81	85	86	90	93	104	111	118	124	121	122	80	91	97	100	101	10
Shippensburg	67	75	76	79	78	75	120	130	136	143	131	133	82	90	93	97	93	9
Slippery Rock ³	67	71	80	79	83	83	117	125	133	137	140	145	82	88	95	97	100	10
West Chester	71	77	77	81	78	76	103	114	118	125	122	129	82	91	92	96	93	9
Total	64	71	74	77	76	76	111	124	133	141	138	141	79	88	93	97	96	9
All universities	55	60	62	64	64	65	91	100	107	111	111	114	68	74	78	80	80	8

1. The average instructional faculty salary cost per student credit hour for each level is calculated as follows: the instructional salary for each rank is assigned by level and (assigned) credits within each rank. The salary for each rank is summed by level and divided by the total student credit-hour production for that level. For individual instructional student credit hours generated. Instructional faculty salary cost per student credit hour equals instructional faculty salary cost per FTE student divided by 30 for undergraduate (Historical Table 6).

2. The master's level included the doctor's level in 1992-93.
3. The master's level included the doctor's level prior to 1997-98.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 8

AVERAGE CLASS SIZES IN CLASSROOM INSTRUCTION BY ACADEMIC DIVISION AND LEVEL¹
1992-93 to 1997-98

University	Lower division						Upper division						Total undergraduate					
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
State-related																		
Lincoln	24	21	20	21	23	22	15	14	13	13	12	12	21	19	18	18	19	19
Penn State	31	30	30	31	30	31	27	27	26	26	26	27	30	29	29	29	29	29
Pittsburgh	31	29	29	29	29	30	27	26	24	24	23	22	29	28	27	27	27	27
Temple	27	27	26	28	26	26	24	23	22	23	22	22	25	25	24	25	24	24
Total	30	29	29	30	29	29	26	25	24	24	24	24	28	28	27	27	27	27
State-owned																		
Bloomsburg	25	23	23	23	23	24	18	17	16	15	15	15	22	21	20	20	20	20
California	29	31	31	29	30	29	18	19	18	17	17	17	24	26	25	24	24	24
Cheyney	23	22	19	19	18	17	14	12	12	11	11	11	20	18	16	16	15	15
Clarion	33	32	32	33	33	33	17	17	15	15	15	14	26	25	24	24	25	24
East Stroudsburg	27	27	28	28	29	29	17	18	18	19	18	19	23	24	24	25	24	25
Edinboro	28	26	26	26	25	25	18	17	17	17	17	17	24	23	22	23	22	22
Indiana	30	29	29	29	28	28	17	16	15	14	14	13	24	23	22	22	21	21
Kutztown	28	28	29	28	30	29	17	16	15	15	15	16	23	22	22	22	23	22
Lock Haven	28	29	28	28	30	30	17	13	17	20	22	18	24	21	24	25	27	25
Mansfield	27	28	26	26	26	26	10	9	8	9	8	9	17	16	14	15	14	15
Millersville	26	25	25	26	25	25	17	19	19	19	20	20	22	22	23	23	23	23
Shippensburg	28	28	28	28	28	29	16	16	17	16	20	21	23	23	23	23	25	26
Slippery Rock ²	31	31	30	31	31	31	16	16	16	16	16	16	25	24	24	24	24	24
West Chester	24	23	23	24	24	24	15	15	14	14	14	14	20	19	19	19	20	20
Total	28	27	27	27	27	27	16	16	15	15	15	15	23	22	22	22	22	22
All universities	29	28	28	28	28	28	21	20	20	19	19	19	25	25	24	24	24	24

1. Average class size for each level is calculated by dividing total classroom student credit hours by total classroom course (assigned) credits.
2. The master's level included the doctor's level prior to 1996-97.
a. No classroom instruction.

SOURCE: Data provided by the individual universities, 1993 to 1998.

Historical Table 9

COMMONWEALTH INSTRUCTIONAL APPROPRIATIONS¹
1992-93 to 1997-98
(in millions)

University	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
State-related						
Lincoln	\$9.3	\$9.4	\$9.6	\$9.7	\$9.8	\$10.0
Penn State	189.3	198.5	207.6	214.7	214.7	219.0
Pittsburgh	119.3	123.4	127.6	130.9	132.2	134.9
Temple	128.1	131.6	134.5	137.3	139.0	141.8
Total	446.0	462.9	479.3	492.6	495.7	505.7
State-owned						
Bloomsburg	27.3	28.5	29.6	29.9	29.8	30.5
California	23.4	24.5	25.4	27.6	27.5	27.9
Cheyney	12.3	12.5	12.7	12.9	13.0	13.2
Clarion	24.7	25.8	26.8	28.5	28.3	28.7
East Stroudsburg	19.9	20.6	21.4	20.3	20.3	21.1
Edinboro	25.4	26.6	27.6	28.8	28.9	29.7
Indiana	49.3	51.7	53.7	56.8	56.5	57.2
Kutztown	26.1	27.2	28.3	28.9	28.7	29.3
Lock Haven	14.9	15.5	16.1	16.8	16.8	17.5
Mansfield	14.6	15.0	15.6	15.9	16.1	16.6
Millersville	27.6	28.7	29.8	31.1	30.9	31.3
Shippensburg	23.9	25.0	25.9	26.7	26.6	27.3
Slippery Rock	27.3	28.4	29.6	30.8	30.7	31.5
West Chester	37.9	39.3	40.9	38.8	38.6	39.1
Total ²	354.6	369.3	383.4	393.8	392.7	400.9
All universities ²	800.6	832.2	862.7	886.4	888.4	906.6

1. Instructional appropriations include educational and general appropriations and for 1993-94 to 1995-96, Tuition Challenge Grants. Excludes medical school data.

2. Excludes amount of instructional appropriation allocated to Office of the Chancellor, McKeever Center, Faculty Professional Development, University Center and System Reserve of the State System of Higher Education.

SOURCE: *Governor's Executive Budget*, 1994-95 to 1998-99; data provided by the individual State-related universities and the State System of Higher Education, Commonwealth of Pennsylvania, 1993 to 1998.

Historical Table 10

ACADEMIC YEAR TUITION AND REQUIRED FEES FOR FULL-TIME STUDENTS
BY ACADEMIC LEVEL AND RESIDENCE
1992-93 to 1997-98

University	Undergraduate		Graduate ¹	
	In-State	Out-of-State	In-State	Out-of-State
State-related				
Lincoln				
1992-93	\$ 2,960	\$4,380	\$4,375	
1993-94	3,140	4,900	4,800	
1994-95	3,495	5,618	4,893	
1995-96	3,956	6,144	5,289	
1996-97	4,180	6,490	5,580	
1997-98	4,392	6,910	5,576	
Penn State				
Main Campus				
1992-93	4,618	9,644	5,158	
1993-94	4,822	10,800	5,386	
1994-95	5,036	10,724	5,624	
1995-96	5,258	11,310	5,872	
1996-97	5,624	11,964	6,268	
1997-98	5,832	12,406	6,502	
Pittsburgh				
Main Campus				
1992-93	4,922	10,066	6,516	
1993-94	5,186	10,708	6,854	
1994-95	5,416	11,240	7,150	
1995-96	5,638	11,724	7,454	
1996-97	5,870	12,230	7,770	
1997-98	6,164	12,928	8,154	
Temple				
1992-93	5,008	9,222	5,828	
1993-94	5,226	9,802	6,068	
1994-95	5,464	10,246	6,342	
1995-96	5,514	10,296	6,656	
1996-97	5,828	10,712	7,088	
1997-98	6,150	11,032	7,672	
State-owned				
Bloomsburg				
1992-93	3,068	6,462	2,958	
1993-94	3,458	7,856	3,338	
1994-95	3,694	8,452	3,574	
1995-96	3,915	8,889	3,783	
1996-97	4,162	9,360	4,020	
1997-98	4,278	9,634	4,133	
California				
1992-93	3,384	6,778	3,258	
1993-94	3,760	8,158	3,608	
1994-95	3,902	8,660	3,804	
1995-96	4,136	9,110	4,038	
1996-97	4,304	9,502	4,206	
1997-98	4,475	9,831	4,377	
Cheyney				
1992-93	2,938	6,332	2,833	
1993-94	3,319	7,717	3,184	
1994-95	3,591	8,349	3,411	
1995-96	3,729	8,703	3,604	
1996-97	3,922	9,120	3,748	
1997-98	4,023	9,379	3,850	
Clarion				
1992-93	3,328	6,830	3,253	
1993-94	3,710	8,108	3,636	
1994-95	3,879	8,637	3,799	
1995-96	4,054	9,028	3,970	
1996-97	4,268	9,466	4,144	
1997-98	4,378	9,734	4,278	
East Stroudsburg				
1992-93	3,352	6,746	3,196	
1993-94	3,664	8,062	3,520	
1994-95	3,844	8,602	3,690	
1995-96	4,016	8,990	3,862	
1996-97	4,195	9,393	4,041	
1997-98	4,322	9,678	4,166	

Edinboro			
1992-93	3,161	6,555	3,131
1993-94	3,531	7,929	3,531
1994-95	3,685	8,443	3,685
1995-96	3,924	8,898	3,924
1996-97	4,083	9,281	4,081
1997-98	4,193	9,549	4,366
Indiana			
1992-93	3,157	6,551	2,969
1993-94	3,539	7,937	3,455
1994-95	3,725	8,483	3,620
1995-96	3,891	8,865	3,787
1996-97	4,064	9,262	3,956
1997-98	4,204	9,560	4,093
Kutztown			
1992-93	3,160	6,639	2,880
1993-94	3,558	8,285	3,428
1994-95	3,699	8,535	3,569
1995-96	3,940	8,914	3,810
1996-97	4,138	9,336	3,968
1997-98	4,219	9,575	4,089
Lock Haven			
1992-93	3,261	6,655	3,261
1993-94	3,509	7,907	3,509
1994-95	3,662	8,896	3,662
1995-96	3,822	8,796	3,822
1996-97	3,988	9,186	3,988
1997-98	4,062	9,418	4,062
Mansfield			
1992-93	3,168	6,562	3,028
1993-94	3,440	7,838	3,300
1994-95	3,624	8,382	3,464
1995-96	3,804	8,778	3,624
1996-97	4,034	9,232	3,834
1997-98	4,354	9,710	3,944
Millersville			
1992-93	3,488	6,882	3,488
1993-94	3,750	8,148	3,750
1994-95	3,920	8,678	3,920
1995-96	4,100	9,074	4,100
1996-97	4,268	9,466	4,268
1997-98	4,400	9,756	4,400
Shippensburg			
1992-93	3,388	6,782	3,258
1993-94	3,710	8,108	3,550
1994-95	3,856	8,614	3,696
1995-96	4,010	8,984	3,850
1996-97	4,230	9,428	4,030
1997-98	4,344	9,700	4,144
Slippery Rock			
1992-93	3,287	6,681	3,287
1993-94	3,547	7,945	3,547
1994-95	3,836	8,594	3,836
1995-96	4,013	8,987	4,013
1996-97	4,179	9,377	4,179
1997-98	4,302	9,658	4,475
West Chester			
1992-93	3,158	6,522	3,040
1993-94	3,504	7,902	3,366
1994-95	3,646	8,404	3,528
1995-96	3,874	8,848	3,756
1996-97	4,032	9,230	3,914
1997-98	4,162	9,518	4,044

1. Excludes first-professional level.

SOURCE: Pennsylvania Department of Education, *Colleges and Universities-Basic Student Charges*, 1992-93 to 1995-96; Pennsylvania Department of Education, *Colleges and Universities-Education Digest*, 1996-97 and 1997-98.

APPENDIX: MODEL OF FTE SALARY COST DETERMINATION

Instructional faculty salary cost per student credit hour, for each academic level and each program area, can be expressed by the following model:

$$\begin{array}{r}
 \text{FTE} \\
 \text{Instructional} \\
 \text{faculty} \\
 \hline
 \text{salaries} \\
 \text{Student} \\
 \text{credit hours}
 \end{array}
 =
 \begin{array}{r}
 \text{Number of FTE} \\
 \hline
 \text{instructional faculty} \\
 \text{Number} \quad \text{Average} \\
 \text{of} \quad \text{x} \quad \text{course} \\
 \text{courses} \quad \text{(assigned)} \\
 \quad \quad \text{credit} \\
 \quad \quad \text{value}
 \end{array}
 \times
 \begin{array}{r}
 \text{Average FTE instructional} \\
 \hline
 \text{faculty salary} \\
 \text{Average} \quad \text{Number} \\
 \text{class} \quad \text{x} \quad \text{of classes} \\
 \text{(section)} \quad \text{(sections)} \\
 \text{size} \quad \quad \text{Number} \\
 \quad \quad \quad \text{of courses}
 \end{array}$$

The two terms on the right-hand side of this equation illustrate the two different kinds of factors which determine FTE instructional salary cost.

The components of the first term are approximately *constants or constant relationships*. In the short run, neither the number of faculty per course nor the number of faculty per average course (assigned) credit value can be readily varied to influence FTE instructional salary cost.

The second term contains *control variables*: average FTE instructional faculty salary, average class (section) size, and the number of classes (sections) per course. To at least some degree, each of these variables can be controlled by university administrators to affect FTE instructional salary cost. Adjustments in the number of classes (sections) per course are an alternative to permitting average class sizes to change with changes in enrollment.

Average instructional faculty salary cost per FTE student, or FTE instructional salary cost, equals the FTE instructional salary cost per student credit hour times 30 for undergraduate students, and times 24 for graduate students.

This model serves as the basis for the regression analysis performed by the Commission staff (see page 4).

