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The Rise of Administration in Higher Education.

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A comparison between the rise of university administration and other institutional growth patterns --such as student enrollment, faculty, and the increasing demand of business and financial affairs --reveals that administration has grown about the same rate as the student body and total faculty. During the first 250 years of higher education in the US, administration depended on the character and attitude of the college president. Today, no standards exist for determining the number of administrative officers necessary for the most efficient operation of a university. Importance should be placed on the effect of various teaching faculty-administrative faculty ratios on the quality of instruction as measured by test scores, persistence to graduate, enrollment in graduate schools, success after graduation, and other factors. A decrease in the teaching faculty, with a constant size student body, will naturally mean larger classes. Although a large segment of the faculty would react negatively to increases in the size of the administrative faculty, several studies of controlled experiments indicated that a decrease in the size of the teaching faculty would not have adverse effects on educational outcomes. Small classes were not shown to have any advantage over large classes. A critical test of leadership would be to shift more effort into administrative functions while minimizing teaching faculty losses. (WM)

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The Rise of Administration in Higher Education

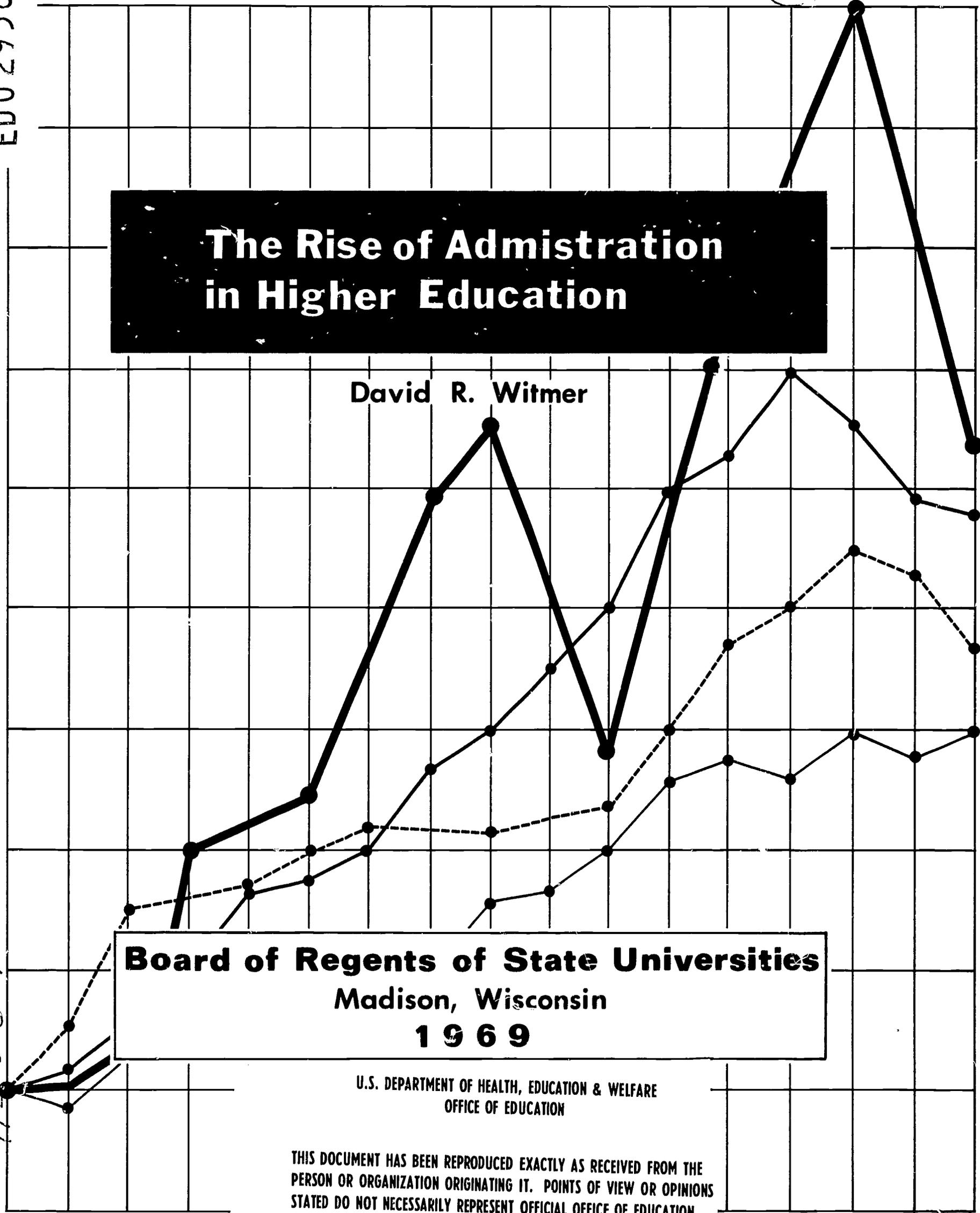
David R. Witmer

**Board of Regents of State Universities
Madison, Wisconsin
1969**

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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The heyday of The Old Time College President¹ is gone forever. Gone with it is the old time faculty. Indeed, the old time faculty, administration, and for that matter the institution itself, were unusually the expressions of different sides of a single personality.² "The old time college president was a very real presence. As head disciplinarian . . . his influence was direct and immediate. He lectured and heard recitations. . . His opportunities for shaping opinions and molding character were almost unlimited."³ His responsibility for the material existence and prosperity of the institution was equally pervasive and complete.⁴

For the first century and a half the president was the faculty in American colleges. "Harvard had been established for more than eighty-five years, Yale for more than fifty, and Princeton for more than twenty years before each had its first professor, and it was to be many years more before regular professors outnumbered transient tutors." Instead of being "elected" by the faculty as in Europe, the American college president "elected" his faculty.⁵ And he chose his faculty with the welfare and promotion of the institution as the prime criterion.⁶

In 1871 the most noble characterization of a college president was "teacher." When Professor of Rhetoric, John Bascom (later president of the University of Wisconsin), attacked President Mark Hopkins, at a Williams College alumni banquet, for being an inadequate administrator and an indifferent scholar, James A. Garfield (later President of the United States), defended him and Williams College with the memorable epitaph "The ideal college is Mark Hopkins on one end of a log and a student on the other."⁷

In the leading contemporary universities teaching is the function of an "un-faculty" of instructors and graduate students.⁸ Faculty are research-oriented "cosmopolitans" predominantly concerned with promoting their peculiar discipline in a way which will bring them honor in the eyes of their colleagues in the national and international professional organization devoted to their particular scholarly discipline.⁹ Local interests of the new faculty, where they exist at all, are limited to the preservation and expansion of departmental operations, the sovereignty of the professor in his classroom,¹⁰ and the search for student recruits to the proliferating, mutating, and mitoting academic disciplines.¹¹

Contemporary colleges and universities have not only replaced the old-time professor with the academician, that trained specialist who knows the rights and privileges of a profession and who is almost indistinguishable from other organization men, but colleges and universities have acquired a new kind of executive officer in a new "shadowy, powerful entity"¹² called the administration.¹³ This administration, peopled by "locals,"¹⁴ is devoted to institutional preservation and expansion, a concern which keeps it strongly involved with and responsive to the trends in secular society.¹⁵ Not limited to the preservation and transmissions of knowledge, the preparation of students for the world of work, the operation of "ideapolis"¹⁶ or a "service station"¹⁷ for society, the new administration maintains a holistic¹⁸ view while using management tools like operations research, systems analysis, and computer-based simulation.

The history of the transition from the old-time college with its president qua faculty to the multiversity with its "administration" indistinguishable in any essential respects from that of industrial, commercial, civil, military, and hospital organizations,²⁰ is first of all the history of the presidency. In the first book published on the administration of higher education in America, Charles F. Thwing separates college presidents into three categories: ministers, scholars, and executives.²¹ Of 288 pre-Civil War presidents, 262 were ordained ministers.²² John Leverett, president of Harvard, 1708-1724, fit all three categories. He "studied divinity and preached . . . studied law and practiced,"²³ and having tutored Harvard students from 1686 to 1698 built a base of political power sufficient to withstand the Mathers, who were horrified over the elevation of a lawyer to be "a praesident (sic) for a College of Divines."²⁴

John Wheelock, the first lay president in the full sense of the word, fit none of Thwing's categories. Appointed president by his father, Eleazar, who was founder and first president of Dartmouth College, he was a military man whose quarrels and political intrigue eventually led to the infamous Dartmouth College Case.²⁵

The next lay presidents, William Samuel Johnson of Columbia and John McDowell of Pennsylvania, assumed the office in 1787 and 1803 respectively.²⁶ Josiah Quincy, a man of affairs, politician, judge, and mayor of Boston, 1823-1828, accepted the Presidency of Harvard in 1829 after his zeal for municipal reform had brought him defeat at the polls. "Born to rule,"²⁷ he stimulated an intellectual awakening, religious freedom for students, academic freedom for teachers,²⁸ the re-introduction of the elective system,²⁹ and sowed the seeds of graduate education.³⁰ He scandalized the Whig community by awarding

an honorary degree to that man of the people, U.S. President Andrew Jackson,³¹ and stunned the champions of academic autonomy by inviting the grand jury to take action against disorderly students.³² He was the first of a new breed, the dynamic "executive" president.³³

The scholar (chemistry)³⁴ turned executive was personified in Harvard President Charles W. Eliot, 1869-1909. The innovations Quincy, an outsider, introduced had faded fast, but Eliot's imprint was indelible. "Two-thirds will and one-third intellect" he was an administrator first and last.³⁵ Seeking to accommodate the university to the significant changes taking place in the society within which, and for which the university exists,³⁶ Eliot insisted on being ex officio a member of every important board and committee as well as the presiding officer of each of the several faculties. A student of administration, he delegated many duties and responsibilities to subordinate administrators, thus freeing himself for broad concerns, one of which was the presentation of bold, new plans and programs. So well studied, digested, and propounded were his proposals that debate was minimized and the legislative function of the faculty, if it ever had had any stature at Harvard, fell into a decline.³⁷

In 1888 President Francis L. Patton unabashedly declared in his inaugural address at Princeton: "College administration is a business in which trustees are partners, professors the salesmen and students the customers."³⁸ A year later the Montgomery, Alabama Advertiser editorialized on the qualifications to be sought in a new university president: "primarily a man of affairs and executive ability, while secondarily of broad culture and scholarly sympathy."³⁹

President Arthur T. Hadley of Yale drew a dividing line between the old and the new when he reported that his predecessor, Timothy Dwight (the younger), "accepted the Yale presidency only on the stipulation that he have no teaching duties." Hadley further delineated the change by relating how when he visited old President Porter he like as not found him reading Kant, but when he called on President Dwight he was more likely to find him examining a balance sheet. On Porter's desk, too, he found manuscripts; on Dwight's the catalogues of competing institutions. It was in keeping with these differences, Hadley noted incidentally, that he called on Porter in his "study" but on Dwight in his "office."⁴⁰ The shift in prevailing values was made clear when President Langdon Stewardson of Hobart was moved to demur "The President of Hobart, permit me to remind you, undertook his present duties with the express stipulation that he was not to be the financial drummer for the college, but its educational leader."⁴¹

Thorstein Veblen disdainfully labeled the new executive presidents "captains of erudition," while observing that America was reluctant to trust the management of its higher education to other than men of pecuniary substance.⁴² Executive activities changed the university president into "the most universal faker and most variegated prevaricator that has yet appeared in the civilized world," said Upton Sinclair.⁴³ The new president moved in a new orbit. The extent of his removal from students and the campus is illustrated by a Chicago coed's questioning response to the news that President Hutchins, the most fantastic fund raiser of them all, had resigned: "How," she asked, "can a myth resign?"⁴⁴

President Clark Kerr of the University of California cited Robert Hutchins as "the last of the giants in the sense that he was the

last of the university presidents who really tried to change his institutions and higher education in any fundamental way." Kerr then averred that the multiversity had become so complex internally, and in its relationship with the society in which it is embedded, that the president had been reduced to the meek role of "mediator-initiator."⁴⁵ If striving mightily is the criterion, Hutchins was not the last giant; if successful innovation is the criterion he may not have even made the grade.⁴⁶ In any case, mediating-initiating seems to be an inadequate response to the position. Whether leadership is still possible remains the crucial, debatable question.

Complimentary to the change in the presidents is the rise of the "full-time administration." In 1870 President Eliot started building his administrative team by appointing Professor Ephraim W. Gurney of the History Department to the position "Dean of the Faculty." That office established in America for the first time at Fordham University (1841) existed at a number of other colleges and could be traced back to the Praefectus Studiorum mentioned in the Jesuit Ratio Studiorum in 1599.⁴⁷ Later, over a period of years, LeBaron Russell Briggs informally assumed responsibility for what we now call "student affairs."⁴⁸ A similar position was first formally organized as the Office of the Dean of Men in 1901 at the University of Illinois.⁴⁹

Separate full-time administrative offices which generally preceded the evolution of the office of the Dean of Men were Librarian (1875), Vice President (1886), Secretary of the Faculty (1887), Registrar (1896), Business Officer (1901), Dean (academic) (1904), and Dean of Women (1905). During the fifty-five year period, 1875-1930, the median number of administrative officers in thirty North Central liberal arts colleges had increased from three to fifteen and were listed, with other staff, under

347 different titles!⁵⁰ By 1933 the median number of administrators in institutions of higher education in the United States was $30\frac{1}{2}$ ⁵¹ (though it should be noted that during "the Depression" administrative titles which carried no substantive authority or responsibility were sometimes passed out in lieu of salary increases).⁵² In the Wisconsin State University System (sixth largest in the nation) there are currently 50,996 students, 3,300 teaching and research faculty, 499 administrators and 2,135 supporting staff members.⁵³

The "great man" theory of history seems adequate to explain the genesis of administration in higher education. For example President Eliot and Dean LeBaron Russell Briggs, who went on to become president of Bowdoin, both qualify as great men. As indicated above, the first 250 years of the evolution of administration in higher education in America is the story of changes in the presidency. Since 1870 "the administration" has grown to include new offices. Operation of the "demonstration effect" undoubtedly was responsible for the spread of organizational concepts and techniques from campus to campus.

It is widely held that the growth of administration parallels the growth of higher education generally.⁵⁴ This matter invites further study. How do the growth rates compare? To which growth pattern is that of the rise of administration most analogous: student enrollment, faculty, growth, or the increasing demand of business and financial affairs?

In her study of The Evolution of Administrative Offices in (30) (Midwest) Liberal Arts Colleges. . . (see Table I for a list) Partridge studied the college catalogs, identified the administrative officers, taxonomized the office titles, and traced the evolution and growth of

the use of each from 1875 to 1933. Although she did not quantify the growth of supporting staff, (a deficiency from our viewpoint), her table of administrative officers⁵⁵ provides a definitive starting point for further investigation. By carefully combing through the annual and biennial reports of the U.S. Commissioner of Education we can build a body of data on student enrollments (Table II), faculty size (Table III), and annual income, which we can take as a further indication of the business-financial workload (Table IV).

Though Tables II, III, and IV speak for themselves, we are struck by the disparity and breadth of ranges in each category: students per administrator range from 6 (Kalamazoo, 1875) to 379 (Transylvania, 1890); and income per administrator ranges from \$1,000 (Ripon, 1875) to \$125,000 (Illinois, 1910). Not only is there wide latitude within the data for any given year, but neither size nor wealth at the beginning of the period (1875) is highly indicative of relative size or wealth in 1933. In face of this, it is reassuring to note the general analogy between medians and means. In other words, while there is diversity and change, the gestalt, as a whole, is relatively stable.

Turning to Figure 1, we note that the number of administrative officers is most generally analogous to the total size of faculty, and that both follow a growth curve which is not greatly different from that described by the number of students enrolled. However, the mean annual income per institution is highly erratic, even after conversion to constant (1933) dollars. If the administration takes the credit and blame for levels of institutional income, as it usually does, this record of fluctuation, together with the range of income per administrator cited

TABLE I

(from Partridge, page 2)

| <u>Institution</u> | <u>Location</u> | <u>Founded</u> |
|----------------------|-------------------------|----------------|
| Albion College | Albion, Michigan | 1835 |
| Augustana College | Rock Island, Illinois | 1860 |
| Baker University | Baldwin City, Kansas | 1858 |
| Beloit College | Beloit, Wisconsin | 1846 |
| Carleton College | Northfield, Minnesota | 1866 |
| Carthage College | Carthage, Illinois | 1870 |
| Centre College | Danville, Kentucky | 1819 |
| Cornell College | Mount Vernon, Iowa | 1853 |
| Denison University | Granville, Ohio | 1831 |
| Drury College | Springfield, Missouri | 1873 |
| Earlham College | Earlham, Indiana | 1847 |
| Franklin College | Franklin, Indiana | 1834 |
| Georgetown College | Georgetown, Kentucky | 1829 |
| Grinnell College | Grinnell, Iowa | 1846 |
| Heidelberg College | Tiffin, Ohio | 1850 |
| Hillsdale College | Hillsdale, Michigan | 1844 |
| Hiram College | Hiram, Ohio | 1850 |
| Illinois College | Jacksonville, Illinois | 1829 |
| Kalamazoo College | Kalamazoo, Michigan | 1833 |
| Knox College | Galesburg, Illinois | 1836 |
| Lawrence College | Appleton, Wisconsin | 1847 |
| Marietta College | Marietta, Ohio | 1800 |
| Monmouth College | Monmouth, Illinois | 1856 |
| Olivet College | Olivet, Michigan | 1844 |
| Ripon College | Ripon, Wisconsin | 1850 |
| Shurtleff College | Alton, Illinois | 1827 |
| Transylvania College | Lexington, Kentucky | 1798 |
| Wabash College | Crawfordsville, Indiana | 1832 |
| Washburn College | Topeka, Kansas | 1865 |
| College of Wooster | Wooster, Ohio | 1866 |

TABLE II - STUDENTS AND ADMINISTRATORS

| Institution | 187556 | | | 188057 | | | 188558 | | | 189059 | | | 189560 | | |
|--------------|--------|-----|------|--------|-----|------|--------|-----|--------|--------|-----|--------|---------|------|--------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Albion | - | - | - | - | - | - | 71 | 5 | 14 | 529 | 6 | 88 | 589 | 6 | 98 |
| Augustana | 38 | 2 | 19 | 63 | 5 | 13 | 93 | 6 | 16 | 342 | 5 | 68 | 510 | 3 | 170 |
| Beloit | - | - | - | - | - | - | 65 | 5 | 13 | 344 | 6 | 57 | 443 | 6 | 74 |
| Baker | - | - | - | - | - | - | - | - | - | 451 | 7 | 64 | 580 | 11 | 53 |
| Carleton | - | - | - | 63 | 4 | 16 | 250 | 4 | 63 | 321 | 4 | 80 | 239 | 6 | 40 |
| Carthage | 86 | 1 | 86 | 83 | 1 | 83 | 47 | 2 | 24 | 177 | 4 | 44 | 129 | 6 | 22 |
| Centre | 100 | 4 | 25 | 96 | 4 | 24 | - | - | - | 240 | 4 | 60 | 265 | 4 | 66 |
| Cornell | 64 | 3 | 21 | 91 | 3 | 30 | 418 | 6 | 70 | 668 | 6 | 111 | 572 | 6 | 95 |
| Denison | 87 | 3 | 29 | - | - | - | - | - | - | 222 | 3 | 74 | 380 | 5 | 76 |
| Drury | - | - | - | 185 | 4 | 46 | - | - | - | 284 | 3 | 95 | 291 | 4 | 73 |
| Earlham | 55 | 2 | 28 | 41 | 2 | 20 | - | - | - | 210 | 8 | 26 | 256 | 7 | 37 |
| Franklin | 19 | 2 | 10 | - | - | - | 164 | 5 | 33 | 273 | 6 | 46 | 238 | 6 | 40 |
| Georgetown | 72 | 3 | 24 | - | - | - | 101 | 5 | 20 | 141 | 3 | 47 | 399 | 4 | 100 |
| Grinnell | 72 | 2 | 36 | 82 | 2 | 41 | 288 | 2 | 144 | 455 | 4 | 114 | 476 | 11 | 43 |
| Heidelberg | - | - | - | - | - | - | - | - | - | 368 | 6 | 61 | 272 | 9 | 30 |
| Hillsdale | 104 | 6 | 17 | - | - | - | - | - | - | 407 | 7 | 58 | 394 | 7 | 57 |
| Hiram | - | - | - | - | - | - | - | - | - | 325 | 4 | 81 | 354 | 4 | 89 |
| Illinois | - | - | - | - | - | - | - | - | - | 173 | 1 | 173 | 203 | 4 | 51 |
| Kalamazoo | 24 | 4 | 6 | 44 | 4 | 11 | 60 | 3 | 20 | 82 | 2 | 41 | 187 | 2 | 64 |
| Knox | - | - | - | - | - | - | - | - | - | 405 | 3 | 135 | 672 | 3 | 224 |
| Lawrence | - | - | - | - | - | - | - | - | - | 159 | 6 | 27 | 361 | 7 | 52 |
| Marietta | 82 | 3 | 27 | - | - | - | - | - | - | 178 | 2 | 89 | 248 | 5 | 50 |
| Monmouth | - | - | - | - | - | - | 200 | 7 | 29 | 211 | 6 | 35 | 289 | 6 | 48 |
| Olivet | 124 | 5 | 25 | 149 | 7 | 21 | 146 | 7 | 21 | 378 | 8 | 47 | 397 | 7 | 57 |
| Ripon | 56 | 8 | 7 | 62 | 6 | 10 | 25 | 5 | 5 | 179 | 5 | 36 | 264 | 5 | 53 |
| Shurtleff | 58 | 2 | 29 | 48 | 2 | 24 | 27 | 1 | 27 | 272 | 3 | 91 | 207 | 3 | 69 |
| Transylvania | 105 | 2 | 53 | - | - | - | - | - | - | 429 | 1 | 429 | 757 | 2 | 379 |
| Wabash | 86 | 5 | 17 | 96 | 5 | 19 | - | - | - | 209 | 8 | 26 | 240 | 5 | 48 |
| Washburn | - | - | - | 23 | 3 | 8 | 101 | 2 | 51 | 296 | 4 | 74 | 216 | 4 | 54 |
| Wooster | 171 | 3 | 57 | 181 | 4 | 45 | 214 | 6 | 36 | 735 | 6 | 123 | 778 | 7 | 111 |
| Range | 19-171 | 1-8 | 6-86 | 23-185 | 1-7 | 8-83 | 25-288 | 1-7 | 13-144 | 82-735 | 1-8 | 26-429 | 129-778 | 2-11 | 22-379 |
| Median | 82 | 3 | 27 | 96 | 4 | 24 | 146 | 5 | 29 | 296 | 5 | 59 | 354 | 6 | 59 |
| Mean | 78 | 3 | 26 | 87 | 4 | 22 | 142 | 4 | 36 | 315 | 5 | 63 | 374 | 6 | 62 |

1. Student Enrollment 2. Number of Administrative Officers (from Partridge Table XLIV). 55

3. Ratio of Students to Administrative Officers X:1 --Data Incomplete

| Institution | 1900 ⁶¹ | | | 1905 ⁶² | | | 1910 ⁶³ | | | 1915 ⁶⁴ | | |
|--------------|--------------------|------|--------|--------------------|------|--------|--------------------|------|--------|--------------------|------|--------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | Albion | - | - | - | 483 | 7 | 69 | 500 | 6 | 83 | 535 | 7 |
| Augustana | 250 | 4 | 63 | 540 | 5 | 108 | 350 | 8 | 44 | 647 | 8 | 81 |
| Beloit | 420 | 8 | 60 | 609 | 9 | 68 | 409 | 16 | 26 | 388 | 18 | 22 |
| Baker | 629 | 7 | 90 | 983 | 5 | 197 | 675 | 14 | 48 | 471 | 10 | 47 |
| Carleton | 366 | 6 | 61 | 346 | 13 | 27 | 342 | 12 | 29 | 480 | 15 | 32 |
| Carthage | 120 | 6 | 20 | 252 | 10 | 25 | 124 | 8 | 16 | 197 | 12 | 16 |
| Centre | - | - | - | - | - | - | - | - | - | - | - | - |
| Cornell | 716 | 6 | 119 | 735 | 7 | 105 | 603 | 6 | 101 | 634 | 9 | 70 |
| Denison | 534 | 5 | 107 | 543 | 6 | 91 | 604 | 8 | 76 | 587 | 8 | 73 |
| Drury | 360 | 6 | 60 | 458 | 8 | 57 | 506 | 10 | 51 | 325 | 7 | 46 |
| Earlham | 298 | 12 | 25 | 445 | 12 | 37 | 391 | 14 | 28 | 397 | 17 | 23 |
| Franklin | 178 | 6 | 30 | 224 | 7 | 32 | 201 | 9 | 22 | 291 | 12 | 24 |
| Georgetown | 338 | 6 | 56 | 280 | 5 | 56 | 256 | 6 | 43 | 372 | 8 | 47 |
| Grinnell | 442 | 10 | 44 | 575 | 12 | 48 | 658 | 14 | 47 | 743 | 18 | 41 |
| Heidelberg | 374 | 8 | 47 | 184 | 8 | 23 | 179 | 10 | 18 | 509 | 11 | 46 |
| Hillsdale | 341 | 8 | 43 | 377 | 9 | 42 | 321 | 13 | 25 | 457 | 6 | 76 |
| Hiram | 424 | 4 | 106 | 272 | 3 | 91 | 345 | 8 | 43 | 231 | 10 | 23 |
| Illinois | 144 | 4 | 36 | 186 | 3 | 62 | 320 | 2 | 160 | 394 | 3 | 131 |
| Kalamazoo | 230 | 3 | 115 | 226 | 4 | 57 | 173 | 4 | 43 | 244 | 7 | 35 |
| Knox | 665 | 4 | 166 | 550 | 5 | 110 | 616 | 5 | 123 | 442 | 6 | 74 |
| Lawrence | 437 | 7 | 62 | 478 | 7 | 68 | 462 | 7 | 66 | 666 | 14 | 48 |
| Marietta | 300 | 5 | 60 | 370 | 6 | 62 | 392 | 6 | 65 | 255 | 6 | 43 |
| Monmouth | 303 | 3 | 101 | 469 | 3 | 156 | 293 | 6 | 49 | 480 | 9 | 53 |
| Olivet | 268 | 9 | 30 | 289 | 10 | 29 | 238 | 9 | 26 | 164 | 11 | 15 |
| Ripon | 175 | 5 | 35 | 146 | 7 | 21 | 219 | 10 | 22 | 306 | 10 | 31 |
| Shurtleff | 168 | 4 | 42 | 187 | 10 | 19 | 168 | 5 | 34 | 126 | 6 | 21 |
| Transylvania | - | - | - | - | - | - | - | - | - | 248 | 9 | 28 |
| Wabash | 200 | 5 | 40 | 281 | 7 | 40 | 348 | 7 | 50 | 335 | 5 | 67 |
| Washburn | 295 | 6 | 49 | 685 | 8 | 86 | 763 | 10 | 76 | 799 | 8 | 100 |
| Wooster | 762 | 9 | 85 | 606 | 7 | 87 | 597 | 10 | 60 | 734 | 11 | 67 |
| Range | 120-762 | 3-12 | 20-166 | 146-983 | 3-13 | 19-197 | 124-763 | 2-16 | 16-160 | 126-799 | 3-18 | 15-131 |
| Median | 338 | 6 | 56 | 377 | 7 | 54 | 348 | 8 | 44 | 397 | 9 | 44 |
| Mean | 361 | 6 | 60 | 421 | 7 | 60 | 395 | 9 | 44 | 430 | 10 | 43 |

1. Student Enrollment 2. Number of Administrative Officers (from Partridge Table XLIV). 55

3. Ratio of Students to Administrative Officers X:1 --Data Incomplete



| Institution | 1925 ⁶⁶ | | | 1930 ⁶⁷ | | | 1933 ⁶⁸ | | |
|--------------|--------------------|------|--------|--------------------|------|-------|--------------------|------|-------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | Albion | 530 | 7 | 76 | 797 | 12 | 66 | 640 | 10 |
| Augustana | 783 | 12 | 65 | 612 | 19 | 32 | 550 | 14 | 39 |
| Beloit | 558 | 10 | 56 | 460 | 22 | 21 | 592 | 22 | 27 |
| Baker | 490 | 11 | 45 | 533 | 13 | 41 | 353 | 10 | 35 |
| Carleton | 634 | 27 | 23 | 810 | 23 | 35 | 813 | 20 | 41 |
| Carthage | 259 | 11 | 24 | 283 | 16 | 18 | 283 | 17 | 17 |
| Centre | 217 | 8 | 27 | 398 | 12 | 33 | 351 | 10 | 35 |
| Cornell | 887 | 20 | 44 | 574 | 20 | 29 | 533 | 20 | 27 |
| Denison | - | - | - | 852 | 19 | 45 | - | - | - |
| Drury | 362 | 6 | 60 | 473 | 8 | 59 | 373 | 4 | 93 |
| Earlham | 555 | 15 | 37 | 390 | 22 | 18 | - | - | - |
| Franklin | 320 | 10 | 32 | 339 | 12 | 28 | 253 | 10 | 25 |
| Georgetown | 340 | 15 | 23 | 361 | 21 | 17 | 309 | 15 | 21 |
| Grinnell | 761 | 17 | 45 | 679 | 24 | 28 | 551 | 23 | 24 |
| Heidelberg | 353 | 11 | 32 | 401 | 14 | 29 | 353 | 12 | 29 |
| Hillsdale | 334 | 11 | 30 | 467 | 11 | 42 | - | - | - |
| Hiram | 285 | 10 | 29 | 348 | 12 | 29 | 385 | 20 | 19 |
| Illinois | 484 | 4 | 121 | 410 | 11 | 37 | - | - | - |
| Kalamazoo | 294 | 8 | 37 | 419 | 12 | 35 | 328 | 13 | 25 |
| Knox | 797 | 15 | 63 | 582 | 16 | 36 | 504 | 14 | 36 |
| Lawrence | 1012 | 14 | 84 | 841 | 27 | 31 | 726 | 25 | 29 |
| Marietta | 267 | 7 | 38 | 371 | 15 | 25 | 427 | 15 | 28 |
| Monmouth | 442 | 9 | 49 | 480 | 24 | 20 | 485 | 21 | 23 |
| Olivet | - | - | - | 289 | 11 | 26 | - | - | - |
| Ripon | 410 | 16 | 26 | 436 | 15 | 29 | 329 | 15 | 22 |
| Shurtleff | - | - | - | 294 | 9 | 33 | 246 | 7 | 35 |
| Transylvania | 289 | 12 | 24 | 403 | 8 | 50 | 442 | 8 | 55 |
| Wabash | 343 | 7 | 49 | 407 | 11 | 37 | 370 | 10 | 37 |
| Washburn | 855 | 10 | 86 | 1151 | 16 | 72 | 934 | 14 | 67 |
| Wooster | 684 | 12 | 57 | 868 | 25 | 34 | 875 | 26 | 34 |
| Range | 217-1012 | 4-27 | 23-121 | 283-1151 | 8-27 | 17-72 | 246-934 | 4-26 | 17-93 |
| Median | 484 | 11 | 44 | 460 | 15 | 31 | 427 | 14 | 31 |
| Mean | 502 | 12 | 42 | 524 | 16 | 33 | 480 | 15 | 32 |

1. Student Enrollment 2. Number of Administrative Officers (from Partridge Table XLIV)⁵⁵

3. Ratio of Students to Administrative Officers X:1 --Data Incomplete

TABLE III - FACULTY AND ADMINISTRATORS

| Institution | 1875 ⁵⁶ | | | 1880 ⁵⁷ | | | 1885 ⁵⁸ | | | 1890 ⁵⁹ | | | 1895 ⁶⁰ | | |
|--------------|--------------------|------|-----------|--------------------|------|-----------|--------------------|------|------------|--------------------|------|------------|--------------------|------|------------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Albion | - | - | - | - | - | - | 16 | 5 | 3.20 | 25 | 6 | 4.17 | 32 | 6 | 5.33 |
| Augustana | 9 | 2 | 4.50 | 6 | 5 | 1.20 | 10 | 6 | 1.67 | 25 | 5 | 5.00 | 27 | 3 | 9.00 |
| Beloit | - | - | - | - | - | - | 14 | 5 | 2.80 | 18 | 6 | 3.00 | 23 | 6 | 3.83 |
| Baker | - | - | - | - | - | - | - | - | - | 13 | 7 | 1.86 | 22 | 11 | 2.00 |
| Carleton | - | - | - | 11 | 4 | 2.75 | 12 | 4 | 3.00 | 14 | 4 | 3.50 | 24 | 6 | 4.00 |
| Carthage | 7 | 1 | 7.00 | 6 | 1 | 6.00 | 6 | 2 | 3.00 | 12 | 4 | 3.00 | 13 | 6 | 2.17 |
| Centre | 7 | 4 | 1.75 | 6 | 4 | 1.50 | - | - | - | 11 | 4 | 2.75 | 15 | 4 | 3.75 |
| Cornell | 11 | 3 | 3.67 | 9 | 3 | 3.00 | 23 | 6 | 3.83 | 24 | 6 | 4.00 | 31 | 6 | 5.17 |
| Denison | 8 | 3 | 2.67 | - | - | - | 8 | 3 | 2.67 | 14 | 3 | 4.67 | 18 | 5 | 3.60 |
| Drury | - | - | - | 13 | 4 | 3.25 | - | - | - | 14 | 3 | 4.67 | 16 | 4 | 4.00 |
| Earlham | 6 | 2 | 3.00 | 6 | 2 | 3.00 | - | - | - | 14 | 8 | 1.75 | 18 | 7 | 2.57 |
| Franklin | 4 | 2 | 2.00 | - | - | - | 9 | 5 | 1.80 | 11 | 6 | 1.83 | 12 | 6 | 2.00 |
| Georgetown | 7 | 3 | 2.33 | - | - | - | 8 | 5 | 1.60 | 8 | 3 | 2.67 | 18 | 4 | 4.50 |
| Grinnell | 10 | 2 | 5.00 | 10 | 2 | 5.00 | 13 | 2 | 6.50 | 23 | 4 | 5.75 | 32 | 11 | 2.91 |
| Heidelberg | - | - | - | - | - | - | - | - | - | 16 | 6 | 2.67 | 19 | 9 | 2.11 |
| Hillsdale | 19 | 6 | 3.17 | - | - | - | - | - | - | 28 | 7 | 4.00 | 22 | 7 | 3.14 |
| Hiram | - | - | - | - | - | - | - | - | - | 16 | 4 | 4.00 | 14 | 4 | 3.50 |
| Illinois | - | - | - | - | - | - | - | - | - | 10 | 1 | 10.00 | 15 | 4 | 3.75 |
| Kalamazoo | 6 | 4 | 1.50 | 5 | 4 | 1.25 | 9 | 3 | 3.00 | 8 | 2 | 4.00 | 14 | 2 | 7.00 |
| Knox | - | - | - | - | - | - | - | - | - | 28 | 3 | 9.33 | 26 | 3 | 8.67 |
| Lawrence | - | - | - | - | - | - | - | - | - | 14 | 6 | 2.33 | 19 | 7 | 2.71 |
| Marietta | 9 | 3 | 3.00 | - | - | - | - | - | - | 11 | 2 | 5.50 | 42 | 5 | 8.40 |
| Monmouth | - | - | - | - | - | - | 15 | 7 | 2.14 | 14 | 6 | 2.33 | 15 | 6 | 2.50 |
| Olivet | 7 | 5 | 1.40 | 15 | 7 | 2.14 | 18 | 7 | 2.57 | 17 | 8 | 2.13 | 24 | 7 | 3.43 |
| Ripon | 12 | 8 | 1.50 | 13 | 6 | 2.17 | 13 | 5 | 2.60 | 12 | 5 | 2.40 | 18 | 5 | 3.60 |
| Shurtleff | 8 | 2 | 4.00 | 5 | 2 | 2.50 | 10 | 1 | 10.00 | 16 | 3 | 5.33 | 21 | 3 | 7.00 |
| Transylvania | 8 | 2 | 4.00 | - | - | - | - | - | - | 14 | 1 | 14.00 | 24 | 2 | 12.00 |
| Wabash | 11 | 5 | 2.20 | 11 | 5 | 2.20 | - | - | - | 13 | 8 | 1.63 | 20 | 5 | 4.00 |
| Washburn | - | - | - | 7 | 3 | 2.33 | 14 | 2 | 7.00 | 13 | 4 | 3.25 | 14 | 4 | 3.50 |
| Wooster | 13 | 3 | 4.33 | 14 | 4 | 3.50 | 25 | 6 | 4.17 | 54 | 6 | 9.00 | 64 | 7 | 9.14 |
| Range | 4-19 | 1-8 | 1.40-7.00 | 5-15 | 1-7 | 1.20-6.00 | 6-25 | 1-7 | 1.60-10.00 | 8-54 | 1-8 | 1.63-14.00 | 12-64 | 2-11 | 2.00-14.00 |
| Median | 8 | 3 | 2.67 | 9 | 4 | 2.25 | 13 | 5 | 2.60 | 14 | 5 | 2.80 | 20 | 6 | 3.33 |
| Mean | 9.0 | 3.30 | 2.73 | 9.13 | 3.73 | 2.45 | 13.12 | 4.35 | 3.02 | 17.00 | 4.70 | 3.62 | 22.40 | 5.50 | 4.07 |

1. Number of Faculty 2. Number of Administrative Officers (from Partridge Table XLIV)⁵⁵

3. Ratio of Faculty to Administrative Officers X:1 - = Data Incomplete



| Institution | 1900 ⁶¹ | | | 1905 ⁶² | | | 1910 ⁶³ | | | 1915 ⁶⁴ | | |
|--------------|--------------------|------|-------|--------------------|------|-------|--------------------|------|-------|--------------------|------|-------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | Albion | - | - | - | 25 | 7 | 3.51 | 26 | 6 | 4.33 | 28 | 7 |
| Augustana | 31 | 4 | 7.75 | 40 | 5 | 8.00 | 29 | 8 | 3.63 | 41 | 8 | 5.13 |
| Beloit | 26 | 8 | 3.25 | 34 | 9 | 3.78 | 30 | 16 | 1.88 | 38 | 18 | 2.11 |
| Baker | 31 | 7 | 4.43 | 29 | 5 | 5.80 | 32 | 14 | 2.29 | 38 | 10 | 3.80 |
| Carleton | 24 | 6 | 4.00 | 22 | 13 | 1.69 | 25 | 12 | 2.08 | 36 | 15 | 2.40 |
| Carthage | 7 | 6 | 1.17 | 15 | 10 | 1.50 | 9 | 8 | 1.13 | 20 | 12 | 1.67 |
| Centre | - | - | - | - | - | - | - | - | - | - | - | - |
| Cornell | 34 | 6 | 5.67 | 41 | 7 | 5.86 | 41 | 6 | 6.83 | 38 | 9 | 4.22 |
| Denison | 37 | 5 | 7.40 | 35 | 6 | 5.83 | 35 | 8 | 4.38 | 42 | 8 | 6.00 |
| Drury | 21 | 6 | 3.50 | 22 | 8 | 2.75 | 28 | 10 | 2.80 | 19 | 7 | 2.71 |
| Earlham | 17 | 12 | 1.42 | 25 | 12 | 2.08 | 23 | 14 | 1.64 | 32 | 17 | 1.88 |
| Franklin | 11 | 6 | 1.83 | 11 | 7 | 1.57 | 13 | 9 | 1.44 | 17 | 12 | 1.42 |
| Georgetown | 18 | 6 | 3.00 | 19 | 5 | 3.80 | 18 | 6 | 3.00 | 25 | 8 | 3.13 |
| Grinnell | 35 | 10 | 3.50 | 32 | 12 | 2.67 | 49 | 14 | 3.50 | 57 | 18 | 3.17 |
| Heidelberg | 28 | 8 | 3.50 | 15 | 8 | 1.88 | 27 | 10 | 2.70 | 33 | 11 | 3.00 |
| Hillsdale | 18 | 8 | 2.25 | 20 | 9 | 2.22 | 22 | 13 | 1.69 | 24 | 6 | 4.00 |
| Hiram | 13 | 4 | 3.25 | 14 | 3 | 4.67 | 22 | 8 | 2.75 | 18 | 10 | 1.80 |
| Illinois | 18 | 4 | 4.50 | 11 | 3 | 3.67 | 22 | 2 | 11.00 | 20 | 3 | 6.67 |
| Kalamazoo | 14 | 3 | 4.67 | 12 | 4 | 3.00 | 12 | 4 | 3.00 | 15 | 7 | 2.14 |
| Knox | 26 | 4 | 6.50 | 30 | 5 | 6.00 | 30 | 5 | 6.00 | 26 | 6 | 4.33 |
| Lawrence | 23 | 7 | 3.29 | 32 | 7 | 4.57 | 30 | 7 | 4.29 | 49 | 14 | 3.50 |
| Marietta | 22 | 5 | 4.40 | 25 | 6 | 4.17 | 27 | 6 | 4.50 | 19 | 6 | 3.17 |
| Monmouth | 15 | 3 | 5.00 | 23 | 3 | 7.67 | 18 | 6 | 3.00 | 28 | 9 | 3.11 |
| Olivet | 23 | 9 | 2.56 | 21 | 10 | 2.10 | 27 | 9 | 3.00 | 19 | 11 | 1.73 |
| Ripon | 21 | 5 | 4.20 | 18 | 7 | 2.57 | 23 | 10 | 2.30 | 21 | 10 | 2.10 |
| Shurtleff | 19 | 4 | 4.75 | 14 | 10 | 1.40 | 13 | 5 | 2.60 | 13 | 6 | 2.17 |
| Transylvania | - | - | - | - | - | - | - | - | - | 25 | 9 | 2.78 |
| Wabash | 16 | 5 | 3.20 | 15 | 7 | 2.14 | 23 | 7 | 3.29 | 20 | 5 | 4.00 |
| Washburn | 22 | 6 | 3.67 | 99 | 8 | 12.38 | 106 | 10 | 10.60 | 45 | 8 | 5.63 |
| Wooster | 51 | 9 | 5.67 | 43 | 7 | 6.14 | 29 | 10 | 2.90 | 45 | 11 | 4.09 |
| Range | 7-51 | 3-12 | 1.17- | 11-99 | 3-13 | 1.40- | 9-106 | 2-16 | 1.13- | 13-57 | 3-18 | 1.42- |
| Median | 22 | 6 | 3.67 | 23 | 7 | 3.29 | 27 | 8 | 3.38 | 28 | 9 | 3.11 |
| Mean | 23 | 6.15 | 3.74 | 26.68 | 7.25 | 3.68 | 28.18 | 8.68 | 3.25 | 29.34 | 9.69 | 3.03 |

1. Number of Faculty 2. Number of Administrative Officers (from Partridge Table XLIV)55

3. Ratio of Faculty to Administrative Officers X:1 - = Data Incomplete

| Institution | 1920 ⁶⁵ | | | 1925 ⁶⁶ | | | 1930 ⁶⁷ | | | 1933 ⁶⁸ | | |
|--------------|--------------------|-------|-------|--------------------|-------|-------|--------------------|-------|-------|--------------------|------|-------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Albion | 31 | 7 | 4.43 | 41 | 8 | 5.13 | 48 | 12 | 4.00 | 40 | 10 | 4.10 |
| Augustana | 58 | 12 | 4.83 | 53 | 16 | 3.31 | 46 | 19 | 2.42 | 54 | 14 | 3.86 |
| Beloit | 44 | 10 | 4.40 | 48 | 18 | 2.67 | 49 | 22 | 2.23 | 54 | 22 | 2.45 |
| Baker | 31 | 11 | 2.82 | 35 | 11 | 3.18 | 32 | 13 | 2.46 | 32 | 10 | 3.20 |
| Carleton | 45 | 27 | 1.67 | 77 | 23 | 3.35 | 68 | 23 | 2.96 | 75 | 20 | 3.75 |
| Carthage | 25 | 11 | 2.27 | 37 | 14 | 2.64 | 25 | 16 | 1.56 | 26 | 17 | 1.53 |
| Centre | 15 | 8 | 1.88 | 19 | 9 | 2.11 | 27 | 12 | 2.25 | 31 | 10 | 3.10 |
| Cornell | 46 | 20 | 2.30 | 47 | 20 | 2.35 | 44 | 20 | 2.20 | 47 | 20 | 2.35 |
| Denison | - | - | - | 63 | 13 | 4.85 | 65 | 19 | 3.42 | - | - | - |
| Drury | 21 | 6 | 3.50 | 32 | 7 | 4.57 | 35 | 8 | 4.38 | 33 | 4 | 8.25 |
| Earlham | 28 | 15 | 1.87 | 38 | 19 | 2.00 | 40 | 22 | 1.82 | - | - | - |
| Franklin | 31 | 10 | 3.10 | 29 | 13 | 2.23 | 25 | 12 | 2.08 | 25 | 10 | 2.50 |
| Georgetown | 21 | 15 | 1.40 | 29 | 19 | 1.53 | 27 | 21 | 1.29 | 28 | 15 | 1.87 |
| Grinnell | 67 | 17 | 3.94 | 62 | 20 | 3.10 | 70 | 24 | 2.92 | 67 | 23 | 2.91 |
| Heidelberg | 25 | 11 | 2.27 | 37 | 18 | 2.06 | 41 | 14 | 2.93 | 39 | 12 | 3.25 |
| Hillsdale | 24 | 11 | 2.18 | 37 | 11 | 3.36 | 35 | 11 | 3.18 | - | - | - |
| Hiram | 21 | 10 | 2.10 | 27 | 11 | 2.45 | 25 | 12 | 2.08 | 33 | 20 | 1.65 |
| Illinois | 22 | 4 | 5.50 | 31 | 6 | 5.17 | 21 | 11 | 1.91 | - | - | - |
| Kalamazoo | 20 | 8 | 2.50 | 28 | 9 | 3.11 | 25 | 12 | 2.08 | 25 | 13 | 1.92 |
| Knox | 47 | 15 | 3.13 | 43 | 13 | 3.31 | 56 | 16 | 3.50 | 53 | 14 | 3.79 |
| Lawrence | 54 | 14 | 3.86 | 71 | 16 | 4.44 | 80 | 27 | 2.96 | 81 | 25 | 3.24 |
| Marion | 16 | 7 | 2.29 | 23 | 9 | 2.56 | 35 | 15 | 2.33 | 31 | 15 | 2.07 |
| Monmouth | 25 | 9 | 2.78 | 38 | 21 | 1.81 | 44 | 24 | 1.83 | 48 | 21 | 2.29 |
| Olivet | - | - | - | 25 | 19 | 1.32 | 23 | 11 | 2.09 | - | - | - |
| Ripon | 29 | 16 | 1.81 | 36 | 15 | 2.40 | 33 | 15 | 2.20 | 33 | 15 | 2.20 |
| Shurtleff | - | - | - | 18 | 8 | 2.25 | 20 | 9 | 2.22 | 24 | 7 | 3.43 |
| Transylvania | 24 | 12 | 2.00 | 30 | 11 | 2.73 | 26 | 8 | 3.25 | 32 | 8 | 4.00 |
| Wabash | 23 | 7 | 3.29 | 26 | 7 | 3.71 | 32 | 11 | 2.91 | 34 | 10 | 3.40 |
| Washburn | 44 | 10 | 4.40 | 55 | 12 | 4.58 | 73 | 16 | 4.56 | 67 | 14 | 4.79 |
| Wooster | 44 | 12 | 3.67 | 64 | 21 | 3.05 | 73 | 25 | 2.92 | 105 | 26 | 4.04 |
| Range | 15-67 | 4-27 | 1.40- | 18-77 | 6-23 | 1.32- | 20-80 | 8-27 | 1.29- | 24-105 | 4-26 | 1.53- |
| Median | 28 | 11 | 2.55 | 38 | 14 | 2.71 | 40 | 16 | 2.50 | 34 | 14 | 2.43 |
| Mean | 32.63 | 11.67 | 2.80 | 39.97 | 13.90 | 2.88 | 41.43 | 16.00 | 2.59 | 44.68 | 15 | 2.98 |

1. Number of Faculty 2. Number of Administrative Officers (from Partridge Table XLIV)⁵⁵

3. Ratio of Faculty to Administrative Officers X:1 - = Data Incomplete

TABLE IV - College Income and Administrators

| Institutions | 1875 ⁵⁶ | | | 1880 ⁵⁷ | | | 1885 ⁵⁸ | | | 1890 ⁵⁹ | | | 1895 ⁶⁰ | | |
|--------------|--------------------|-----|------|--------------------|-----|------|--------------------|-----|------|--------------------|---|---|--------------------|------|------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Albion | - | - | - | - | - | - | 24 | 5 | 5 | - | - | - | 20 | 6 | 3 |
| Augustana | 3 | 2 | 2 | 3 | 5 | 1 | 73 | 6 | 12 | - | - | - | 39 | 3 | 13 |
| Beloit | - | - | - | - | - | - | 28 | 5 | 6 | - | - | - | 41 | 6 | 7 |
| Baker | - | - | - | - | - | - | - | - | - | - | - | - | 23 | 11 | 2 |
| Carleton | - | - | - | 19 | 4 | 5 | 60 | 4 | 15 | - | - | - | 30 | 6 | 5 |
| Carthage | 9 | 1 | 9 | 10 | 1 | 10 | 6 | 2 | 3 | - | - | - | 9 | 6 | 2 |
| Centre | 28 | 4 | 7 | 14 | 4 | 4 | - | - | - | - | - | - | 27 | 4 | 7 |
| Cornell | 18 | 3 | 6 | 16 | 3 | 5 | - | - | - | - | - | - | 35 | 6 | 6 |
| Denison | 28 | 3 | 9 | - | - | - | 24 | 3 | 8 | - | - | - | 42 | 5 | 8 |
| Drury | - | - | - | 8 | 4 | 2 | - | - | - | - | - | - | 24 | 4 | 6 |
| Earlham | 19 | 2 | 10 | 12 | 2 | 6 | - | - | - | - | - | - | 45 | 7 | 6 |
| Franklin | 7 | 2 | 4 | - | - | - | 16 | 5 | 3 | - | - | - | 22 | 6 | 4 |
| Georgetown | - | - | - | - | - | - | - | - | - | - | - | - | 30 | 4 | 8 |
| Grinnell | 11 | 2 | 6 | - | - | - | - | - | - | - | - | - | 57 | 11 | 5 |
| Heidelberg | - | - | - | - | - | - | - | - | - | - | - | - | 12 | 9 | 1 |
| Hillsdale | 12 | 6 | 2 | - | - | - | - | - | - | - | - | - | 23 | 7 | 3 |
| Hiram | - | - | - | - | - | - | - | - | - | - | - | - | 23 | 4 | 6 |
| Illinois | - | - | - | - | - | - | - | - | - | - | - | - | 22 | 4 | 6 |
| Kalamazoo | 12 | 4 | 3 | 7 | 4 | 2 | 8 | 3 | 3 | - | - | - | 22 | 2 | 11 |
| Knox | - | - | - | - | - | - | - | - | - | - | - | - | 32 | 3 | 11 |
| Lawrence | - | - | - | - | - | - | - | - | - | - | - | - | 18 | 7 | 3 |
| Marietta | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Monmouth | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Olivet | 14 | 5 | 3 | 15 | 7 | 2 | 26 | 7 | 4 | - | - | - | 23 | 6 | 4 |
| Ripon | 11 | 8 | 1 | 21 | 6 | 4 | 60 | 5 | 12 | - | - | - | 28 | 7 | 4 |
| Shurtleff | 18 | 2 | 9 | 11 | 2 | 6 | 10 | 1 | 10 | - | - | - | 17 | 5 | 6 |
| Transylvania | 16 | 2 | 8 | - | - | - | - | - | - | - | - | - | 24 | 3 | 6 |
| Wabash | 20 | 5 | 4 | 28 | 5 | 6 | - | - | - | - | - | - | 34 | 2 | 12 |
| Washburn | - | - | - | 10 | 3 | 3 | 55 | 2 | 28 | - | - | - | 18 | 5 | 7 |
| Wooster | 22 | 3 | 7 | 15 | 4 | 4 | 34 | 6 | 6 | - | - | - | 35 | 7 | 5 |
| Range | 3-28 | 1-8 | 1-10 | 3-28 | 1-7 | 1-10 | 8-73 | 1-7 | 3-28 | - | - | - | 9-57 | 2-11 | 1-13 |
| Median | 16 | 3 | 5 | 14 | 4 | 4 | 28 | 5 | 6 | - | - | - | 27 | 6 | 5 |
| Mean | 16 | 3 | 5 | 14 | 4 | 4 | 33 | 4 | 8 | - | - | - | 28 | 6 | 5 |

1. Income in thousands of dollars, expressed in constant (1933) dollars.⁶⁹ Data for 1920 and thereafter exclude contributions to endowment and other permanent funds. Data for 1930 and 1933 includes income for education and general only; excludes auxiliary enterprises, building funds, etc.

2. Number of Administrative Officers (from Partridge Table XLIV).⁵⁵

3. Ratio of thousands of dollars of Income to Administrative Officers X:1 - = Data Incomplete

| Institution | 1900 ⁶¹ | | | 1905 ⁶² | | | 1910 ⁶³ | | | 1915 ⁶⁴ | | |
|--------------|--------------------|------|------|--------------------|------|------|--------------------|------|-------|--------------------|------|------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | Albion | - | 4 | - | 55 | 7 | 8 | 65 | 6 | 11 | 128 | 7 |
| Augustana | 43 | 8 | 11 | 85 | 5 | 17 | 165 | 8 | 21 | 144 | 8 | 18 |
| Beloit | 36 | 7 | 5 | 94 | 9 | 10 | 146 | 16 | 9 | 266 | 18 | 15 |
| Baker | 41 | 7 | 6 | 57 | 5 | 11 | 71 | 14 | 5 | - | - | - |
| Carleton | 37 | 6 | 6 | 47 | 13 | 4 | 84 | 12 | 7 | 580 | 15 | 39 |
| Carthage | 11 | 6 | 2 | 13 | 10 | 1 | 30 | 8 | 4 | 51 | 12 | 4 |
| Centre | - | - | - | - | - | - | - | - | - | - | - | - |
| Cornell | 50 | 6 | 8 | 77 | 7 | 11 | 102 | 6 | 17 | 169 | 9 | 19 |
| Denison | 74 | 5 | 15 | 81 | 6 | 14 | 147 | 8 | 19 | - | - | - |
| Drury | 31 | 6 | 5 | 29 | 8 | 4 | 70 | 10 | 7 | 69 | 7 | 10 |
| Earlham | 32 | 12 | 3 | 91 | 12 | 8 | 114 | 14 | 8 | 226 | 17 | 13 |
| Franklin | 20 | 6 | 3 | 22 | 7 | 3 | 36 | 9 | 4 | 68 | 12 | 7 |
| Georgetown | 32 | 6 | 5 | 37 | 5 | 7 | 51 | 6 | 9 | 54 | 8 | 7 |
| Grinnell | 63 | 10 | 6 | 86 | 12 | 7 | 320 | 14 | 23 | 392 | 18 | 22 |
| Heidelberg | 12 | 8 | 2 | 28 | 8 | 4 | 57 | 10 | 6 | 57 | 11 | 5 |
| Hillsdale | 17 | 8 | 2 | 23 | 9 | 3 | 104 | 13 | 8 | 102 | 6 | 17 |
| Hiram | 24 | 4 | 6 | 35 | 3 | 12 | 56 | 8 | 7 | 62 | 10 | 6 |
| Illinois | 22 | 4 | 5 | 22 | 3 | 7 | 250 | 2 | 125 | 82 | 3 | 27 |
| Kalamazoo | 29 | 3 | 10 | 35 | 4 | 8 | 52 | 4 | 13 | 200 | 7 | 29 |
| Knox | 39 | 4 | 10 | 61 | 5 | 12 | 177 | 5 | 35 | 300 | 6 | 50 |
| Lawrence | 43 | 7 | 6 | 38 | 7 | 5 | 186 | 7 | 27 | 360 | 14 | 26 |
| Marietta | 24 | 5 | 5 | 34 | 6 | 6 | 238 | 6 | 40 | 63 | 6 | 11 |
| Monmouth | 27 | 3 | 9 | 48 | 3 | 16 | 67 | 6 | 11 | 81 | 9 | 9 |
| Olivet | 28 | 9 | 3 | 32 | 10 | 3 | 72 | 9 | 8 | 57 | 11 | 5 |
| Ripon | 24 | 5 | 5 | 41 | 7 | 6 | 73 | 10 | 7 | 78 | 10 | 8 |
| Shurtleff | 18 | 4 | 5 | 31 | 4 | 8 | 23 | 10 | 2 | 34 | 5 | 7 |
| Transylvania | - | - | - | - | - | - | - | - | - | 62 | 9 | 7 |
| Wabash | 47 | 5 | 9 | 51 | 7 | 7 | 97 | 7 | 14 | 81 | 5 | 16 |
| Washburn | 19 | 6 | 3 | 59 | 8 | 7 | 137 | 10 | 14 | 98 | 8 | 12 |
| Wooster | 48 | 9 | 5 | 58 | 7 | 8 | 635 | 10 | 64 | 224 | 11 | 20 |
| Range | 11-74 | 3-12 | 2-15 | 13-94 | 3-13 | 1-17 | 23-635 | 2-16 | 2-125 | 34-392 | 3-18 | 4-50 |
| Median | 36 | 6 | 6 | 48 | 7 | 7 | 102 | 9 | 11 | 82 | 9 | 9 |
| Mean | 33 | 6 | 6 | 49 | 7 | 7 | 129 | 9 | 14 | 151 | 10 | 15 |

1. Income in thousands of dollars, expressed in constant (1933) dollars.⁶⁹ Data for 1920 and thereafter exclude contributions to endowment and other permanent funds. Data for 1930 and 1933 includes income for education and general only; excludes auxiliary enterprises, building funds, etc.

2. Number of Administrative Officers (from Partridge Table XLIV).⁵⁵

3. Ratio of thousands of dollars of Income to Administrative Officers X:1 - = Data Incomplete

TABLE IV - Page 3

| Institution | 1920 ⁶⁵ | | | 1925 ⁶⁶ | | | 1930 ⁶⁷ | | | 1933 ⁶⁸ | | |
|--------------|--------------------|------|------|--------------------|------|------|--------------------|------|------|--------------------|------|------|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| Albion | 59 | 7 | 8 | 148 | 8 | 19 | 278 | 12 | 23 | 227 | 10 | 23 |
| Augustana | 87 | 12 | 7 | 160 | 16 | 10 | 157 | 19 | 8 | 137 | 14 | 10 |
| Beloit | 22 | 10 | 2 | 299 | 18 | 17 | 284 | 22 | 13 | 227 | 22 | 10 |
| Baker | 66 | 11 | 6 | 114 | 11 | 10 | 143 | 13 | 11 | 93 | 10 | 9 |
| Carleton | 417 | 27 | 15 | 451 | 23 | 20 | 537 | 23 | 23 | 405 | 20 | 20 |
| Carthage | 69 | 11 | 6 | 69 | 14 | 5 | 108 | 16 | 7 | 100 | 17 | 6 |
| Centre | 48 | 8 | 6 | 71 | 9 | 8 | 113 | 12 | 9 | 105 | 10 | 11 |
| Cornell | 144 | 20 | 7 | 215 | 20 | 11 | 237 | 20 | 12 | 157 | 20 | 8 |
| Denison | - | - | - | 265 | 13 | 20 | 420 | 19 | 22 | - | - | - |
| Drury | 49 | 6 | 8 | 79 | 7 | 11 | 137 | 8 | 17 | 91 | 4 | 23 |
| Earlham | 111 | 15 | 7 | 325 | 19 | 17 | 211 | 22 | 10 | - | - | - |
| Franklin | 72 | 10 | 7 | 111 | 13 | 9 | 125 | 12 | 10 | 95 | 10 | 10 |
| Georgetown | 59 | 15 | 4 | 153 | 19 | 8 | 175 | 21 | 8 | 106 | 15 | 7 |
| Grinnell | 277 | 17 | 16 | 359 | 20 | 18 | 436 | 24 | 18 | 221 | 23 | 10 |
| Heidelberg | 37 | 11 | 3 | 205 | 15 | 14 | 178 | 14 | 13 | 106 | 12 | 9 |
| Hillsdale | 30 | 11 | 3 | 155 | 11 | 14 | 144 | 11 | 13 | - | - | - |
| Hiram | 45 | 10 | 5 | 96 | 11 | 9 | 166 | 12 | 14 | 124 | 20 | 6 |
| Illinois | 41 | 4 | 10 | 111 | 6 | 19 | 261 | 11 | 24 | - | - | - |
| Kalamazoo | 66 | 8 | 8 | 180 | 9 | 20 | 349 | 12 | 29 | 105 | 13 | 8 |
| Knox | 135 | 15 | 9 | 231 | 13 | 18 | 267 | 16 | 17 | 187 | 14 | 13 |
| Lawrence | 174 | 14 | 12 | 340 | 16 | 21 | 510 | 27 | 19 | 278 | 25 | 11 |
| Marietta | 45 | 7 | 6 | 125 | 9 | 14 | 128 | 15 | 9 | 91 | 15 | 6 |
| Monmouth | 75 | 9 | 8 | 116 | 21 | 6 | 171 | 24 | 7 | 160 | 21 | 8 |
| Olivet | - | - | - | 85 | 19 | 4 | 135 | 11 | 12 | - | - | - |
| Ripon | 90 | 16 | 6 | 123 | 15 | 8 | 91 | 15 | 6 | 89 | 15 | 6 |
| Shurtleff | - | - | - | 94 | 8 | 12 | 178 | 9 | 20 | 53 | 7 | 8 |
| Transylvania | - | - | - | 112 | 11 | 10 | 95 | 8 | 12 | 79 | 8 | 10 |
| Wabash | 47 | 7 | 7 | 111 | 7 | 16 | 173 | 11 | 16 | 149 | 10 | 15 |
| Washburn | 99 | 10 | 9 | 169 | 12 | 14 | 211 | 16 | 13 | 209 | 14 | 15 |
| Wooster | 135 | 12 | 11 | 377 | 21 | 18 | 684 | 25 | 27 | 298 | 26 | 11 |
| Range | 22-417 | 4-27 | 3-16 | 69-451 | 6-23 | 4-21 | 91-684 | 8-27 | 6-29 | 53-405 | 4-26 | 6-23 |
| Median | 69 | 11 | 6 | 153 | 12 | 13 | 173 | 16 | 11 | 124 | 15 | 8 |
| Mean | 96 | 12 | 8 | 182 | 14 | 13 | 237 | 16 | 15 | 156 | 15 | 10 |

1. Income in thousands of dollars, expressed in constant (1933) dollars.⁶⁹ Data for 1920 and thereafter exclude contributions to endowment and other permanent funds. Data for 1930 and 1933 includes income for education and general only; excludes auxiliary enterprises, building funds, etc.
2. Number of Administrative Officers (from Partridge Table LXIV)⁵⁵
3. Ratio of thousands of dollars of Income to Administrative Officers X:1 - = Data Incomplete

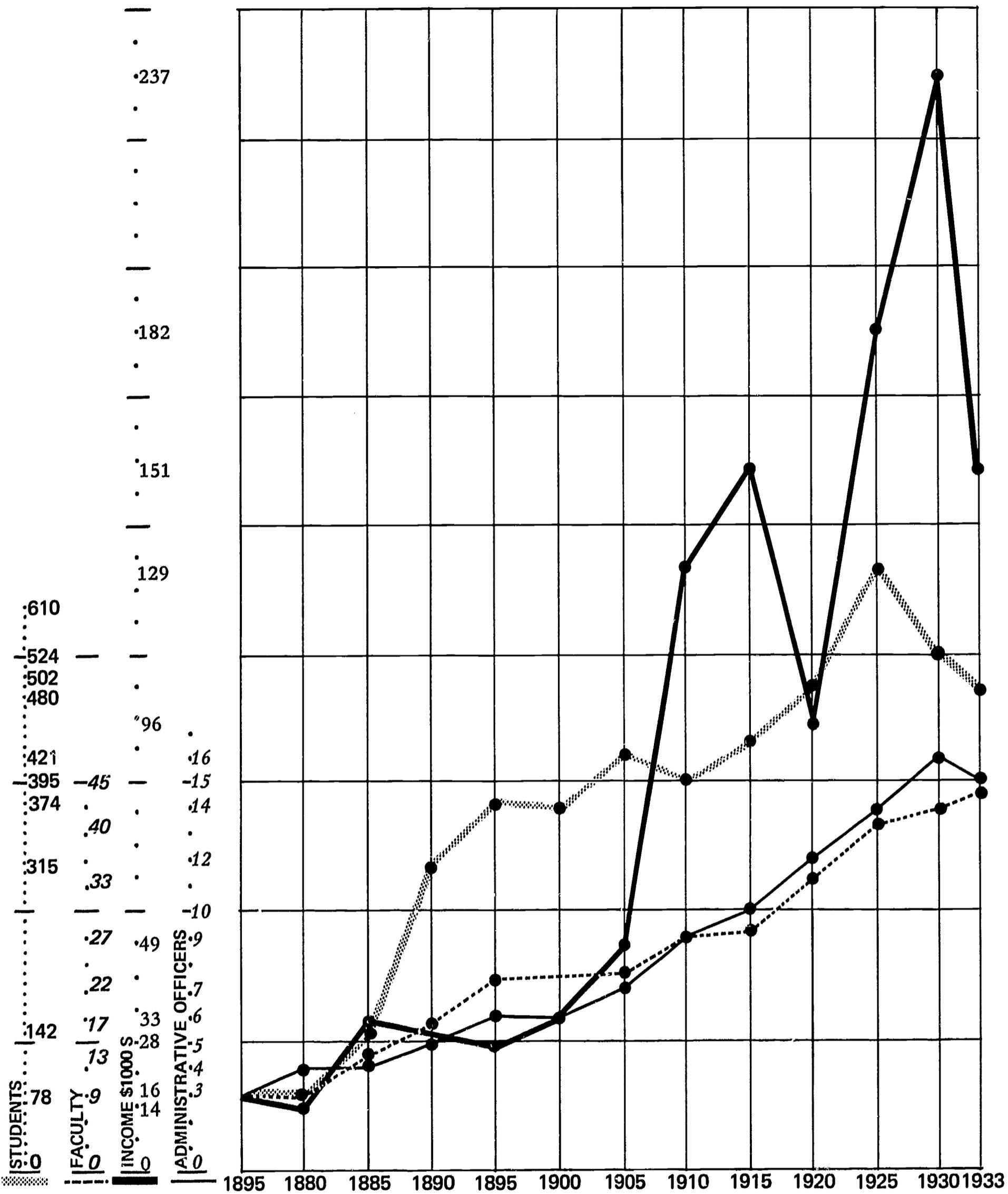


Figure 1 – Mean number of students, faculty, administrative officers, and thousands of dollars of income for each period, listed in thirty liberal arts colleges from 1875 to 1933.

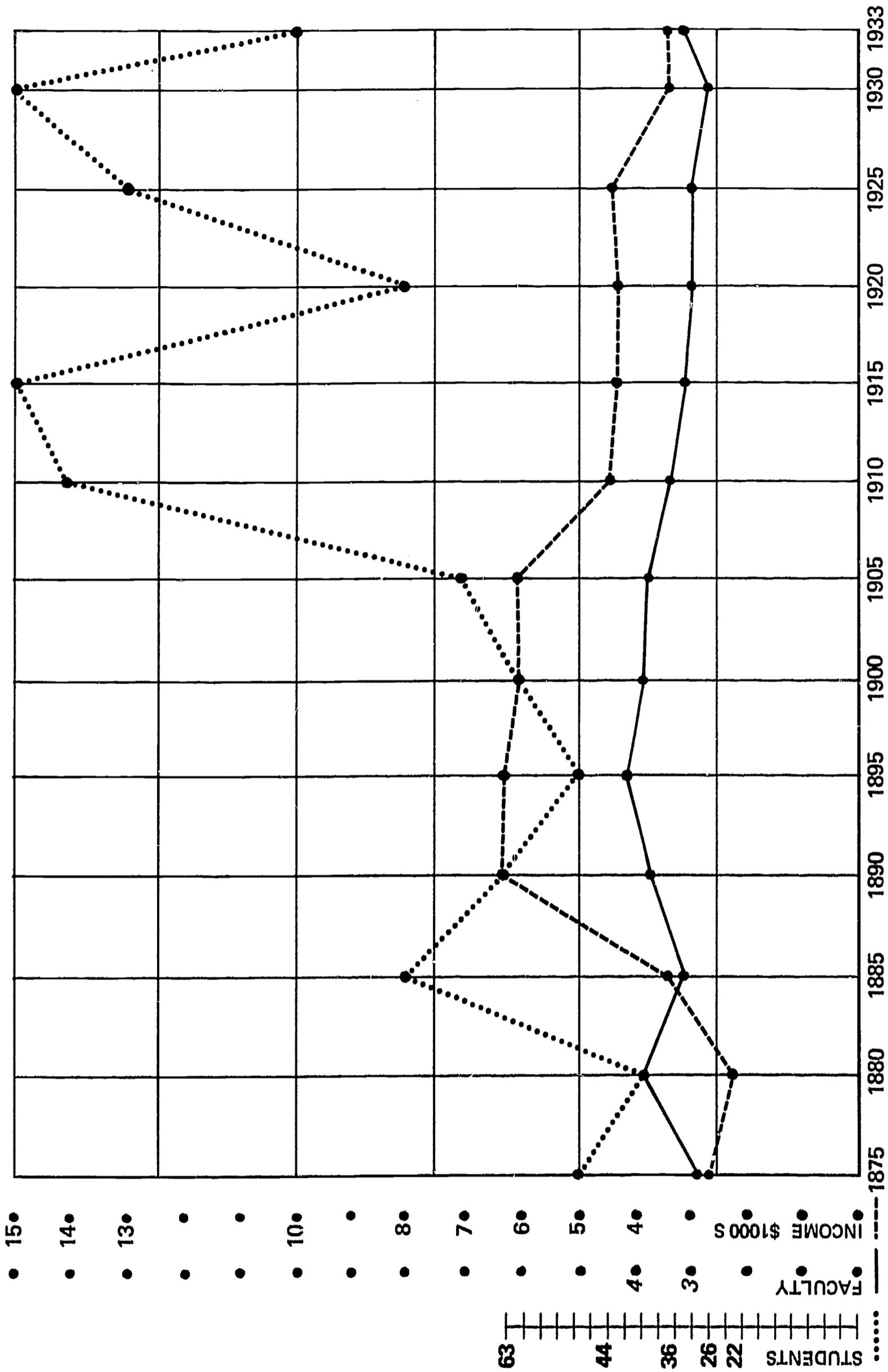


Figure 2 — Mean ratio of students, faculty, and thousands of dollars of income for each period to number of administrative officers in thirty liberal arts colleges from 1875 to 1933.

above and illustrated again in Figure 2, should be disturbing. Further, in Figure 2, we see that administration has not been growing faster than the number of students or the total number of faculty, while it has been growing much more slowly than (constant) dollar income.

Private liberal arts colleges predominated prior to 1950.⁷⁰

To confirm our conclusion that administration has not grown disproportionately, we should like to have evidence from recent, public higher institutions.

We should also like to have a broader definition of administration. Without pretending that they are typical nor that this data represents the fruits of a comprehensive search, we can note the following evidence from the Wisconsin State Universities for the years since the Educational Finance Inquiry Commission's standard definition of "administration" was adopted:⁷¹

| <u>Academic Year</u> | <u>Total Operational Expenditures</u> | <u>Expenditures for Administration</u> | <u>Ratio</u> |
|----------------------|---------------------------------------|--|--------------|
| 1959-60 | \$10,715,830.36 | \$ 525,075.69 | 4.90% |
| 1960-61 | 12,026,709.73 | 614,564.87 | 5.11 |
| 1961-62 | 13,997,929.36 | 966,989.77 | 6.91 |
| 1962-63 | 22,790,822.98 | 1,102,547.63 | 4.84 |
| 1963-64 | 29,003,536.61 | 1,450,327.78 | 5.00 |
| 1964-65 | 37,792,671.01 | 1,742,804.55 | 4.61 |
| 1965-66 | 51,478,518.31 | 2,557,701.55 | 4.97 |
| 1966-67 | 72,354,196.16 | 3,633,764.33 | 5.02 |

Data for all of the institutions in the United States is available but only through 1963-64:

Percentage of Total Operating Expenditures Devoted to Administration

| | <u>All</u> | <u>Public</u> | <u>Private</u> |
|-----------------------|------------|---------------|----------------|
| 1951-52 ⁷² | 9.50% | 7.60% | 11.60% |
| 1953-54 ⁷³ | 10.01 | 7.78 | 12.74 |
| 1955-56 ⁷⁴ | 10.20 | 7.80 | 13.20 |
| 1957-58 ⁷⁵ | 10.50 | 8.50 | 13.10 |
| 1959-60 ⁷⁶ | 10.40 | 8.60 | 12.80 |
| 1961-62 ⁷⁷ | 10.50 | 8.40 | 13.20 |
| 1963-64 ⁷⁸ | 10.50 | 9.10 | 12.20 |

Again, the stability of administration as a share of total operations, seems evident.

The rise in administration during the first 250 years of higher education in America is the story of gradual change in the character and attitude of the college president. During the past 100 years, it is the story of a gradual growth, punctuated now and then by individual leadership. Only one facet, the emergence of student personnel services, seems worthy of detailed study.⁷⁹ All in all, "managerial evolution" seems more descriptive than "managerial revolution" whether one is speaking of growth or of organization and technique unless, of course, one is addressing a group which is so out of touch with the larger contemporary secular society as not to be knowledgeable concerning changes in management generally.⁸⁰

There is a pervasive, though undocumented, impression in academic circles that student-faculty ratios affect prestige levels i.e. institutions with high ratios, say 8:1 rate higher in the pecking order than those with low ratios, say 22:1. (Indeed, prestige correlates,

positively and significantly, with student-faculty ratios only when both private and public categories are both mixed in the study; i.e. private institutions, with high student faculty ratios (8:1) have high prestige, while public institutions, with low student-faculty ratios (22:1) have low prestige. Consider the two categories separately, and the correlation co-efficient drifts to levels of insignificance.⁸¹

Cartter does not cite student-faculty ratios as being significant factors in the patterns of quality in universities, but does comment on administrative leadership.⁸² Of course no one is claiming that administrative leadership correlates with the size of the university administration.

No standards exist for determining the number of administrative officers necessary for the most efficient operation of a university.⁸³ In searching for policy guides we could examine the practice in other states and adjust our practice toward the typical. The result could be well-deserved movement toward mediocrity.

Our foremost concern should be the effect of various teaching faculty-administrative faculty ratios on the quality of instruction as measured by test scores, persistence to graduation, enrollment in graduate schools, success after graduation, etc. If student-faculty ratios are accepted as a given, an increase in the administrative faculty will, ceteris paribus, mean a decrease in the teaching faculty. A decrease in the teaching faculty, with a constant size student body, will mean larger classes. There are those who hold that the smaller the class the more effective the educational process, however it is not clear that smaller classes yield better results. It is certainly doubtful that the educational product is much better if forty students attend a lecture rather than two hundred and fifty.

It is of some interest that study after study of controlled experiments did not reveal that the small class had any advantage over the large class.⁸⁴

One study which dealt with 59 experiments in 108 classes distributed among 11 departments in four colleges, and involving 6,059 students concluded: "Class size seemed to be a relatively minor factor. . .in student achievement. Techniques of instruction may have less influence upon student achievement than is generally ascribed to them and. . .the value of student participation may be over-rated. In forty-six of the experiments (78%) a more or less decided advantage accrued to the paired students in the large section, and only in the remaining 13 (22%) was there any advantage in favor of the small sections."⁸⁵

We have noted that (1) university administration has grown at about the same rate as the total faculty and the student body, (2) Wisconsin State University teaching faculty-administrative faculty ratios average 6:1 vs. a persistent 3:1 elsewhere, and that Wisconsin State University budgets for administration average about 5% of total operations vs. 9% in public institutions of higher education nationally and 12% in private colleges and universities. It is common knowledge that (1) a large segment of the faculty would react negatively to increases in the size of the ~~ADMINISTRATIVE~~ ^{ADMINISTRATIVE} faculty and (2) a decrease in the relative size of the teaching faculty would not have adverse effects on educational outcomes. There is a strong possibility that major advantages will accrue to institutions that shift effort into such administrative functions as program planning, systems analysis, computing, public relations, information and intelligence service, institutional studies, development, etc. Ability to gain these

advantages while minimizing losses due to faculty disaffection might well be a critical test of executive leadership.

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