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THE
UNIVERSITY
OF
KANSAS.

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THE UNIVERSITY OF KANSAS.

Comments and Statistics Bearing on Needed
Appropriations.

1903.

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The Standing of the University of Kansas as to Income.

The state universities of the country may be best classified, probably, according to their incomes. They fall into four classes. The first class includes the great universities like Michigan, Minnesota, Wisconsin and Illinois, with incomes running from \$500,000 to \$800,000. Kansas was once in this class. In 1888 the income of the University of Kansas was more than that of the University of Minnesota. Kansas long ago fell out of the first class. In 1902 the income of the University of Minnesota was four times that of the University of Kansas.

The University of Kansas remained for some time in the second class with Missouri, Ohio, Nebraska, Iowa, Texas and Georgia, but has now fallen out of the second class into the third, with Virginia, Washington, Colorado, Maine, Vermont, Utah and Tennessee.

The action of the present legislature will determine whether Kansas must remain finally and decisively in the third class. In fact, the indications are that at the present rate, Kansas will soon fall from the third into the fourth class with Arkansas, New Mexico, Arizona, Wyoming, Oregon and North Carolina.

The incomes of the first class are probably beyond the reach of Kansas.

The incomes of the state universities of the second class are as follows for the year ending June 30, 1902. It should be borne in mind that these are for the biennium now passed, and that the incomes of these same universities for the next biennium will be much greater:

Missouri..\$422,000 a year, includes buildings.
 Ohio..... 420,000 a year, does not include buildings.
 Nebraska. 307,000 a year, does not include buildings.
 Iowa..... 287,000 a year, includes (50,000) buildings.
 Texas 275,000 a year, includes (50,000) buildings.
 Georgia.. 221,000 a year, does not include buildings
 Average \$322,000 a year. [we believe.

The third class, in which Kansas now is, is made up of the following, each of which falls far below the lowest in the preceding class:

Virginia...\$154,000, does not include buildings we believe
 Washington 210,000 per year, \$60,000 for buildings.
 Kansas 187,000 per year, \$45,000 for buildings.
 Colorado.. 130,000, does not include buildings we believe
 Maine..... 105,000, does not include buildings we believe
 Vermont.. 97,000, does not include buildings we believe
 Utah..... 95,000, does not include buildings we believe
 Tennessee 86,000, does not include buildings we believe
 Average \$107,000

North Dakota should be in this list: Total without buildings, \$88,000; next year total \$100,000, and \$150,000 for buildings or grand total of \$175,000 a year.

It will be noticed that Kansas is but third in this list, and there is every indication that at the present rate Kansas will, by the end of the next biennium, be nearly at the bottom of the third class, if not entirely in the fourth.

The wealth and position of Kansas make it entirely out of the question that the University of Kansas should remain in the third class. The assessed valuation of Kansas is \$363,000,000, and according to investigation of the Department of Economics in the University, the real valuation is about \$2,000,000,000. The value of live stock and farm produce last year (1902) was

\$371,000,000.

The University of Kansas needs and must have for current expenses, in order to put it at the bottom of the list of universities of the second class, about two-thirds of a mill on the assessed valuation, or two-fifteenths of a mill on the real valuation.

The great mass of persons in Kansas are assessed on \$1,000 or less. Indeed, the average according to population is but \$242.

What the University needs would only add twenty-five cents a year to the taxes of a man assessed on \$1,000 or a total tax on him for the University of less than seventy cents per year. Kansas could well afford to give to its University one mill on the assessed valuation of the state or one-fifth of one mill on the real valuation.

It should be borne in mind in this connection that the policy of separating the state institutions increased the cost of maintaining each of them at substantially the same point of efficiency as the institutions of other states. It is suicidal, however, for a state on that account to insist on maintaining inadequately supported and inefficient educational institutions. A state will never rise above the plane of its higher educational institutions, and no state can afford to sacrifice its best young men and women because of an educational policy which proves expensive. The state has entered deliberately upon this policy and the only thing to be done is to pay the cost. Nevertheless we are willing, or at least for the present, to be considered on the same basis as in other states where the universities have the Agricultural college, that is, we are willing to be classed with the Agricultural College as to income. It will be noticed therefore, that when the University of Kansas and the

State Agricultural College are both together asking for maintenance considerably less than one mill on the assessed valuation of the state, that Nebraska gives its University and Agricultural College one mill on the assessed valuation of the state.

It should be noted also that California is another good example of what a state with great profit can and ought to do for its University. Its population is almost exactly the same in number as that of Kansas. The real valuation of its wealth is almost the same as that of Kansas. Its assessed valuation is much more than that of Kansas, but our assessed valuation is 20 per cent. (or less) of the real, while the assessed valuation in California is 60 per cent. of the real. California has a two mill tax for the University and Agricultural College, (which are together), and appropriates directly \$100,000 a year besides. It gives in all \$345,000 by taxation, and the total income of the University is \$600,000.

The University of California is in the first class of state universities, where the University of Kansas ought to be and might be.

This university has got on for some years with inadequate appropriations. It can do so no longer without finally forfeiting its own position and that of Kansas. We have in on year lost three of the men of greatest power the University has ever had. We shall certainly lose more unless something is done. We are falling sadly behind in laboratory equipment and library facilities. Necessary repairs have been put off until they can be put off no longer. Everything must be done at once. The work of the University must be broadened to provide courses that will bring it into touch with the life of the state. The need is absolute for more teach-

ers—we must have them.

The inadequacy of former appropriations by contrast makes the amount we absolutely need seem large when it is in reality small in comparison with the work that the state requires of the University. No other state university in the country, it is believed, will undertake to get along during the next biennium on the amount we ask for maintenance.

An itemized list of the pressing needs of the University covering every item of expenditure for the next biennium, shows for ordinary current expenses \$205,443 per year; and special appropriations for repairs, sewer system, etc., \$23,830. This list has been gone over many times and cut as low as it can be cut, and we are not asking for more than the actual pressing needs of the University require with the expectation that the committee will cut it down and we will get about our real needs.

We wish to call your attention to an astounding fact—that eight hundred students go out of Kansas every year for work represented at the University and take with them more than \$500,000 a year which is spent outside the state. We need these people at home.

THE TOTAL.

The total amount asked for general university expenses is about two-thirds of one mill on the assessed valuation of the state, and less than two-thirds of one mill on the value of the products of one year, 1902.

THIS WOULD MEAN about seventy cents a year for each person assessed on \$1,000; or an increase of twenty-five cents a year over the last biennium.

TO PAY THIS each person in Kansas raised on the average products to the value of \$247 last year, and \$233 in 1901, or \$480 for the biennium.

Per Capita Cost on Basis of Appropriations Asked for.

Per capita 1903-4,

On current expenses, total \$212,643, 1450 students.....\$147

Per capita 1904-05.

On current expenses, total \$212,443, 1600 students..... 133

Per capita cost to state, 1903-4.

On current expenses, total \$205,443, 1450 students... 141

Per capita cost to state, 1904-05.

On current expenses \$205,443, 1600 students..... 128

Total per capita cost 1903-04.

Current expenses and special appropriation for repairs,
extensions, etc., \$236,473, 1450 students..... 163

Total per capita cost 1904-05.

Current expenses and special appropriations, repairs,
extensions, etc., \$236,473, 1600 students..... 148

Total per capita cost to state 1903-04.

Current expenses and special appropriations, \$229,273,
1450 students..... 158

Total per capita cost to state 1904-05.

Current expenses and special appropriations, \$229,273,
1600 students..... 143

What is Expected by Other Universities for Next Biennium.

State	No. Build- ings	Total In- come ex- pected for 1903-4	Am't ex- pected for buildings in 1903-5...
Kansas.....	10	\$235,000	\$175,000 (2)
Missouri.....	25	500,000	400,000
Illinois.....	22	950,000	375,000
Michigan.....	22	704,000	
Ohio.....	14	367,875	and buildings.
North Dakota..	8	100,000	150,000
Colorado.....	13	170,000	100,000
Nebraska ...	10	380,000	170,000 (3)

Assessed and Real Valuation of States.

State.	Assessed Valuation.	Real Valuation.
Kansas.....	\$363,000,000	\$ 2,000,000,000
Colorado.....	350,000,000	875,000,000
North Dakota.....	133,000,000	
Iowa.....	572,840,000	2,290,000,000
Missouri.....	1,235,000,000	3,705,000,000
Nebraska.....	180,000,000	
Wisconsin.....	1,370,000,000	1,500,000,000

KANSAS.

Year end'g	Population.	Attendance	EXPENSE.		Attendance per1000(pop)	Cost per Student		Per Capita Cost to State
			State.	Total.		to State.	Total.	
1888	1,211,596	483	57,580 00	68,620 87		119 21	142 27	
1889		505	46,630 00	55,876 53		92 34	110 65	
1890	1,427,096	508	70,925 00	79,825 89	3 56	139 61	157 14	4.970
1891		474	75,000 00	83,446 93		158 23	176 04	
1892	.....	630	75,000 00	75,000 00		110 05	119 05	
1893		729	75,000 00	92,098 23		102 88	126 34	
1894		691	86,500 00	95,381 95		125 18	138 03	
1895	1,334,668	875	85,285 00	93,614 23	6 55	97 30	116 99	6.389
1896		895	96,317 23	102,965 65		107 63	115 05	
1897		1004	96,916 11	98,230 04		91 55	97 83	
1898		1062	101,344 06	109,156 27		95 43	102 78	
1899		1087	89,578 00	96,876 00		82 41	89 12	
1900	1,470,495	1150	120,000 00	127,000 00	7 82	104 35	110 44	8.160
1901		1154	120,000 00	127,790 52		104 53	111 70	
1902		1233	135,000 00	140,606 30		109 50	114 03	

The income of the University of Kansas has almost exactly doubled in fourteen years. In the case of Minnesota it has increased six times. The population of Minnesota in 1900 was 1,750,000.

Ratio of Teachers to Students in Universities.

California.....	1-12	Chicago.....	1-12
Columbia.....	1-11	Cornell.....	1-8
Harvard.....	1-10	Johns Hopkins.....	1-5
Leland Stanford.....	1-10	Michigan.....	1-15
Illinois.....	?	Minnesota.....	1-13
Missouri.....	1-15	Nebraska.....	1-13
Northwestern.....	1-10	Pennsylvania.....	1-9
Princeton.....	1-13	Syracuse.....	1-12
Wisconsin.....	1-15	Yale.....	1-9
KANSAS.....	1-17	1901-02.	

(Taken from SCIENCE, December 26, 1902.)

Kansas will have about 1-18, year 1902-03.

Kansas will have about 1-16, year 1903-04 if the present budget on which our requests are based is followed.

Kansas Students Who Go Outside the State for their College or University Training.

Yale.....	21	Brown.....	1
Harvard.....	17	Boston University.....	1
Vassar.....	1	Swarthmore.....	1
Indiana.....	1	Cincinnati.....	2
Princeton.....	6	Ohio State.....	2
Wellesley.....	3	Teachers' College.....	3
Missouri.....	15	Vanderbilt.....	1
Michigan.....	26	Minnesota.....	4
Cornell.....	6	Lehigh.....	1
Wisconsin.....	5	Washington University.....	5
Chicago.....	114	New York University.....	3
Oberlin.....	16	Oklahoma.....	5
Leland Stanford.....	6		
Pennsylvania.....	6		360
Denver University.....	5	Other Universities.....	90
California.....	3		450
Illinois.....	4		
Colorado.....	4	Medical Colleges not includ-	
Northwestern.....	48	ed in above list.....	350
William Jewell.....	8		
Ohio Wesleyan.....	4		
Nebraska.....	13	Total.....	800

This does not include a large number of institutions like Columbia, Dartmouth, Amherst and many others, nor does it include law schools and ladies seminaries offering work which is represented in the University. This calculation also does not include the medical schools except in a few instances.

The total number—excluding nearly all medical schools—is at least 450 and probably 500, and the average cost to each person is \$750 a year at a low estimate, or a total of \$337,500 which is taken entirely out of the state and lost.

Investigations made for two years by the University show beyond any doubt that at least 400 students go out

from Kansas yearly to medical schools. Deducting from this number about 50 which are already included in the list given above, there are 350 whose expenses average at least \$500 a year. The total amount for these, which is taken entirely out of the state, is \$175,000. This, with the \$337,500 noted before, makes a grand total of \$512,500 which is taken out of the state each year by 800 students, or more than twice as much as is asked by the State University for maintenance.

If we should add those who go out of the state for normal training and to agricultural colleges, the total would be more than twice as much as the whole sum asked for by the three state institutions of Kansas.

Number of Fellowships and Scholarships in Universities etc.

UNIVERSITY	FELLOWSHIPS	SCHOLARSHIPS
Missouri	20 at \$50 to \$200	
Minnesota	28	
Illinois	8 at \$300 each	Many; No. unknown
Nebraska	14 at \$400 each	15 at \$200 each
Michigan	10 to 15 up to \$500 each	10 to 15 up to \$500 ea.
Wisconsin	19 at \$400; 1 at \$300	{ 8 at \$200 besides } Eng. and Phar.
Iowa	21 of both	
Yale	96 of both at \$200 to \$600	
Harvard	190 of both at \$200 to \$750	
Kansas	4 at \$200 each	3 at \$60 to \$200

Summer Session, 1901-02.

UNIVERSITY	ATTENDANCE	UNIVERSITY	ATTENDANCE
California	830	Missouri.....	468
Chicago.....	2350	Nebraska.....	256
Columbia.....	643	Syracuse.....	39
Cornell.....	548	Wisconsin.....	338
Harvard.....	945	Colorado.....	?
Indiana.....	569	Iowa.....	135
Leland Stanford.....	48	Texas.....	191
Michigan.....	454	Illinois.....	204
Minnesota.....	320		

(Taken from SCIENCE, December, 1902.)

University of Kansas Not a Local Institution.

The University of Kansas is not a Lawrence or a Douglas county institution. Of the total enrollment in the year 1901-02, 80 per cent came from outside of Douglas county and 81 per cent from outside of Lawrence. Of the 20 per cent from Douglas county, about 4 per cent were temporary residents for university purposes.

A comparison with investigations on this subject made recently show that no institution of its kind is more truly a state and not a local institution than the University of Kansas.

At the University of Nebraska about 23 per cent come from Lincoln and immediate vicinity corresponding to Lawrence, and 32 per cent from Lancaster county corresponding to Douglas county. In Yale College and Graduate School about 20 per cent come from New Haven and 40 per cent from a district corresponding to Douglas county. In the University of Pennsylvania over 60 per cent from Philadelphia. In the University of California 37 per cent come from Alameda county and 56 per cent come from San Francisco, Alameda, Oakland and Berkely. An examination of the enrollment of other state universities shows substantially the same state of affairs as in the case of Yale, Nebraska, Pennsylvania and California.

Students Self Supporting.

Registration January 19, 1903.....	1184
Students tabulated, as below,.....	1007
Self-supporting students.....	373
Partially self-supporting students.....	97
Self-supporting.....	37 per cent
Partially self-supporting.....	9 $\frac{2}{3}$ per cent
Total.....	46 $\frac{2}{3}$ per cent
Occupations of parents :	
Farmers.....	367
Merchants.....	173

Mechanics.....	60
Lawyers.....	57
Clerks and Business Managers.....	56
Real Estate and Loan Agents.....	48
Doctors.....	44
Bankers and Brokers.....	32
Commercial Travelers.....	32
Contractors and carpenters.....	29
Teachers.....	27
Ministers.....	21
Political Office-holders.....	15
Manufacturers.....	14
Newspaper Men.....	9
Capitalists.....	5
Hotel-keepers.....	5
Photographers.....	4
Undertakers.....	4
Liverymen.....	3
Army Officers.....	2
Not tabulated.....	177
Total.....	1184

Comments on the Budget for Biennium 1903-4, 1904-5.

Enrollment etc.:

The following table shows the enrollment of students for several years past:

1898-99,.....	1087
1899-00,.....	1150
1900-01,.....	1154
1901-02,.....	1233
1902-03,.....	1300

(Estimated on basis of enrollment on February 1st, 1902.)

The new conditions existing now, and the present spirit of the University, make it practically certain that the number will more rapidly increase in the future, and the number that will have to be cared for during the new biennium is by a low estimate,

1903-4,.....	1450
1904-5,.....	1600

The budget for the new biennium, however, does not anticipate the future. What is asked for would no

more than place the University on a sound footing on the basis of 1300 students (the enrollment for the present year) and represents what the university should have for the present year, 1902-03.

Per Capita Cost:

Even on the basis of the enrollment for the present year (1300) the per capita cost under the budget asked for would be small in comparison with that of nearly every university of our class in the country. On the basis of the enrollment which the University must certainly care for during the next biennium, the per capita cost would be very low as compared with what experience in general has shown to be necessary for efficient work. The tendency in all institutions, especially in state universities, is, for many reasons, to reduce the cost per capita to the lowest point consistent with efficiency. The concensus of experience of these universities, therefore, as to the cost per capita will be a well-nigh infallible test of about where our cost per capita ought to be.

The universities in the foregoing list represent all of the state universities in the country that are in the same class with the University of Kansas, and a few smaller institutions for better comparison, together with one large eastern institution, Yale, which may fairly represent the cost among the great universities of the east.

Including Yale, the average cost per capita in these fourteen universities for the year 1901-02 was \$205; leaving Yale out of consideration because it is not a state university and exists under very different conditions from our own, the average per capita cost is \$197.

COMPARATIVE STATISTICS.

Below is given a table of statistics in regard to all the universities of like condition and class with our own.

Name of State	Population.	Total Income	St. Ap. or Mill Tax.	Income Land Fund	U. S. Ap.	Total No. Students.	Total No Teachers.	Max Sal'y Full Profs.	No. Vols. In Library	Amt App Library.	Summer School.	Per Cap. Cost.
t Nebraska	1,068,539	\$ 307,500	130,150	50,000	40,000	2289	173	2200 } 2500 }	55,000	10,000	Yes.	134 §
t Minnesota.....	1,751,394	x 556,826	200,000	53,000	40,000	3656	290	2400	110,000	7,500	Yes.	152 x
o Colorado.....	539,700	\$ 130,000	110,000	5,060	None.	550 U. } 375 P. }	105	2200 3000	25,000	.....	No.	140 §
t Wisconsin.	2,069,042	x 575,000	304,000	22,000	40,000	2777	180	2750	250,000	17,375	Yes.	154 x
t Missouri	3,106,665	x 422,000	{ 97,450 120,000	63,017	40,000	1575	86	2400 } 4000 }	48,000	12,500	Yes.	267 x
o Iowa	2,231,853	x 287,368	188,774	12,619	None.	1512	160	2100	68,000	7,700	Yes.	190 x
o North Dakota ..	319,146	\$ 88,000	49,839(?)	4,023	None.	374	31	3000	10,000	1,000	No.	166 §
o Texas.....	3,048,710	x 275,333	165,000	81,000	None.	1109	103	25 0	40,000	4,000	Yes.	241 x
t Ohio	4,157,545	x 420,006	193,383	33,606	25,000	1516	138	4000	44,523	7,531	No.	277 x
t California	1,485,053	\$ 560,000	{ 100,000 246,754	133,433	40,000	3144	282	1800	95,000	.....	Yes.	178 x
o Washington	518,103	\$ 160,000	150,000	2,400	None	601	35	2500	16,000	5,000	No.	253 §
t Illinois	4,821,550	x 778,789	523,330	32,176	40,000	2932	270	.....	60,000	10,000	Yes.	265 x
o Yale.....		776,760				2542	.....	4000				305
o Michigan.	2,420,982	x 741,000	403,525	38,285	None.	3709	234	2000	155,000	15,000	Yes.	182 x
o Kansas ...	1,470,495	\$ 140,856	135,000	5 606	None.	1233	73	2100 }	38,000	5,500	No.	114 §

‡ Does not include buildings. x Includes buildings. t Agricultural College with University. o Agricultural College separate.

the teaching of students by other students who are immature and without experience is, when done to any considerable degree, a distinct loss to the student, to the University, and to the State; it is a loss that cannot be repaired in the life of the student; students protest against it; university teachers protest against it. 4th, the funds of the University will not allow of fair and reasonable and absolutely necessary additions to libraries, laboratories, shops and buildings. It is a trite saying, but entirely true, that modern education depends upon

The per capita cost of the University of Kansas for 1901-02 was \$114, vastly below the average of what experience is showing to be necessary. The fact of the matter is that the cost per capita at the University of Kansas is far below what it ought to be on the most conservative consideration. It shows that the cost is being kept down at the sacrifice of efficiency and that the young men and women of the state are being sacrificed to a low cost of education. The manner in which they are being sacrificed is this:—1st, the best men in the University are being taken away one by one after they have become of the greatest service to the state, because the funds of the Board will not allow of their being paid an adequate and fair compensation; 2nd, instructors are obliged to handle classes that are entirely too large so that the individual student can get but little individual attention or opportunity for class work; the loss to the student is a real and vital one and the strength of the instructor is overtaxed with out adequate results; 3rd, the impossibility of providing instructors for the number of students attending makes it necessary to hand part of them over to student instructors for a considerable portion of their work; the teaching of students by other students who are immature and without experience is, when done to any considerable degree, a distinct loss to the student, to the University, and to the State; it is a loss that cannot be repaired in the life of the student; students protest against it; university teachers protest against it. 4th, the funds of the University will not allow of fair and reasonable and absolutely necessary additions to libraries, laboratories, shops and buildings. It is a trite saying, but entirely true, that modern education depends upon

equipment, upon libraries and laboratories.

Kansas needs and can afford just as good facilities for the education of its boys and girls as any other state. The boys and girls of Kansas are just as worthy and deserve as good treatment as those of any other state. It certainly ought not to be true that scores of them go out of the state to find the best advantages.

Higher Education Expensive :

It should be constantly borne in mind that higher education is increasingly expensive. The cost per capita of high schools is much greater than that of grammar schools ; that of normal schools higher than the cost of high schools, and that of colleges and universities, if they do efficient work, is still higher. The very things that the public rightly demands, i. e., the practical education with its laboratories, shops, museums, and libraries, is just what has increased the cost of higher education. If we are to supply that demand for practical education in engineering, in science, etc., we must meet the increased cost.

Cost of Practical Education:

The per capita cost in the University of Kansas for the year 1901-02 of the several departments or schools shows well that the newer work of universities along what are called practical lines has added largely to the expense of the modern university.

1901-02.....	Per Capita Cost.
School of Arts.....	\$116
School of Engineering	149

Need of Larger University Fund:

It will be seen by the table showing the income of various universities, that the University of Kansas must ask for relatively large assistance from the legislature because of several reasons: first, because of the very small income from its land fund; second, because of its having no United States government appropriations; third, because of its having no income from fees.

The University of Kansas must have larger funds because of the necessity of undertaking a broader work for its students and the state.

1. Kansas must provide at home as broad a culture and as many avenues of education as can be found elsewhere. It must offer the same differentiation of work and specialization of courses as other institutions and the same facilities for technical work and for investigation and research. There is no good reason why so large a number of the young men and women of Kansas should go outside of the state for their collegiate, technical and professional work. Careful investigation into the matter shows a surprising exodus of young men and women for this purpose. It is a serious economic loss to Kansas in at least two ways. First, because of the very large sum, in the aggregate, of ready money that they take and spend entirely outside the state. Second, and more serious, because those who go abroad for their training are apt to remain and be lost to the state just when they are economically of the greatest value.

2. The course in medicine must be enlarged to a four year course and at the same time arrangements must be made to provide clinical facilities. The apparatus and laboratories of the School of Medicine must be greatly enlarged and its facilities along many lines made more adequate.

3. The courses in the School of Law ought to be enlarged and differentiated and the law library increased. The absolute necessity of a new building in this connection, is discussed elsewhere.

4. The Graduate School, especially, must be put in condition to offer more and better facilities for real advanced original work, so that graduates of this and other colleges and universities of the state may find here the best quality of research work. In order to do this, the library must be enlarged and the heads of departments and others qualified must have enough assistance to enable them to give advanced graduate courses.

5. The University of Kansas has a relatively high reputation for important work in original investigation and in the publication of works of value. This is a legitimate and exceedingly important work and must be encouraged. Without it a university is almost certain to get into a rut, to lose enthusiasm and vital contact with the ever changing currents of life.

6. The time has come when a larger work must be done for the teachers of the state in the courses offered by the University both as regular and special work. Especially must we provide higher professional training for superintendents and principals of schools and those who expect to undertake the administration of the schools of the state. There ought to be a stream of teachers pouring into the University every year for higher work, both regular and special, and out again for service.

In this connection, the University cannot longer safely put off providing a summer session for teachers of the state and others who desire such facilities. The need is a real and vital one and the University cannot expect to keep its hold upon the teachers and the schools unless it responds to this need. The scores of teachers going out of the state each summer shows this. Leaving Kansas out of consideration, those state universities almost without exception which have fulfilled their functions best and have grown to have the strongest influence and hold upon the state, have summer sessions, and they have greatly strengthened the schools of the state, the teachers and themselves by so doing. The relation of a state university to the people is so close and its duty to perform broad social service so great, that it cannot rightly neglect any function that is reasonable and possible that the development of higher education has made legitimate.

7. The University must also be enabled to make its influence upon the high schools felt in a more direct and efficient way. This is a matter of vital concern to the whole school system of the state, and a more syste-

matic method of school visitation and of correlation of work must be at once undertaken.

8. It is of great importance that the college work of the University, or, as it is named here, the work of the School of Arts, be enlarged and strengthened. It is the center and vital point of the life of the University and every other school or department depends upon its vigor and adaptation to the conditions of the state and nation. Many departments ought to be able to broaden and differentiate their courses. It should be possible to organize definite courses bearing directly upon a preparation for business in its higher and larger relations. These should include courses in industry, commerce, general economics, banking, insurance, modern languages with especial reference to commercial relations, elements of law, journalism, the elements of engineering, railroad-ing and transportation in general. Some of this work is already given at the University.

As supplementary to the above, the work in administration and government should be enlarged and the work in history increased, especially as it covers social and economic history and the history of colonial dependencies. All of the work outlined above should be based on the requirements for entrance to the freshman year of the School of Arts and founded on the idea of a liberal training.

9. The work in the various branches of engineering must be strengthened and much new equipment provided. It is remarkable that at present there are no shop facilities for woodworking at the University.

10. Further equipment in the scientific laboratories is necessary, some departments needing more than others. The rapid development in electricity, the various branches of biology and chemistry, make continual advance in our laboratories not simply useful and convenient, but necessary.

11. The necessity of an enlarged library is partially set out in other places, but it cannot be too strongly emphasized. The library is the universal department of the

University upon which in greater or less degree all the work of the institution rests. It teaches more students and affects more lives probably than any other department unless it be the department of physical education. It should be enlarged and its work so adjusted as to bring it more specifically in touch with the whole University work.

12. The development of the state in mining and kindred industries makes our work in the department of mines of great importance to Kansas, and it needs to be strengthened and enlarged. The Geological Survey is another matter of especial importance in the industrial development of the state. Kansas has taken on, from an economic standpoint, an entirely different aspect in the last five years and the Geological Survey has been of no small assistance in many directions. The industrial work in general, the analysis of mineral waters, and other like undertakings is worthy of larger support.

13. The department of administration of the University needs to be reorganized and enlarged. It must undertake some functions that our position as a state university and our relations to the schools of the state make necessary. It needs to be centralized, also, so that all executive functions, outside of the financial management, shall be, subject to the Chancellor, under one responsible head. The whole University depends in large measure upon the efficiency of the administration.

14. The University must be able to keep its best men and to call others of eminence so that the youth of the state shall find here all that he can find elsewhere. The salary of professors should, therefore, be raised to a fair and reasonable point in comparison with the salaries in other universities like our own.

15. The University must have the means to provide a sufficient number of instructors so that students may have the requisite amount of personal attention and not be handed over to student instructors without maturity and experience.

16 The prosperous times and the very large demands in industrial pursuits and in the professions, for trained men of ability, increases enormously the difficulty of getting for the salaries paid at present, men of the highest qualifications as teachers. The University as well as every other institution of higher education, has constantly to meet the stubborn fact that the pecuniary rewards for labor in other walks of life for the same grade of efficiency, are far greater than the rewards for university service. And yet there can be no possible doubt that more than ever before our industrial efficiency and wealth producing power as a state, our intellectual standard as a people, and the real quality of our civilization depend upon the quality of our education. No state, therefore, can be satisfied with anything in its state institutions less than the most efficient services obtainable.

As to the matter of salaries it is fair to note that in the list of universities given, which includes practically all fairly to be compared with Kansas, the salaries of full professors are in nearly every case in excess of those paid in the University of Kansas. In one case only, the University of Washington, is the salary below that of this university, and that is in an institution less than one half as large as ours and in a new and sparsely settled country. In only one case, North Dakota, is the salary the same as in this university, and that is in an institution less than a third as large as the University of Kansas with a population of less than a quarter of that of Kansas. In all the institutions of the same class as our own whose experience we ought to heed, the salary ranges from \$2200 to \$4000.

The large increase in the cost of living should also be taken into account. The testimony before the coal strike commission shows very explicitly the fact that the cost of living is much greater than it was some years ago. While the increase in Kansas has not been so great, perhaps, as in the East, it still remains true that it has operated to reduce, in effect, to a considerable

degree every salary in the University.

The salaries of full professors in this University ought to be \$2500 per year.

Are Too Many Entering Higher Education?

It is sometimes feared that too many young people are flocking to our high schools and colleges and are seeking education that will unfit them for their destined service in life. That is, that the number seeking higher education in our country is excessive in proportion to our population. There could not be a more baseless assumption. In the first place, the difficulty of doing the work of the grammar grades and the high school, the persistence and self-control, the sacrifices by parents and pupils that are required, the expense attending twelve years of schooling even when schools are free, the immense pressure from both parents and pupils to force boys and girls early into the industrial machine—all these tremendous forces act necessarily as deterrents and will always so act, to cut down the number who reach our colleges just as low as the standard of living and the grade and form of civilization will allow. In fact the danger lies not in there being too many, but in there not being enough and of the right sort. How strongly these forces work and how they lead to a method of natural selection and the survival of the fittest, is shown by the report of the Commissioner of Education for 1899-00. This is to the effect that for each million persons in the United States there are only 1913 students in higher college education.

Ratio of Teachers to Students:

It is worth while to notice whether, on the basis of the budget asked for, we are wanting more than a necessary and usual number of instructors. A foregoing table shows the ratio of teachers to students in universities.

On the basis of our present number of teachers the ratio next year for Kansas would be 1 to 19 or 20.

The number in the universities with few exceptions runs about 1 to 15 or less and in the University of Kansas should not exceed 1 to 15. The budget is based on a calculation of about 1 teacher to 16 or 17 students.

Repairs :

In the matter of repairs and improvements, the University has large needs because the funds have not allowed in the past few years the extensive permanent repairs and improvements that have been necessary. The steam heating system needs overhauling and replacing at once or else it will entirely break down in some of the buildings. The whole heating system needs alterations for efficiency and economy. There is, rightly speaking, no general sewer system of sufficient capacity in the University and the immediate need for one is very great. It should be undertaken at once. The lighting system must be greatly extended. The Museum of Natural History is not furnished with lights nor is the Chemistry building.

New Buildings :

The needs of the University in the way of buildings are extensive. While the Museum of Natural History is of great importance to the University, it does not in anything like an adequate degree add to the floor space of the University for ordinary class work. It is of the greatest importance that ample accommodation for class work be at hand.

Law Building :

The necessity of providing for the School of Law in the north wing of Fraser Hall makes it impossible to adequately provide for the expansion of departments in the School of Arts. A building for the School of Law is necessary and the Board of Regents should be enabled to erect one at once. The school is now in very cramped quarters and the library facilities (which cannot be enlarged under present conditions) are entirely inadequate. Temporarily a part of the new building could probably be used to relieve the pressure in other departments.

Gymnasium :

The building that in many respects is more sorely needed than any other and the one which would most directly affect the well-being of the whole student body, is a new gymnasium. The present quarters are absurdly inadequate and the facilities for baths and dressing-rooms

would be a disgrace to a country high school. Then too the young women are absolutely disbarred from proper gymnasium privileges and a great injustice is done them in that respect. It is entirely wrong to have the means for athletic exercises limited to men and to the few at that. It is those who are unfit for hard training in foot ball and the like, who need exercise the most and who must find it, if at all, in a well equipped gymnasium under a trained director of physical education. Athletics in general should include every young man and young woman in the University. A well equipped gymnasium built according to modern plans will, in conjunction with McCook Athletic Field, touch in a vital way nearly all the students of the University. The experience of all colleges and universities for many years has shown that in no other way can the physical well-being of students be cared for. It is therefore the duty of the University of Kansas to rightly care for its young men and women. It is a remarkable fact that probably no other university in the United States of half the size of this University, has such utterly inadequate facilities for general physical education.