#### DOCUMENT RESUME

ED 287 393 HE 020 809

AUTHOR Howe, Richard D.; Tuttle, Lynette

TITLE Salary-Trend Study of Faculty in Physics for the

Years 1983-84 and 1986-87.

INSTITUTION Appalachian State Univ., Boone, N.C.; College and

Univ. Personnel Association, Washington, D.C.

PUB DATE 87

NOTE 16p.; For related documents, see HE 020 777-818.

PUB TYPE Reports - Research/Technical (143)

EDRS PRICE DESCRIPTORS

MF01 Plus Postage. PC Not Available from EDRS.
Academic Rank (Professional); \*College Faculty;
College Programs; College Science; Comparative
Analysis; Departments; \*Full Time Faculty; Higher
Education; Intellectual Disciplines; \*Physics;
Private Colleges: Public Colleges: \*Science Teachers

Private Colleges; Public Colleges; \*Science Teachers;

\*Teacher Salaries; Trend Analysis

#### **ABSTRACT**

Average salary increases for 2,452 faculty in the field of physics are reported for 1983-1984 and 1986-1987, as part of the College and University Personnel Association's annual faculty salary studies. Included are comparative data for 120,580 faculty at 167 public colleges and 235 private colleges, representing 44 academic disciplines. In 1983, 117 public colleges and 152 private colleges reported on physics faculty salaries, while 117 public and 150 private colleges reported in 1986. Between 1983 and 1986, average salaries of faculty in this field increased 22.6% at public colleges and 16.8% at private colleges. For 1986-1987 the average salary for physics faculty was above the average faculty salary in the other 43 disciplines (10% above for public colleges and 15% above for private colleges). Included is information on: the number of faculty by academic rank, including new assistant professors; salaries by academic rank; the ratio of average salaries to total salaries of all institutions in both years; comparisons with the Consumer Price Index of changes in cost-of-living for both years; and comparisons with 43 other disciplines. The disciplines and participating institutions are listed. (SW)

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Reproductions supplied by EDRS are the best that can be made \*
from the original document.





dividend for his first the same of

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Richard D. Howe Appalachian State Univ.

# SALARY-TREND STUDY OF FACULTY IN PHYSICS

#### FOR THE YEARS

## 1983-84 AND 1986-87

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1986-87. Each year two separate studies are conducted, one for public senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 44 selected academic disciplines including physics. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1981. The definition of the discipline/major field of physics in the CIP is as follows:

A group of instructional programs that describe the physical properties and interactions of matter and energy, including equilibrium, power, wave phenomena, mechanics, heat, electricity, magnetism, sound, light, special relativity, and the particular nature of matter.

This article presents a summary of the overall average salary increases in the discipline/major field of physics from the "baseline year" of 1983-84 to and including the "trend year" of 1956-87 for both public and private institutions. Of the 215 institutions which participated in CUPA's PUBLIC (AASCU)

U.S DEPARTMENT OF EDUCATION
Office of Ed. attornal Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

to this document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

study of 1983-84, 167 also participated in 1986-87. Data from those same 167 institutions were used in both the baseline year and the trend year. Of the 355 institutions which participated in CUPA'S PRIVATE study of 1983-84, 235 also participated in 1986-87. Data from those same 235 institutions were used in both the baseline year and the trend year.

In addition to listing the average salaries in physics for both public and private participating institutions by rank, including "new assistant professor," and listing the faculty mix percentage (FAC MIX PCT) and the salary factor, comparisons are made between the two studies for each of the two study years (1983-84 and 1986-87) and with the CPI (Consumer Price Index) of changes in cost-of-living.

The CPI is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the economy and the CPI yields a more precise representation of "real" salary increases over time.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.



The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .33 for associate professor of physics in the 1983-84 public study means that 33 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: PUBLIC 1983-84, PUBLIC 1986-87, PRIVATE 1983-84 and PRIVATE 1986-87. For example, a SALARY FACTOR of 1.00 for assistant professors in the discipline/major field of physics in the 1983-84 public study means that their salaries are about the same as the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1983-84 or 1986-87). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 44 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of physics with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1983-84 and the "crend year" of 1986-87 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.



NEW ASST **ASSO** ASST ALL RANKS **PROF** PROF **PROF** PROF INSTRUCTOR SALARY NUM N/IN PUBLIC, 1983-84: PHYSICS **AVERAGE** SALARY: 33946 95 21738 29186 668 117 308 27049 218 92 22724 123 70 23 20 18393 19 17 FAC MIX PCT: 0.46 0.33 0.18 0.03 0.03 1.00 SALARY FACTOR: 1.03 1.01 1.09 1.00 1.00 0.38 ALL MAJOR FIELDS **AVERAGE** SALARY: 33110 11461 26895 3661? 167 27177 11328 22634 10381 22154 1290 18126 3442 FAC MIX PCT: 0.31 0.28 0.04 0.09 1.00 0.31 PUBLIC, 1986-87: **PHYSICS** AVERAGE SALARY: 40809 355 100 16 14 35776 694 117 33174 193 86 27303 130 66 24878 16 13 22567 FAC MIX PCT: 0.51 0.02 0.02 1.00 0.28 0.19 SALARY FACTOR: 1.02 1.01 0.95 1.05 1.10 1.00 ALL MAJOR FIELDS **AVERAGE** SALARY: 40113 13035 32670 38815 167 32782 11510 27174 10781 26216 1487 21478 3489 FAC MIX 1.00 FCT: 0.34 0.30 0.28 0.04 0.09 PRIVATE, 1983-84: **PHYSICS** AVERAGE 30981 527 152 SALARY: 36653 21496 12 11 259 103 27979 152 83 22706 104 72 21 21 18320 FAC MIX PCT: 0.49 0.29 0.04 0.02 1.00 0.20 SALARY 1.07 1.17 FACTOR: 1.06 1.05 1.01 1.04 ALL MAJOR FIELDS **AVERAGE** SALARY: 34211 6450 26553 21861 235 26502 6767 21689 6900 856 17673 1744 21369 FAC MIX PCT: 0.30 0.08 1.00 0.32 0.04 0.31 PRIVATE, 1986-87: **PHYSICS** AVERAGE 36180 563 150 SALARY: 43735 269 99 32669 161 90 25479 124 77 25042 23 22 20660 FAC MIX 1.00 0.02 PCT: 0.48 0.29 0.22 0.04 SALARY 0.99 1.15 I-ACTOR: 1.05 1.00 0.99 1.08 ALL MAJOR FIELDS **AVERAGE** 31548 23292 235 SALARY: 40330 7187 20959 1637 31212 7199 25583 7269 25205 1173 FAC MIX 0.05 0.07 1.00 PCT: 0.31 0.31 0.31



### RESULTS OF THE TWO PUBLIC (AASCU) STUDIES, 1983-84 AND 1986-87

In the PUBLIC 1983-84 salary study in the above table, the reader may note that the discipline/major field of physics was reported in 117 of the 167 public (AASCU) institutions. The average salary of the 668 faculty was \$29,186. This average salary was approximately 9 percent (1.09) higher than the average salary of \$26,895 for all 36,612 faculty in ALL MAJOR FIELDS in the 1983-84 public study.

In the PUBLIC 1986-87 salary study in the above table, the discipline/major field of physics was reported in 117 of the same 167 public (AASCU) institutions. The average salary of the 694 faculty was \$35,776. This average salary was approximately 10 percent (1.10) higher than the average salary of \$32,670 for all 38,815 faculty in ALL MAJOR FIELDS in the 1986-87 public study.

The increase in average salaries for all faculty in physics after three years in the public institutions studied was 22.6 percent (\$35,776 minus \$29,186 equals \$6,590). The CPI of increased cost-of-living between October 1983 and October 1986 was 9.2 percent. A more realistic increase, therefore, in average faculty salaries over the three-year time period is 13.4 percent or an average of 4.5 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the public institutions studied was 21.5 percent (\$32,670 minus \$26,895 equals \$5,775). In comparison to the discipline/major field of physics (22.6%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.1 percent (22.6% minus 21.5% equals 1.1%) less than faculty in the discipline/major field of physics.

Since the discipline/major field of physics is one of the "older" disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the public studies;



0.46 vs. 0.18 (1983-84) respectively; and 0.51 vs. 0.19 (1986-87) respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both public studies is as follows: 0.31 vs. 0.28 (1983-84) and 0.34 vs. 0.28 (1986-87) respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors compared to physics in both public studies.

Finally, the hiring rate of new assistant professors in physics is low in the public studies: 3.4 percent (23/668) in 1983-84 vs. 3.5 percent (1,290/36,612) in ALL MAJOR FIELDS in 1983-84. Also, the hiring rate of new assistant professors in physics in 1986-87 was 2.3 percent (16/694) vs. 3.8 percent (1,487/38,815) in ALL MAJOR FIELDS that same year. In other words the hiring rate in the discipline/major field of physics is less than for ALL MAJOR FIELDS in both the public studies of 1983-84 and 1986-87.

# RESULTS OF THE TWO PRIVATE STUDIES, 1983-84 AND 1986-87

In the PRIVATE 1983-P4 salary study in the above table, the reader may note that the discipline/major field of physics was reported in 152 of the 235 private institutions. The average salary of the 527 faculty was \$30,981. This average salary was approximately 17 percent (1.17) higher than the average salary of \$26,553 for all 21,861 faculty in ALL MAJOR FIELDS in the 1983-84 private study.

In the PRIVATE 1986-87 salary study in the above table, the discipline/major field of physics was reported in 150 of the same 235 private institutions. The average salary of the 563 faculty was \$36,180. This average salary was approximately 15 percent (1.15) higher than the average salary of \$31,548 for all 23,292 faculty in ALL MAJOR FIELDS in the 1986-87 private study.



The increase in average salaries for all faculty in physics after three years in the private institutions studied was 16.8 percent (\$36,180 minus \$30,981 equals \$5,199). The CPI of increased cost-of-living between October 1983 and October 1986 was 9.2 percent. A more realistic increase, therefore, in average faculty salaries over the three-year time period is 7.6 percent or 2.5 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 18.8 percent (\$31,548 minus \$26,553 equals \$4,995). In comparison to the discipline/major field of physics (16.8%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.0 percent (18.8% minus 16.8% equals 2.0%) more than faculty in the discipline/major field of physics.

Because the discipline/major field of physics is one of the "older" disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the private studies: 0.49 vs. 0.20 (1983-84) respectively; and 0.48 vs. 0.22 (1986-87) respectively. This differs from ALL MAJOR FIELDS for both private studies: 0.30 vs. 0.32 (1983-84) respectively; and 0.31 vs. 0.31 (1986-87) respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors than physics in both private studies.

Finally, the hiring rate of new assistant professors in physics in the private study of 1983-84 slightly exceeded the hiring rate in ALL MAJOR FIELDS 4.0 percent (21/527) vs. 3.9 percent (856/21,861) respectively. However, in 1986-87 the hiring rate of new assistant professors in physics lagged behind ALL MAJOR FIELDS: 4.1 percent (23/563) vs. 5.0 percent (1,173/23,292), respectively.

#### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of physics and compared that information with 43 other academic disciplines/major fields over a period of three years: the "baseline year" of 1983-84 and the "trend year" of 1986-87. Two studies, one for public (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year—a total of four studies. A total of 2,452 faculty in the discipline/major field of physics participated and were included in the overall total of 120,580 faculty in all 44 disciplines/major fields in all four studies. The same 167 public (AASCU) institutions and the same 235 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the average faculty salary in the discipline/major field of physics is currently (1986-87) some 10 and 15 percent above the overall average faculty salary of the other 43 disciplines/major fields for both the public and private studies, respectively. The average faculty salary for physics in the private institutions was 8 percent more in comparison to that in the public institutions in 1983-84. The overall salary factor in the private institutions is now (1986-87) 5 percent more compared to that for the public institutions: 1.15 vs 1.10, respectively.

Second, the CPI of October 1986, in comparison to the CPI of October 1983, indicates that the faculty in physics, in both the public and private institutions, received overall salary increases for three years above the cost-of-living. Physics average faculty salaries in the public institutions exceeded faculty in ALL MAJOR FIELDS during this same period by 1.1 percent, whereas the physics average faculty salaries in the private institutions lagged



behind faculty in ALL MAJOR FIELDS by 2 percent. Physics faculty in the public institutions have some catching up to do in salary in comparison with their colleagues in the private institutions.

Third, since the discipline/major field of physics is one of the older disciplines, there is a marked difference between the number of faculty with the rank of full professor and assistant professor in the public and in the private institutions. The full professor rank is already "top heavy" in both the public and private institutions, and appears to be increasing more rapidly in the public institutions. It seems a smaller percentage of new assistant professors are being hired in the public institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend studies will be effected in physics, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Lynette Tuttle is a research analyst in the Office of Equal Opportunity Programs, Appalachian State University, Boone, North Carolina.

#### APPENDICES:

- 1) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- 2) LIST OF PUBLIC Participating Institutions, page 11
- 3) LIST OF PRIVATE Participating Institutions, page 13

#### APPENDIX A.

#### OVERALL LIST OF SELECTED DISCIPLINES

AGRIBUSINESS AND AGRICULTURAL PRODUCTION LETTERS

ACCOUNTING LIBRARY AND ARCHIVAL SCIENCES

ANTHROPOLOGY LIFE SCIENCES

AREA AND ETHNIC STUDIES MATHEMATICS

AUDIOLOGY AND SPEECH PATHOLOGY MUSIC

BUSINESS & MANAGEMENT MULTI-INTERDISCIPLINARY STUDIES

BUSINESS ADMINISTRATION AND MANAGEMENT NURSING

BUSINESS ECONOMICS PHILOSOPHY & RELIGION

CHEMISTRY PHYSICAL EDUCATION

COMMUNICATION TECHNOLOGIES PHYSICAL SCIENCES

COMMUNICATIONS PHYSICS

COMPUTER & INFORMATION SCIENCES POLITICAL SCIENCE

CURRICULUM AND INSTRUCTION PSYCHOLOGY

DRAMATIC ARTS READING EDUCATION

EDUCATION SECRETARIAL AND RELATED PROGRAMS

EDUCATION ADMINISTRATION SOCIAL SCIENCES

ENGINEERING SOCIOLOGY

FINE ARTS SPECIAL EDUCATION

FOREIGN LANGUAGES STUDENT COUNSELING AND PERSONNEL

SERVICES

TEACHER EDUCATION, GENERAL

GEOLOGICAL SCIENCES PROGRAMS

HISTORY VISUAL AND PERFORMING ARTS

HOME ECONOMICS

TOTAL: 44



GEOGRAPHY

#### APPENDIX B.

CUPA Public (AASCU) Faculty Salary-Trend Studies: 1983-84 and 1986-87

in a contraction of a contraction of the second contraction of interest of the second in a contraction of the second

# Institutions Participating in Both Studies:

Alabama State University (AL) Angelo State University (TX) Appalachian State University (NC) Arkansas State University (AR) Arkansas Tech University (AR) Auburn University at Montgomery (AL) Augusta College (GA) Austin Peay State University (TN) Ball State University (IN) Black Hills State College (SD) Bluefield State College (WV) California State University, Hayward (CA) California State University, Long Beach (CA) California University of Pennsylvania (PA) Castleton State College (VT) Cayey University College (PR) Central Connecticut State University (CT) Chadron State College (NE) Christopher Newport College (VA) Clarion University of Pennsylvania (PA) College of Staten Island, The (NY) College of the Virgin Islands at St. Croix (VI) College of the Virgin Islands at St. Thomas (VI) Columbus College (GA) Concord College (WV) Coppin State College (MD) Delta State University (MS) Dickinson State College (ND) East Central University (OK) East Tennessee State University (TN) East Texas State University at Texarkana (TX) Eastern Connecticut State University (CT) Eastern Montana College (MT) Edinboro University of Pennsylvania (PA) Fitchburg State College (MA) Florida Atlantic University (FL) Fort Hays State University (KS) Francis Marion College (SC) Frostburg State College (MD) George Mason University (VA) Georgia College (GA) Georgia Southern College (GA) Glenville State College (WV) Grambling State University (LA) Grand Valley State College (MI) Harris-Stowe State College (MO)

Henderson State University (AR)

Adaho State University (ID) Illinois State University (IL) Indiana State University (IN) Jacksonville State University (AL) James Madison University (VA) John Jay College of Criminal Justice (NY) Keene State College (NH) Kennesaw College (GA) Lake Superior State College (MI) Lewis Clark State College (ID) Mansfield University (PA) Marshall University (WV) Mary Washington College (VA) Mayville State College (ND) Memphis State University (TH) Metropolitan State College (CO) Middle Tennessee State University (TN) Midwestern State University (TX) Millersville University (PA) Minot State College (ND) Mississippi University for Women (MS) Missouri Southern State College (MO) Missouri Western State College (MO) Montana College of Mineral Science and Technology (MT) Hurray State University (KY) North Carolina Agricultural and Technical State University (NC) Northeast Louisiana University (LA) Northeast Missouri State University (MO) Northern Arizona University (AZ) Northern Illinois University (IL) Northern Kentucky University (KY) Northern State College (SD) Northwest Missouri State University (MO) Oakland University (MI) Old Dominion University (VA) Pan American University (TX) Peru State College (NE) Pittsburg State University (KS) Plymouth State College (NH) Radford University (VA) Saginaw Valley State College (MI) Salem State College (MA) Sangamon State University (IL) Shepherd College (WV) Shippensburg University (PA)



## Participating Institutions (continued):

Slippery Rock University (PA) South Dakota School of Mines & Technology (SD) Southeast Missouri State University (NO) Southeastern Louisiana University (LA) Southeastern Massachusetts University (MA) Southern Arkansas University (AR) Southern Oregon State College (CR) Southern Utah State College (UI) Southwest Missouri State University (MO) Southwest State University (MN) Southwestern Oklahoma State University (OK) St. Cloud University (MN) State University of New York College at Brockport (NY) State University of New York College at Buffalo (NY) State University of New York College at Cortland (NY) State University of New York College at Fredonia (NY) State University of New York College at Geneseo (NY) Stephen F. Austin State University (TX) Tennessee Technological University (TN) Texas A&I University (TX) Texas A&M University at Galveston (TX) Texas Woman's University (TX) Towson State University (MD) Troy State University (AL) University of Akron, The (OH) University of Central Arkansas (AR) University of Colorado at Colorado Springs (CO) University of Colorado at Denver (CO) University of Maine at Farmington (ME) University of Maine at Fort Kent (ME) University of Montevallo (AL) University of Nebraska at Omaha (NE) University of Nevada, Las Vegas (NV) University of North Carolina at Asheville (NC) University of North Carolina at Charlotte (NC) University of North Florida (FL) University of Northern Iowa (IA) University of Science and Arts of Oklahoma (OK) University of South Alabama, The (AL) University of South Carolina - Aiken (SC) University of South Carolina at Spartanburg (SC) University of Southern Colorado (CO) University of Southern Mississippi (MS) University of Southwestern Louisiana (LA) University of Tennessee at Chattanooga (TN) University of Tennessee at Martin, The (TN) University of Texas at Dallas, The (TX) University of Texas at San Antonio (TX) University of Texas at Tyler, The (TX) University of Texas of the Permian Basin (TX) University of Wisconsin--Eau Claire (WI) University of Wisconsin--Green Bay (WI)

University of Wisconsin--La Crosse (WI) University of Wisconsin--Platteville (WI) University of Wisconsin--Stevens Point (WI) University of Wisconsin--Superior (WI) University of Wisconsin--Oshkosh (WI) Valdosta State College (GA) WLyne State College (NE) Weber State College (UT) West Georgia Collage (GA) West Texas State University (TX) West Virginia College of Graduate Studies (WV) West Virginia Institute of Technology (WV) Western Connecticut State University (CT) Western Illinois University (IL) Western Kentucky University (KY) Western Michigan University (MI) Western New Maxico University (NM) Western Oregon State College (OR) Western State College of Colorado (CO) Wichita State University, The (KS) William Paterson College of New Jersey (NJ) Winston-Salem State University (NC) Youngstown State University (OH)

TOTAL: 167



eristing in interpretation of the contract of

and the wind is a complete to the wind when the wind we have a second of the complete to the complete the complete to the comp

#### APPENDIX C.

CUPA Private (AASCU) Faculty Salary-Trend Studies: 1983-84 and 1986-87

### Institutions Participating in Both Studies:

Abilene Christian University (TX) Cogswell Polytechnical College (CA) Albertus Magnus College (CI) College of Idaho, The (ID) Albion College (MI) College of Mount Saint Vincent (NY) Alfred University (NY) college of New Rochelle (NY) Alma College (NI) College of Notre Dame (CA) American College, The (PA) College of Saint Zlizabeth (NJ) American University, The (DC) College of St. Scholastica (MN) Anna Maria College (MA) College of the Holy Cross (MA) Aquinas College (MI) College of Wooster, The (OH) Arkansas College (AR) Columbia College (MO) Ambury College (KY) Concordia College (MI) Augsburg College (MN) Cooper Union for the Advancement of Aurora University (IL) Science and Art, The (NY) Averett College (VA) D'Youville College (NY) Avila College (MO) Defiance College, The (OH) Azusa Pacific University (CA) Depaul University (IL) Babson College (MA) DeParw University (IN) Bard College (NY) Dickinson College (PA) Barnard College (NY) Doane College (NE) Barry University (FL) Dorát College, Inc. (IA) Beaver College (PA) Drake University (IA) Bellarmine College (KY) Drew University (NJ) Benedictine College (KS) Eastern College (PA) Bethune-Cookman College (FL) Eckerd College (FL) Biola University (CA) Elmhurst College (IL) Birmingham-Southern College (AL) Emory & Henry College (VA) Bishop College (TX) Erskine College (SC) Boston College (MA) Ferrum College (VA) Boston University (MA) Findlay College (OH) Bradley University (IL) Fontbonne College (20) Briar Cliff College (IA) Fordham University (NY) Bridgewater College (VA) Franklin and Marshall College (PA) Bryant College (RI) Furne: University (SC) Bryn Mawr College (PA) Gannon University (PA) Bucknell University (PA) George Washington University, The (DC) Butler University (IN) Georgetown University (DC) Canisius College (NY) Gonzaga University (WA) Capital University (OH) Graceland College (IA) Carroll College (MT) Greensboro College (NC) Catawba College (NC) Guilford College (NC) Cedar Crest College (PA) Hamline University (MN) Cedarville College (OH) Hartwick College (NY) Centenary College (NJ) Hawaii Loa College (HI) Heidelberg College (OH) Central College (IA) Central Wesleyan College (SC) Hood College (MD) Christian Brothers College (TN) Hope College (MI) Clark University (MA) Huntington College (IN)



## Participating Institutions, continued:

Norwich University (VI) Husson College (HB) Ohio Northern University (OH) Huston-Tillotson College (TX) Illinois Benedictine College (IL) Oklahoma Baptist University (OK) Illinois College (IL) Ottawa University (KS) Immaculata College (PA) Otterbein College (OH) Iona College (NY) Our Lady of the Holy Cross College (LA) Palm Beach Atlantic College (FL) Ithaca College (NY) John Brown University (AR) Parks College (NO) John Carroll University (OH) Pikeville College (KY) Johns Hopkins University (MD) Presbyterian College (SC) Johnson C. Smith University (NC) Queens College (MC) Quincy College (IL) Kansas Wesleyan (KS) Reed College (OR) Kenyon College (OE) King's College (PA) Regis College (MA) La Roche College (PA) Rider College (NJ) Le Tourneau College (TX) Ripon College (WI) Lincoln Memorial University (TN) Rockford College (IL) Loyola College in Maryland (MD) Rockhurst College (MO) Lubbock Christian College (TX) Sacred Heart College (NC) Saint John's University (MN) Luther College (IA) Saint Joseph College (CI) Lycoming College (PA) Saint Joseph's College (IN) Lynchburg College (VA, Saint Mary Callege (KS) Malone College (OH) Manhattanville College (NY) Saint Paul's College (VA) Saint Vincent College (PA) Marist College (NY) Mary Baldwin College (VA) Saint Xavier College (IL) Jalem College (NC) Marymount College (NY) gina--The Newport College (RI) Marywount, Manhattan College (NY) Scarri t Graduate School (TN) Maryville College (TN) Marywood College (PA) School of the Ozarks, The (MO) Seattle University (WA) Mercy College (NY) Seton Hill College (PA) Mercy College of Detroit (MI) Siena College (NY) Meredith College (NC) Siena Heights College (MI) Merrimack College (NA) Millikin University (IL) Simpson College (IA) Sioux Falls College (SD) Molloy College (NY) Southern California College (CA) Monmouth College (NJ) Southern Methodist University (TX) Moravian College (PA) Southwestern College (KS) Morningside College (IA) Spaiding University (KY) Morris Brown College (GA) Mount Mary College (WI) Springfield College (MA) St. Bonaventure University (NY) Mount Marty College (SD) St. Francis College (NY) Mount Saint Clare College (IA) Mount Saint Mary's College (MD) St. Mary's University (TX) St. Norbert College (WI) Mount Vernon College (DC) Suffolk University (MA) Muskingum College (OH) Sweet Briar College (VA) Nazareth College (NI) Syracuse University (NY) Nazareth College of Rochester (NY) Neumann College (PA) Taylor University (IN) Texas Christian University (TX) North Central College (IL) Texas Lutheran College (TX) Northwestern College (IA) Northwestern College (MN)



the way the contract of the first will be still the track of the same of the same of the same of the same of the

## Participating Institutions, continued:

Transylvania University (XY) Tri-State University (IN) Trinity College (DC) Trinity College (VI) Trinity University (TX) University of Dayton (OH) University of Dubuque, The (IA) University of La Verne (CA) University of Mismi (FL) University of Portland (OR) University of San Diego (CA) University of Scranton (PA) University of the South, The (TN) University of Tulsa (OK) Ursuline College (OH) Valparaiso University (IN) Villa Maria College (PA) Virginia Union University (VA) Viterbo College (WI) Wabash College (IN) Wagner College (NY) Walsh College (OH) Warner Pacific College (OR) Washington and Jefferson College (PA) Washington and Lee University (VA) West Virginia Wesleyan College (WV) Western Maryland College (MD) Westmar College (IA) Westminster College of Salt Lake City (UT) Whitman College (WA) Whittier College (CA) Widener University (PA) William Jewell College (MO) William Marsh Rice University (TX) William Penn College (IA) Wilmington College (OH) Wilson College (PA) Wittenburg University (OH) York College of Pernsylvania (PA)

TOTAL: 235