

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

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REPORT ON THE
HIGHER EDUCATIONAL INSTITUTIONS
OF ARKANSAS

By

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,

Washington, December 9, 1921.

SIR: The Bureau of Education renders service to the several States by detailing its specialists from time to time to make studies of educational systems and to make recommendations for their improvement. In the autumn of 1920 the State superintendent of public instruction in Arkansas requested this bureau to detail Dr. George F. Zook, specialist in higher education, to make an inspection of the higher institutions in Arkansas and to submit a report showing the extent to which the several colleges complied with standards which had been adopted in May, 1920. Accordingly, Dr. Zook was detailed for this work. His report contains information concerning the higher institutions in Arkansas, together with suggestions for their improvement, which will be useful not only to educators in Arkansas but in other States as well. I recommend that the report be published as a bulletin of the Bureau of Education.

Respectfully submitted

JNO. J. TIGERT,
Commissioner.

The SECRETARY OF THE INTERIOR.

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LETTER OF THE STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.

On the basis of an extended conference composed of school superintendents and principals in June, 1918, the Arkansas State Board of Education issued, June 1, 1920, a preliminary outline of a course of study for high schools. This circular also contained certain standard requirements for approved high schools, among which were these:

1. By September, 1923, all teachers employed [in class A high schools] shall have four years of training beyond the high school in a standard college or normal school.
2. By September, 1926, at least three-fourths of the teachers in a class A high school should be on the approved list of high-school teachers.
3. After September 1, 1923, no person shall be allowed to teach in the high schools of Arkansas who has not the equivalent of a bachelor's degree from a standard four-year college.
4. After September 1, 1923, no person shall be allowed to teach in the public high schools of Arkansas who has not had at least two years of normal training work above the four-year high-school course, or its equivalent.

It thus becomes clear that, beginning with September, 1923, the Arkansas State Board of Education will need to know what colleges of the State may be considered as standard colleges, in order to ascertain what persons are eligible to teach in the high schools of the State. This situation was presented to a meeting of the college presidents of the State held May 5, 1920. At this conference it was agreed to establish a series of standards by which to determine the standing of the respective colleges in the State and to employ a competent and neutral investigator to conduct a personal inspection of each institution. Accordingly, in September, 1920, Mr. A. B. Hill, of the Arkansas State Department of Education, presented the matter informally to Dr. P. P. Claxton, then United States Commissioner of Education, and requested the services of the bureau's specialist in higher education. Dr. Claxton very kindly consented. Subsequently I directed a formal request to the Commissioner of Education, and his reply confirmed the consent which he had given informally to Mr. Hill.

Subsequently letters were directed to each of the college presidents, asking them if an inspection conducted by Dr. Zook, of the United States Bureau of Education, would be agreeable to them. The college presidents cordially confirmed the action of the State superintendent, and definite arrangements were therefore made for the inspection.

Dr. Zook has made three visits to the State. During the first visit in December, 1920, he met and discussed the details of the inspection with the college presidents in Little Rock. Afterwards he made a study of the situation at each college, supplementing his personal impressions with extensive data which the college executives were asked to supply. On the basis of this information Dr. Zook has made the accompanying report. I wish herewith to express my appreciation to the Commissioner of Education for detailing Dr. Zook for this work, and to Dr. Zook for the time and careful consideration which he has given to it.

J. L. BOND,

State Superintendent of Public Instruction.

LETTER OF DR. ZOOK.

Hon. J. L. BOND,

State Superintendent of Public Instruction, Little Rock, Ark.

DEAR SIR: I have the honor to submit herewith a report of my inspection of the higher institutions of Arkansas made at your invitation during the winter of the academic year 1920-21. The report includes all of the 13 higher institutions about which the State department of education desired information.

I wish to express my great appreciation of the very cordial welcome accorded me at each of the higher institutions and for the utmost willingness displayed by all the college authorities to supply me with adequate information.

Yours, very sincerely,

GEORGE F. ZOOK,

Specialist in Higher Education.

JUNE 24, 1921.

METHOD OF CONDUCTING THE INSPECTION.

In conducting the inspection of the higher institutions of Arkansas the catalogues of the respective colleges were examined with care. The college presidents supplied data and statistics on a questionnaire printed and distributed by the State department of education.

The information secured in this manner was supplemented by a personal inspection at each institution of the buildings, grounds, laboratories, and library. The entrance records and the financial accounts were examined. Interviews were had with the college presidents, deans, registrars, and members of the faculties. Except at the State university, a short visit was paid to classes conducted by almost all the instructors in the several colleges.

From this information brief statements were assembled showing the degree to which each institution met the standards established by the college presidents at the meeting in May, 1920. These statements were submitted to the respective college presidents and by them corrected and verified. On the basis of these statements as qualified by the extensive additional information gained in the ways already mentioned, a report has been made containing certain suggestions and recommendations for the improvement of higher education in Arkansas.

REPORT ON THE HIGHER EDUCATIONAL INSTITUTIONS OF ARKANSAS.

COLLEGE ATTENDANCE IN ARKANSAS.

The last complete statistics of attendance at colleges and universities compiled by the Bureau of Education are for the academic year 1917-18. The total attendance for that year, on account of the entry of the United States into the World War, was slightly less than in the year 1915-16.¹ In every State in the Union college attendance was much affected by the war. There is, however, no reason to believe that this situation affected one State more than another. Since 1917-18 there has been a considerable increase in student attendance at higher institutions all over the country. It may be assumed with some certainty, therefore, that the present relative standing of the States in the matter of college attendance according to population has varied but little, if any, from that of three years ago.

Unfortunately no complete statistics have been compiled showing the proportion of residents of a given State who are in attendance at higher institutions throughout the country. We have only the attendance at colleges and universities in a given State to compare with the population of the State. Such a comparison is manifestly unfair to those States in which for any reason a number of superior higher institutions have not been developed. It is natural that in these States a large proportion of students will go to colleges located in other States, thus swelling the total number of students in those States which are recognized as having a number of standard institutions. This is the only explanation of the fact that, although New Jersey stands twenty-second among the States in high-school attendance according to population, it has the lowest collegiate attendance of all the States in the Union. It is logical to suppose that about as many graduates from New Jersey high schools go to college as from the high schools of other States. It should also be remembered that in Arkansas, as in all the Southern States, the standing of the State with respect to students in colleges and universities is much affected by the presence of a large colored population, which is not extensively represented in higher institutions.

Nevertheless, the attendance at colleges and universities in Arkansas, compared to the total population, is undoubtedly significant. In only one State in the Union, New Jersey, is the collegiate attendance per population less than it is in Arkansas. Arkansas and New Mexico are tied for the place next to the last. The situation is made clear by Table 1.

¹ Statistics for the year 1916-17 were not gathered. The Bureau of Education gathers complete statistics biennially.

ARKANSAS HIGHER EDUCATIONAL INSTITUTIONS.

TABLE 1.—College attendance compared with population, 1917-18.¹

| States. | Students in colleges and universities to total population. | States. | Students in colleges and universities to total population. | States. | Students in colleges and universities to total population. |
|---------------------------|--|---------------------|--|--------------------|--|
| | <i>Per cent.</i> | | <i>Per cent.</i> | | <i>Per cent.</i> |
| District of Columbia..... | 1.66 | South Dakota..... | 0.37 | Mississippi..... | 0.20 |
| Iowa..... | .72 | Michigan..... | .36 | Idaho..... | .19 |
| Colorado..... | .63 | Indiana..... | .34 | Kentucky..... | .19 |
| Massachusetts..... | .56 | Virginia..... | .33 | Rhode Island..... | .19 |
| Nebraska..... | .55 | Vermont..... | .32 | Alabama..... | .18 |
| Oregon..... | .54 | Wisconsin..... | .31 | Louisiana..... | .18 |
| Kansas..... | .51 | Montana..... | .29 | Wyoming..... | .18 |
| California..... | .50 | North Dakota..... | .29 | Arizona..... | .17 |
| Illinois..... | .50 | Washington..... | .29 | Oklahoma..... | .17 |
| Minnesota..... | .45 | Maine..... | .28 | Florida..... | .16 |
| Ohio..... | .44 | Nevada..... | .28 | Delaware..... | .15 |
| Utah..... | .44 | Tennessee..... | .28 | West Virginia..... | .14 |
| New York..... | .42 | South Carolina..... | .26 | Arkansas..... | .11 |
| Maryland..... | .41 | Connecticut..... | .24 | New Mexico..... | .11 |
| New Hampshire..... | .40 | Texas..... | .24 | New Jersey..... | .10 |
| Pennsylvania..... | .38 | North Carolina..... | .23 | | |
| Missouri..... | .37 | Georgia..... | .22 | United States..... | .36 |

¹ In compiling this table it was found necessary for other reasons to add the preparatory students in the colleges to the regular college students. This fact undoubtedly worked to the advantage of Arkansas as much as to any State in the Union, inasmuch as every college in Arkansas, including the State university, maintains a preparatory school or a training school, which usually has a large number of preparatory students.

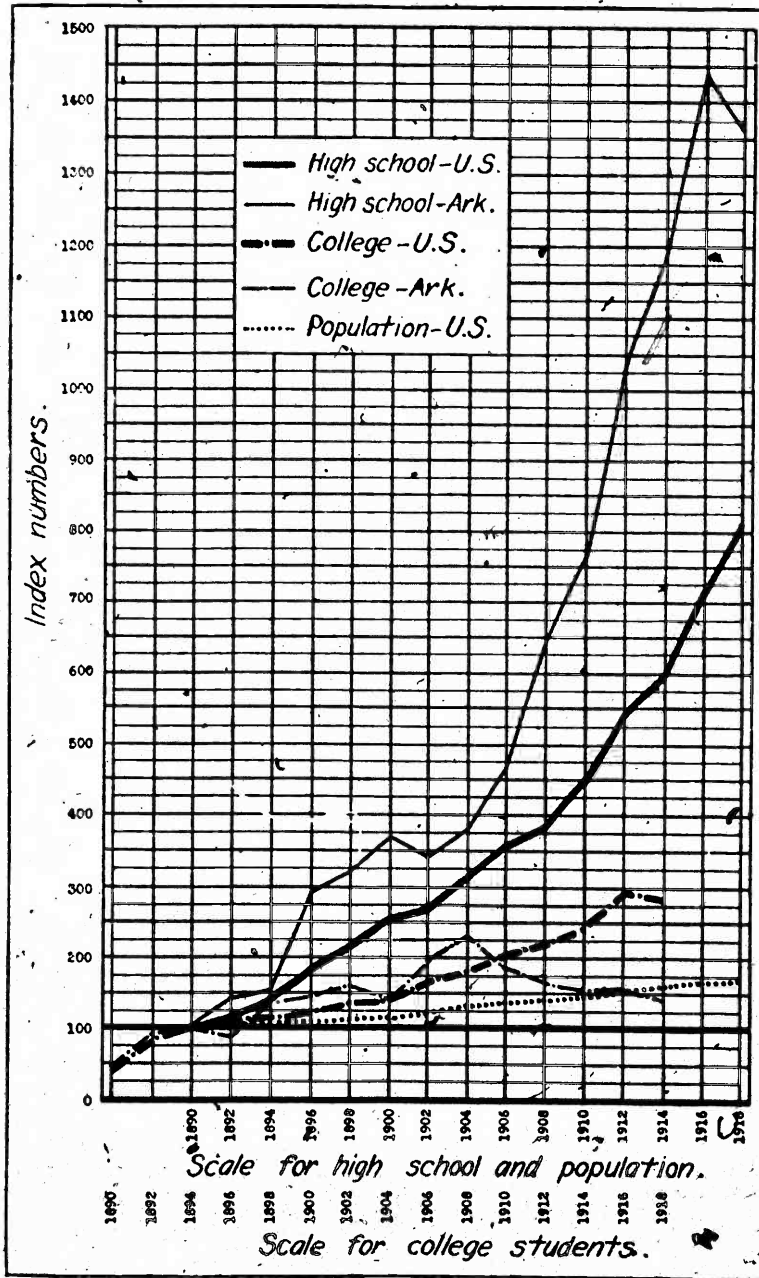
The situation in Arkansas is further clarified by the graph showing the per cent of the population in Arkansas, 19 to 23 years of age, who during the past 25 years have attended college, as compared to the average for the country. The same thing is done for the per cent of the population 23 years of age who graduated from college.

If one considers attendance per population at publicly supported institutions only, Arkansas again ranks low. Massachusetts, Maryland, and Connecticut are at the bottom of the list, with an average attendance of only one person for each 10,000 of population.¹ Pennsylvania, with two per 10,000, comes next, followed by Louisiana, Rhode Island, Tennessee, and Arkansas, with four per 10,000 population.

TABLE 2.—Attendance at public universities, colleges, and professional schools compared to population, 1917-18.

| States. | Per cent attending colleges, etc. | States. | Per cent attending colleges, etc. | States. | Per cent attending colleges, etc. |
|---------------------------|-----------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|
| Colorado..... | 0.45 | Arizona..... | 0.17 | Alabama..... | 0.08 |
| Utah..... | .44 | Wisconsin..... | .17 | Illinois..... | .08 |
| District of Columbia..... | .38 | Vermont..... | .16 | Georgia..... | .07 |
| Oregon..... | .36 | Delaware..... | .15 | West Virginia..... | .07 |
| Iowa..... | .34 | Indiana..... | .15 | North Carolina..... | .06 |
| Nebraska..... | .31 | Idaho..... | .14 | Kentucky..... | .05 |
| Montana..... | .29 | New Hampshire..... | .13 | Arkansas..... | .04 |
| Nevada..... | .28 | Mississippi..... | .12 | Louisiana..... | .04 |
| Michigan..... | .27 | Missouri..... | .12 | Rhode Island..... | .04 |
| Minnesota..... | .26 | Oklahoma..... | .12 | Tennessee..... | .04 |
| Washington..... | .26 | Maine..... | .11 | Pennsylvania..... | .02 |
| California..... | .24 | New Mexico..... | .11 | Connecticut..... | .01 |
| Kansas..... | .23 | Florida..... | .10 | Maryland..... | .01 |
| South Dakota..... | .21 | South Carolina..... | .10 | Massachusetts..... | .01 |
| Ohio..... | .20 | Texas..... | .10 | New Jersey..... | .00 |
| North Dakota..... | .19 | Virginia..... | .10 | | |
| Wyoming..... | .18 | New York..... | .09 | United States..... | .12 |

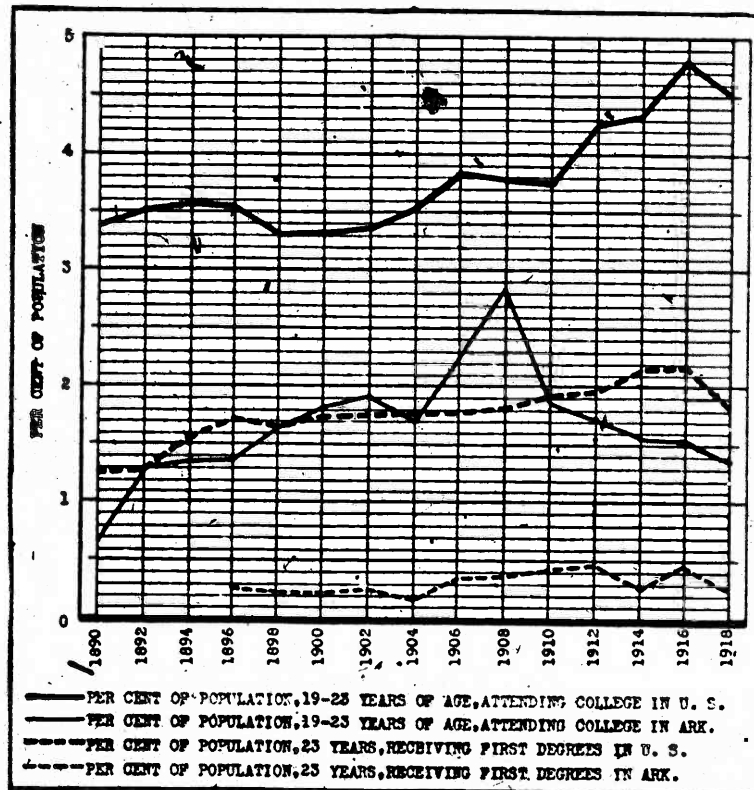
¹ No figures are given for New Jersey for the reason that Rutgers College, the State university of New Jersey, is not controlled by the State.



Increase of attendance in high schools and colleges in Arkansas compared with the United States.

ARKANSAS HIGHER EDUCATIONAL INSTITUTIONS.

The evidence concerning the low proportion of the population of Arkansas in attendance at higher institutions so far adduced is, as has been stated, inconclusive. Taken in conjunction with the standing of the State in the matter of high-school attendance, however, there seems no reason to be in doubt concerning the situation. The average number of students in public and private high schools in the United States to each 1,000 in the population is 17.1. Utah, California, Kansas, and Iowa lead, with 29.8, 28.5, 27.5, and 26.6, respectively, per 1,000 population. South Carolina and Arkansas, with 6.4 and 6.9, respectively, bring up the rear. In the whole



Per cent of population attending college and receiving first degrees.

State of Arkansas there were in 1917-18 only 12,507 students in high schools, and only 979 boys and girls graduating from these schools. It is obvious therefore that until the secondary schools of the State are more numerous and more largely attended, the colleges may not expect large increases in enrollment. One can not build a house without a foundation; good high schools are a prerequisite to superior colleges.

Strangely enough, however, the colleges have not until recently been absorbing the small but steady increase in secondary students which has been taking place. As is shown in the accompanying table, there was during the decade from 1907-8 to 1917-18 an increase of over 4,000 secondary students, while the number of students in colleges remained practically stationary. Only during the past year or two has the collegiate attendance of the State made any marked increase.

ARKANSAS HIGHER EDUCATIONAL INSTITUTIONS.

TABLE 3.—College and secondary students in Arkansas.

| Years. | Institution-reporting. | Total college students | First degrees granted. | Secondary students. |
|--------|------------------------|------------------------|------------------------|---------------------|
| 1880 | 4 | 509 | | 1,805 |
| 1881 | 5 | 351 | | 2,708 |
| 1882 | 10 | 650 | | 3,433 |
| 1883 | 11 | 1,300 | 68 | 5,201 |
| 1884 | 9 | 871 | 56 | 4,901 |
| 1885 | 9 | 985 | 56 | 5,978 |
| 1886 | 7 | 1,211 | 67 | 8,267 |
| 1887 | 8 | 1,276 | 52 | 6,394 |
| 1888 | 8 | 1,276 | 94 | 6,844 |
| 1889 | 8 | 4,633 | 105 | 8,688 |
| 1890 | 8 | 1,570 | 116 | 9,012 |
| 1891 | 7 | 1,705 | 147 | 10,825 |
| 1892 | 6 | 1,538 | 84 | 11,546 |
| 1893 | 7 | 1,640 | 142 | 13,156 |
| 1894 | 9 | 1,537 | 89 | 12,993 |
| 1895 | 9 | 1,867 | 137 | |

Includes the preparatory students at the colleges and at the State university.

These facts point clearly to the probability that Arkansas may be, for the present at least, oversupplied with colleges. This probability gains ground when the number of colleges and the college attendance in Arkansas are compared with other States. In the statistical report for 1917-18, the Bureau of Education lists 23 colleges in Iowa, with an average attendance of 604; 19 institutions in Indiana, with average attendance of 458; 18 institutions in Georgia, with average attendance of 280; 11 institutions in Alabama with average attendance of 273; and 9 institutions in Arkansas with an average attendance of 171. It will be seen that the average attendance at the Arkansas colleges falls far below that of the colleges in the other States named. After subtracting the university attendance, 730, from the total, it will be seen that the average attendance for the privately supported colleges, exclusive of preparatory students, is only 101. The situation is made clear by the following table:

TABLE 4.—Attendance at higher institutions in selected States, 1917-18.

| States | Total number of colleges. | Total college attendance. | Average attendance. | Number of privately supported colleges. | Total attendance. | Average attendance. |
|---------------|---------------------------|---------------------------|---------------------|---|-------------------|---------------------|
| Alabama | 11 | 3,093 | 273 | 8 | 1,126 | 141 |
| Georgia | 18 | 5,032 | 280 | 15 | 3,280 | 220 |
| Illinois | 48 | 24,394 | 508 | 45 | 23,399 | 520 |
| Indiana | 19 | 8,701 | 458 | 16 | 4,369 | 274 |
| Iowa | 23 | 13,880 | 604 | 20 | 7,169 | 358 |
| Kansas | 20 | 8,146 | 407 | 17 | 4,169 | 245 |
| Kentucky | 14 | 3,302 | 236 | 12 | 1,982 | 165 |
| Ohio | 44 | 21,168 | 480 | 38 | 10,507 | 277 |
| Oklahoma | 6 | 3,224 | 537 | 3 | 683 | 228 |
| Tennessee | 19 | 4,294 | 226 | 17 | 4,461 | 262 |
| United States | 668 | 310,471 | 465 | 558 | 209,671 | 376 |
| Arkansas | 9 | 1,537 | 171 | 8 | 807 | 101 |

Since 1917-18 the attendance at the Arkansas colleges has increased considerably, but even yet the total attendance of college students, including special students for 1919-20, was only 1,867, with an average per institution of only 207. If we subtract from this number the university's attendance of 821, it will be seen that the average attendance of college students for the privately supported colleges last year was 131. If we assume, as has been done by several writers and investigators in this

field, that 500 students is a desirable number of students for an efficient college, it seems clear that Arkansas is at present oversupplied with colleges, or what is more significant, undersupplied with college students.

NEED OF INCREASED FINANCIAL SUPPORT.

The higher institutions of the country are passing through a critical financial period. This statement applies both to the publicly supported colleges and universities and to those supported from private funds. The State institutions are crowded beyond all expectations, and at the same time the changed economic condition has materially reduced the value of the appropriations made by the State legislatures. The State institutions can, however, appeal to the State legislatures for more generous support, an appeal which is meeting with ready response. The privately supported institutions, on the other hand, find that they, too, are crowded as never before, and that the meager endowments which they have accumulated with the greatest effort are now reduced to little more than one-half their former comparative value. The privately supported colleges have realized this situation, and a very large portion of them have instituted campaigns for increased endowments. Information received by the Bureau of Education from 317 higher institutions, 15 public and 302 private, reveals the fact that during the biennium ending June 30, 1920, the total benefactions received by these institutions were \$138,235,770. Of this amount, \$44,608,966 was for current expenses; \$23,951,445 for increase of plant; and \$64,675,359 for increase of endowment.

It should be noted that 84.1 per cent of the funds for increasing the plant and endowment of higher institutions has been raised in the North Atlantic and North Central Divisions of the United States, as against 13.7 per cent in the South Central and South Atlantic States. These figures indicate a situation serious enough for the privately supported colleges of the Southern States, but it is even more serious than is so far apparent, because figures during recent years indicate clearly that the rate of growth in student attendance at colleges in the Southern States is greater than it is in the Northern States. In other words, in those regions most needing additions to the endowments of their higher institutions the movement to meet the situation as yet lags.

TABLE 5.—Private benefactions to 317 colleges and universities, July 1, 1918, to June 30, 1920.

| Divisions. | Number of institutions reporting. | Increase of plant | Increase of endowment. | Current expenses. | Total benefactions. | For increase of plant and endowment. |
|------------------------------|-----------------------------------|-------------------|------------------------|-------------------|---------------------|--------------------------------------|
| North Atlantic Division..... | 74 | \$7,585,987 | \$39,573,098 | \$17,162,776 | \$64,331,860 | Per cent. |
| North Central Division..... | 128 | 11,527,032 | 19,970,677 | 20,020,595 | 51,518,304 | 73.3 |
| South Atlantic Division..... | 51 | 1,901,324 | 5,949,721 | 3,848,639 | 11,699,304 | 60.2 |
| South Central Division..... | 44 | 2,134,961 | 2,940,800 | 2,532,689 | 7,608,450 | 67.1 |
| Western Division..... | 20 | 791,942 | 1,241,063 | 1,044,847 | 3,077,852 | 66.7 |
| Total..... | 317 | 23,951,445 | 64,675,359 | 44,608,966 | 138,235,770. | 67.8 |

Only one of the privately supported colleges in Arkansas, Hendrix College, has an endowment of any consequence. In 8 of the 11 privately supported institutions in the State the endowment is so small as to be almost negligible. Furthermore, the income derived from this source is subject to use both in the college proper and in the preparatory school maintained in each case in connection with the college. As a result of this situation the financial support of the colleges is to an unusual degree thrown upon the students themselves.

¹ For example, "The Efficient College," bulletin of the Association of American Colleges. Revised edition, February, 1917.

Tuition and other student fees are naturally of chief importance, but in about one-half of the colleges the profit on student board and lodging affords a large proportion of the income. Aside from the burden this condition entails on the students and their parents, it is likely to have a bad influence on the quality of work done in the colleges. In order that the situation facing the privately supported colleges of Arkansas may be clarified, Table No. 6, taken from the last statistics published by the Bureau of Education for the year 1917-18, is included. The States selected are all in the Southern or Middle Western section of the country, in most instances not far distant from Arkansas. From this table it will be seen that there is only one State in the group, Alabama, in which the privately supported colleges raise a larger proportion of their income from student fees. In fact, there are only two States in the Union, Alabama and Mississippi, where the students pay a larger proportion of the income of the privately supported colleges. The Arkansas privately supported colleges raise 84.7 per cent of their income from student fees; the average for the country is 54.2 per cent.

During the same time, on account of the great increase in prices caused by the World War and the consequent necessity for increased salaries, all of the higher institutions, including those in Arkansas, have been brought face to face with financial difficulties more critical than at any previous time in their history. The amount of endowment possessed by a college, the assured annual income, and the salaries paid to members of the faculty are not necessarily indicative of the standard of work performed by the institution. When other conditions are favorable, however, they do have a very important influence on the standard of work which may be done. As one goes about from one institution to another in the State and notices the unfavorable conditions under which many of the teachers work and the extremely low salaries which they receive, one is immediately impressed with the fact that the colleges are getting a higher standard of service than they deserve. The fact that men and women of training and ability remain in the colleges can only be explained by their devotion to the work and their hope that an increased compensation will not be long deferred. If the higher institutions of Arkansas are to take their place with similar institutions in other parts of the country, and particularly in the Southern States, the friends of the privately supported colleges must be aroused to provide large endowments. Only in this way can the financial jeopardy facing almost every privately supported college in the State be removed and the institutions placed on the proper level of excellence.

TABLE 6.—Income of privately supported colleges from various sources.

| Institutions. | From productive funds. | From United States, State, or city. | From private benefactions. | From student fees and other sources. |
|--------------------|------------------------|-------------------------------------|----------------------------|--------------------------------------|
| | Per cent. | Per cent. | Per cent. | Per cent. |
| Alabama..... | 4.6 | | 8.2 | 87.2 |
| Georgia..... | 13.2 | | 43.7 | 43.1 |
| Illinois..... | 37.8 | | 13.0 | 49.2 |
| Indiana..... | 27.4 | | 6.7 | 65.9 |
| Iowa..... | 20.1 | | 14.6 | 65.0 |
| Kansas..... | 15.4 | | 16.6 | 68.0 |
| Kentucky..... | 19.9 | | 12.2 | 67.9 |
| Ohio..... | 29.7 | 0.4 | 22.8 | 47.1 |
| Oklahoma..... | 16.6 | | 28.9 | 54.5 |
| Tennessee..... | 25.1 | 1.6 | 16.4 | 57.0 |
| United States..... | 27.7 | 3.8 | 14.3 | 54.2 |
| Arkansas..... | 9.7 | | 5.6 | 84.7 |

Important as are the student fees in the income of the privately supported colleges in Arkansas, the fees themselves are not high when compared to those in other States. For this reason the total income from all sources at the various institutions is so small as to necessitate a very low schedule of salaries.

THE JUNIOR COLLEGE AS A SOLUTION.

It is scarcely within the province of this study to discuss at length the remedies for the financial condition of the colleges in Arkansas nor the excess in the number of colleges within the State. The large number of colleges is, moreover, an evidence of the zeal exhibited by a great band of self-sacrificing leaders, particularly among the various church denominations, to establish for the young people of the State more adequate opportunities for secondary and collegiate education than hitherto existed. Granting, however, the beneficent influence spread abroad in the State by these leaders and the institutions which they have founded and supported through sacrifice and toil, it is evident that the denominations have been and still are attempting to support a larger number of four-year colleges than the number of college students and the available income justify. If one yields to the sentiment in favor of separate institutions for young men and young women found prominently in the Southern and Eastern States, there is yet no reason why the Southern Methodist and Baptist Churches should each be asked to help support three colleges, several of which are as yet wholly without endowment and therefore lead a struggling existence. Nor is it clear that the Presbyterian Church through its two great branches should support two four-year colleges, both of which are coeducational and have only a small number of collegiate students. It would be the part of wisdom for these denominations to consider the subject of collegiate education in Arkansas with a view to such reorganization of the institutions they support in the State as to eliminate unnecessary and expensive duplication, which results in inferior collegiate instruction.

In effecting this reorganization it would be quite fitting to consider the feasibility of reducing several of the present four-year colleges to junior colleges, with the curricula so organized as to enable the graduates of the junior colleges to go into the junior classes of the standard four-year colleges. This would perhaps enable the denominations to economize at the junior colleges and enable them each to support more effectively a single four-year college within the State, or at the most two.

The matter of financial economy is not, however, the most important consideration leading to this conclusion. In fact, it would be wholly unwise for any of the present four-year colleges, should they wisely accept the opportunity to do junior college work only, to receive less income than they now receive. The convincing argument in this matter is the extremely small proportion of students who complete four years of college work. During the past 12 years the registration at the Arkansas colleges has varied from 1,537 to 1,867, but the number of first degrees granted has never been greater than 142. In other words, not more than one college student out of about every four or five in Arkansas finishes his course of study for a degree.

Many explanations have been offered for the low percentage of college students in the State who graduate. All of the reasons assigned doubtless have some influence, but both experience and reason demonstrate the fact that students will leave an institution when they begin to feel they have received about all the faculty and the institution are able to give them. Having been at an institution during preparatory years and for a part of college, they yearn for better educational facilities or, as is more likely, feeling that they have about exhausted the possibilities at college, they grow impatient to enter active life outside. Many of these young people could be saved for additional years in college if they thoroughly realized the opportunities afforded at the superior higher institutions. A high-grade college will hold most of its students through graduation; an inferior institution can not expect to do so. From this it follows that a college should attempt to do only so much of college work as it can do well. It should then send its students on to other colleges or universities with better buildings, more equipment, and more highly trained faculties. Such a conclusion not only appeals to judgment and common sense, but it will result in holding a greater proportion of college students through to graduation.

It seems fair to assume, therefore, that in Arkansas, as elsewhere, students leave college before graduation to a considerable extent because most of the colleges can not afford, and in fact do not really attempt, to give much work of advanced character in the junior and senior years. Therefore, either the higher institutions in Arkansas should effectively separate their preparatory schools from the organization, faculty, students, and buildings of the colleges themselves, or they should cease to give junior and senior work and attempt to build up an effective coordinated course of study through the four years of high school and the first two years of college. These are the two alternatives. All our educational experience demonstrates that a good four-year college can not be conducted in close conjunction with a preparatory school as large or larger than the college itself, or by college officials who fear for the existence of the institution if they let go of the preparatory work.

Another condition argues in favor of junior colleges. It is generally agreed that the work of the first two years in college is very closely related to the work of the high schools. The large colleges and universities which in recent years have been forced to reduce materially the number of prescribed units for college entrance are now beginning to appreciate the lack of correlation between their work and the secondary schools. The freshman class at a large higher institution is a queer conglomeration of students with an everwidening variety of preparation, and it unfortunately requires many months to assimilate and digest it. The junior college happily is saved much of this embarrassment. Taking its students largely from its own preparatory school, it knows as definitely what work they have had as the high schools know the preparation of the boys and girls who have been through the grades. In a junior college the education of young people through the secondary school and the first two years of college is a continuous process, with a minimum of lost motion and readjustment. The break in the students' curriculum comes at the end of the sophomore year in college, where to say the least it is as natural as at the end of the so-called secondary school. If a junior college is equipped properly and staffed with well trained teachers, it has therefore some right to insist that the quality of work it can do during the first two years of college be as superior to that done in a large institution as the work of the junior and senior years in the large institution is superior to that done in a small college with inadequate facilities for advanced work. The work therefore of the junior college is not only necessary; it is dignified and it offers possibilities of unique service to some of the colleges in Arkansas which are now attempting, with a small measure of success, four years of collegiate work. The possibilities of junior colleges as a solution of the difficulties facing the higher institutions in Arkansas should receive the deep consideration of the officials at several of the institutions and of those interested in the educational welfare of the State.

THE PREPARATION OF TEACHERS.

Inasmuch as one of the chief motives which led the Arkansas State Board of Education to request a study of the Arkansas colleges was to obtain a reliable classification of these colleges for purposes of certifying teachers, it seems fitting to point out some salient factors relating to this matter. In the regulations issued by the State board of education in June, 1920, it is stated that after September, 1923, all teachers employed in class A high schools "shall have four years of training beyond the high school in a standard college or normal school." "After September 1, 1925, no person shall be allowed to teach in the high schools of Arkansas who has not the equivalent of a bachelor's degree from a standard four-year college." In another place it is stated that "All high-school teachers must possess certificates which will entitle them to teach the subjects assigned." It may be assumed therefore that the State board of education intends to replace the present chaotic method of granting teachers' certificates to high-school teachers with a genuine system requiring adequate subject

matter preparation. It is to be hoped that this will be effected by requiring subject matter preparation more specific than mere graduation from a standard college. The high schools of the country are full of college graduates who specialized to a certain extent in one or more fields of study and were subsequently called upon to teach in another field. College graduation is no adequate guaranty of ability to teach any or all subjects in secondary schools. Unfortunately, however, this is in effect the usual practice in a large proportion of the secondary schools. The requirement of graduation from college or normal school or its equivalent should therefore be supplemented by a minimum program of subject matter preparation required of each teacher in the several fields of high-school work. As a result of such a requirement, the colleges will naturally plan more carefully the program of subject matter courses which they outline for prospective teachers in the high schools.

In the new rules governing the granting of teachers' certificates to high-school teachers it is also stated that "After September, 1923, no person shall be allowed to teach in the high schools of Arkansas who has not had at least two years' normal training work above the four-year high-school course or its equivalent." The meaning of this statement is indefinite, but it may be assumed that in a short time professional preparation in methods of teaching and the training of teachers will be a prerequisite to obtaining certificates to teach in the Arkansas high schools. Reasonable professional preparation of high-school teachers in Arkansas is urgently needed, and when effected will be in line with similar action taken long ago by a number of States in the Union.

As yet the higher institutions in Arkansas, with the exception of the State university and the normal school, have given relatively little attention to courses in education. To be sure, in most instances, some work along this line has been provided, but it has been for the most part subsidiary to other interests such as psychology, philosophy, and religious education. These interests and many others deserve the heartiest encouragement possible. In fact, it should not be forgotten that colleges of liberal arts and science exist primarily for the purpose of instilling that culture and those qualities of good citizenship which will enable young men and women to enjoy the best in life and become leaders among their associates. Professional preparation should, therefore, for the most part follow the broad foundation laid during the four years' course in college.

On the other hand, we must always keep the present situation in sight. "It is a condition, not a theory, that confronts us." Therefore, it is well to point out what number and proportion of the graduates of the Arkansas higher institutions have become teachers. According to figures furnished by 11 of the colleges, it appears that, of the 1,120 graduates of these institutions during the last five years, 432, or 32.1 per cent, are now in the teaching profession. Excluding the State university and the State normal school, it appears that, of the 809 graduating during the past five years, 280, or 25.7 per cent, are now teaching—many more than have entered any other occupation. Some of the Arkansas colleges have outlined work preparatory to the profession of medicine. Many of them consciously aim their curricula in part toward the preparation of young men to enter the ministry. Teaching is a profession which ought to be dignified not only by generous increases in salary, but by a higher degree of professional preparation. The colleges of Arkansas may therefore well consider not only the outlining of better programs or subject-matter preparation for the several fields of high-school teaching, but also the establishment of an adequate and reasonable number of courses in teacher training.

Table 7 shows for the last five years the proportion of graduates from the several higher institutions in Arkansas who are now engaged in the teaching profession.

TABLE 7.—Proportion of graduates engaged in teaching.

| Institutions. | Teachers. ¹ | | Graduates in other occupations. | Engaged in additional study. | Occupation not given. | Total number. |
|---|------------------------|-----------|---------------------------------|------------------------------|-----------------------|---------------|
| | Number. | Per cent. | | | | |
| Arkansas College..... | 8 | 53.3 | 6 | 1 | | 15 |
| Arkansas State Normal School..... | 83 | 80.6 | 15 | 4 | 1 | 104 |
| Central College..... | 44 | 49.4 | 45 | | | 89 |
| College of the Ozarks..... | 7 | 19.4 | 12 | 4 | 13 | 36 |
| Crescent College ² | 8 | 33.3 | 8 | 7 | 1 | 24 |
| Galloway College..... | 21 | 38.3 | 34 | 3 | | 60 |
| Henderson-Brown College..... | 31 | 41.1 | 30 | 11 | 1 | 73 |
| Hendrix College..... | 94 | 32.1 | 158 | 21 | 20 | 293 |
| Mountain Home College..... | 10 | 37.0 | 12 | 5 | | 27 |
| Orchita College..... | 55 | 28.5 | 92 | 23 | 21 | 193 |
| University of Arkansas ³ | 69 | 37.7 | 40 | 13 | 61 | 207 |

¹ Excluding teachers of music and expression.

² Four years only.

³ Includes only graduates of the college of arts and science and education.

OTHER OBSERVATIONS.

Second only in importance to the teaching personnel in a college are adequate buildings and equipment. Practically every higher institution in Arkansas is exerting itself to the limit to raise funds for new buildings. Such efforts deserve the heartiest commendation only if they are to house better equipment for college work. In this connection it may be remarked that the higher institutions in Arkansas almost without exception are inadequately equipped. Several have considerable equipment in chemistry; a few possess sufficient apparatus in physics for the work they attempt; only the university is prepared to do effective work in botany, zoology, and geology.

Aside from scientific equipment, the thing most lacking in Arkansas colleges is library facilities. Not a single higher institution in Arkansas has a separate library building. One possesses no library at all. In all the others the library is housed in the main college buildings, usually in a single room. The number of books, except at the university, is extremely small, and often they are uncatalogued and poorly selected. Old magazines are seldom bound and are therefore not available for the use of students or faculty. Good college work is practically impossible unless adequate library facilities are at hand.

The colleges of the State need to adopt a uniform attitude on a number of important problems relating particularly to the admission of students. It would be desirable for all the colleges to adopt at once a rule making 15 units the standard of entrance, with not more than two entrance conditions permitted. The amount of credit which may be given for certain high-school work, for example algebra, should be agreed on. A common policy of scaling off units from 8 months' high schools ought to be adopted. The practice followed in some institutions of giving college credit for high-school units in excess of entrance requirements should be stopped immediately. The amount and quality of college work which students may do in the summer should be carefully guarded. These and many other matters which sometimes tend to create dissatisfaction can easily be eliminated by common agreement among college executives. A permanent association of the college presidents of the State should be formed for the solution of these and other problems.

OBSERVATIONS ON STANDARDS.

The standards adopted by the college presidents of the State for the purposes of this inspection are obviously based on those now used by the commission on higher institutions of the Association of Colleges and Secondary Schools of the Southern States. It is perhaps not amiss to point out that in several particulars they have been considerably modified for the purposes of this inspection. According to the Arkansas standards, seven departments of instruction in liberal arts and science are allowed for the current year. There is no definite recommendation concerning the salary of full professors, as in the standards of the southern association. Also the requirement concerning the number of hours of teaching is modified somewhat. The number of volumes prescribed for the library is reduced from 10,000 to 5,000. The provision regarding laboratory equipment is of somewhat different character. In the requirement stating that, if a college maintains a preparatory school under its college charter, "it must be kept rigidly distinct and separate from the college in students, faculty, and buildings," the last two words, "and buildings," have been omitted. The standard on su. freshman work has been added, while that of the southern association on professional and technical departments has been omitted.

TABLE 8.—Comparative statement of conditions in Arkansas higher institutions.

| Name of institution. | Units required to enter A. B. course. | Present entrance requirements become effective. | Entrance conditions permitted. | Units from 8 months' high schools in Arkansas accepted? | Semester hours required for A. B. degree. | Degrees conferred. | Departments with at least one full-time professor. | Departments with less than one full-time professor. | Heads of departments with master's or other higher degree. | Heads of departments with bachelor's degree. | Heads of departments with no degree. | Average salary of members of faculty. | Average classroom hours per instructor. | Additional work in preparatory school. |
|--|---------------------------------------|---|--------------------------------|---|---|--|---|--|--|--|--------------------------------------|---------------------------------------|---|--|
| Arkansas College..... | 15 | 1920 | 2 | Yes. | 132 | A. B., B. M., D. D..... | English, Bible and political science, French and psychology, history and Spanish. | Mathematics, Latin and German, science, education. | 5 | 2 | 0 | Fair..... | 97 | 2 |
| Arkansas State Normal School..... | 15 | 1914 | 2 | Yes. | 126 | A. B..... | Science, mathematics, education, history, English. | Religious education, Latin, education, history and science, history. | 3 | 5 | 1 | Good..... | 9 | 9½ |
| Central College..... | 15 | 1919 | 2 | Yes. | 120 | A. B., B. S., Ph. B., B. M., B. O..... | English, mathematics, modern languages. | Latin, mathematics, history, modern languages, science, psychology, English, household arts. | 1 | 5 | 1 | Poor..... | 131 | ..... |
| College of the Ozarks..... | 15 | 1919 | 2 | Yes. | 132 | A. B., D. D..... | Psychology and philosophy. | History, psychology, English, household arts. | 2 | 5 | ..... | do..... | 13 | 97 |
| Crescent College (junior college)..... | 15 | 1917 | 1 | Yes. | None..... | None..... | Modern languages..... | History, psychology, English, household arts. | 1 | 3 | 1 | Poor..... | 91 | 6½ |
| Galloway College..... | 15 | 1920 | 3 | Yes. | 120 | A. B..... | Latin, Bible and psychology, mathematics, English, science. | History, French..... | 3 | 5 | ..... | Fair..... | 16 | ..... |

1. Departments of liberal arts and science in which there is not less than one professor devoting his whole time to the department.
 2. Departments of liberal arts and science in which there is less than one professor devoting his entire time to the department.

TABLE 8.—Comparative statement of conditions in Arkansas higher institutions—Continued.

| Name of institution. | Units required to enter A. B. course. | Present entrance requirements become effective. | Entrance conditions permitted. | Units from 8 months' high schools in Arkansas accepted. | Semester hours required for A. B. | Degrees conferred. | Departments with at least one full-time professor. | Departments with less than one full-time professor. | Heads of departments with master's or other higher degree. | Heads of departments with bachelor's degree. | Heads of departments with no degree. | Average salary of members of faculty. | Average classroom hours per instructor. | Additional work in preparatory school. |
|---|---------------------------------------|---|--------------------------------|---|-----------------------------------|--|--|---|--|--|--------------------------------------|---------------------------------------|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | Departments with at least one full-time professor. | Departments with less than one full-time professor. | 10 | 11 | 12 | 13 | 14 | 15 |
| Henderson-Brown College. | 14 | 1917 | 2 | Yes. | 130 | A. B., B. S., B. M., B. O., D. D. | Philosophy and education, Latin, mathematics, science, English, modern languages, religious education. | History and economics. | 4 | 4 | ..... | Poor..... | 19 | ..... |
| Hendrix College..... | 15 | 1912 | 2 | Yes. | 130 | A. B., B. S., D. D., L.L. D. | English, history and economics, modern languages, mathematics, science, religious education. | Ancient languages..... | 5 | 3 | ..... | Good..... | 14½ | 2½ |
| Little Rock College..... | 15½ | 1910 | 1½ | Yes. | 131 | A. B., B. S., Litt. B., M. A. | English, science, romance languages, ancient languages, history, mathematics, philosophy, and political science. | Biology, religion..... | 7 | ..... | 1 | Fair..... | 12½ | 1 |
| Mountain Home Baptist College (Junior college)..... | 14 | 1916 | 2 | Yes. | ..... | B. M., B. O..... | Mathematics, science, English, history, Bible. | Mathematics, science, English, history, Bible. | 1 | ..... | 1 | Very poor | 9 | 16½ |
| Onachita College..... | 14 | 1909 | 2 | Yes. | 128 | A. B., B. S., B. O., B. M., B. M. in Theol., A. M., D. D., L.L. D. | English and education, history and economics, Bible and philosophy, modern languages, science. | Mathematics, ancient languages. | 3 | 3 | 1 | Fair..... | 13½ | 2½ |

| College | 1918 | 1919 | Yes | No | 1920 | 1921 | 1922 |
|------------------------|------|------|-----|-----|------|------|------|
| Subisco College | | | 0 | | | | |
| University of Arkansas | 15 | 1919 | 2 | Yes | 134 | | |

Ancient languages in physics, French and geometry, philology and Spanish, history, mathematics.

Source: Ancient languages, botany, chemistry, economics and sociology, English, geology, German, history and political science, mathematics and astronomy, physics, romance languages, pedagogy, education, psychology.

A. B., M. A., M. S., A. M., Ph.D., in various fields including Education, History, and Science.

* Includes only the college of liberal arts and education.



TABLE 8.—Comparative statement of conditions in Arkansas higher institutions—Continued.

| Name of institution. | Average number of students in classes. | Productive endowment. | Annual income, exclusive of tuition fees. | Volumes in library. | Annual appropriation for libraries. | Value of laboratory equipment. | Preparatory school part of college organization? | Faculty of college separate? | Students in the college and preparatory school separate? | Regular college students. | Special students. | Preparatory students. | Material equipment. | Value of buildings and grounds. | Curriculum and spirit of administration. | Standing accorded graduate schools. |
|------------------------------------|--|-----------------------|---|---------------------|-------------------------------------|--------------------------------|--|------------------------------|--|---------------------------|-------------------|-----------------------|---------------------|---------------------------------|--|-------------------------------------|
| Arkansas College School. | 7-27 | \$151,000 | \$9,278 | 5,285 | \$200 | \$1,125 | Yes | Not entirely. | Not entirely. | 69 | 40 | 53 | Poor. | \$135,750 | Fair. | Not accorded. |
| Arkansas State Normal School. | 10-26 | | 62,000 | 5,400 | 1,000 | 7,500 | Yes | do. | do. | 175 | 0 | 731 | Good. | 313,200 | Good. | Not determined. |
| Central College. | | 2,000 | | 3,000 | 400 | 1,850 | Yes | Partially. | Nearly complete. | 103 | 59 | 71 | Fair. | 116,000 | Fair. | Not accorded. |
| College of the Ozarks. | 17 | 28,000 | 10,000 | 100 | 0 | 750 | Yes | do. | Not entirely. | 31 | 48 | 83 | Poor. | 90,150 | do. | In some instances. |
| Crescent College (junior college). | 11 | 0 | 5,000 | 1,000 | 200 | 1,700 | Yes | do. | do. | 32 | 30 | 19 | Good. | 100,000 | Good. | Not accorded. |
| Galloway College. | 10-25 | 65,000 | 6,000 | 3,000 | 500 | 2,250 | Yes | Yes. | Nearly complete. | 115 | 27 | 113 | Good. | 375,000 | Fair. | Accorded junior college standing. |
| Henderson-Brown College. | 14-29 | 500 | 3,300 | 2,200 | 500 | 6,000 | Yes | do. | do. | 171 | 43 | 104 | Fairly good. | 254,000 | Fairly good. | In some instances. |
| Hendrix College. | 7-28 | 416,000 | 5,000 | 10,000 | 1,000 | 6,200 | Yes | Partially. | do. | 213 | 4 | 152 | Fair. | 308,200 | Good. | Yes. |
| Little Rock College. | 5-21 | 0 | 13,952 | 4,750 | 500 | 10,500 | Yes | do. | Yes. | 84 | 0 | 108 | Excellent. | 700,000 | do. | In some instances. |
| Mountain Home Baptist College. | 7-12 | | 3,700 | 1,200 | 250 | 958 | Yes | No. | Not entirely. | 9 | 1 | 108 | Poor. | 83,000 | Unsatisfactory. | Not accorded. |
| Ousechita College. | 10-30 | 104,000 | | 5,000 | 700 | 3,500 | Yes | Partially. | Nearly complete. | 292 | 52 | 42 | Fairly good. | 220,000 | Fairly good. | In some instances. |
| Shiloh College. | 3 | 6,000 | 10,000 | 15,000 | 800 | 1,200 | Yes | No. | Yes. | 3 | 0 | 131 | Excellent. | 2,002,000 | Good. | In some instances. |
| University of Arkansas. | 12-25 | 132,096 | 377,817 | 20,071 | 25,000 | 22,727 | Yes | Yes. | Nearly complete. | 659 | 217 | 0 | Fair. | 3,500,000 | do. | Yes. |

* Also exclusive of room rent and board.
 * Exclusive of room rent, board, and per diem.
 * Including summer school students.
 † In this institution the separation of college and preparatory student is complete, except that college students with entrance conditions may remove them by taking work in the preparatory department.

APPENDIX.

STANDARDS FOR HIGHER INSTITUTIONS IN ARKANSAS ADOPTED BY THE COLLEGE PRESIDENTS OF THE STATE, MAY 5, 1920.

I. SENIOR COLLEGES.

1. *Entrance requirements.* Entrance requirements should be not less than 15 standard high-school units as defined in the by-laws of the Southern Association of Colleges.
2. *Requirements for graduation.*—The completion of college work amounting to not less than fifteen 60-minute class periods per week through 4 years of 36 weeks each.
3. *Number of degrees.*—The conferring of a multiplicity of degrees should be discouraged. Small institutions should confine themselves to one or two. When more than one baccalaureate degree is offered, all should be equal in requirements for admission and for graduation. Institutions of limited resources should confine themselves to undergraduate work.
4. *Number of college departments.*—The college should maintain at least eight separate departments in liberal arts and sciences, with not less than one professor devoting his whole time to each department. This shall be effective after 1920-21. Seven may be allowed till that time.
5. *Training of the faculty.*—A properly qualified faculty should consist entirely of graduates of standard colleges, and each head of a department should hold at least a master's degree from a university having a fully organized graduate school. Graduate study and training in research equivalent to that required for the Ph. D. degree are urgently recommended.
6. *Salaries.*—The average salary paid to members of the faculty is an important consideration in determining the standing of an institution.
7. *Classroom hours per teacher.*—Not more than 18 hours per week should be required of any teacher, 15 being recommended as the maximum.
8. *Students in classes.*—The number of students in a recitation or laboratory section should be limited to 30. A smaller number is desirable.
9. *Support.*—In addition to income from tuition fees, room rent, boarding halls, etc., the college should have a productive endowment of not less than \$200,000, or its equivalent in assured annual income.
10. *Library.*—The library should contain, exclusive of public documents and periodicals, at least 5,000 volumes bearing specifically upon the subjects taught, and should have an appropriation of not less than \$500 a year for permanent additions. The library should contain 7,000 volumes two years from the present time.
11. *Laboratories.*—The laboratory equipment should be sufficient for all the experiments called for by the courses offered in the sciences; sufficiency to be measured by the value of apparatus and equipment.
12. *Separation of college and academy.*—The college may not maintain a preparatory school as part of its college organization. In case such a school is maintained under the college charter, it must be kept rigidly distinct and separate from the college in students and faculty.
13. *No subfreshman work.*—The college may not maintain or provide for any classes except those for which college credit can be given in a degree schedule.

14. *Proportion of regular college students to whole student body.*—At least 75 per cent of the students in a college should be pursuing courses leading to baccalaureate degrees in arts and sciences. The classification of students must be printed in the catalogue.

15. *Material equipment.*—The location and construction of the buildings, the lighting, heating, and ventilation of the rooms, the nature of the laboratories, corridors, closets, water supply, school furniture, apparatus, and methods of cleaning shall be such as to insure hygienic conditions for both students and teachers.

16. *Curriculum and spirit of administration.*—The character of the curriculum, the efficiency of instruction, the scientific spirit, the standard for regular degrees, the conservatism in granting honorary degrees, and the tone of the institution shall also be factors in determining its standing.

17. *Standing in the educational world.*—The institution must be able to prepare its students to enter recognized schools as candidates for advanced degrees.

II. JUNIOR COLLEGES.

Junior colleges shall be those exacting standard entrance requirements and giving two years of standard college work.