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ABSTRACT

Patterns of expenditures in higher education are examined, based on 1977 financial data from the Higher Education General Information Survey (HEGIS) and on data from "Higher Education Financing in the Fifty States, Interstate Comparisons, Fiscal Year 1976, Review Edition." Based on 1977 fiscal year data from HEGIS, distributions of institutional expenditures are indicated by type and control of institutions. Ratios were obtained by dividing the amount expended for a specific category, such as instruction, by that expended for total educational and general categories combined. Institutions are ranked from low to high, based on the ratio of expenditures for instruction to total educational and general expenditures. Additional information includes expenditures for instruction as a percentage of total educational and general expenditures, by state, for public institutions as a whole and for four institutional subgroups (public and private 2- and 4-year institutions); and ranking of the states by percentages of overall expenditures for instruction relative to overall total educational and general expenditures. States ranking highest direct the highest percentages of their expenditures to instruction. Possible reasons for variations among the states along with reasons for differences in percentages of expenditures allocated to instruction, are noted. This approach of ranking states allows identification of the status of all institutions of a given type within a state relative to their counterparts in each of the other states, and may facilitate the identification of clusters of states with similar funding or other factors. Information on the classifications of institutions and expenditures and statistical tables are appended. (SW)

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**HIGHER EDUCATION INSTITUTIONS:
PATTERNS OF EXPENDITURES**

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HIGHER EDUCATION INSTITUTIONS: PATTERNS OF EXPENDITURES

The Need for the Study

As increasing numbers of higher education institutions are having to face decisions about conditions that could lead to financial distress, faculty have reason for a greater interest in the way in which institutions expend their financial resources. The outlook for continuing declines in the number of persons in the 18-to-24 age group accompanying extremely high levels of inflation makes it necessary for every institution to direct greater attention to the use of its resources.

Criteria for evaluating financial data to identify the institutions approaching or experiencing financial distress are not yet available. For example, many institutions already in serious straits have shown little or no deterioration in the quality of their programs.

A review of patterns of expenditures among similar institutions may make it possible to identify the institutions having unusual expenditure priorities that may be symptoms of impending financial distress. It may also help an institution evaluate the extent to which its financial resources are directed to the achievement of institutional purposes.

Each year institutions of higher education are asked to report basic financial data to the National Center for Education Statistics (NCES) in the Higher Education General Information Survey (HEGIS) package of questionnaires. The HEGIS financial questionnaire requests a wide variety of information on income and expenditures, although the categories are not as detailed as those in institutional budgets or in the reports required by some state coordinating offices. In the absence of more detailed data from all institutions of higher education, the information from the HEGIS survey provides the best source for an analysis and a comparison of financial receipts and expenditures on a national basis.

National and state-by-state summaries of receipts and expenditures of higher education institutions by type and control have been published by NCES for fiscal 1977 in *Financial Statistics of Institutions of Higher Education, Fiscal 1977* by Norman J. Brandt and Anne Ni (available for \$4.50 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402; stock number 017-080-02018-1).

Definitions of the types of institutions and of the expenditures included in each of the broad categories used in the HEGIS financial questionnaire may be found in the Appendix of this Research Memo.

The Findings of the Study

Using the financial data reported to NCES for fiscal 1977, NEA Research has summarized the distributions of institutional expenditures by type and control of institutions through use of ratios of expenditures in each component category to the *total educational and general expenditures* (including mandatory transfers). Tables 1 through 6 contain these summaries, with institutions classified by type and control as follows: Public Universities (Table 1), Public Other 4-Year Institutions (Table 2), Public 2-Year Institutions (Table 3), Private Universities (Table 4), Private Other 4-Year Institutions (Table 5), and Private 2-Year Institutions (Table 6).

Ratios were obtained by dividing the amount expended for a specific category, such as *instruction*, by that expended for *total educational and general* categories combined. The resultant percentage was then stored for subsequent statistical compilation for all institutions in the classification. The tables contain the mean and standard deviation along with deciles, quartiles, and the fifth and ninety-fifth percentiles for each component. For example, in Table 1 the first figure given in Column 6 (for the tenth percentile) indicates that if the institutions were ranked from low to high based on the ratio of expenditures for *instruction* to *total educational and general expenditures*, the point that would separate the lower 10 percent of institutions from the remaining 90 percent is that at which the expenditures for *instruction* equal 29.8 percent of the *total educational and general expenditures*.

A similar analysis of the 1975-76 expenditure patterns was also made. It is not reported here, however, because in most cases the statistics for given categories did not differ widely for the two years.

Beginning in 1975-76, revisions in the HEGIS questionnaire make it difficult to compare expenditure patterns with those reported for earlier years. Therefore, information in the present summary is not sufficient to evaluate the long-term effects upon higher education expenditures of many recent developments such as the energy crisis, the effects of inflation, changes in program emphasis as a result of growing enrollment of older and part-time students, increased need for recruitment and fund raising, and/or other forces affecting the mission or operational pattern of an institution.

Table 7 gives the expenditures for *instruction* as a percentage of *total educational and general expenditures*, by state, for public institutions as a whole and for four institutional subgroups. The subgroupings reduce the impact of differences related to basic institutional characteristics upon the expenditure pattern of institutions within a given category. The differences among the states in the overall percentages of *educational and general expenditures* directed to *instruction* provide another indication of the variability of these percentages and supply additional useful information for evaluating the expenditure patterns of specific institutions.

Table 8 ranks the states by percentages of overall expenditures for *instruction* relative to overall *total educational and general expenditures*. Rankings are given for public institutions as a whole and for the four subgroups. States ranking highest direct the highest percentages of their expenditures to instruction.

The data for Tables 7 and 8 are drawn from *Higher Education Financing in the Fifty States, Interstate Comparisons, Fiscal Year 1976, Review Edition*, by Marilyn McCoy and D. Kent Halstead (Washington, D.C.: National Institute of Education, 1979; available for \$7.50 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402; stock number 017-080-02068-8). This publication contains a comprehensive review of state-by-state comparisons of receipts and expenditures of higher education institutions.

Some of the variations among the states may result from the following:

- The extent to which the HEGIS surveys include vocational and technical institutions that are postsecondary in nature
- The proportion of total expenditures for administration of higher education centrally handled by a state postsecondary commission
- The amount of expenditures for certain services obtained by some campuses but not charged back to them by the larger university centers providing these services
- The extent to which state payments for employee benefits do not flow through institutional accounts
- The extent to which capital costs of physical facilities are financed through a separate agency instead of through institutional current funds
- The extent to which financial information for central administration and extension or research institutes is considered as part of the main campus or component campuses
- The extent to which member campuses are classified in the same category as main campuses
- The extent to which certain institutions provide some public services not handled by higher education in other states
- Other patterns of appropriations and accounting for higher education expenditures.

Use of the Findings

The summaries presented in Tables 1 through 6 provide a starting point for making an assessment of the extent to which a local institution is typical of similar institutions in its pattern of expenditures. The category of *instruction* is probably of greatest interest to faculty because such expenditures reflect the resources directed to accomplishing the primary purpose of most institutions. Statistics for the other categories are useful for similar evaluations of other types of expenditures. Where an institution ranks relatively low in instructional expenditures, for example, an evaluation of its relative status in the other categories may identify the areas receiving the resources normally directed to instruction.

This information can lead to an evaluation of the appropriateness of any unusual expenditure patterns. For example, an institution with relatively low expenditures for *instruction* may have a higher-than-typical percentage of expenditures directed to *research* as an appropriate reflection of its primary purpose or mission to conduct research as well as instruction. On the other hand, if relatively low expenditures for *instruction* are accompanied by relatively high expenditures for *academic support, institutional support, and/or student services*, there may be a need for a more detailed look at the possible presence of special conditions that may justify the unusual local pattern.

The percentages of total educational and general expenditures for *instruction* vary widely among institutions. The differences in percentages allocated to this category result from several conditions such as the following:

- *Size of institution.* It may be possible for large institutions to devote a smaller proportion of total expenditures to administration than would be necessary in a very small institution.
- *Location of the institution.* Lower cost of fuel or lower fuel requirements for institutions in southern states would make it likely that they might allocate a smaller proportion of their expenditures for plant operation.
- *Adequacy of institutional financing.* Generously financed institutions might devote a larger proportion of expenditures to instruction than would institutions having limited resources (institutional survival may require large expenditures in institutional support areas).
- *Emphasis upon buildings and grounds.* An institution that deliberately emphasizes the presence of modern, beautiful, well-equipped buildings may do so at the expense of faculty salaries.
- *Emphasis upon administrative staff.* An institution that deliberately emphasizes its large number of administrative staff or pays relatively high administrative salaries may do so at the expense of faculty salaries.
- *Emphasis upon recruitment and public relations.* An institution that gives more than average attention to recruitment and public relations may do so at the expense of faculty salaries.
- *Record-keeping system.* The system for financial record keeping and/or local definitions of expenditures of the institution may influence the percentage distribution of expenditures.

The state-by-state percentages and rankings of Tables 7 and 8 provide additional information for evaluating expenditures in a given institution. Particularly useful are the three classifications of institutions granting the 4-year bachelor's degree or higher because within each classification the basic institutional characteristics that may have contributed to differences in expenditure patterns have been reduced significantly. Therefore, faculty in individual institutions (as well as in those of a specific type within a state) ranking relatively low in the percentage of instructional expenditures have sufficient evidence to look further at the remaining categories of their institutional expenditures.

The rankings of states by the percentages of *total educational and general expenditures* directed to *instruction* in the four subgroupings of their public institutions (Table 8) permit immediate identification of the status of all institutions of a given type within a state relative to their counterparts in each of the other states. This summary may also facilitate the identification of clusters of states with similar funding, centralized administration, and/or other considerations influencing their institutional expenditure patterns.

Additional Information from NEA Research

Copies of the HEGIS financial questionnaire data reported by any institution of higher education are available from NEA Research. In addition to information for one's own institution, data for selected "peer" institutions may be obtained. If requested, NEA Research can also assist in identifying such institutions by supplying the names and data of institutions in the same Carnegie code grouping of similar enrollment size as the target institution.

Other information and statistics from these data may be developed upon request. Address inquiries to William S. Graybeal, Research Specialist, NEA Research, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

APPENDIX

The following classifications of institutions are used for the summaries in Tables 1 through 6. These classifications are assigned by the National Center for Education Statistics (NCES) based upon information filed by the institutions in various questionnaires of the Higher Education General Information Survey (HEGIS).

INSTITUTION CONTROL

Public institutions are institutions controlled by federal, state, or local governments.

Private institutions are independent institutions or those controlled by religious organizations.

INSTITUTION TYPE (Tables 1-6)

Universities are institutions that give considerable emphasis to graduate instruction, confer advanced degrees as well as bachelor's degrees in a variety of liberal arts fields, and have at least two professional schools that are not exclusively technological.

Other 4-year institutions are all 4-year institutions not classified as universities. They include institutions granting bachelor's degrees or higher, or some other type of equivalent recognition (e.g., ecclesiastical recognition in a theological institution) based on at least 4 academic years of college-level work beyond secondary school.

Two-year institutions are institutions offering at least 2 years, but less than 4 years, of college-level work beyond secondary school.

INSTITUTION TYPE (Tables 7 and 8)

The following classifications of institutions were introduced and developed by the National Center for Higher Education Management Systems (NCHEMS) and the data reported by state in *Higher Education Financing in the Fifty States* by Marilyn McCoy and Kent Halstead (Washington, D.C.: National Institute of Education, 1979, 221 pp.). Professional and specialized institutions (law, education, engineering, and those granting degrees in fewer than three programs) are not included in this Research Memo.

Major doctoral degree-granting institutions are those that grant a minimum of 30 doctoral-level degrees in three or more doctoral-level program areas and do not confer more than 50 percent of their degrees in a single program area.

Comprehensive institutions are those that do not qualify as Major Doctoral Degree-Granting Institutions but grant a minimum of 30 postbaccalaureate degrees in three or more postbaccalaureate programs, or confer more than 50 percent of their degrees at the postbaccalaureate level in three or more programs. In both instances the institution confers not more than 50 percent of its degrees in a single program area.

General baccalaureate institutions are those that do not qualify in either of the above but grant a minimum of 30 baccalaureate degrees in three or more programs, or confer over 50 percent of their degrees in interdisciplinary studies. In the former subcategory, the institution confers not more than 50 percent of its degrees in a single program area.

Two-year institutions are those that do not confer degrees at the baccalaureate, master's or doctoral level, but confer degrees or awards for two years of work, or formal awards and completions for less than two years of work.

EXPENDITURES

In the HEGIS questionnaire *Financial Statistics of Institutions of Higher Education for Fiscal Year Ending 1977*, institutions were asked to report both unrestricted and restricted current fund expenditures in the classifications listed below:

Instruction includes expenditures of the colleges, schools, departments, and other instructional divisions of the institution for both credit and noncredit activities in general academic instruction, occupational and vocational instruction, special session instruction, community education, preparatory and adult basic education, and remedial and tutorial instruction. Where they are not separately budgeted, the expenditures for departmental research and public service are also included here. Expenditures for academic administration are included only where the primary function is instruction.

Research includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution.

Public service includes all funds budgeted specifically for public service and expended for activities primarily to provide noninstructional services beneficial to groups external to the institution. Expenditures for community services and cooperative extension services are included.

Academic support includes expenditures for the support services that are an integral part of the institution's primary missions of instruction, research, or public service. Included are expenditures for libraries, museums, galleries, audio-visual services, computing support, ancillary support, academic administration, personnel development, and course and curriculum development.

Student services includes expenditures for admissions, registrar activities, and activities whose primary purpose is to contribute to students' emotional and

physical well-being and to their intellectual, cultural, and social development outside the context of the formal instruction program. Examples are career guidance, counseling, financial aid administration, and student health services, where not operated as a self-supporting auxiliary enterprise.

Institutional support includes expenditures for the day-to-day operational support of the institution, excluding expenditures for physical plant operations. Included here are general administrative services, executive direction and planning, legal and fiscal operations, and community relations.

Operation and maintenance of plant includes all expenditures (except those from institutional plant funds accounts) for operations established to provide service and maintenance related to campus grounds and facilities.

Scholarships and fellowships includes only the monies given in the form of outright grants and trainee stipends to individuals enrolled in formal coursework either for credit or noncredit. Also included is aid to students in the form of tuition or fee remission, except where this is granted because of faculty or staff status. It does not include Federal Basic Opportunity Grants, ROTC, scholarships, or other programs where the institution is not allowed to select the recipient of the grant. College work study program expenses are not reported here but are reported where the student serves.

Educational and general mandatory transfers are transfers from current funds that must be made in order to fulfill a binding legal obligation of the institution. Reported here are mandatory debt-service provisions relating to academic buildings, including amounts set aside for debt retirement and interest, and required provisions for renewal and replacements to the extent not financed from other sources.

Total educational and general expenditures and mandatory transfers are the sum of the expenditures in the categories listed above.

T A B L E S

TABLE 1.—SUMMARY OF THE DISTRIBUTION OF EXPENDITURES BY PUBLIC UNIVERSITIES, 1976-77

| Type of expenditure | Number reporting | Percent of total educational and general expenditures | | | | | | | | |
|---|------------------|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|
| | | Mean | Standard deviation | Percentiles | | | | | | |
| | | | | 5th | 10th | 25th | 50th | 75th | 90th | 95th |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Instruction | 95 | 40.3% | 8.3% | 27.8% | 29.8% | 33.7% | 40.1% | 45.6% | 51.4% | 53.7% |
| Research | 95 | 16.2 | 8.9 | 1.8 | 2.9 | 9.2 | 16.4 | 24.1 | 27.8 | 28.9 |
| Public service | 94 | 7.9 | 6.2 | 0.4 | 0.9 | 3.0 | 6.0 | 11.8 | 16.9 | 21.3 |
| Academic support | 95 | 9.1 | 3.1 | 4.4 | 5.7 | 6.8 | 8.7 | 10.9 | 13.3 | 14.1 |
| Student services | 95 | 4.0 | 1.8 | 1.5 | 1.9 | 2.7 | 3.6 | 5.0 | 6.7 | 7.6 |
| Institutional support | 95 | 7.9 | 3.5 | 3.6 | 4.8 | 5.7 | 7.1 | 9.6 | 11.9 | 15.2 |
| Operation and maintenance of plant | 95 | 9.3 | 2.5 | 5.8 | 6.3 | 7.5 | 8.9 | 10.6 | 12.8 | 14.0 |
| Scholarships and fellowships | | | | | | | | | | |
| Unrestricted | 80 | 1.6 | 1.2 | 0.1 | 0.2 | 0.8 | 1.3 | 2.3 | 3.0 | 3.5 |
| Restricted | 95 | 2.7 | 1.7 | 0.6 | 0.9 | 1.4 | 2.4 | 3.5 | 5.4 | 5.8 |
| Educational and general mandatory transfers | 72 | 1.8 | 2.8 | a | 0.1 | 0.1 | 0.4 | 2.7 | 5.2 | 8.4 |

^aLess than 0.1 percent.

TABLE 2.—SUMMARY OF THE DISTRIBUTION OF EXPENDITURES BY PUBLIC OTHER 4-YEAR INSTITUTIONS, 1976-77

| Type of expenditure | Number reporting | Percent of total educational and general expenditures | | | | | | | | |
|---|------------------|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|
| | | Mean | Standard deviation | Percentiles | | | | | | |
| | | | | 5th | 10th | 25th | 50th | 75th | 90th | 95th |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Instruction | 418 | 47.0% | 9.4% | 31.0% | 34.5% | 41.3% | 48.1% | 53.2% | 58.0% | 60.2% |
| Research | 323 | 4.6 | 7.8 | 0.1 | 0.1 | 0.4 | 1.2 | 5.2 | 13.7 | 19.6 |
| Public service | 340 | 3.0 | 3.4 | 0.1 | 0.3 | 0.7 | 1.8 | 3.7 | 7.1 | 9.9 |
| Academic support | 416 | 9.3 | 4.4 | 3.1 | 4.6 | 6.8 | 8.5 | 11.5 | 13.8 | 16.2 |
| Student services | 415 | 6.4 | 3.6 | 1.2 | 2.6 | 4.1 | 6.1 | 8.3 | 10.5 | 12.0 |
| Institutional support | 417 | 12.1 | 6.4 | 5.2 | 6.4 | 8.6 | 11.0 | 14.5 | 17.9 | 20.8 |
| Operation and maintenance of plant | 419 | 12.9 | 4.4 | 6.9 | 8.1 | 10.0 | 12.4 | 15.1 | 18.5 | 20.7 |
| Scholarships and fellowships | | | | | | | | | | |
| Unrestricted | 289 | 2.0 | 2.6 | 0 | 0.1 | 0.5 | 1.2 | 2.5 | 4.0 | 5.6 |
| Restricted | 358 | 3.5 | 4.4 | 0.2 | 0.5 | 1.1 | 2.0 | 4.2 | 8.6 | 13.3 |
| Educational and general mandatory transfers | 222 | 3.8 | 5.4 | . | 0.1 | 0.2 | 0.8 | 5.3 | 11.7 | 18.1 |

*Less than 0.1 percent.

TABLE 3.—SUMMARY OF THE DISTRIBUTION OF EXPENDITURES BY PUBLIC 2-YEAR INSTITUTIONS, 1976-77

| Type of expenditure | Number reporting | Percent of total educational and general expenditures | | | | | | | | |
|---|------------------|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|
| | | Mean | Standard deviation | Percentiles | | | | | | |
| | | | | 5th | 10th | 25th | 50th | 75th | 90th | 95th |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Instruction | 826 | 51.0% | 8.4% | 37.4% | 39.8% | 45.2% | 51.5% | 57.0% | 61.2% | 63.5% |
| Research | 135 | 1.2 | 2.6 | a | 0.1 | 0.2 | 0.4 | 0.8 | 2.6 | 5.2 |
| Public service | 565 | 2.8 | 4.0 | a | 0.1 | 0.5 | 1.7 | 3.6 | 5.9 | 9.4 |
| Academic support | 819 | 8.2 | 3.9 | 2.9 | 3.8 | 5.4 | 7.7 | 10.4 | 13.3 | 15.1 |
| Student services | 825 | 8.5 | 3.5 | 3.9 | 4.9 | 6.2 | 7.9 | 10.0 | 12.7 | 14.9 |
| Institutional support | 819 | 14.3 | 6.2 | 6.4 | 7.5 | 9.5 | 13.0 | 18.0 | 22.8 | 26.6 |
| Operation and maintenance of plant | 828 | 11.6 | 4.1 | 6.0 | 7.1 | 8.8 | 11.0 | 13.9 | 16.3 | 18.7 |
| Scholarships and fellowships | | | | | | | | | | |
| Unrestricted | 351 | 1.3 | 1.8 | a | 0.1 | 0.2 | 0.5 | 1.5 | 3.8 | 4.7 |
| Restricted | 553 | 3.7 | 4.4 | 0.1 | 0.3 | 0.8 | 1.9 | 5.2 | 9.7 | 11.7 |
| Educational and general mandatory transfers | 297 | 4.3 | 5.5 | a | 0.1 | 0.3 | 2.3 | 6.4 | 12.3 | 16.6 |

^aLess than 0.1 percent.

TABLE 4.—SUMMARY OF THE DISTRIBUTION OF EXPENDITURES BY PRIVATE UNIVERSITIES, 1976-77

| Type of expenditure | Number reporting | Percent of total educational and general expenditures | | | | | | | | | |
|---|------------------|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|--|
| | | Mean | Standard deviation | Percentiles | | | | | | | |
| | | | | 5th | 10th | 25th | 50th | 75th | 90th | 95th | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| Instruction | 63 | 41.2% | 9.1% | 23.3% | 26.8% | 35.5% | 41.5% | 47.1% | 51.2% | 55.3% | |
| Research | 61 | 14.5 | 11.7 | 0.5 | 0.9 | 4.4 | 12.3 | 22.6 | 29.8 | 34.9 | |
| Public service | 34 | 3.2 | 5.9 | • | 0.1 | 0.5 | 1.7 | 3.7 | 5.2 | 9.4 | |
| Academic support | 63 | 8.0 | 3.3 | 3.2 | 4.1 | 6.0 | 7.4 | 9.1 | 11.6 | 14.5 | |
| Student services | 63 | 4.3 | 2.0 | 1.7 | 2.2 | 2.7 | 3.8 | 5.3 | 6.8 | 7.8 | |
| Institutional support | 63 | 11.0 | 4.2 | 5.0 | 6.3 | 8.3 | 10.4 | 12.4 | 16.3 | 18.8 | |
| Operation and maintenance of plant | 63 | 9.6 | 2.5 | 5.8 | 6.4 | 7.7 | 9.0 | 11.9 | 13.0 | 13.3 | |
| Scholarships and fellowships | | | | | | | | | | | |
| Unrestricted | 63 | 4.8 | 2.5 | 1.5 | 1.7 | 2.8 | 4.4 | 6.4 | 7.9 | 9.5 | |
| Restricted | 60 | 4.0 | 2.5 | 0.7 | 1.1 | 2.4 | 3.4 | 5.5 | 7.1 | 7.9 | |
| Educational and general mandatory transfers | 57 | 1.7 | 1.6 | 0.1 | 0.1 | 0.4 | 1.1 | 2.0 | 3.7 | 5.5 | |

*Less than 0.1 percent.

TABLE 5.—SUMMARY OF THE DISTRIBUTION OF EXPENDITURES BY PRIVATE OTHER 4-YEAR INSTITUTIONS, 1976-77

| Type of expenditure | Number reporting | Percent of total educational and general expenditures | | | | | | | | |
|---|------------------|---|--------------------|--------------|-------|-------|-------|-------|-------|-------|
| | | Mean | Standard deviation | Percentiles | | | | | | |
| | | | | 5th | 10th | 25th | 50th | 75th | 90th | 95th |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Instruction | 1,151 | 37.0% | 10.0% | 20.6% | 24.8% | 31.3% | 37.0% | 42.6% | 48.8% | 53.2% |
| Research | 350 | 4.5 | 9.5 | ^a | 0.1 | 0.4 | 1.0 | 3.6 | 11.0 | 20.5 |
| Public service | 365 | 3.7 | 5.8 | 0.1 | 0.2 | 0.8 | 2.0 | 4.7 | 7.9 | 12.6 |
| Academic support | 1,127 | 8.1 | 5.6 | 2.6 | 3.4 | 4.6 | 6.5 | 9.8 | 14.2 | 19.2 |
| Student services | 1,064 | 8.2 | 4.2 | 1.6 | 2.8 | 5.5 | 8.1 | 10.4 | 13.0 | 14.9 |
| Institutional support | 1,128 | 20.2 | 8.7 | 8.7 | 11.2 | 14.5 | 18.8 | 24.4 | 31.0 | 35.4 |
| Operation and maintenance of plant | 1,141 | 12.6 | 6.5 | 5.4 | 6.9 | 8.9 | 11.4 | 14.4 | 18.9 | 23.5 |
| Scholarships and fellowships | | | | | | | | | | |
| Unrestricted | 956 | 5.7 | 4.3 | 0.6 | 1.2 | 2.9 | 4.9 | 7.6 | 10.5 | 12.6 |
| Restricted | 904 | 6.1 | 5.6 | 0.4 | 0.9 | 2.2 | 4.7 | 8.4 | 12.3 | 16.0 |
| Educational and general mandatory transfers | 785 | 4.0 | 5.3 | 0.1 | 0.2 | 0.6 | 2.4 | 5.3 | 9.6 | 13.6 |

^aLess than 0.1 percent.

TABLE 6.—SUMMARY OF THE DISTRIBUTION OF EXPENDITURES BY PRIVATE 2-YEAR INSTITUTIONS, 1976-77

| Type of expenditure | Number reporting | Percent of total educational and general expenditures | | | | | | | | |
|---|------------------|---|--------------------|-------------|----------|-------|-------|-------|-------|-------|
| | | Mean | Standard deviation | Percentiles | | | | | | |
| | | | | 5th | 10th | 25th | 50th | 75th | 90th | 95th |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Instruction | 198 | 34.9% | 12.9% | 17.1% | 20.0% | 26.6% | 32.5% | 41.1% | 52.1% | 59.7% |
| Research | 10 | 1.8 | 2.8 | <i>a</i> | <i>a</i> | 0.4 | 0.7 | 1.9 | 1.9 | 5.7 |
| Public service | 25 | 4.5 | 5.4 | 0.2 | 0.3 | 0.6 | 2.0 | 5.8 | 11.5 | 16.7 |
| Academic support | 190 | 8.1 | 7.4 | 1.3 | 1.8 | 3.4 | 5.8 | 9.6 | 18.3 | 25.9 |
| Student services | 181 | 10.2 | 6.4 | 1.1 | 2.0 | 6.0 | 10.0 | 14.0 | 17.1 | 21.2 |
| Institutional support | 184 | 23.7 | 11.2 | 4.2 | 8.6 | 16.2 | 23.5 | 30.5 | 37.5 | 42.5 |
| Operation and maintenance of plant | 201 | 14.4 | 7.2 | 3.2 | 6.0 | 9.5 | 13.7 | 18.1 | 23.2 | 27.6 |
| Scholarships and fellowships | | | | | | | | | | |
| Unrestricted | 138 | 4.4 | 5.7 | 0.3 | 0.6 | 1.5 | 3.1 | 5.4 | 9.1 | 10.6 |
| Restricted | 107 | 5.6 | 6.2 | 0.3 | 0.6 | 1.6 | 3.6 | 7.4 | 11.6 | 17.5 |
| Educational and general mandatory transfers | 84 | 6.9 | 9.1 | 0.1 | 0.3 | 1.0 | 3.1 | 9.0 | 14.4 | 26.4 |

^aLess than 0.1 percent.

TABLE 7.—PERCENT OF TOTAL EDUCATIONAL AND GENERAL EXPENDITURES DIRECTED TO INSTRUCTION IN FISCAL 1976 IN PUBLIC INSTITUTIONS OF HIGHER EDUCATION, BY STATE AND TYPE OF INSTITUTION

| State | Type of public institution | | | | |
|----------------------|----------------------------|--------------------------------|---------------|-----------------------|-----------|
| | All institutions | Major doctoral degree-granting | Comprehensive | General baccalaureate | Two-year |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Alabama | 44% | 41% | 43% | 45% | 55% |
| Alaska | 29 | ... | 29 | ... | 29 |
| Arizona | 47 | 42 | 51 | ... | 56 |
| Arkansas | 41 | 23 | 45 | 43 | 49 |
| California | 47 | 36 | 63 | ... | 50 |
| Colorado | 45 | 41 | 47 | 52 | 53 |
| Connecticut | 44 | 36 | 58 | ... | 47 |
| Delaware | 41 | 41 | ... | 35 | 44 |
| District of Columbia | 48 | ... | 53 | ... | ... |
| Florida | 45 | 47 | 41 | 38 | 46 |
| Georgia | 42 | 38 | 53 | 40 | 49 |
| Hawaii | 43 | 40 | ... | 52 | 53 |
| Idaho | 45 | 34 | 56 | 50 | 52 |
| Illinois | 46 | 39 | 46 | ... | 57 |
| Indiana | 47 | 43 | 58 | 51 | 52 |
| Iowa | 46 | 42 | 46 | ... | 59 |
| Kansas | 46 | 38 | 50 | 54 | 52 |
| Kentucky | 35 | 32 | 37 | 33 | 57 |
| Louisiana | 49 | 44 | 50 | 47 | 48 |
| Maine | 33 | 28 | ... | 35 | 59 |
| Maryland | 49 | 44 | 46 | 58 | 50 |
| Massachusetts | 48 | 42 | 61 | 46 | 47 |
| Michigan | 46 | 43 | 49 | 50 | 52 |
| Minnesota | 40 | 40 | 54 | 46 | 46 |
| Mississippi | 42 | 34 | 48 | 41 | 57 |
| Missouri | 44 | 40 | 49 | 42 | 51 |
| Montana | 44 | 52 | 37 | ... | 57 |
| Nebraska | 45 | 38 | 55 | 40 | 54 |
| Nevada | 39 | ... | 38 | ... | 48 |
| New Hampshire | 36 | 29 | 59 | ... | 56 |
| New Jersey | 46 | 38 | 51 | 47 | 42 |
| New Mexico | 36 | 32 | 45 | 33 | 50 |
| New York | 45 | 34 | 50 | 39 | 51 |
| North Carolina | 47 | 37 | 58 | 45 | 58 |
| North Dakota | 48 | 56 | 34 | 54 | 58 |
| Ohio | 50 | 50 | 49 | 26 | 53 |
| Oklahoma | 48 | 40 | 66 | 57 | 54 |
| Oregon | 46 | 39 | 54 | 52 | 50 |
| Pennsylvania | 43 | 39 | 48 | 44 | 46 |
| Rhode Island | 37 | 33 | ... | ... | 47 |
| South Carolina | 44 | 38 | 44 | 48 | 55 |
| South Dakota | 42 | ... | 40 | 49 | ... |
| Tennessee | 42 | 36 | 46 | 47 | 54 |
| Texas | 46 | 37 | 49 | ... | 53 |
| Utah | 42 | 39 | ... | 53 | 56 |
| Vermont | 42 | 42 | ... | 47 | 34 |
| Virginia | 48 | 43 | 55 | 54 | 53 |
| Washington | 46 | 39 | 54 | 37 | 58 |
| West Virginia | 44 | 37 | 43 | 49 | 56 |
| Wisconsin | 44 | 36 | 50 | 38 | 55 |
| Wyoming | 50 | 51 | ... | ... | 49 |
| U.S. AVERAGE | 45 | 39 | 51 | 47 | 52 |
| Highest | 50 | 56 | 66 | 58 | 59 |
| Third quartile | 47 | 42 | 54 | 51 | 56 |
| Median | 45 | 39 | 49 | 46 | 52 |
| First quartile | 42 | 36 | 45 | 40 | 49 |
| Lowest | 29 | 23 | 29 | 26 | 29 |

TABLE 8.—RANKINGS OF THE STATES BY THE PERCENT OF TOTAL EDUCATIONAL AND GENERAL EXPENDITURES DIRECTED TO INSTRUCTION IN FISCAL 1976 IN PUBLIC INSTITUTIONS OF HIGHER EDUCATION, BY TYPE OF INSTITUTION

| State | Type of public institution | | | | |
|----------------------|----------------------------|--------------------------------|---------------|-----------------------|----------|
| | All institutions | Major doctoral degree-granting | Comprehensive | General baccalaureate | Two-year |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Alabama | 27 | 15 | 36 | 22 | 14 |
| Alaska | 51 | ... | 44 | ... | 45 |
| Arizona | 10 | 11 | 16 | ... | 10 |
| Arkansas | 42 | 47 | 33 | 25 | 35 |
| California | 10 | 35 | 2 | ... | 31 |
| Colorado | 22 | 15 | 28 | 7 | 20 |
| Connecticut | 27 | 35 | 5 | ... | 40 |
| Delaware | 42 | 15 | ... | 34 | 46 |
| District of Columbia | 5 | ... | 14 | ... | ... |
| Florida | 22 | 5 | 38 | 31 | 43 |
| Georgia | 36 | 27 | 14 | 28 | 35 |
| Hawaii | 34 | 18 | ... | 7 | 20 |
| Idaho | 22 | 39 | 8 | 11 | 25 |
| Illinois | 14 | 22 | 29 | ... | 6 |
| Indiana | 10 | 8 | 5 | 10 | 25 |
| Iowa | 14 | 11 | 29 | ... | 1 |
| Kansas | 14 | 27 | 18 | 3 | 25 |
| Kentucky | 49 | 43 | 41 | 36 | 6 |
| Louisiana | 3 | 6 | 18 | 16 | 38 |
| Maine | 50 | 46 | ... | 34 | 1 |
| Maryland | 3 | 6 | 29 | 1 | 31 |
| Massachusetts | 5 | 11 | 3 | 20 | 40 |
| Michigan | 14 | 8 | 22 | 11 | 25 |
| Minnesota | 44 | 18 | 11 | 20 | 43 |
| Mississippi | 36 | 39 | 26 | 27 | 6 |
| Missouri | 27 | 18 | 22 | 26 | 29 |
| Montana | 27 | 2 | 41 | ... | 6 |
| Nebraska | 22 | 27 | 9 | 28 | 17 |
| Nevada | 45 | ... | 40 | ... | 38 |
| New Hampshire | 47 | 45 | 4 | ... | 10 |
| New Jersey | 14 | 27 | 16 | 16 | 47 |
| New Mexico | 47 | 43 | 33 | 36 | 31 |
| New York | 22 | 39 | 18 | 30 | 29 |
| North Carolina | 10 | 32 | 5 | 22 | 3 |
| North Dakota | 5 | 1 | 43 | 3 | 3 |
| Ohio | 1 | 4 | 22 | 38 | 20 |
| Oklahoma | 5 | 18 | 1 | 2 | 17 |
| Oregon | 14 | 22 | 11 | 7 | 31 |
| Pennsylvania | 34 | 22 | 26 | 24 | 43 |
| Rhode Island | 46 | 42 | ... | ... | 40 |
| South Carolina | 27 | 27 | 35 | 15 | 14 |
| South Dakota | 36 | ... | 39 | 13 | ... |
| Tennessee | 36 | 35 | 29 | 16 | 17 |
| Texas | 14 | 32 | 22 | ... | 20 |
| Utah | 36 | 22 | ... | 6 | 10 |
| Vermont | 36 | 11 | ... | 16 | 48 |
| Virginia | 5 | 8 | 9 | 3 | 20 |
| Washington | 14 | 22 | 11 | 33 | 3 |
| West Virginia | 27 | 32 | 36 | 13 | 10 |
| Wisconsin | 27 | 35 | 18 | 31 | 14 |
| Wyoming | 1 | 3 | ... | ... | 35 |
| U.S. AVERAGE | 22 | 24 | 16 | 17 | 25 |