RECENT TRENDS IN THE PUBLIC JUNIOR COLLEGES OF KANSAS

A THESIS

SUBMITTED TO THE DEPARTMENT OF EDUCATION AND THE GRADUATE COUNCIL OF THE KANSAS STATE TEACHERS COLLEGE OF EMPORIA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE

BY

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APRIL 1935

Approved for the Major Department

Approved for the Graduate Council

ACKNOWLEDGEMENT

To Dr. Edwin J. Brown for his suggestion of the problem and for his guidance as advisor. To Dr. H. E. Schrammel, Miss Louie Leslie of the State Board of Education, and Mr. F. P. OBrien of the University of Kansas for their suggestions and help in obtaining materials.

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CHAPTER I

INTRODUCTION

The Problem

Kansas has ten public junior colleges which have been in operation for more than seven years. The survey presented herein is an attempt to analyse certain trends which are developing in each college, and in the entire group, over a period of years--principally from 1929-30 to 1934-35.

A brief resumé of the junior college movement in the United States and in Kansas is included to give an understanding of this junior college movement which has become so important in the last two decades.

Following the resumé is an analysis of the year-by-year enrollment and of the costs of the Kansas public junior colleges together with a discussion of the various questions which arise from these phases. Trends in the curricular development, the faculty, contributions of the junior college to the community, and the preparatory function of the junior colleges are considered in order.

While numerous studies have been made, the writer has been unable to find a study of Kansas junior colleges showing specific trends in each college as well as in the entire group

for the items mentioned.

Previous Studies

Robert B. Kinsey[1] wrote a thesis as part of the requirement for his Master's degree at the University of Wichita in 1930 on "A Survey of the Public Junior Colleges of Kansas." His purpose was to make a general survey of the public junior colleges, in which he studied their sizes, courses, activities, and locations. He gave a short history of the movement and then studied each college.

Rees H. Hughes[2] has annually compiled data and statistics for the public junior colleges of Kansas for a period of years. These compilations have been used as sources for many of the tables in this study. Mr. Hughes has also written articles on the public junior colleges of Kansas. He made studies of the group, and from these he drew analyses of the general situation in 1930[3] and again in 1934[4].

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[1]Robert B. Kinsey, Survey of the Public Junior Colleges of Kansas, Unpublished Master's Thesis, University of Wichita, Wichita, 110 pp., 1930.

[2]Rees H. Hughes, Kansas Public Junior Colleges, mimeographed reports from Parsons, 1929-30 to 1934-35.

[3]. . . . ., "Public Junior College Movement in Kansas." Kansas Teacher, vol. 21, pp. 14-16, September, 1930, or School Review, vol. 38, pp. 350-5, June, 1930.

[4]. . . . ., "Public Junior Colleges in Kansas." Junior College Journal, vol. 4, pp. 287-89, March, 1934.

In 1931 Mr. F. P. OBrien[5] analysed the Kansas public junior college situation and gave what, in his opinion, was the future of the public junior college in Kansas.

Mr. OBrien also has three studies of Kansas junior colleges which have been made as part of requested surveys for communities wishing to establish junior colleges. These communities were: Atchison[6], Hutchinson[7], and Pratt[8].

J. W. Shideler[9] also made a study of the junior college movement in Kansas in which he tells of the beginning of the movement by President Harper of Chicago and Dean Lange of The University of California. His treatment is general.

J. H. Peet[10] compared the public junior colleges of Kansas with those of Iowa. He found the Kansas colleges to

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[5]F. P. OBrien, "Development of the Junior College in Kansas." Junior College Journal, vol. 2, pp. 78-86, November, 1931.

[6]. . . . . Report of a Survey in Atchison Dealing with the Establishment of a Junior College, Kansas Studies in Education, vol. I, no. 15, October 1, 1923, University of Kansas, Lawrence, 32 pp.

[7]. . . . . College Standards and a Public Junior College, Kansas Studies in Education, vol. I, no. 4, 42 pp.

[8]. . . . . The Public Junior College as a Community Asset, Kansas Studies in Education, vol. II, no. 4, 41 pp. January, 1925.

[9]J. W. Shideler, "The Junior College Movement in Kansas." School Review, vol. 31, pp. 460-68, June, 1923.

[10]J. H. Peet, "Public Junior Colleges of Iowa and Kansas." Junior College Journal, vol. 4, pp. 173-76, January, 1934.

be larger and more stable; however, he found little if any difference in the quality of instruction.

E. F. Engel[11] published an article in the Junior College Journal for October, 1934, on the Kansas public junior colleges from 1919 to 1934. He discussed the establishment, enrollment, records, and future problems. Mr. Engel also collected and mimeographed annually, until 1932-33, a cumulative "Report on Junior Colleges in Kansas." Since they are cumulative, only the last report will be quoted.[12]

Sources of Data

There has been built up an extensive bibliography of the junior colleges in the United States; however, the junior colleges of Kansas have not been studied extensively.

For the study the following sources have been used:

I. Studies in official publications.
II. Junior College catalogs.
III. Compilations of public junior college data for Kansas.
IV. Magazine articles.
V. Books.
VI. Interviews.

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[11] E. F. Engel, "The Junior College in Kansas, 1919-34." Junior College Journal, vol. 5, pp. 89, October, 1934.

[12] . . . . , Report on Junior Colleges in Kansas, 1932-33, mimeographed at the University of Kansas, 1 p., April, 1933.

Organization into Chapters

As mentioned above, in Chapter II there is a review of the growth and development of the junior college movement in the United States and in Kansas. In Chapter III a study of the trends of the enrollment of colleges and of the costs with the various tendencies which these trends give is shown. In Chapter IV the trends and changes in the curricula and in the faculties of the Kansas pubic junior colleges are presented. In Chapter V the contributions of these institutions to their respective communities are discussed, and in Chapter VI there is a discussion of these institutions and the preparatory function of the junior college, as well as the conclusions drawn from the study.

CHAPTER II

THE JUNIOR COLLEGE MOVEMENT

The junior college has been defined as an institution which offers two years of instruction of strictly collegiate grade. Definitions containing this thought may be found in numerous sources and are given by accrediting agencies.[1,2,3,4] The term "instruction" deals, however, with the difficulty of the work and not the type; for, undoubtedly, an important factor in the development of the junior college has been the conviction that the freshman and sophomore years of college work were, after all, secondary work. Wells[5] states that among the first men to suggest this idea were Henry P. Tappan, in 1852, while he was president of the University of Michigan,

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[1] W. C. Wells, The Junior College, Houghton Mifflin Co., Boston, 1931, p. 5.

[2] "Junior College Standards by the American Council on Education." U. S. Bureau of Education, 1927, Bulletin no. 41, p. 3.

[3] Ibid. p. 26.

[4] "Standards of the North Central Association of Colleges and Secondary Schools." North Central Association Quarterly, vol. 3, p. 63 ff.

[5] W. C. Wells, op. cit., p. 45.

and President W. W. Folwell, of the University of Minnesota, in 1869. Since that time there has been a steadily growing conviction among educators that the "general" education should be completed before the student enters the university. The university instructors have found that the student comes to college unable to go directly into either specialized research or professional training, thus necessitating additional general training and the resulting duplication of, or overlapping with, the secondary schools as was shown by Koos.[6]

There has been developing a reorganization of our educational system. Koos[7] has shown that since 1800 there has been (1) a definite advance in the college and university entrance age; (2) a widening scope of entrance requirements as the secondary schools increased in number and efficiency; (3) a downward shift of the college curriculum so that some of the present-day freshman subjects were formerly considered upper-class subjects, and in the process there was no dilution of subject matter; and (4) a gradual reorganization of the

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[6] L. V. Koos, The Junior College, University of Minnesota Education Series, no. 5, 1924, pp. 288-89, 678.

[7] L. V. Koos, The Junior College Movement, Ginn and Co., Boston, 1925, pp. 194 f. also

[7] L. V. Koos, "The Trend of Reorganization in Higher Education." School Review, vol. 32, p. 575 ff., October, 1924.

college curricula into the elective system. Thus gradually the line of demarcation between the junior and senior colleges not only became more marked[8], but there was also a growing feeling that the present high school graduate needed more work to round out or complete his education, should he not go to college.[9]

After the war there was an increase in the enrollment of colleges and universities[10] which, coupled with the fact that their building program was checked, led to the overcrowded conditions of the universities, especially in the lower classes. The result is the system of mass education with its corresponding difficulties in adjustments for the new student. The adjustment difficulties and the necessity of reducing the large numbers of freshmen caused a high mortality among young university students; this process caused many youths to feel that they were failures. The overcrowding also caused the freshman and sophomore classes to be larger, whereas these

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[8] H. C. Morrison, "A Notable Work on the Junior College." School Review, vol. 32, p. 745.

[9] L. V. Koos, The Junior College Movement, op. cit. p. 28.

[10] L. V. Koos, The Junior College, op. cit., p. 380.

classes should be smaller.[11] These factors encouraged the development of the junior college.

Another factor which has aided in the formation of junior colleges has been the growing feeling on the part of parents and educators that students of the junior college age should be under home influence with fewer adjustments to make.[12] Furthermore, when it is possible for students to live at home a larger percent will be financially able to continue their education beyond high school. Thus the junior college has helped democratize education,[13] i. e., to make it available to more people under more favorable circumstances and, thus, to equalize the opportunity for education.

The above are not the only factors which lead to the development of junior colleges; however, they are important; and to make a complete list of the factors would require too much space in a study of this kind.

Lange[14] has suggested three methods by which the junior

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[11] C. L. Littel, "The Junior College Movement--Radio Address." Junior College Journal, vol. 5. p. 132. December, 1934.

[12] D. M. Dorsey, "The Place of the Junior College in Public Education." National Educational Association Addresses and Proceedings for 1923, p. 214 ff.

[13] C. E. Seashore, "Education for Democracy and the Junior college." School and Society, vol. 25, p. 475 ff. April, 1927.

[14] A. F. Lange, "The Junior College as an Integral Part of the Public School System." School Review, vol. 25, p. 465. September, 1917.

colleges were formed, and Eells[15] adds a fourth. The first method may be termed "university amputation." In this method the first and second years of the four-year college and university undergraduate school are cut off and delegated to other institutions. Thus the university or professional school would begin with the so-called junior year and would continue through graduate school. As given above this was advocated by Henry C. Tappan, of the University of Michigan, and by W. W. Folwell, of the University of Minnesota. Eells[16] shows that in about 1885 the University of Michigan differentiated between the upper and the lower two years of the undergraduate work by means of allowing the upperclassmen to specialize to a certain extent; this arrangement was later dropped. He also states that William Rainey Harper, as president of the University of Chicago, made the first real separation in 1892. Within a few years these units were called the junior and senior colleges. The next step was the separation of the two colleges by eliminating the junior college from the university. This has actually begun at Johns Hopkins and Stanford.

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[15] W. C. Eells, The Junior College, op. cit., ch. III.

[16] Ibid., p. 45 ff.

The second origin as suggested by Lange was the elongation of the secondary or high school. This movement has probably been the most important in developing the junior college, for from it has come the many public district junior colleges as well as many private. In 1915 President Angel, of Yale, held that the motivation for the junior colleges came from the secondary schools and from the intelligent public that supported them.[17] The earliest work of this type was done in Michigan where the University accepted one year of college work done by the stronger high schools of Michigan.[18] The Joliet Junior College, Joliet, Illinois, which was organized in 1902, was the first public junior college which is still in operation. It was soon followed by junior colleges of this type in Indiana, Michigan, and Missouri. President Harper deserves much of the credit for helping organize the institutions at Joliet, Illinois, and Goshen, Indiana.[19]

The public district and local junior colleges, most of which were organized under this plan, have proved to be the

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[17] Ibid., p. 52.

[18] Ibid., p. 53.

[19] Ibid., p. 54 ff.

most popular in that they have made the largest growth in number and in enrollment. Koos distinguishes between the public, i.e., district and local; the state; and the private colleges. He gives a comparison of their growth from 1922 to 1927; he found that the number of all types of junior colleges increased 57%, while the public junior colleges increased 128%; the state, 19%; and the private, 28%; and during the same period the enrollment of students in all junior colleges increased 121%, while the public increased 217%; the state, 15%; and the private, 102%.[20] There has been no recent study which uses the same subdivisions. The more common subdivisions are the public and private junior colleges, in which case the state junior colleges would be considered as public junior colleges. This trend has continued, however, for Eells[21] reports in 1935 that 223, or 42%, of the 526 junior colleges were public and that 77,111, or 70%, of the 110,118 junior college students attend them. For comparison, the reader will note that based on Koos figures, in 1922, 70, or 33.8%, of the 207 junior colleges were public junior colleges; i.e., he listed them as public and state.

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[20] L. V. Koos, "Recent Growth of the Junior College." School Review, vol. 36, pp. 256 ff. April 1928.

[21] W. C. Eells, "Status of the Junior College in the United States, 1934-35." School and Society, vol. 41, p. 205, February 9, 1925.

The reader will also note that 8,439, or 56.1%, of the 16,121 students attended the 70 public junior colleges.

Some private colleges were also organized by adding two years of junior college work to private academies and institutions which were secondary in nature; there are no available figures on these, however; and most of the private junior colleges are classified under the next type.

The third type which Lange mentioned was the "decapitation" of colleges. Thus while universities are dropping the first two years, many small colleges are solving many of their problems by offering only the first two years of college work. This is especially true of the small struggling denominational schools whose financial difficulties made four years of effective work practically an impossible undertaking. President Harper suggested that these colleges become affiliated with the various universities, and a few did.[22] This movement, however, was previously started in Texas among the Baptist colleges of that state; and the Decatur Baptist College, which was established in 1898, is the earliest junior college in the United States which is still operating.[23] Although the private junior college movement had an earlier

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[22] W. C. Wells, The Junior College, op. cit. pp. 59 ff.

[23] Ibid. p. 64.

start than the public, at the present time the public junior colleges almost equal the private in number; and the public junior colleges have a larger enrollment, as shown above.[24]

The fourth method of origin which has been suggested by Bells[25] is the creation of new institutions to fit a felt need. Virginia and Missouri both have contemplated in their educational system the establishment of a number of collegiate institutions to be connecting links between the university and the secondary schools. However, California and a few other states have established such institutions, whereas Missouri and Virginia have not.

In this fourth classification are the various types of state junior colleges for agriculture and mechanical arts and the polytechnic schools which are junior colleges. The branch junior colleges, for instance those affiliated with the University of Pittsburg, also belong in this group.[26] Other universities such as the University of California and the University of Minnesota also have branch junior colleges.[27]

As indicated above in the discussion of the methods of

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[24] Cf. post, p. 12

[25] W. C. Bells, op. cit., pp. 67-8.

[26] Ibid., p. 68.

[27] Ibid., p. 7.

establishing the junior colleges, there are several different types of junior colleges.[28] The two main divisions are the public, which are controlled by a board either appointed or elected by the public, primarily supported by taxation; and the private junior colleges, controlled by a privately chosen or personal board, supported by tuition, endowments, and gifts.

The public junior colleges may be subdivided into the branch, the state, the district, and the local. The branch junior colleges are affiliated with the state universities and may or may not be separated from the university campus. Eells[29] states that the state junior colleges, which have usually been established by an act of the legislature, are supported in whole or in a large part by state funds, are controlled by state appointed boards, and are open to all students in the state on equal terms. The branch junior colleges are as a rule state institutions even if located on separate campuses from the state four-year colleges and university. The district junior college is established and maintained by and for a certain district, which is often the high school district; and the local or municipal junior

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[28] Ibid., pp. 6 ff.

[29] Ibid., p. 9.

colleges are organized, administered, and supported locally. These smaller local and district institutions are the most significant of the entire movement because of their part in popularizing this type of public education.[30]

The private junior colleges may be subdivided into the branch, the denominational, the special, and the proprietary. The private branch junior college is similar to the public branch junior college except that they are under private control and are affiliated with private universities. Denominational junior colleges are under the control of church organizations. Most of these are in the South. The special types of junior colleges are the few scattered junior colleges which are supported by some non-denominational organization or society. The proprietary junior colleges are organized and operated on a private or commercial basis.

The public junior colleges which have the largest enrollment are chiefly of the local and district types and are most commonly located in California and the Middle Western states. The private institutions which are mainly denominational are chiefly found in the Southern states.[31,32]

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[30] Ibid., p. 10.

[31] Ibid., pp. 29 f.

[32] L. V. Koos, The Junior College Movement, op. cit., p. 11.

Since this study is of the public junior colleges of Kansas only, the public junior colleges are discussed below.

The factors which influenced the origin have aided in the rapid growth and development of the junior college. The rapidity of the growth may be seen from Table I.

TABLE I

INCREASE IN NUMBER AND IN ENROLLMENT OF PUBLIC JUNIOR COLLEGES

	1922[33]	1927[33]	1931[33]	1925[34]
Number	46	105	136	223
Enrollment	5,863	16,382	37,662	77,111
Av. Enrollment	143	188	277	345.8

Read table thus: In 1922 there were 46 public junior colleges with 5,163 students enrolled, making an average enrollment of 143 students.

The Table shows that although there has been an increase of 385% in the number of public junior colleges since 1922 the increase in enrollment has been 1394%. It is well to note that since 1931 the number of public junior colleges has been increased by 87 and the enrollment has increased 39,449, which is more than the 1931 enrollment. Campbell's[35] conclusions

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[33] O. I. Frederick, "Recent Growth and Present Status of Public Junior College." U. S. Office of Education, Bulletin, 1932, no. 17, monograph 5, p. 357, for 1922, 1927, and 1931.

[34] W. C. Eells, "Status of the Junior College in the United States, 1924-25." op. cit. p. 205.

[35] D. S. Campbell, "The Effects of the Depression." Junior College Journal, vol. 3, pp. 281 f., April, 1932.

upon the effects of the depression are that the public junior college has suffered the least of the types of junior colleges. Table I shows that the enrollment has increased in spite of other effects of the depression. Table I also shows that there has been an increase in the size of the colleges until in 1934-35 the average public junior college enrollment was 845.8 students. This average is made larger by such institutions as the Los Angeles Junior College, the Pasadena Junior College, and the ten others which have an enrollment of over 1,000 students, for there are public junior colleges with an enrollment of less than 30 students.[36] Thus, there are public junior colleges which are too small as well as poorly distributed geographically.[37]

The purpose and functions of junior colleges have been selected and classified since the earlier studies of Koos and Whitney. Eells[38] names the following four functions which he quotes from F. W. Thomas:

1. Popularizing Function. To make possible a college education, of a general nature, to high school graduates who could not otherwise secure it due to geographical or economic reasons and to give similar benefits to adults.

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[36] W. C. Eells, "Status of the Junior College in the United States, 1934-35." op. cit., pp. 205 ff.

[37] F. P. OBrien, "The Public Junior College as a Community Asset." Kansas Studies in Education, vol. II, no. 4, p. 6, January, 1925.

[38] W. C. Eells, op. cit., p. 191.

2. Preparatory Function. To give the students, locally, adequate preparation for upper division specialization of the university.

3. Terminal Function. To give specific preparation, by vocational courses, for specific occupations on the semi-professional level, thus qualifying the student for immediate placement in the occupation.

4. Guidance Function. "This assumes a scientific interest in the individual traits, ability, and personal welfare of young students, aiding them to make the most of their college education and experience."[39]

F. P. OBrien[40] recognizes five functions of the junior college:

1. A curriculum for social intelligence.
2. Specialized vocational curriculum.
3. Pre-professional curriculum.
4. Pre-academic curriculum.
5. Adult education.

These two classifications are similar; the guidance function makes Kells' list more inclusive than the other, however.

Naturally the curriculum must be so constructed as to fulfil the junior college functions, and as many graduates wished to continue to college there arose the question as to what curricula would be accepted by the universities. There also were many who wanted cultural and professional training, for which the universities would not give credit. These

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[39] F. L. Whitney, The Junior College in America, Colorado Teachers College Educational Series, no. 5, Greeley, 1928, p. 46.

[40] F. P. OBrien, op. cit., p. 7, citing Carnegie Foundation for the Advancement of Teaching with Reference to State Higher Education in California, June, 1932.

conflicting factors caused an early scattering or broadening of the curriculum. In fact Koos in 1925 considered 225 to 250 semester hours necessary to adequately meet the functions of the junior college.[41] Whitney found that the average curricula of the public junior college had decreased from 255 semester hours in 1922 to 214.1 semester hours in 1927, and he concludes that the public junior colleges are concentrating on more specific objectives.[42] In 1927 Eells[43] studied 284 colleges and found that less than half offered 225 semester hours of work. He grouped the colleges by states and found that the range was from 147 semester hours in Iowa to 351 in California. New York was the median with 228, and Kansas with 202 semester hours, two states below the median.

Another important item is the selection of the best possible faculty. The Master's degree or its equivalent is the most common standard set up by the various accrediting

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[41] L. V. Koos, The Junior College, op. cit., pp. 61 f.

[42] F. L. Whitney, "Seven Years Change in the Curricula of the Junior College." North Central Association Quarterly, vol. 3, pp. 422 ff., December, 1928.

[43] W. C. Eells, "Adjustments in the Junior College Curriculum." Junior College Journal, vol. 3, pp. 402 ff, May, 1933.

agencies[44], and Eells finds that the quality of the preparation has improved.[45] Koos in 1925 found, in the public junior colleges, that although only 8% had Doctor's degrees and 2% had no degrees 47% had Master's degrees and another 47% had Bachelor's degrees.[46] However, he omitted the teachers of special subjects. It is difficult to arrive at a true evaluation of the preparation of the faculty since many who have taken work equivalent to the Master's degree have not taken the degree. On the whole, the junior college instructors are not as well prepared academically as the random samplings of university and college instructors, although they do compare very favorably with the freshman and sophomore instructors in the universities and colleges.[47] In this study Koos[48] also found that the junior college instructor is more experienced than the university or college instructor, and he considers this fact particularly significant, for students of the junior college age should be taught rather than merely given the

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[44] W. C. Eells, The Junior College, op. cit., pp. 400 f.

[45] Ibid, pp. 401 f.

[46] L. V. Koos, The Junior College Movement, op. cit., pp. 67 f.

[47] W. C. Eells, loc. cit.

[48] Ibid., pp. 75. f.

results of researches to assimilate as best they can. Kells' study showed the recommended teaching load for a junior college instructor was 15 hours per week, but many taught 18 to 20 or even more, and the junior college instructor's salary compared favorably with those of the university and college instructors.[49]

This relatively new junior college movement has many problems which it must solve in the future. Snyder[50] states that the junior college must find its own field and must break away from its domination by the traditional standardizing agencies and that it must have a generally accepted philosophy of the function of education. Andrews finds additional problems in that the junior college in the high school building must keep its individuality and identity; the junior college must not become a dumping ground for those who can not or will not make the grade in the universities; the junior college can not serve two masters, the secondary school and the university; and the junior college must solve its curriculum problems as to the terminal and preparatory

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[49] Ibid. pp. 412 ff.

[50] W. H. Snyder, "The Distinctive Status of the Junior College." Junior College Journal, vol. 3, p. 236, February, 1933.

functions.[51]

The junior college has a unique opportunity to eliminate much of the wasteful overlapping of courses between the high school and the first two years of college work. This was pointed out by Koos.[52]

The Junior College Movement in Kansas

Kansas was the second state to pass a general law for junior colleges. This law was passed in 1917 before any junior college had been organized in the state. The law was sponsored by the people of Holton who established a junior college in the same year.[53] In 1918 another junior college was organized at Marysville; both of these institutions, however, were abandoned after two years of operation.[54] Two of the existing institutions, Fort Scott and Garden City, were organized in 1919; and the other eight followed within nine years. Hutchinson, the last to be organized, appeared

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[51] A. Andrews, "The Significance of the Junior College Movement." Junior College Journal, vol. 3, pp. 223 f., February, 1933.

[52] L. V. Koos, op. cit., pp. 530 f.

[53] F. W. Shideler, "The Junior College Movement in Kansas." School Review, vol. 31, p. 46, June, 1923.

[54] W. C. Eells, op. cit., pp. 134 f.

in 1928. Dodge City has voted to open a junior college this September, and Pratt has recently had a survey for an analysis of their situation.[55]

There has been an increasing tendency for a survey to be made of the community desiring a junior college. These are made at the request of the community, and several have been made by F. P. OBrien, Professor of Education at the University of Kansas. This caution, although Kansas has not an ideal distribution of her junior colleges, has prompted Eells to say, "Kansas set an excellent example in the decade from 1920 to 1930 of how junior colleges should be established."[56]

All ten of the Kansas public junior colleges are district institutions. At least three of them, however, do not charge a stated tuition for non-resident students.[57] Most of the public junior colleges are grouped in southeastern Kansas, the only exceptions being Garden City in western Kansas and Kansas City in northeastern Kansas. However, there are few four-year colleges in southeastern Kansas; and western Kansas has but one four-year college.

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[55] F. P. OBrien, op. cit., pp. 39 ff.

[56] W. C. Eells, op. cit., p. 125.

[57] Rees Hughes, The Kansas Public Junior Colleges, mimeographed report for 1924-35, p. 2.

Of the seven public junior colleges in operation in 1923-24, four had not been open a year; and the total enrollment was 447. This enrollment steadily increased until it had reached 3451 in 1932-33, from which it dropped to 2940 for 1933-34, and this year (1934-35) finds the enrollment increased to 2975. Thus in eleven years the enrollment increased 543%, and the number of colleges increased 3, or 43.0%.[58]

The standardising agencies effective in Kansas are the two national, i.e., the American Council of Education and the American Association of Junior Colleges; the regional, the North Central Association of Colleges and Secondary Schools; and the three state, the State Board of Education, the State College Association, and the University of Kansas.

The university and the colleges have been favorable to the movement, and both the University of Kansas and the Kansas State College have junior college committees which work with the junior colleges and contribute to the fine relationship which exists between the junior colleges and the four-year colleges and university. The University of Kansas committee has been the most active and has worked with the

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[58] Ibid., p. 1.

State Department of Education in working out agreements for accepting junior college work.[59] The State Board of Education has the power to prescribe the course of study and to inspect the junior colleges.

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[59] W. C. Eells, op. cit., p. 104.

CHAPTER III

TRENDS IN ENROLLMENT AND COSTS

In any institution, the size of the student body and the quality of students enrolled will affect the type of work done. In this chapter the trends in enrollment of the Kansas public junior colleges are studied through the following approaches: (a) the changes in enrollment in the Kansas public junior colleges and a comparison with the standards set by writers in the junior college field, (b) the effect of the size of the high school graduating class on the junior college enrollment, and (c) the tendency for the students to complete their courses.

Three types of standards may be used in studying the enrollment; they are: (1) the minimum requirements set by various accrediting agencies; (2) the minimum size which will operate efficiently, as set by authorities; and (3) the average and median enrollment in the United States. A study of the accrediting agencies which chiefly concern Kansas shows that the American Association of Junior Colleges and the North Central Association of Colleges and Secondary Schools require at least 60 students,[1] while the American

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[1] W. C. Eells, The Junior College, Houghton Mifflin Co., Boston, 1931, p. 178.

Council on Education considers 50 as a minimum enrollment,[2] and the Kansas State Board of Education does not mention a minimum enrollment.[3] All of the standards quoted above were made before 1920. Eells, writing in 1931, believed minimum enrollment requirements to be of doubtful value.[4]

In his study, The Junior College, Koos attempted to find whether or not the smaller junior colleges were as efficient as the larger ones. His conclusions were that the cost per student is likely to run unreasonably high unless the junior college enrollment is as many as 150 or 200 students, and he emphasized the 200 as the more satisfactory.[5] OBrien states, ". . . . the minimum enrollment for efficiency and economy of operation as a junior college is at least 150 students."[6]

A comparison of the median and average enrollment for public junior colleges by periods will give a better grasp of the situation in Kansas. Frederick reports that in 1922

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[2] Loc. cit.

[3] F. M. McDowell, "The Junior College," U. S. Bureau of Education, Bulletin 1919, no. 35, pp. 78-79.

[4] W. C. Eells, op. cit., p. 565.

[5] L. V. Koos, The Junior College, University of Minnesota, Educational Series No. 5, 1924, pp. 581, 624.

[6] F. P. OBrien, The Public Junior College as a Community Asset, Kansas Studies in Education, vol. II, no. 4, January, 1935, p. 11.

46 public junior colleges had a median enrollment of 60 students and an average of 142 students; while in 1927, 105 institutions had a median of 108 and an average of 188 students; and in 1931, 136 institutions had a median of 138 and an average of 277 students.[7] These figures may be supplemented by Eells' report for 1935 in which he reports 228 public junior colleges with a total enrollment of 77,111, which would give an average enrollment of 345.8 students.[8] The median enrollment is not given; and, as seen above, the average enrollment is considerably higher due to the influence of the larger institutions. However, since the range in enrollment for the Kansas public junior colleges is only 336, and since only one institution enrolled less than 200 students in 1934-45, the average is used in this study. Table II shows that Kansas had an average enrollment of 225.2 in 1931 which increased to 345.1 in 1933 but dropped to 294 in 1934 and rose to 297.5 in 1935, with an average enrollment of 275 students for the six-year period beginning in 1929-30. Also, of the Kansas public junior colleges only one has an

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[7] O. I. Frederick, "Recent Growth and Present Status of the Public Junior College," U. S. Office of Education, Bulletin 1932, no. 17, monograph 5, pp. 257 ff.

[8] W. C. Eells, "Status of the Junior College in the United States, 1934-35." School and Society, vol. 41, p. 205.

enrollment of less than 200 in 1934-35; and only two average less than 200 in the six-year period; however, both of the latter averages are more than 140 students.

TABLE II

ENROLLMENT IN THE KANSAS PUBLIC JUNIOR[9] COLLEGES FROM 1929-30 TO 1934-35

Junior College	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	Totals	Average
Arkansas City	149	193	243	273	225	263	1346	224.3
Coffeyville	118	169	289	369	366	384	1693	282.2
El Dorado	167	203	235	262	294	253	1414	235.7
Fort Scott	149	177	267	298	300	247	1538	256.3
Garden City	85	109	127	166	183	221	891	148.5
Hutchinson	301	307	352	412	408	428	2208	368.0
Independence	170	174	259	329	336	319	1587	264.5
Iola	150	136	152	191	151	92	852	142.0
Kansas City	422	477	663	798	367	357	3084	514.0
Parsons	241	307	357	353	290	301	1889	314.8
Totals	1950	2252	2984	3451	2940	2975		
Averages	195.0	225.2	298.4	345.1	294.0	297.5		275.0

Read table thus: The enrollment of the Arkansas City Junior College was 149 in 1929-30, 273 in 1932-33, and is 253 in 1934-35. The total from 1929-30 to 1934-35 is 1346, with an average of 224.3 students. The total enrollment of the Kansas public junior colleges for 1929-30 was 1950, averaging 195.0.

Table II shows that in 1934-35 there is one public junior

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[9] Rees Hughes, The Kansas Public Junior Colleges, Mimeographed reports from 1929-30 to 1934-35 gave enrollment of each college, (compiled from).

college with an enrollment of less than 100, three between 200 and 299, five between 300 and 399, and one above 400. In the six-year averages there are two institutions with enrollments between 140 and 199, five between 200 and 299, two between 300 and 399, and one above 500.

TABLE III

PERCENT INCREASE IN ENROLLMENT IN THE KANSAS PUBLIC JUNIOR COLLEGES FROM 1929-30 TO 1934-35[10]

	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	Average
Arkansas City	2.1	29.5	25.9	12.3	-17.6	16.9	9.9
Coffeyville	-5.7	45.7	71.0	27.9	-0.8	4.9	25.7
El Dorado	5.7	21.6	10.8	16.4	12.3	-10.5	9.5
Fort Scott	28.1	18.8	50.8	11.6	0.7	15.7	20.1
Garden City	29.3	28.2	16.5	20.7	10.3	20.8	24.3
Hutchinson	8.6	2.0	14.7	17.0	-1.0	4.9	6.7
Independence	7.6	2.4	48.7	27.0	2.1	-5.1	12.8
Iola	2.7	-9.3	11.8	25.7	-31.4	-29.8	-5.1
Kansas City	13.8	12.0	89.0	20.4	-54.0	-2.7	4.8
Parsons	14.2	27.4	15.3	-1.1	-6.5	-8.8	6.9
Average	11.0	17.9	30.6	18.8	-8.6	2.7	

Read table thus: The enrollment of the Arkansas City Junior College for 1929-30 increased 2.1% over its enrollment for 1928-29, and its enrollment for 1933-34 decreased 17.6% under its enrollment for 1932-33. For the six-year period Arkansas City has an average increase of 9.9%. The average of the ten junior colleges for 1929-30 is an increase of 11.0% over the enrollment of 1928-29.

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10 Compilations based on figures taken from Table I except the enrollment figures for 1928-29 which were obtained from: Robert B. Kinsey, A Survey of the Public Junior Colleges of Kansas, University of Wichita, Wichita, Master's Thesis, 1930, pp. 29, 37, 45, 53, 61, 69, 77, 94.

In Table III the change in enrollment is given as percent increase or decrease. It shows that Fort Scott and Garden City were the only two of the entire group to increase every year; they have average increases of 20.1% and 24.3%, respectively. Coffeyville has the largest, with an average increase of 25.7%. Iola had an average decrease of 5.1%, and the averages of the remaining junior colleges for the period are increases ranging from 4.8% to 13.8%.

The total enrollment increased each year except in 1933-34 which showed a decrease of 8.6%. In 1931-32 the public junior colleges of Kansas increased 30.6% which was the largest per cent increase during the period studied. There is an increase of 2.7% this year over the enrollment of 1933-34.

In studying Table III it will be noted that the Coffeyville Junior College has the largest increase, which is 71% for 1931-32, while Kansas City Junior College has the largest decrease, which is 54.0% for 1933-34. Garden City Junior College has been the most consistent, for its percent increase ranges from 10.2% in 1933-34 to 39.3% in 1929-30. Kansas City Junior College has been the least consistent, for its range is from an increase of 39.0% in 1931-32 to a decrease of 54.0% in 1933-34. During the six years the entire ten public junior colleges have decreased 14 times out of 60 possible. Only

three of the decreases came before 1933-34; six of them came during the year, 1934-35. The entire group and each college, except one, have tended to increase during the six-year period.

The second approach to a study of enrollment trends is the comparison of the number of high school graduates to the junior college enrollment in the various districts. OBrien considers the size of the high school and thereby the number of high school graduates to be a criteria upon which the establishment of a junior college depends, as shown by the following statement:[11]

> To assure satisfactory enrollment in a junior college, there should be as a bare minimum in the region to be served from 150 to 300 high school graduates each year, from which the college may draw its students.

In 1934, there were four junior colleges, i.e., Iola with 90, Independence with 139, Garden City with 66, and Fort Scott with 144, which had less than 150 high school graduates. However, in 1933-34 and in 1934-35 only one junior college, Iola, had an enrollment of less than 150 students. The six-year average adds El Dorado to the group which has less than 150 high school graduates, and there are two of the junior colleges whose average enrollment for the six years was less than 150 students, but their averages

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[11] F. P. OBrien, op. cit., p. 11.

were both above 140. It is worthy of note that the Kansas City Junior College is the only one of the group in which the junior college enrollment is less than the number of high school graduates, which could be expected in a city of the size of Kansas City, Kansas.

TABLE IV

THE NUMBER OF HIGH SCHOOL GRADUATES[12] AND THE JUNIOR COLLEGE ENROLLMENT

	1933-34		average 1929-30 to 1934-35	
	high school graduates	junior college enrollment	high school graduates	junior college enrollment
Arkansas City	198	225	181.5	224.3
Coffeyville	198	366	164.7	282.2
El Dorado	173	294	142.8	225.7
Fort Scott	144	300	127.2	256.3
Garden City	66	183	71.3	148.5
Hutchinson	289	408	264.2	368.0
Independence	139	336	126.2	264.5
Iola	90	131	96.7	142.0
Kansas City	877	367	712.7	514.0
Parsons	158	330	166.3	314.8

Read table thus: The Arkansas City district had 198 high school graduates and a junior college enrollment of 225 students in 1933-34. Its six-year average was 181.5 high school graduates and 224.3 students enrolled in junior college.

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12 Rees Hughes, loc. cit.

A further study of Table IV shows that there is a definite relationship between the size of the high school graduating class and the enrollment of the junior college. In fact, correlations, worked by the rank-difference method, between the two columns for 1933-34 gave a coefficient of correlation of .74 with a probable error of ±.10, while the coefficient of correlation between the two columns for the six-year averages was .78 with a probable error of ±.09. The calculations were based on the figures taken from Table IV. Therefore, at least, in Kansas the junior college district with the largest high school graduating class will probably also have the largest junior college enrollment. Coffeyville is a notable exception to this, but since a correlation merely points out a relationship and not a causal relationship, it should be noted that other conditions, such as distance to other colleges, the popularity of the junior colleges, the type of individuals who inhabit the district, tuition charges, and other local conditions may cause variations.

The type and social status of the people of the community also have much influence upon the type of students who attend the junior college; and they, in turn, influence the tendency of the students to complete their courses not only for each semester but also for the two years. Naturally, there are also other causes for students to continue or to

drop out; but the purpose of this study is to point out the tendencies in the Kansas public junior colleges and not to attempt to find the causes for these tendencies. These tendencies are studied from three angles: (1) the percent of freshmen who continue as sophomores the following year, (2) the ratio of the graduating class to the freshman class of the previous year, and (3) the percent of sophomores who graduate. The percent of the freshmen who return the next

TABLE V

THE RATIO IN PERCENT OF THE SOPHOMORE CLASS[15] TO THE FRESHMAN CLASS OF THE PREVIOUS YEAR

	1930-31	1931-32	1932-33	1933-34	1934-35	Average
Arkansas City	53.2	68.0	54.9	46.4	60.0	56.5
Coffeyville	69.1	70.5	68.6	64.5	51.0	64.7
El Dorado	69.8	67.0	63.1	64.8	54.8	63.9
Fort Scott	63.0	70.4	67.4	59.0	64.9	64.9
Garden City	75.0	89.8	60.3	58.7	60.7	68.9
Hutchinson	49.7	58.5	58.4	50.2	52.8	54.1
Independence	33.3	77.2	52.2	45.8	46.8	51.1
Iola	40.6	47.1	63.4	46.2	51.7	49.8
Kansas City	69.8	55.6	60.9	27.3	54.6	53.6
Parsons	79.0	59.1	54.7	74.1	65.6	67.7
Average	60.3	66.3	66.4	52.7	56.4	

Read table thus: In 1930-31 the sophomore class of the Arkansas City Junior College was 53.2% as large as the freshman class of 1929-30. For the period reported, the sophomore classes of the Arkansas City Junior College averaged 56.5% as large as the freshman class of the previous year. In 1930-31 the sophomore class of all the institutions was 60.3% as large as the freshman class of 1929-30.

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[15] Calculated from data taken from reports of Rees Hughes, loc. cit.

year as sophomores have been found as nearly as possible by finding the ratio of the sophomore class for a particular year to the freshman class of the previous year. This merely indicates the trend, for all repeating freshmen and new sophomores are disregarded. Table V gives the result of that comparison for the six-year period which is studied.

The Table shows that of the individual institutions the sophomore class of Garden City for 1930-31 was 89.8% as large as it was the previous year, which is the largest percentage, while the sophomore class of the Independence Junior College for the same year was 33.3% as large as it was the year before. Independence also has the greatest variation with a range of 43.9%. Garden City has the best average over the entire period which is 68.9%, and Iola has the lowest with an average of 49.8%, so there is not such a large difference between the institutions in this respect. In fact, five average over 60%, and the other five average between 49.8% and 56.7% for the entire period. When considering the entire group it is found that the years 1931-32 and 1932-33 had sophomore classes 66.3% and 66.4%, respectively, as large as these classes were the previous year; whereas in 1933-34 the sophomore class was only 58.7% as large. This study also indicates the holding power of the institutions, but to just what proportion these figures are due to the holding power of the colleges it is impossible to determine from the available data. The

holding power of the public junior colleges of Kansas is discussed more completely in another chapter,[13] in which there is an explanation of Table XVIII which gives the percent of sophomores to the entire enrollment. It is pertinent, however, to point out at this place that in 1921-22 the average for the entire group was 29.8% sophomores; and although the average since that time has been above 30.0% only in 1933-34 did the sophomores average more than 33.3% of the enrollment. Another point of interest is that although only two of the junior college enrollments average less than 30.0% sophomores, in five the sophomores average less than 31.0%; and in only one, Iola, do the sophomores average more than 33.3% of the enrollment. It should also be noted that Iola is the only one of the junior colleges whose enrollment showed an average decrease over the six-year period, and that in Garden City, which was the most consistent in percent increase of enrollment, the sophomores averaged only 28.4% of the enrollment. These facts indicate that a school with an increasing enrollment will have a smaller percent of sophomores. Table XVIII also indicates that several of the junior colleges now have more than 30.0% of their enrollment in the sophomore class, but that the smaller percentages of

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[13] Cf. post, p. 94

the previous years lower the average for the entire period.

The second approach to the tendency of the students to complete their course is the ratio of the junior college graduates for any particular year to the freshman enrollment for the previous year. The ratio is expressed in percentages. The averages of the entire group range from 45.8% in 1931-32 to 38.0% in 1933-34, and the averages of the various colleges over the period studied show a range from 22.9% at Independence to 55.4% at Coffeyville. Three of the junior colleges averaged more than 50.0%, and three more of them averaged between 40.0% and 49.9%. Table VI shows that with the exception of Hutchinson and Iola the larger percents will be found in the first two years reported, and these two junior colleges have their largest in the third year. The largest average percent for any year was in 1931-32, and for the other three years the percentages are quite uniform. A comparison between Tables V and VI shows that the percent of the freshmen who graduate the following year is smaller than the percent of freshmen who continue, which is to be expected unless all the sophomores graduate. This fact is also shown in Table VII.

The fact that not all of the sophomores graduate, or if they do it is a very rare occurrence, makes the third approach to the study of the tendency for the junior college students

TABLE VI

THE RATIO IN PERCENT OF THE JUNIOR COLLEGE GRADUATES[14] TO THE FRESHMAN CLASS OF THE PREVIOUS YEAR

	1930-31	1931-32	1932-33	1933-34	Average
Arkansas City	40.4	56.8	42.8	35.5	44.5
Coffeyville	70.6	53.3	50.3	47.4	55.4
El Dorado	45.3	47.7	36.2	42.8	43.0
Fort Scott	45.2	61.1	56.7	45.1	52.0
Garden City	42.5	63.3	55.9	44.6	51.6
Hutchinson	29.0	38.6	41.6	33.2	35.6
Independence	20.4	25.2	20.8	25.0	22.9
Iola	27.7	32.7	40.9	31.5	33.2
Kansas City	44.8	30.8	29.4	28.5	33.4
Parsons	42.9	47.0	39.2	46.6	43.9
Average	40.9	45.8	41.5	38.0	

Read table thus: The graduates of the Arkansas City Junior College in 1930-31 numbered 40.4% of the freshman class of 1929-30, and for the four percentages figured for each college, the Arkansas City graduating class averaged 44.5% of its size as a freshman class. The average percent for all ten of the junior colleges for 1930-31 was 40.9%.

to complete their courses. Table VII gives those facts for the five years from 1929-30 to 1933-34, which is the last graduating class. Coffeyville in 1930-31 and Kansas City in 1933-34 have the highest percent for any one year when the entire class of sophomores were reported to have graduated, and Independence has the lowest percent when 22.6% of its sophomores were graduated in 1931-32. The yearly average of the ten institutions varied only 4.7%, i.e., from 67.8% in 1930-31 to 72.5% in 1934. It is of interest that since 1930-31 there has been a gradual increase in the average percent of sophomores who were graduated; however,

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14 Compiled and calculated from reports by Rees Hughes, loc. cit.

TABLE VII

THE PERCENTAGE OF THE SOPHOMORES WHO ARE[15] GRADUATED FROM THE JUNIOR COLLEGES

	1929-30	1930-31	1931-32	1932-33	1933-34	Average
Arkansas City	69.8	76.0	85.7	79.8	76.6	77.6
Coffeyville	92.1	100.0*	75.6	73.2	73.5	82.9
El Dorado	68.4	65.0	71.2	57.3	66.0	65.6
Fort Scott	76.1	71.7	86.8	84.2	76.5	79.1
Garden City	72.0	56.7	70.5	92.7	75.9	73.6
Hutchinson	62.9	58.2	66.0	70.6	66.1	65.0
Independence	53.2	61.3	32.6	29.0	54.5	48.1
Iola	55.6	68.3	69.4	64.4	68.3	65.2
Kansas City	81.8	64.2	55.4	76.9	100.0*	75.6
Parsons	61.7	54.3	68.0	71.7	62.8	63.7
Average	69.5	67.6	68.1	70.4	72.0	

Read table thus: In 1929-30, 69.8% of the sophomores in the Arkansas City Junior College were graduated; in 1932-33, 79.8% of the sophomores were graduated. The average percent of all sophomores to be graduated from all ten of the colleges in 1929-30 was 69.5%, and 77.6% is the average for the Arkansas City Junior College during the period given.

* These two gave percentages of over 100.0%.

the percents of each college fluctuate considerably. Independence has the lowest average percent graduating in the period, with 48.1%; and Coffeyville has the highest, with 82.9%. The other eight institutions range between these two extremes, with four of them having an average percent between 70.0 and 79.9; and the remaining four have an average percent between 60.0 and 66.0. The Table shows that there

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[15] Calculated from the reports compiled by Rees Hughes, Loc. cit.

is a considerable variation from year to year in the same college. Iola has the most consistent group of percentages, for with the exception of 1929-30 its percents do not vary more than five points.

TABLE VIII

THE TOTAL OPERATING COSTS OF THE JUNIOR COLLEGES[16] AND THE VALUATION OF THEIR DISTRICTS

	Total operating cost		Valuation	
	1931-32	1933-34	1929-30	1934-35
Arkansas City	$18,000.00	$15,624.00	$17,600,000	$13,906,149
Coffeyville	25,411.90	22,854.04	17,160,155	12,911,849
El Dorado	22,825.44	17,874.00	11,995,087	7,866,229
Fort Scott	22,519.40	19,470.00	10,000,000	7,514,680
Garden City	9,506.86[a]	7,442.74	5,445,089	5,429,939
Hutchinson	32,645.62	25,790.84	33,288,894	26,651,935
Independence	21,333.57	15,187.39	15,773,586	10,606,219[b]
Iola	15,356.15	9,450.42	7,293,526	5,188,870
Kansas City	---	---	143,000,000	102,191,656
Parsons	23,780.77	18,274.42	15,672,828	11,810,926

Read table thus: The total cost of operation of the Arkansas City Junior College in 1931-32 was $18,000.00, and for 1933-34 it was $15,624.00. The valuation of the Arkansas City district was $17,600,000 in 1929-30 but decreased until it was $13,906,149 in 1934-35.

[a]These figures are for 1932-33 instead of 1931-32.
[b]These figures are for 1933-34 instead of 1934-35.

At the beginning of this chapter the relationship between the size of the enrollment and the economy of the instruction

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16 Rees Hughes, loc. cit.

was pointed out.[17] In Table VIII there is a comparison of the total operating costs of the junior colleges in 1921-22 and 1933-34. The Table shows that there has been a distinct decrease, ranging from about $2,400 at Arkansas City to nearly $7,000 at Hutchinson.

The first two columns of Table VIII indicate the curtailment of operating expenses which have occurred in the last few years. Kansas City has no figures as its junior college finances are handled with the funds of the other public schools of the city.[18] It should be noted that every one of the junior colleges that did give figures show a decrease. In computing the total costs of operation per student upon the basis of enrollment, OBrien[19] found that the Kansas public junior colleges vary from $65.00 to $141.00 with the median at $82.50, about which he says:

> Each of the statements of cost presented here is unduly low because of excessively low salaries, large classes, and heavy teaching load.

He continues by saying that $197.40 per student is not high for college instruction of the proper quality.[20]

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[17] Cf. ante p. 28

[18] Rees Hughes, op. cit.

[19] F. P. OBrien, op. cit., pp. 20 f.

[20] Ibid., p. 26.

In the Kansas public junior colleges these costs are raised chiefly by two methods which are (1) taxation of the junior college district, and (2) tuition fees paid by non-resident students. Naturally in institutions of this type the taxes must be the primary support of the school, not only because the tuition income is not stable enough or dependable enough to replace taxation, but also because institutions of this type do not care to lower their non-residence attendance by exorbitant tuition fees. It may be noted here that in 1933-34 Arkansas City and El Dorado reported over fifty percent of their operating costs to be raised by tuition income from non-resident students, as shown by comparing the tuition income as given on page 47 with Table VIII. OBrien questions the reported costs,[21] and the reported tuition incomes may well be questioned.[22] Thus since a district's ability to pay taxes depends, in a large part, upon the valuation of its property, the property valuation of the district is important to the junior college and does limit the work the college can do. OBrien states that the district should have a property valuation of not less than twelve to fifteen million dollars

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[21] Cf. post. p. 46

[22] Loc. cit.

and that it should be free from heavy bonded indebtedness to avoid finding the support of the junior college burdensome to it.[23] A study of Table VIII shows that in 1929-30 only three of the junior colleges, Fort Scott, Garden City, and Iola, had property valuations of less than twelve million dollars, and Fort Scott had a valuation of ten million dollars. In 1934-35 the situation is almost reversed, for there are only four junior colleges, Arkansas City, Coffeyville, Hutchinson, and Kansas City, whose districts have a property valuation of approximately twelve million dollars or more although the Parsons district has property valued at more than eleven million dollars; and Independence has nearly eleven million dollars of property assessed. This indicates the great reduction of property valuation which has taken place in the last few years. Table VIII also shows that with the exception of Garden City, whose valuation decreased approximately $25,000, the range of the decreases for the other nine districts was from $2,100,000 at Iola to Kansas City with a decrease of approximately $41,000,000; however, the second largest decrease was Hutchinson with a decrease of slightly less than $6,700,000.

Such decreased valuation causes the tax levies to be

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[23] Ibid. p. 11.

raised in order to raise the necessary costs to run the school unless the costs are also reduced very sharply. In the nine junior colleges which reported (Kansas City did not report since the Kansas City Junior College funds are not distinguished from the public school funds of the city) the levies ranged from no levy to 1.5 mills for 1934-35.[24] OBrien in his study of the situation in 1933-34 says:

> To provide the total junior college operating costs for that year, however, six junior colleges would have needed levies of two mills or more (one more than three mills) and only the one at Kansas City, due to the large property valuation of that city, could have provided operating expenses on a levy of less than one mill. In brief, the average of the levies reported was, it appears, less than half the average levy needed if costs were properly allocated and reported.[25]

The highest levy reported for any of the junior colleges in 1933-34 was two mills for Garden City.

Although these junior colleges, like all public junior colleges, are primarily supported by taxation,[26] the other important source of revenue which cannot be overlooked is the tuition paid by non-resident students. The various tuition rates for non-resident students are: for Coffeyville and Independence, no stated tuition rate; for Garden

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[24] Rees Hughes, op. cit.

[25] F. P. OBrien, op. cit., pp. 19 f.

[26] Rees Hughes, op. cit.

City, Iola, and Parsons, $36.00 each semester; for Arkansas City, six dollars a month; for El Dorado, $50.00 a year; for Fort Scott the rate for 1934-35 was not given, but for 1933-34 it was twelve dollars a year to be paid by the county and twenty dollars a semester in addition for non-residents of Kansas; and for Kansas City, the non-residents of the state pay $142.00 annually, and the residents of the state but not of the district pay in this manner: residents of Wyandotte County pay $142.00 annually of which the county pays $72.00, residents of Johnson County pay $178.00 annually of which the county pays $108.00, and residents of any other Kansas county pay $142.00.[27] All of the junior colleges except Garden City list the amount of revenue collected from this source during 1933-34. These amounts, given in order, beginning with the largest are:[28] Arkansas City, $9,996.00; El Dorado, $8,270.00; Iola, $3,516.00; Fort Scott, $3,150.00; Kansas City, $2,248.00; Hutchinson, $2,186.40; Coffeyville, $2,168.00; Independence, $1,460.85; and Parsons, $1,092.80. Garden City was not reported; but if the 33 non-resident students were charged $36 each semester, at least $2,376.00 would have been received from

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[27] Rees Hughes, op. cit., 1934-35.

[28] Ibid., 1933-34.

this source in 1933-34. It is interesting to note that while El Dorado had 140 non-resident students in 1933-34, Coffeyville had 115; Fort Scott, 125; Parsons, 93; Independence, 91; and the number decreases to Garden City, with 33, which is the fewest non-resident students.[29] It should also be noted that proportionately El Dorado collected far more tuition money than did any of the other above-named schools with more than 90 non-resident students. Another point of interest is the fact that Arkansas City had only 42 students from outside the district in 1933-34 and that these students would have paid only $2,248.00 on the basis of the tuition rate of six dollars a month, while the total tuition collected, as reported, was $9,960.00; but for that matter the $50.00 a year tuition charged by El Dorado would have raised only $7,000.00 for 1933-34 from the 140 non-resident students.

A third source of revenue which should be mentioned at this place is the activity fees which are charged by each of the junior colleges. The smallest is $1.50 at Kansas City, and the largest is $10.00 at Iola. The fees at the other schools are: $2.50 at Coffeyville, El Dorado, and Parsons; $3.00 at Independence; $2.50 at Arkansas City and Garden City;

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[29] Ibid., 1933-34.

and $4.00 at Fort Scott.[30] This activity fee, like the activity fee of any four-year college or university, is used for student activities.

During the last session of the Kansas legislature agitation for legislation giving the junior colleges state aid was revived. However, the legislation did not pass; and no state aid has been given, so the support of each of the junior colleges rests upon its district. The methods by which the districts support their junior colleges are explained above.

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[30] Ibid., 1934-35

CHAPTER IV

THE CURRICULAR AND FACULTY TRENDS AND CHANGES IN THE KANSAS PUBLIC JUNIOR COLLEGES

In this chapter two important problems of the modern junior colleges are discussed. The first problem is a study of the curricula, and the second is a study of the faculty of the Kansas public junior colleges. The study of the curricula is subdivided into the following problems: (1) the trends in the development of the curricula of the various Kansas public junior colleges for the last several years; (2) an analysis of the curricula of these colleges at the present, and a comparison of their curricula with the various standards which have been set up by different authorities; and (3) an analysis of the non-academic courses which are offered by these institutions, and a comparison of these courses with standards.

In analysing the curricula of the colleges to ascertain the trends, the courses are divided into seven groups, namely: English, languages, mathematics, physical sciences, biological sciences, social sciences, and the miscellaneous or the other courses which do not fit into any of the above classifications. Each of these groups is subdivided into departments or sub-groups thus: English includes rhetoric, literature, public

speaking, and journalism. Rhetoric and literature are always offered; public speaking is offered by all of the institutions, although the range of credits in 1934-35 is from two to eleven; and journalism is or has been offered by six of the colleges as shown by the catalogs studied. The languages include French, Spanish, German, and Latin. Of these four languages French and Spanish are the most popular, for all of the colleges have formerly and are now offering them with the exception of Arkansas City, which has not offered Spanish since 1929-30. German is or has been offered by four of the junior colleges and appears to be increasing in popularity. Latin is now offered by one but has formerly been offered by four others; hence it is decreasing in popularity. Mathematics includes the usual courses through calculus I, and four of the institutions offer a course in calculus II. Kansas City offers a course in the theory of equations, and Independence offers a course in theories of investments. The physical sciences include physics and chemistry; although both are now offered by each institution, four of them at some time did not offer physics. The biological sciences include botany, zoology, comparative anatomy, and physiology. Independence does not at the present nor has in any catalog studied offered any biological science; the other nine colleges, however, offer or have offered the above biological sciences, although comparative anatomy and physiology have in several

TABLE IX

TRENDS IN THE CURRICULA OF THE KANSAS PUBLIC JUNIOR COLLEGE AS SHOWN BY A STUDY OF THE CATALOGS[1]
(Semester hours as a basis)

	Semester hour credits							
	English	Languages	Mathematics	Physical sciences	Biological sciences	Social sciences	Others	Total
Arkansas City Junior College								
1924-25	25	33	13	13	10	30	6	130
1925-26	22	38	15	13	20	34	6	148
1926-27	19	31	15	13	20	35	6	139
1927-28	16	32	11	13	20	35	6	134
1928-29	15	30	13	13	15	40	25	151
1929-30	17	25	13	13	15	40	25	148
1930-31	17	25	13	13	15	40	35	158
1931-32	17	25	13	23	18	41	34	171
1932-33	21	25	13	23	18	39	34	173
1934-35	21	30	13	23	17	39	36	179
Coffeyville Junior College								
1928-29	19	36	17	20	10	40	59	201
1930-31	35	53	20	20	10	43	61	242
1931-32	33	35	20	25	10	43	100	266
1932-33	33	35	20	27	10	41	106	272
1934-35	32	35	20	29	15	41	99	272
El Dorado Junior College								
1928-29	32	30	20	23	13	36	21	175
1929-30	20	33	21	20	10	36	21	161
1931-32	22	32	19	20	10	36	13	153
1934-35	29	30	19	28	10	41	18	175
Fort Scott Junior College								
1924-25	20	40	17	15	15	20	6	133
1928-29	20	40	19	20	15	25	36	175
1932-33	26	20	19	30	20	35	75	225
1934-35	29	20	19	30	20	38	82	238
Garden City Junior College								
1921-22	26	20	20	20	6	45	73	210
1924-25	14	20	10	10	8	32	17	111
1928-29	25	35	17	14	10	35	16	148
1934-35[a]	27	30	18	25	15	33	13	171

[1] Compiled from the catalogs of these schools for the years given.

TABLE IX (continued)

TRENDS IN THE CURRICULA OF THE KANSAS PUBLIC JUNIOR COLLEGE AS SHOWN BY A STUDY OF THE CATALOGS
(Semester hours as a basis)

	Semester hour credits							
	English	Languages	Mathematics	Physical sciences	Biological sciences	Social sciences	Others	Total
Hutchinson Junior College								
1928-29	21	40	18	25	15	25	6	149
1930-31	23	45	19	25	20	37	37	206
1931-32	29	55	18	25	20	43	38	228
1934-35	29	50	19	20	15	43	42	218
Independence Junior College								
1928-29	33	40	17	20	--	42	20	172
1931-32	31	40	20	20	--	42	63	216
1932-33	36	42	20	20	--	44	63	225
1933-34	35	40	20	20	--	44	61	220
1934-35	40	42	25	20	--	44	78	252
Iola Junior College								
1925-26	17	30	21	15	15	30	10	138
1928-29	17	30	21	20	10	35	25	158
1929-30	17	30	21	20	10	35	30	163
1934-35	19	15	14	15	10	35	20	128
Kansas City Junior College								
1925-26	20	50	27	25	15	28	4	169
1927-28	20	60	27	25	15	35	38	220
1929-30	28	70	27	35	15	40	42	257
1931-32[a]	28	70	24	25	20	45	51	263
1934-35[b]	25	70	24	25	20	45	24	233
Parsons Junior College								
1926-27	25	50	21	20	15	25	6	162
1928-29	25	45	21	20	15	25	65	216
1932-33	28	45	21	20	20	25	118	277
1933-34	30	45	21	25	20	25	116	282
1934-35	28	40	21	25	20	30	122	286

Read table thus: In 1926-27 the Parsons Junior College offered 25 semester hours of credit in the English group, 50 hours of modern languages, 21 hours of mathematics, 20 hours of physical sciences, 15 hours of biological sciences, 25 hours of social sciences, and 6 hours of miscellaneous offerings. Parsons offered a total of 162 hours of work in 1926-27.

[a] No date was given on the catalog which was sent to the writer as the present catalog.

[b] September, 1933, catalog was sent to the writer as the present catalog.

cases been recent additions to the curricula. The social sciences include history, government, economics, sociology, philosophy, and psychology. The miscellaneous or other courses include agriculture, which is offered at Parsons; art, which is offered by four of the institutions; commercial subjects, which are offered by seven; educational subjects, which are offered by all except Iola; various engineering subjects, which are also offered by all except Iola; home economics courses, which are offered by six; music, which is offered by seven; a course in printing, which is offered by Parsons; and a course in mythology, which is offered by Coffeyville. Table IX shows the curricula of the various Kansas public junior colleges classified according to the above description from the available catalogs.

In studying the trends, the subject groups of Table IX are taken separately; and the trends for each college are noted. These figures are based upon the courses which the college plans to offer during the particular year for which the catalog was issued. Thus, these figures may vary somewhat from the actual offerings because of a lack of demand for a particular course that is listed or because of a sufficient demand to justify a class in a course that is not listed. These variations, however, will not be so great that Table XI will not show the trends.

The first subject group to be discussed is English. At present six of the junior colleges offer between 25 and 30 hours in this group. The exceptions are Iola with 19 hours, which is the lowest; Arkansas City with 21; Coffeyville with 33; and Independence with 40, which is the highest. Fort Scott and Hutchinson have made a substantial and continual increase. Coffeyville, Fort Scott, Hutchinson, Independence, and Kansas City made inconsistent but substantial increases in their offerings in the English group; Parsons, Garden City, and Iola made small increases; and Arkansas City and El Dorado decreased. Since 1928-29, however, only El Dorado and possibly Kansas City have not increased; and these colleges offer 29 and 25 hours, respectively.

In the languages there is more variation; at present, six of the colleges offer between 30 and 42 hours. The exceptions are Iola with 15, Fort Scott with 20, Hutchinson with 50, and Kansas City with 70 hours. Garden City, Hutchinson, and Kansas City tended to increase their offerings in this group; Arkansas City, Coffeyville, El Dorado, and Independence tended to remain approximately the same even though their offerings fluctuated; and the others, i.e., Fort Scott, Iola, and Parsons show decreases.

Mathematics appears to be a relatively stable group, for only three colleges show a fluctuation of more than four

hours, and not one fluctuated more than ten hours. At present six of the colleges offer between 18 and 21 hours. The exceptions are Arkansas City with 18 hours, Iola with 14, Kansas City with 24, and Garden City with 25. The only changes other than compensated fluctuations or minor changes are the seven-hour increase of Independence since 1928-29 and the seven-hour decrease of Iola since 1929-30.

At present, Iola with an offering of 15 hours is the only one of the junior colleges whose offering in the physical sciences does not fall between 20 and 30 hours. Six of the institutions, namely, Arkansas City, Coffeyville, El Dorado, Fort Scott, Garden City, and Parsons, show an increase in their offerings in this group. Independence has not varied her offering, while Iola and Kansas City have tended to remain the same even though their offerings have fluctuated, and Hutchinson has decreased her offering by five hours.

The present offerings in biological science vary from 0 to 20 hours. Independence has offered no biological science in any of the catalogs studied. El Dorado and Iola offer 10 hours, and the other seven vary between 15 and 20 hours. Coffeyville, Fort Scott, Garden City, Kansas City, and Parsons have tended to increase their offerings, as has Arkansas City, although its offerings have fluctuated more. Hutchinson has remained about the same, but Iola and El Dorado have decreased

the number of courses offered in the biological sciences.

In the social sciences seven of the junior colleges now offer from 38 to 45 hours while Parsons offers 30 hours, Garden City offers 32, and Iola offers 35. Garden City is the only one of the junior colleges to decrease its offering in social science. Independence and Coffeyville have slight increases, and Arkansas City did increase but has remained approximately the same in the last six years, and the other junior colleges have shown increases.

The miscellaneous group which is labelled "others" is discussed later[2], and the present curricula of the junior colleges is also discussed more completely later in the chapter.[3]

A study of the total offerings of the colleges for the given years show that Coffeyville, Fort Scott, and Parsons made continual and significant increases, while Arkansas City, Hutchinson, Independence, and Kansas City have made significant but not continual increases, and Garden City which offered 99 less hours in 1924-25 than in 1921-22 has made a significant increase since 1924-25. From 1928-29 El Dorado showed decreases in 1929-30 and 1931-32, but in 1934-35 its offerings were as large in credit hours as in 1928-29. Iola increased its offerings from 1925-26 until

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[2] Cf. post., p. 61 ff.

[3] Cf. post., p. 58 ff.

1929-30, as shown by the Table, but 1934-35 shows a decrease so that fewer credit hours are offered now than in 1925-26. The conclusion may be drawn that on the whole the trend of the junior colleges is to increase both in the number of semester hours of credit and in the variety of work offered; the latter is obvious since Table IX shows that each of the colleges except El Dorado, Garden City, Iola, and Kansas City have increased their miscellaneous offerings more than 30 hours; and both Iola and Kansas City have increased their offerings in this group by ten or more hours. In the case of Kansas City, this group has been decreased in the last few years due to a decrease in its teacher training activities. To compare with the above statement is the fact that, as shown in Table XI, with the exception of the commercial work offered in Coffeyville, Fort Scott, Independence, and Parsons, and the printing offered at Parsons, no school offers more than 14 hours of work in any one group which is listed under the group called "others" in Table IX.

The present curricula offered by the junior colleges are taken from Table IX and are placed with the averages in each group for all of the colleges in Table X. Thus it is shown that all but three of the colleges are within five hours either way of the English average, and that five of the schools vary not more than one point from 28.0.

The average for the languages is 26.2 hours, and six of

schools are within ten hours of the average. This group, with a range from 15 to 70 semester hours, has the greatest range of any of the academic groups.

Mathematics has an average of 19.5 hours and a range of only twelve points--from 13 hours to 25 hours. Six of the colleges vary not more than two points either way from the average of all the schools.

Of the "sciences" the average for the physical sciences is 24.0 hours of work, and eight of the institutions offering science are within five hours of the average. The only two exceptions are one of 30 hours and one of 18 hours. The courses offered in biological sciences average 14.2 hours which is almost 10 hours less than the average for the physical sciences. As mentioned above, Independence offers no biological science; but the other nine do not vary more than six hours from the average.

The social science courses have the largest average of all the academic groups, with an average of 28.9 hours; however, the average for the languages is only 3.7 hours less, with an average of 26.2. The social science offerings of all but one of the junior colleges are within 6.1 hours of the average except one, which offers 20 hours of social sciences.

The average of 54.5 hours for the miscellaneous group is

TABLE X

A GROUPING OF THE CURRICULAR OFFERINGS OF THE KANSAS[4] PUBLIC JUNIOR COLLEGES FOR 1934-35
(Semester hours as a basis)

	English	Languages	Mathematics	Physical sciences	Biological sciences	Social science	Others	Total
Arkansas City	21	30	13	23	17	29	26	179
Coffeyville	33	35	20	29	15	41	99	272
El Dorado	29	30	19	28	10	41	18	175
Fort Scott	29	20	19	30	20	38	82	238
Garden City	27	20	18	25	15	33	23	171
Hutchinson	29	50	19	20	15	43	42	218
Independence	40	42	25	20	0	44	78	249
Iola	19	15	14	15	10	35	30	128
Kansas City	25	70	24	25	20	45	24	233
Parsons	28	40	21	25	20	30	122	286
Average	28.0	26.2	19.5	24.0	14.2	38.9	54.4	

Read table thus: Arkansas City Junior College now offers 21 hours of English, 30 of languages, 13 of mathematics, 29 of social sciences, and presents a total offering of 179 hours. The average number of hours offered by all ten of the schools for English is 28.0 hours.

very misleading: four of the colleges offer less than half of that amount, and two more of the schools are offering less than the average. This is especially true in the cases of Coffeyville and Parsons. The median for this group would be between

[4] Taken from Table IX, cf. ante., p. 52

36 to 42 hours.

The range of the total offerings of the junior colleges is from 128 to 286 hours. This is a range of 158 hours. The average for the entire group is 216.6 hours. Six of the colleges have a total offering larger than the average with five of them offering more than 230 hours. The offerings of three of the remaining schools are 171, 175, and 179 hours respectively; and the other school offers a total of 128 hours.

The analysis of the miscellaneous or "others" group of Table X shows that this group is composed of professional, vocational, and cultural courses of a non-academic nature. Coffeyville has one two-hour course in mythology which seems to defy classification; although it is not given a place in Table XI, which is an analysis of the miscellaneous group, it is added to the total for Coffeyville, which is 99 hours. Parsons' total of 122 hours of miscellaneous offerings includes 8 hours of agriculture and 36 of printing.

Table XI shows that the most work is offered in commerce with 204 hours of credit; however, courses in education and in engineering were o fered by more schools. Courses in the latter two fields are offered in all the junior colleges except Iola. Commerce and music are each offered by seven schools although not by the same seven, and home economics is offered by six. Four schools offer work in art, and one

TABLE XI

NON-ACADEMIC OFFERINGS OF A PROFESSIONAL, VOCATIONAL, OR CULTURAL NATURE IN THE KANSAS PUBLIC JUNIOR COLLEGES[5]

	Art	Commerce	Education	Engineering	Physical Education	Home Economics	Music	Total
Arkansas City	-	6	9	5	-	10	6	36
Coffeyville	-	65	9	10	-	5	8	99[b]
El Dorado	-	-	9	4	-	-	-	18
Fort Scott	9	29	9	10	5	8	12	82
Garden City	-	-	14	9	-	-	-	23
Hutchinson	2	-	9	8	-	12	11	42
Independence	12	42	9	10	-	-	5	78
Iola	-	10	-	-	-	10	-	20
Kansas City	-	6	10	7	-	-	1	20
Parsons	6	46[a]	9	9	-	13	-	122[c]
Total	29	204	87	72	5	58	48	

Read table thus: Arkansas City offers six hours of commercial work, nine of education, five of engineering, ten of home economics, and six of music, with a total of 36 hours. The total number of hours of art offered by the ten colleges is 29 hours.

[a] contains 22 hours of commerce from LaSalle Extension University

[b] contains 2 hour course in mythology

[c] contains 3 hours of agriculture and 36 hours of printing

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[5] Compiled from the catalogs of these junior colleges for 1934-35.

school offers courses in each of the follo ing: agriculture, at Parsons; mythology, at Coffeyville; physical education, other than gymnasium, at Fort Scott; and printing, at Parsons. The groups of fields ranked in order of the number of semester hours offered are: commerce with 204 hours, educat ion with 87, engineering with 72, home economics with 58, music with 48, printing with 36, physical education with 5, agriculture with 3, and mythology with 2.

It is obvious that academic courses make up the largest part of the curricula of the Kansas public junior colleges. This fact is shown by Figures 1 and 2. In these figures the commercial training, educational courses, home economics, and printing are considered to be vocational training; all other courses and work presented in Table XI are considered as non-academic, professional, or cultural training; and the six-named groups or fields in Tablex IX and X are considered to be academic training. Table XII gives the data which are interpreted by Figures 1 and 2.

Although Figure 1, which gives the academic, vocational, and other non-academic offerings in terms of semester hours, and figure 2, which gives the same divisions in terms of per-cent of the total offerings for each school, explain Table XII, a few points are to be noted here. The schools may be roughly divided into two groups (1) those whose academic training is approximately 75% or more of the total offering

TABLE XII

ACADEMIC, VOCATIONAL, AND OTHER NON-ACADEMIC OFFERINGS[6] IN THE KANSAS PUBLIC JUNIOR COLLEGES IN 1924-25

	Academic hours	Vocational hours	Other non-academic hours	Total	Academic percent	Vocational percent	Other non-academic percent
Arkansas City	143	25	11	179	79.9	14.0	6.1
Coffeyville	175	80	17	272	64.3	29.4	6.3
El Dorado	157	9	9	175	89.7	5.1	5.2
Fort Scott	156	46	36	238	65.5	19.3	15.2
Garden City	148	14	9	171	86.5	8.2	5.3
Hutchinson	176	21	21	218	80.7	9.6	9.7
Independence	171	51	27	249	69.0	20..	10.8
Iola	108	20	0	128	84.4	15.6	0.0
Kansas City	209	16	8	233	89.7	6.9	3.4
Parsons	164	104	18	286	57.3	36.4	6.3

Read table thus: Arkansas City offers 143 hours of academic training, 25 of vocational training, and 11 of other non-academic training. These figures in percent of the total offerings are: academic, 79.9%; vocational, 14.0%; and other non-academic, 6.1%.

and (2) those whose academic training is less than 75% of the total offering. It should be noted that the six junior colleges which are in the first group are the six with the least number of hours offered in their curricula: of these, however, Arkansas City and Iola both have a vocational offering of over 10%; and Hutchinson offers nearly 10% in the vocational and in

[6] Compiled from the catalogs from these colleges for 1924-25.

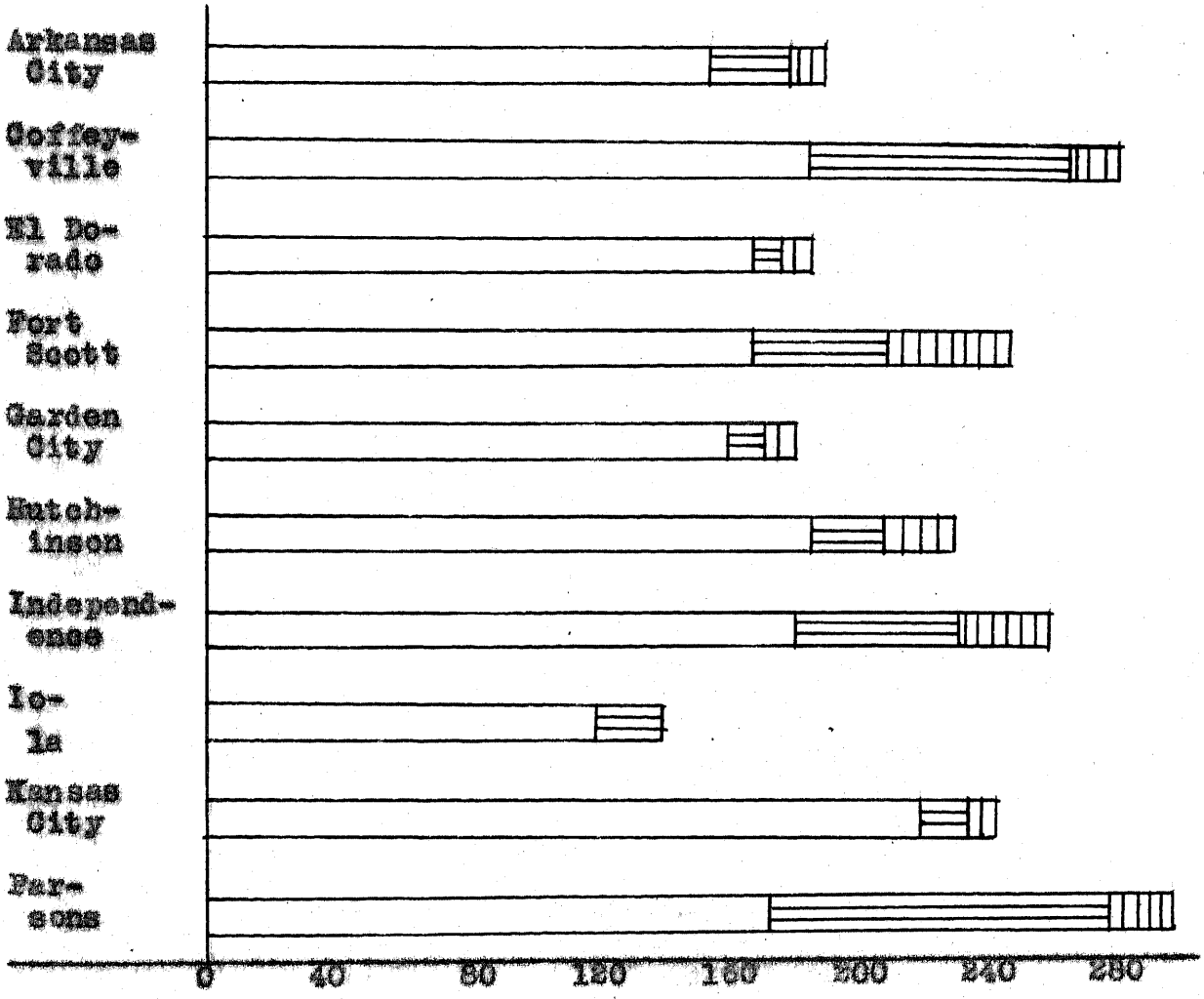

FIGURE 1

ACADEMIC, VOCATIONAL, AND OTHER NON-ACADEMIC OFFERINGS IN KANSAS PUBLIC JUNIOR COLLEGES, 1934-35
(In semester hours)

Read figure thus: ▭ indicates academic hours, ▤ indicates vocational hours, and ▦ indicates other non-academic hours.

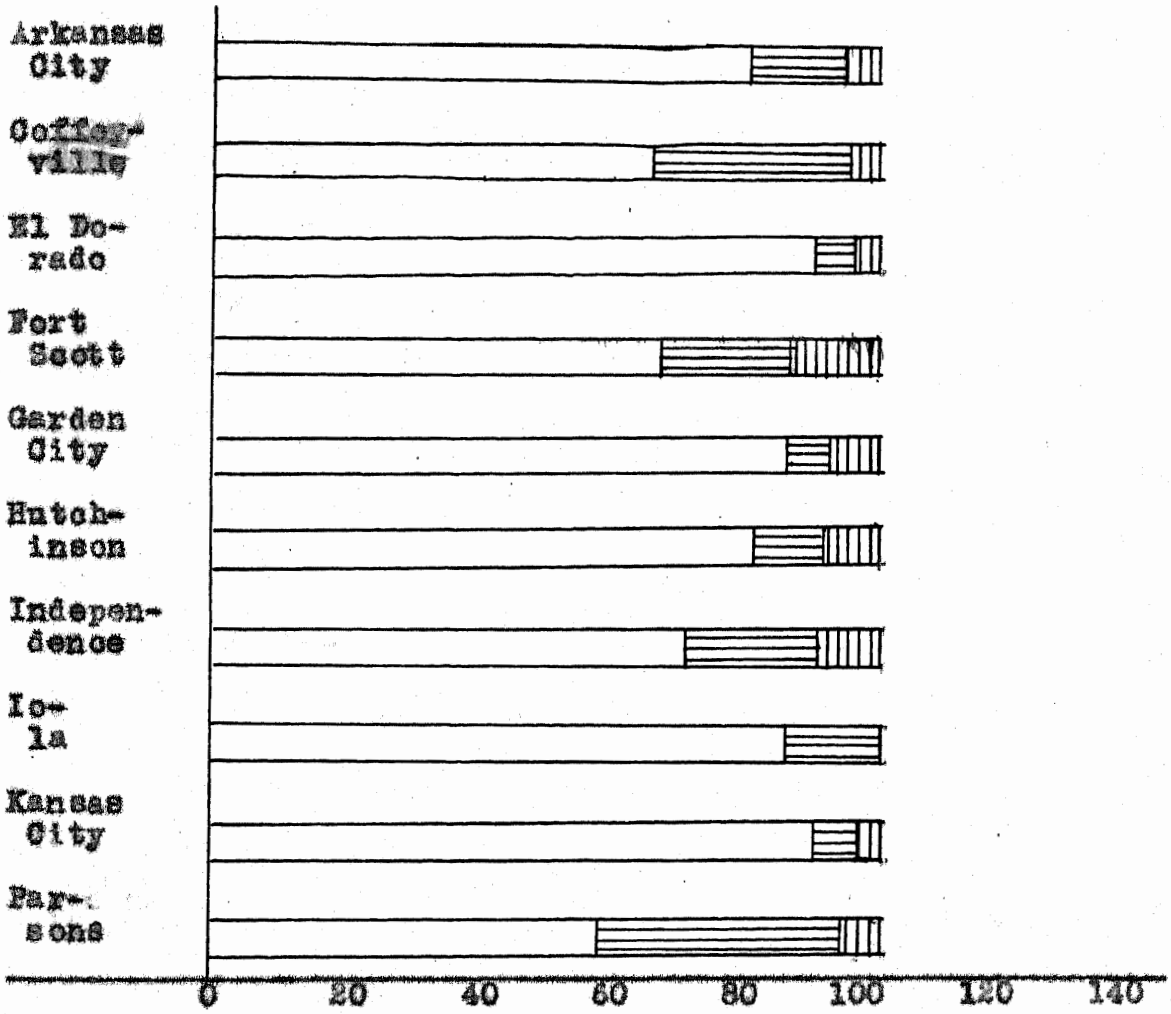

FIGURE 2

ACADEMIC, VOCATIONAL, AND OTHER NON-ACADEMIC OFFERINGS IN KANSAS PUBLIC JUNIOR COLLEGES, 1934-35
(In percent)

Read figure thus: ▭ percent of academic hours, ▤ indicates percent of vocational hours, and ▦ indicates percent of other non-academic hours.

other non-academic offerings.

It should also be noted that the four junior colleges which are in the second group and which have more than 30.0% of their curricula in vocational offerings are the schools which offer from 29 to 65 hours of commercial work, as shown in Table XI.

To compare the curricular offerings of the Kansas public junior colleges with standards set in previous studies, the reader should know that in 1921 Koos found the average offerings of the 23 public junior colleges which he studied to be 255.0 hours; in 1928 Whitney examined 15 public junior colleges with average offerings of 214.1; and in 1930 Hollingsworth-Eells studied 129 public junior colleges whose average offerings were 285.0 hours.[7] The average for the Kansas public junior college in 1934-35 is 216.6, or only 2.5 hours above Whitney's average, which is the smallest of the averages found in these previous studies. Eells writing in 1933, however, quoted his study of 284 junior colleges and found that less than half of them had as extensive a curriculum as Koos had suggested in 1921, and he found after he had grouped the junior colleges as to states that New York with 228 hours had the median curriculum for the institutions studied.[8]

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[7] W. C. Eells, The Junior College, Houghton Mifflin Co., Boston, 1931, pp. 482, 485.

[8] W. C. Eells, "Adjustments in the Junior College Curriculum." Junior College Journal, vol. 3, pp. 402 f., May, 1933.

A second comparison may be made of the percent of academic and non-academic offerings. Kells[9] compared these percents for the public junior colleges in 1931, when the academic was 69% of the curriculum, leaving 31% for non-academic; in 1930 he found that the academic subjects had decreased to 67% of the curriculum, and thus the non-academic had increased to 33%. Table XII shows that only four of the Kansas junior colleges could compare with either of these figures, and that the other six have more than 79% of their curricula devoted to academic subjects. The four junior colleges whose percents do compare with Kells' figures have the large commercial offerings.

A third method of comparison is used in Table XIII in which the average of the curricular offerings, both in semester hours and in percents, made by departments in the Kansas public junior colleges in 1934-35 is compared with a similar study of the curricular offerings in 279 junior colleges in 1930.

The comparison made by Table XIII shows that here again the Kansas public junior colleges have a larger percent of academic training than the 279 junior colleges reported by Kells. Those subjects in which the Kansas junior colleges have offerings in excess of the other study are: English,

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[9] W. C. Kells, The Junior College, op. cit., p. 488.

TABLE XIII

COMPARISON OF THE CURRICULAR OFFERINGS BY DEPARTMENTS IN 279 JUNIOR COLLEGES IN 1930[10] AND 10 IN 1934-35[11]

	(1) Averages for 279 colleges 1930	(2) Percent each subject is of column one	(3) Averages for 10 colleges 1934-35	(4) Percent each subject is of column three
Academic	174.1	68.6	162.7	75.3
Public Speaking	6.[illegible]	2.4	6.9	3.2
English	20.3	8.0	21.1	9.7
Languages, Ancient	10.9	4.3	1.0	.5
Languages, Modern	35.5	14.0	35.2	16.2
Social Sciences	29.0	11.4	32.6	15.2
Natural Sciences	36.1	14.2	38.2	17.6
Mathematics	17.0	6.7	19.2	8.8
Philosophy	2.2	0.9	2.5	1.1
Psychology	5.9	2.3	3.8	1.7
Bible and Relig. Educ.	6.0	2.4	0.0[a]	0.0
Physical Education	5.0	2.0	3.2[a]	1.5
Non-academic	79.4	31.4	53.9	24.7
Agriculture	3.8	1.5	0.3	0.1
Art	6.6	2.6	2.9	1.3
Commerce	6.6	2.6	18.2	8.4
Education	10.6	4.2	8.7	4.0
Engineering	8.4	3.3	7.2	3.3
Home Economics	9.8	3.9	5.8	2.7
Music	17.8	7.0	4.8	2.2
Extension	5.8	23.0[c]	2.2[b]	1.0
Other	2.0	0.8	3.8	1.7
Total	253.5	100.0	216.6	100.0

Read table thus: The average of the 279 junior colleges in 1930 was 20.3 hours of English, which was 8.0% of the total offerings (253.5); and the average of the ten public junior colleges of Kansas in 1934-35 is 21.1 hours or 9.7% of the total offerings (217.9).

[a] Three did not list any physical education courses, but at least two of them had faculty and equipment.
[b] This is commercial work from La Salle University.
[c] This must be a misprint.

[10] Ibid, p. 489.

[11] Compiled from the catalogs of the colleges for 1934-35.

public speaking, modern languages, social sciences, natural sciences, mathematics, and commercial subjects. All of these are academic subjects except the commercial subjects, and in their case it is the case of a few colleges having many hours of commercial work rather than all of the colleges having a few hours of commercial work. The subjects which have approximately equal percents in both cases are: philosophy, psychology; physical education, education, and engineering. The subjects having smaller offerings in percent in the Kansas institutions are: ancient languages, Bible and religious education, agriculture, art, home economics, music. Apparently the curricula of the Kansas junior colleges contains so much academic work that the junior colleges may be putting too much stress upon their preparatory function.

In conclusion, it appears that the average curriculum of a Kansas public junior college does not offer enough semester hours of work; and, furthermore, the semester hours of work offered are not properly distributed among the various departments. The average curriculum stresses the academic and the preparatory phases for too great an extent.

The curricula which are offered the junior college student is important. The method of presenting this curricula is also important, however, since the junior college student must be taught rather than left to dig out his own material as an upperclassman or graduate student may be

expected to do. The method of presenting the subject matter to the student depends upon the faculty; hence the faculty is an important part of the junior college, as it is of any school. To study the faculty at least three phases must be studied. These are: (1) the preparation which a faculty member must have; (2) the standard of living which he is permitted to maintain, i.e., his remuneration; (3) the teaching load. The preparation of the faculty naturally breaks itself up into two divisions, the academic or formal training and the individual's previous experience. In this study only the academic training as measured by earned degrees shall be studied. Lack of available material makes the study of the problem lack completeness at this time. Table XIV shows the degrees held by the various members of the junior college faculties as shown by the catalogs.

Table XIV shows that every junior college, with the exception of Arkansas City, has more Master's degrees than Bachelor's degrees; in fact, the other nine have more than half of their faculty members with Master's degrees. The average for the group shows that there are over twice as many Master's degrees as there are Bachelor's degrees. It is also interesting to note that four of the seven faculty members who hold no degree are librarians; and the other three include a music instructor, a dean of women, and a director of athletics.

TABLE XIV

DEGREES HELD BY THE FACULTIES OF THE KANSAS PUBLIC JUNIOR COLLEGES IN 1934-35[12]

	Master's	Bachelor's	No degree	Vacancy	Total
Arkansas City	7	9	-	1	17
Coffeyville	10	4	1	1	16
El Dorado	10	8	-	-	18
Fort Scott	14	6	1	-	21
Garden City	7	-	-	-	7
Hutchinson	13	3	1	-	17
Independence	18	8	2	-	28
Iola	8	3	-	-	11
Kansas City	16	4	-	-	20
Parsons	16	7	2	-	25
Average	11.4	5.2	.7	.2	17.5

Read table thus: At the time that their 1934-35 catalog was published, Arkansas City Junior College faculty had seven who held Master's degrees, nine who held Bachelor's degrees, and one vacancy.

Of the two vacancies one was in modern languages, and the other was in home economics. These would be filled by individuals holding at least Bachelor's degrees and probably by the holders of Master's degrees.

There has been a tendency to increase the number of Master's degrees held by the faculty members of the junior colleges and thus to get better qualified faculties, at least in academic training. Table XV compares the percent of degrees held by the faculties of the junior colleges in 1928-29

[12] Compiled from the catalogs of the various junior colleges for 1934-35.

with those held in 1934-35. During this period each of the colleges with the single exception of Arkansas City has increased its percent of Master's degrees which are held in the respective faculties, and while the percentage of Master's degrees held by the members of the Arkansas City faculty decreased only 3.2% this city dropped the faculty memebers who held no degrees. The increases in percent of Master's degrees ranged from 1.1% at El Dorado to 22.2% at Garden City. Garden City at the present time has a faculty composed entirely of holders of Master's degrees. During the period Arkansas City, El Dorado, and Garden City lost the members of their faculties who held no degree, and although the percents of the Fort Scott, Hutchinson, and Independence faculties who hold no degree decreased, they still have faculty members who hold no degree. Since 1928-29 Coffeyville has hired one faculty member who holds no degree. The average of the entire group shows that the percentage of Master's degrees has increased at the expense of the other divisions.

The averages for the degrees held by the faculties of the Kansas public junior colleges may be compared with the averages found by Koos and McDowell in their studies of junior colleges in the United States and reported by

TABLE XV

TRENDS IN THE DEGREES HELD BY THE KANSAS PUBLIC JUNIOR COLLEGE FACULTY MEMBERS AS MEASURED IN PERCENT[13]

	1928-29				1934-35			
	Master's	Bachelor's	No degree	Vacancy	Master's	Bachelor's	No degree	Vacancy
Arkansas City	44.4	33.3	11.1	11.1	41.2	52.9	----	5.9
Coffeyville	41.7	58.3	----	----	62.5	25.0	6.3	6.3
El Dorado	54.5	27.3	9.1	11.1	55.6	44.0	----	----
Fort Scott	61.5	30.8	7.7	----	66.7	28.6	4.8	----
Garden City	77.8	11.1	11.1	----	100.0	----	----	----
Hutchinson	63.6	27.3	9.1	----	76.4	17.6	5.9	----
Independence	63.6	18.2	18.2	----	56.6	34.8	8.7	----
Iola	66.7	22.2	----	----	72.7	27.3	----	----
Kansas City	72.2	27.8	----	----	75.0	25.0	----	----
Parsons	42.8	27.6	----	----	64.0	28.0	8.0	----
Average	58.8[a]	30.4	7.5	2.2	67.0	28.5	3.3	1.2

Read table thus: In 1928-29 the Arkansas City Junior College faculty held the following degrees as measured in terms of percents: 44.4% held Master's degrees and 33.3% held Bachelor's degrees, 11.1% held no degree and 11.1% was a vacancy. In 1934-35 41.2% held Master's degrees, 52.9% held Bachelor's degrees, and the remaining 5.9% was a vacancy. In 1928-29 an average of 58.8% of the faculties of the ten institutions held Master's degrees.

[a] Eleven and one-tenth per cent of the Iola faculty held a Ph. D. which is not included in the table.

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[13] Compiled from the catalogs of the various junior colleges for 1928-29 and 1934-35 with the exception that the Kansas City catalog for 1929-30 was used instead of 1928-29.

Eells.[14] In a study of 180 public junior colleges McDowell found that 3.0% held Doctor's degrees, 39.0% held Master's, 45.0% held Bachelor's, and 13.0% held no degree. Koos studied 162 public junior colleges, and after omitting special teachers in subjects like home economics, art, music, and physical education, he found that 3.0% of the faculties held Doctor's degrees, 47.0% held Master's, another 47.0% held Bachelor's, and 3.0% held no degree. In comparison, the ten junior colleges studied here have in 1934-35, no Doctor's degrees, 67.0% Master's degrees, 28.5% Bachelor's degrees, 3.3% no degrees, and 1.2% listed as vacancies at the time that the catalogs were issued.

It is also of interest to note that four of the most important accrediting agencies which include Kansas in their area of influence, i.e., The American Council on Education, The American Association of Junior Colleges, The North Central Association of Colleges and Secondary Schools,[15] and the Kansas State Board of Education,[16] set one year of graduate study as a minimum for the academic training of the junior

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[14] W. C. Eells, The Junior College, op. cit., p. 401

[15] Ibid., p. 176.

[16] F. M. McDowell, The Junior College, U. S. Bureau of Education, Bulletin 1919, No. 35, p. 79.

college faculty member.

OBrien sounds a warning that the junior college faculty may be robbed of many of its best men by excessive salary cuts. He found the median salaries of the full-time instructors in the ten public junior colleges ranging from $1269 to $1982 with a median of $1640. When the many part-time instructors are taken into consideration, however, the salaries are lowered, and he says, ". . . . if the junior college classes are not actually taught by high school teachers, they are in many instances taught by those who receive meager high school salaries."[17] He continues by stating that if the part-time instructors are also considered half of the Kansas public junior colleges pay a median salary of $1503 or less, and one of the junior colleges has a typical or median salary of $1069 when calculated on this basis.[18] In connection with this it should be noted that in Rees Hughes' report for 1934-35,[19] one of the Kansas public junior colleges reports no full time instructor, a second reports only one full-time instructor, and two other institutions report three full-time instructors. The totals

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17 F. P. OBrien, The Public Junior College as a Community Asset, Kansas Studies in Education, Vol. II, no. 4, January, 1935, p. 21.

18 Loc. cit.

19 Rees Hughes, The Public Junior Colleges of Kansas, mimeographed reports published at Parsons, 1934-35.

show that only 30.2% of the junior college instructors for the current year are full-time instructors.

A study of the total salaries paid each year by the different junior colleges shows that all ten are paying less in 1934-35 than they were paying in 1931-32. There was a slight increase this year over 1933-34, however. Six of the junior colleges show increases this year, and the total for 1934-35 is $138,378.79 as compared to $132,682.29 for 1933-34 and $203,414.90 for 1931-32.[20] This may become more significant by comparing the salary change measured in percent with the faculty change measured in percent. Since 1932-33 Arkansas City has decreased its total salary 14.1% and has increased its faculty 41.7%. Coffeyville has decreased its total salary 8.4% and has decreased its faculty 11.1% since 1931-32. Other colleges for which there is material to compare the change since 1931-32 include El Dorado, which has decreased its total salary 15.3% and has increased the faculty 38.5%; Hutchinson, which has decreased its total salary 14.9% and has decreased its faculty 45.6%; and Independence, which has decreased its total salary 16.2% and has increased the faculty 2.1%. Since 1932-33 Fort Scott decreased its total salary 32.3% and increased the faculty

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[20] Ibid., for 1931-32, 1933-34, and 1934-35.

5.0% and since 1932-34 Parsons decreased its total salary 19.1% and increased the faculty 13.6%. Of course there has been a change in living conditions and in the cost of living during the last several years, but all of these comparisons have been made since June, 1931. The figures for the total salaries were obtained from the Hughes report,[21] and the sources of the figures for the faculty are the various catalogs of the junior colleges.[22]

No study of the faculty of an educational institution is complete without a study of the teaching load of the faculty. OBrien has recently studied the teaching load in the Kansas public junior colleges, and his conclusions include:[23]

> Of the 53 instructors (including four Deans) who teach only in the junior college, 31 have teaching assignments which exceed the standard number of hours and 18 exceed the maximum. The student loads carried by these instructors range from 50 to 249, while their typical (median) load is 126 students. Most (87 per cent) of those who are joint instructors in high school and college have between 20 and 30 hours of assigned teaching. In addition to instructional duties, teachers may have other duties on committees, in sponsoring or coaching student activities and in various special assignments. A ten percent increase in number of instructors would remedy this type of loading of teachers.

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[21] Ibid., for 1931-32, 1932-33, 1933-34, and 1934-35.

[22] Compiled from the catalogs for the various institutions.

[23] F. F. OBrien, op. cit., pp. 22-24, 26.

> The size of classes has a direct bearing on both the teaching load and the cost of instruction. With increased enrollments we have been faced with larger and larger classes. Probably the optimum size of class will vary with the content and the purpose of instruction. But the possibility of classes being too large is generally recognized by teachers, students and other close observers . . . .
>
> During the current semester more than one-third (35%) of the classes exceed what has long been regarded as a fair maximum class size in both high school and junior college, namely 30 students. This prescribed limitation has served to call attention to the danger of unduly large classes, although the limit specified has not been established beyond doubt. It seems reasonable and is the view held by many competent judges that the best class size varies according to subject and general or specific aims. It may be that forty or fifty students in music appreciation can be handled as well as can twenty in French or Chemistry.
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> *
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> Many of the large classes in Kansas public junior colleges (those having 36 to 65 students each) are in social sciences, literature, and health or physical education, in which large classes may be less difficult to manage. But many also (40 per cent) are in rhetoric, mathematics, physical science, language and teacher-training courses. Ten per cent were in music, foods, and commercial subjects. To expect instructional efficiency in mathematics and modern languages in such large classes is certainly expecting too much. Lecturing does not seem to fit these subjects.

He also suggests that if large classes are necessary the number of teaching hours per teacher should be limited, thus allowing for more frequent student-teacher conferences.[24]

Another comparison may be obtained by comparing the faculty-student ratio of the Kansas public junior colleges

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[24] Ibid., p. 26

with that of the average junior college as found by Eells.[25] He found for the average junior college in the United States, when he counted two part-time instructors as equivalent to one full-time instructor, that the faculty-student ratio was one to eighteen. The total number of faculty members as given by the catalogs and taken from Table XIV,[26] without reference to whether they are part-time or full-time, give a faculty-student ratio of one to seventeen. By taking the number of faculty members for 1934-35 as given by Rees Hughes[27] and counting two part-time instructors as equivalent to one full-time instructor, the faculty-student ratio is one to twenty-eight, which is considerably larger than the average as found by Eells.

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[25] W. C. Eells, "Status of the Junior College in the United States, 1934-35." School and Society, vol. 41, p. 206, February 9, 1935.

[26] Cf. ante., p. 72.

[27] Rees Hughes, op. cit., 1934-35.

CHAPTER V

THE JUNIOR COLLEGE AS A FACTOR OF THE COMMUNITY

One of the important duties of a junior college is to be of direct service to its community. This is especially true of the Kansas public junior colleges, for these institutions are local in nature; and, consequently they must be of direct value to the local community for no community will long support what appears to be of little or of doubtful value to it. Any educational institution, which does not improve the life of the community in which it is situated and by which it is supported, has somehow missed, at least, one important factor of modern education.

Before considering the junior college contributions to the community it should be noted that these institutions are accredited by one or more responsible accrediting agencies. This gives some indication of the quality of education given in these junior colleges. All of the Kansas public junior colleges are accredited by the University at Lawrence: and all, except Iola, are accredited by the State Board of Education. In addition the Arkansas City, the Hutchinson, the Independence, the Kansas City, and the Parsons Junior Colleges are accredited by the American Association of Junior Colleges while the Arkansas City, the El Dorado, and the Kansas City Junior

Colleges are accredited by the State College Association.[1]

A second point to be noted at this place is OBrien's study of the tax levies.[2] He points out that, for 1933-34 only one of the public junior colleges of Kansas would need more than a three-mill levy to provide the operating costs of the junior college, five others would need a levy of two or more mills, and the other four would need less than two-mill levies. Certainly the additional levies as stated above would not be enough of an additional burden to any of these ten Kansas communities to produce a serious condition of excessive taxation unless the other taxes were excessive. Eells found that Kansas has been especially prudent in establishing public junior colleges.[3]

The direct contributions of these junior colleges to their communities are studied under the following topics: (1) making advanced training, i.e., beyond the high school, available to more people; (2) holding more of the intelligent and talented youths of the community at home for a longer period; (3) drawing intelligent and talented individuals from other communities; and (4) offering work which

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[1] Doak S. Campbell, "Directory of Junior Colleges, 1935." Junior College Journal, vol. 5, p. 214 f., January, 1935.

[2] F. P. OBrien, The Public Junior College as a Community Asset, Kansas Studies in Education, vol. 2, no. 2, January, 1935, p. 19.

[3] W. C. Eells, The Junior College, Houghton Mifflin Co., Boston, 1931, p. 135.

will enable the members of the communities to be more efficient not only in their daily work and occupations but also in their living. The evidence that college attendance varies inversely with the distance to the institution is important, for all of the Kansas public junior colleges are local institutions and therefore give to more communities accessible institutions of higher learning. The above statement of the relationship of college attendance to distance is true, even for the larger state universities and colleges, as shown by Eells:[4]

> Studies have shown that 90 percent of the students in the average college come from within a radius of 100 miles. The homes of 50 percent of University of California students are within 30 miles of Berkeley. Koos found that 41 percent of the enrollment in 39 four-year colleges came from the immediate community. Green found that 96 percent of the students in public junior colleges come from within a radius of twenty miles. Koos found in California that the counties having junior colleges the freshman enrollment was 71 percent of the high school graduates; in counties without junior colleges or other higher institutions, it was 38 percent.

Thus Eells points out that not only do most of the students of the larger institutions come from within 75 miles and for smaller institutions, particularly the junior colleges, the distance is much less, but also that a much larger percent of the high school graduates attend an institution of higher learning if there is one in the same county. The

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[4] W. C. Eells, op. cit., p. 198.

illustration of the percent of high school graduates who continued is only for junior colleges, but universities and four-year colleges certainly would not draw a smaller percent of the high school graduates from its county than would a junior college from its county, other factors being equal; in fact, the four-year colleges and universities would probably draw a larger percent.

This trend, i.e., for a junior college to increase the college enrollment of the district, may also be shown from figures compiled for various reports by Rees Hughes.[5] In the following comparisons for six of the junior colleges, the number of students from the junior college district who were in college attendance the year before the junior college was established is compared with the number of students in college attendance as freshmen and sophomores, only, in 1929-30 and in 1934-35. From the Arkansas City district in 1921-22 fifteen students were away in attendance at some college, while in 1929-30 121 students from the district were in colleges as freshmen or sophomores; of these, 14 were not attending the Arkansas City Junior College. For 1934-35 there were 220 attending colleges, of whom six were not attending the home junior college.

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[5] Rees Hughes, The Public Junior Colleges of Kansas, mimeographed reports, Parsons, 1929-30, 1930-31, 1934-35.

From the Coffeyville district twelve students were away in attendance at college in 1922-23, while in 1929-30 there were in school 123 of whom seven were not attending the home junior college; and in 1934-35 270 were attending college, of whom 26 were not attending the home junior college. For El Dorado, in 1926-27 twenty-six students were away at college, while the figures for 1929-30 are 140 of whom 23 were away, and for 1934-35 142 of whom 20 were away. In Iola 19 were away at college in 1922-23, and the figures for 1929-30 are 79, of whom seven were away, and for 1934-35 54 of whom seven were away. Kansas City had 148 students away at college in 1922-23, and in 1929-30 there were 419 students of whom 26 were away, and in 1934-35 there were 326 students of whom 41 were away attending college. In Parsons 11 students were away at college during 1922-23, while in 1929-30 there were 196 college students of whom 17 were away, and in 1934-35 there were 208 students of whom seven were attending other colleges.

These figures show trends only, for while the first figures for each district show the students who were attending college the last figures are only for those attending the freshman and sophomore years of college; also, in each case several years have elapsed since the year given for the first figures and 1929-30. However, in each case there is a distinct

increase between the first figures, which are the college students in attendance the year before the junior college was established, and the figures for 1929-30; in fact, in no case was the increase less than 100%; and in the case of Coffeyville the increase was 925%. In two cases, Iola and Kansas City, the number of students in attendance for the first two years of college work is less in 1934-35 than in 1929-30; and in two other cases, El Dorado and Parsons, the increases are slight. Arkansas City, El Dorado, Iola, Kansas City, and Parsons all show a decrease in 1934-35 as compared with 1929-30 in the number of students who attend colleges away from home for their junior college training. Kansas City and Parsons show the largest decreases. Coffeyville shows a decrease in 1929-30 and an increase in 1934-35 over 1928-28 in the number of students who do not attend the home college for their junior college work.

Another approach to the junior college's affecting the availability of educational training above the high school level, i.e., making our education more democratic, is to determine the percent of the high school graduating class which enter the junior college the following year. Table XVI shows the percent of high school graduates who attend their home junior college the following year.

TABLE XVI

THE PERCENT OF THE HIGH SCHOOL GRADUATING CLASS WHO ENTERED THE JUNIOR COLLEGE THE NEXT YEAR[6]

	1928-1929	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	Average
Arkansas City	32.4	39.3	80.9	45.4	46.4	45.1	48.3
Coffeyville	29.6	58.5	63.1	56.6	52.3	55.4	52.6
El Dorado	44.2	48.6	52.3	51.7	48.6	45.7	47.7
Fort Scott	36.7	49.2	57.1	53.8	56.2	59.7	52.1
Garden City	33.3	38.2	37.8	54.1	57.5	63.6	47.4
Hutchinson	54.9	31.8	40.7	54.4	46.4	40.8	44.3
Independence	45.2	56.6	61.0	53.1	62.8	57.6	55.9
Iola	40.2	38.2	40.0	52.6	32.3	22.2	39.3
Kansas City	31.9	30.5	35.2	45.0	18.9	17.4	34.7
Parsons	46.6	56.2	67.1	65.3	55.9	58.2	57.2
Average	39.4	44.1	53.5	52.5	47.7	47.1	

Read table thus: At Arkansas City 32.4% of the high school graduates of 1928-29 entered the junior college in 1929-30. Of the 1930-31 graduates 80.9% entered the junior college in 1931-32, and the six-year average is 48.3%. For the year 1929-30 44.1% was the average for all ten of the districts.

The percents range from 17.4 at Kansas City for 1933-34 to 80.9 at Coffeyville for 1930-31. Over the entire period El Dorado has the most consistent record with a range of 8.7 points, and Coffeyville has the greatest variation with a

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[6] Ibid., 1929-30 to 1934-35.

range of 43.5 points. The six-year averages have a range of 22.5 points; however, six of the junior colleges are between 45.0% and 55.0%. Independence with 55.9% and Parsons with 57.4% are above 55.0 while Iola with an average of 39.3% and Kansas City with 34.7% are below 45%. The annual average of all ten of the junior colleges vary from 39.4% in 1928-29 to 53.5% in 1930-31. These averages show an increase from 1929-30 to 1930-21, and from that time the annual averages have been decreasing each year until only 47.1% of the high school graduating class of 1933-34 entered the junior college. These figures are not directly comparable to those given above by Eells[7] because only those graduates who enter the junior college are used in calculating the percents for the Kansas public junior colleges. Nevertheless these percents compare very favorably with those given by Eells, for while none of the averages reach 71% only one school, Kansas City, has an average of less than 38%; and Iola is not far above 38%. In the annual averages only one, 1928-29, for which the average was 39.4%, was below 45.0%. Hence the trends show that the college enables more of the youth to attend at least two years of college.

Still another approach to the fact that the proximity

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[7] Cf. ante. p. 83

of a college increases the number of individuals who may attend may be seen from OBrien's survey of Reno county.[8] His study shows that the trend is for the county having a college to have a larger proportion of college students among its youth. Such counties as Lyon, Douglass, and Riley had in 1924-25 from two to four times as large a college enrollment as they had high school graduates the previous year, while these adjoining counties having no college would have approximately as many students attending college as there had been in the high school graduating class in the previous year. In a lesser degree this was also true of most of the other counties which had good accredited colleges.

In 1926, Wellemeyer[9] found that of 469 Kansas public junior college students 37.0% could not have attended college if there had not been a junior college in the community, and another 16% were doubtful or non-committal. In 1929 Green[10] found that of 3825 junior college students only 44% were certain that they would have been in college elsewhere. Both of these studies show that less than 50% of the junior college

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[8] F. P. OBrien, College Standards and a Public Junior College, mimeographed report, University of Kansas, 1927, p. 17.

[9] C. F. Wellemeyer, "The Junior College as Viewed by Its Students." School Review, vol. 34, p. 764, December, 1926.

[10] W. C. Eells, op. cit., p. 229.

students were certain to have been attending college if there had not been a junior college in that vicinity.

As seen in the above paragraph, there is no doubt but that some of the students who attend a junior college would have gone away to college if there had not been a local institution; also it is a commonly accepted fact that the college students tend to rank among the more intelligent and enterprising of the community. Consequently, although these students who continue their education after their graduation from the junior college may eventually leave the community, nevertheless they have remained two years longer than they would have if the community lacked the educational facilities offered by the junior college.

One method of illustrating the holding power or rather the ability of the junior college to attract and hold the youth of the community who are eligible to attend it, is to find what percent of all individuals from the district doing freshman and sophomore college work attend the home junior college. Table XVII shows by years the trends for the last six years of the college students in the district eligible to attend a junior college who actually attend their home junior colleges.

It is interesting to note that only one junior college, Independence, averaged less than 85.0% for the six-year

TABLE XVII

THE PERCENT OF COLLEGE STUDENTS FROM THE JUNIOR COLLEGE DISTRICT ELIGIBLE TO ATTEND A JUNIOR COLLEGE WHO ATTEND THE LOCAL JUNIOR COLLEGE[11]

	1929-1930	1930-[a]1931	1931-1932	1932-1933	1933-1934	1934-1935	Average
Arkansas City	88.4	91.1	82.8	91.7	89.7	97.3	90.2
Coffeyville	93.8	78.9	96.6	98.0	98.8	90.4	92.8
El Dorado	83.6	70.6	85.1	89.4	95.1	85.9	85.0
Fort Scott	85.5	69.9	98.0	95.2	98.3	97.4	90.7
Garden City	92.3	83.1	81.5	100.0	99.3	99.4	92.6
Hutchinson	94.1	92.5	92.8	96.1	97.1	93.4	94.3
Independence	88.8	75.0	81.3	92.3	93.2	78.0	84.8
Iola	91.1	64.6	89.4	97.3	82.6	87.0	85.3
Kansas City	93.8	82.9	90.0	94.1	85.3	87.4	88.9
Parsons	91.5	79.4	98.2	98.9	99.6	96.6	94.0
Average	90.3	78.8	89.6	95.3	93.9	90.7	

Read table thus: Arkansas City Junior College in 1929-30 had 88.4% of all the college students from that district, who were eligible to attend the junior college, in attendance in their junior college. In 1932-33 the percentage was 91.7, and for the six-year average they had 90.2%. For 1929-30 the average percent for the ten junior colleges is 90.3.

[a]The data for 1930-31 did not specify that only those who were eligible to attend junior colleges were given.

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[11] Calculated from data compiled from Rees Hughes, loc. cit.

period, and its average was 84.8%, and that five of the junior colleges average more than 90.0%. Hutchinson has the highest average with 94.3%, and it is the most consistent for its range is only from 93.8 to 97.1%, which is 4.3 points, while Iola has the greatest range, from 64.6 to 97.3%, a variation of 32.7 points. The 64.6% which Iola had for 1930-31 is the lowest percent for any school for any one year. Garden City had over 99.0% for three years, one of which is 100% and therefore the highest. The annual averages vary from 78.8% in 1930-31 to 95.3% in 1932-33, and since that year the average has been falling so that for 1934-35 the average is 90.7, which is slightly larger than the average of 90.3 for 1929-30.

A fair measure of the ability of the junior colleges to hold their students in the second year has been difficult to secure especially since newly established junior colleges increase the number of freshmen in the entire group, making it appear that the retaining power of the junior colleges is lower than it actually is. This fact has caused Wells[12] to compare the number of sophomores in 1927-28 with the number of freshmen the previous year, and he found that the ratio is 53%, and for California the ratios averaged from 52%

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12 W. C. Wells, op. cit., p. 231 f.

in 1925-26 to 74% in 1928-29. In chapter III[13] it is shown that for the Kansas public junior colleges the annual averages ranged from 62.7% to 66.4% with a median of 60.3 with the average practically the same. Thus while Kansas junior colleges from 1929-30 to 1934-35 are superior in the retention of their students to the junior colleges of the United States in 1927-28, it is inferior to the California average in 1928-29. In all three cases the irregular students were disregarded, so in some cases identical students were used.

Another study of this type has been made by Hanna,[14] in which he found that out of 7737 students from three successive classes, from September, 1923, to September, 1925, 26% of the freshmen who entered were graduated from the junior college that they first entered. He also found that an additional 19% had transferred, but this fact is not particularly pertinent to this study. To compare with this are the similar averages as given in Chapter III for the Kansas public junior colleges which are 40.9 for 1930-31, 45.8 for 1931-32, 41.5 for 1932-33, and 38.0 for 1933-34. In this respect the Kansas junior colleges show a superiority. However, it should be remembered that possibly the percent of the colleges studied by Hanna would have increased for the

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[13] Cf. post., p. 86.

[14] J. V. Hanna, "Student Retention in Junior Colleges," Journal of Educational Research, vol. 22, June, 1930, p. 1.

classes which were graduated in the years from 1930-31 to 1933-34. These facts also merely point out a trend; for there is no way of telling, from the available data, to what extent identical students have been used in either study.

Since there have been no new public junior colleges established in Kansas during the period studied, the percent of sophomores to the entire enrollment of the junior colleges will also give an indication of the holding power of these junior colleges. Table XVIII shows the percent of sophomores to the entire enrollment of the junior colleges for the six-year period. The special students were included while if only the regular students had been figured the percentages would have been higher. In 1927-28 the public junior colleges of the United States were 29% sophomores and 71% freshmen with the special students disregarded.[15]

The six-year averages for the junior colleges vary only seven points, for the range is from 28.4% at Garden City to 34.8% at Iola with seven of the averages between 30.4% and 31.6%. It will be noted that Independence has a range of 18.9% and Coffeyville has one of 6.6%.

The annual averages for the entire group range from 27.6% in 1930-31 to 35.2% in 1933-34 and drops slightly to 32.2% for the current year. It is interesting to note

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[15] W. C. Eells, op. cit., p. 32.

TABLE XVIII

THE PERCENT OF SOPHOMORES IN THE JUNIOR COLLEGE ENROLLMENT[16]

	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	Average
Arkansas City	28.9	25.9	28.8	32.6	34.2	31.9	30.4
Coffeyville	32.8	27.8	29.8	34.4	37.2	26.6	31.4
El Dorado	22.8	29.6	32.4	34.0	32.0	38.8	31.6
Fort Scott	30.9	26.0	28.5	31.9	34.0	22.0	30.6
Garden City	29.4	27.5	34.6	24.7	29.5	24.4	28.4
Hutchinson	27.9	29.5	28.4	34.7	30.4	34.3	30.9
Independence	27.6	17.8	36.7	24.9	32.7	32.3	28.7
Iola	36.0	20.1	32.2	30.9	45.8	33.7	34.8
Kansas City	20.9	31.0	25.3	33.7	37.3	35.0	30.6
Parsons	24.9	30.6	28.8	28.0	39.1	34.2	30.9
Average	28.2	27.6	30.6	31.0	35.2	32.3	

Read table thus: In the Arkansas City Junior College in 1929-30, 28.9% of its student body were sophomores, in 1933-34 32.6% were sophomores, and for the six-year period the Arkansas City Junior College average is 30.4% sophomores. In 1929-30 28.2% of the entire group were sophomores.

that only two of the institutions have less than 31.9% of their enrollment in their sophomore class for the current year but that the lower percentages from previous years lower the six-year averages of seven of the colleges.

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[16] Calculated from data compiled by Rees Hughes, loc. cit.

A third contribution of the junior college to its community is the extent to which it draws intelligent and talented individuals to the community. These individuals are of two groups, the faculty members and non-resident students; a third may be added, however, in those parents who move to a junior college district in order that they may give their children a college education. This third group would hardly be important enough for a study as most parents, if they were moving into a college community for the sole purpose of educating their children, would move to a community in which the entire college or university work would be available.

Of the first group, it is sufficient to point out that very rarely if ever will the junior college faculty be composed entirely of individuals from that community. Furthermore, any junior college faculty member should be an asset to his community; thus the community should gain an asset each time a new junior college faculty member is brought into it.

The second group is composed of the non-resident students who attend the junior college. For not only does a junior college hold many of its own youth, but it attracts students from the neighboring vicinities who bring to the junior college district both talent and money. Table XIX shows the percent of non-resident students in attendance at the junior colleges for the six-year period.

TABLE XIX

PERCENT OF THE KANSAS PUBLIC JUNIOR COLLEGE ENROLLMENT WHO ARE NON-RESIDENT STUDENTS[17]

	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	1934-1935	Average
Arkansas City	28.2	15.0	24.6	22.7	18.7	18.6	23.0
Coffeyville	8.6	11.2	21.8	33.3	31.4	36.5	23.8
El Dorado	29.9	29.1	49.3	51.5	47.6	53.6	42.5
Fort Scott	32.9	34.5	44.2	38.0	41.7	45.2	41.9
Garden City	15.3	10.1	23.6	20.7	18.0	24.4	20.4
Hutchinson	15.0	23.1	26.4	27.4	16.9	18.0	21.1
Independence	34.7	32.4	42.9	46.2	27.1	56.4	38.3
Iola	52.0	61.0	44.7	44.0	42.0	48.9	48.8
Kansas City	6.9	8.8	19.6	14.5	11.4	20.2	13.6
Parsons	25.7	18.6	25.8	25.2	28.2	32.2	26.1
Average	24.9	23.4	33.3	34.9	28.3	35.5	

Read table thus: Of the Arkansas City Junior College student body 28.2% were non-resident students in 1929-30, in 1934-35 18.6% were non-resident, and the average for the six-year period was 23.0%. The average for the ten institutions for 1929-30 was 24.9%.

Table XIX shows that the percent of non-resident students varies greatly both between the different schools and between the different years. Kansas City has the lowest precent for any one year with 6.9 for 1929-30, however

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[17] Calculated from data compiled by Rees Hughes, loc. cit.

Coffeyville for 1929-30 and Kansas City for 1930-31 both have less than 9.0 percent. Iola has the highest percent with 61.0 for 1930-31, although there are five other years among the various junior colleges during the entire period which are above 50.0%. They are: El Dorado, 51.5 in 1932-33 and 53.6 in 1934-35; Fort Scott, 58.0 in 1932-33; Independence, 56.4 in 1934-35; and Iola, 52.0 in 1929-30. The college averages for the six-year period range from 13.6% at Kansas City to 48.8% at Iola. Four average over 38.0%, six average between 20.0 and 26.1%, and one averages less than 14.0%. Kansas City would naturally be expected to draw a smaller percent of non-resident students since their enrollment has been so large. For instance, in 1931-32, although there were 130 non-resident students enrolled in the Kansas City Junior College they were only 19.6% of the total enrollment. The annual averages of the ten institutions vary from 28.4 in 1930-31 to 35.5 percent in 1934-35 and fluctuates considerably from year to year. The value of this contribution of the junior colleges to their communities may be shown by the fact that the ten junior colleges herein studied have 1015 non-resident students enrolled for the present school year.

The fourth contribution of the junior college to the community is to offer work which will enable the members

of the communities to be more efficient not only in their daily work and occupations but also in their living. This may be done by terminal courses of various types, by the "guidance" function of the junior college, and by having a well-equipped and well-managed junior college library which is also accessible to the community. Chapter IV[18] points out that the terminal courses are too small a proportion of the present public junior college curricula. Thus these junior colleges fail to help their particular communities to meet the problems of the various communities. These institutions, as a group, have taken for their primary purpose to prepare students for future academic and professional training. Figures 1 and 2 show the relationship of the non-academic courses to the curricula of the various colleges of Kansas. It is not necessary to repeat the information which was given in Chapter IV except to point out that the public junior colleges of Kansas are lagging in developing their curricula to meet the needs and wishes of the communities. It should also be noted that a large proportion of certain vocational courses, especially, are offered by four of the colleges. These colleges offer from 29 to 65 hours in commerce, and one of them also offers 36 semester

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[18] Cf. ante., p. 62 ff.

hours of printing. OBrien points out that the vocational courses should be second in importance to the courses which prepare the student for social citizenship.[19] In the junior colleges studied the vocational courses are not considered to be that important.

The guidance or counseling service is important in all fields of junior college instruction. OBrien points out that other writers, such as Eells, stress the importance of the guidance function, in that it is an influence in all of the other fields or functions, and that the junior college has an opportunity to do better and more successful guidance work than the four-year college or university. He continues by stating, "This seems to be one of the services upon which the Kansas junior colleges have economized."[20]

Eells[21] finds that the junior college library has been neglected, for not only has the standardization agency failed to be specific and to maintain a high standard for junior colleges but also the junior college catalogs have been vague in describing their libraries. He also finds, "The status of the junior college library has been all but

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[19] F. P. OBrien, op. cit., p. 27.

[20] Ibid., p. 28.

[21] W. C. Eells, op. cit., p. 146 ff.

neglected in the national investigations of the movement."[22] OBrien likewise stresses the importance of the library in saying, "The right kind of a college library may influence a community both directly and indirectly."[23] However, there is no available study of the junior college libraries of the public junior colleges of Kansas.

The measuring of the quality of the junior college instruction is another method of measuring the college's contribution to the community. However, at the present the only criterion for measuring the quality of the junior college instruction is by a comparison of the junior college transfers with the "native" students of either the senior class or of the graduate school in a university or college.

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[22] Loc. cit.

[23] F. P. OBrien, op. cit., p. 29.

CHAPTER VI

THE KANSAS PUBLIC JUNIOR COLLEGES AS PREPARATORY SCHOOLS

The desire of the junior colleges to meet the approval of the four-year colleges and of the universities so that the junior college product would be acceptable to them has influenced the junior college standards. In respect to the junior college standards Eells says:[1]

> They have been written, almost exclusively, from the university-preparatory point of view. All organizations except the American Association of Junior Colleges have been interested primarily in setting up standards that will insure adequate preparation of students for university entrance. The broader possibilities of the junior college for the great mass of students, who may and probably should never enter the university, but who are entitled to more than a high school education, are usually ignored or barely suggested. It should be borne in mind, therefore, that they have not attempted to be complete, but only partial definitions. For the most part the two objectives are not inconsistent . . . .

He continues by pointing out other limitations of the present junior college standards such as:[2] (1) the standards are largely written by college men, and Eells asks "Shall standards be imposed from without, or developed from within?"; (2) high quality work does not necessarily follow the living up to mechanical and quantitative standards; (3) the

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1 W. C. Eells, The Junior College, Houghton Mifflin Co., Boston, 1931, p. 184.

2 Ibid., p. 184 ff.

quantitative standards should be flexible and should be scientifically determined wherever possible; and (4) unless the junior college is to become very similar to the college or university, and unless it is to use the same methods, its product can not be entirely measured by a mold made to measure the college or university product. He concludes by saying:[3]

> With all their limitations, the standards summarized in this chapter have been a powerful influence in helping the junior college to find itself, and to become established in the confidence of higher institutions and of the general public. Rightly used, progressively interpreted, and constructively revised, they will continue to be a potent stimulus to constant improvement.

Thus while the influence of the colleges and universities, coupled with the desire of the junior college administrators to have their graduates as well trained in the pre-academic and pre-professional fields as the "native" college or university students, has led to an overemphasis of the preparatory function of the junior college, this influence has speeded up the development of the junior college movement until it could stand upon its own merits.

In this study the importance of the preparatory function of the public junior colleges of Kansas may be seen: (1) by finding the percent of the junior college graduates who continue to college the next year--this is all the data which

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[3] Ibid., p. 186.

is available for the public junior colleges of Kansas on this topic; (2) by comparing these results with the emphasis placed on the preparatory function by the curricula of the public junior colleges of Kansas; and (3) by comparing both of the above results with the results of other studies of this question. Table XX shows the number of junior college graduates who enroll for advanced work in a college or university the next year after their graduation.

The average for the different institutions for the entire period vary from 21.0% to 40.8% which gives a range of 19.8%. The averages may be classified into three groups which are: (1) four institutions, Coffeyville, Fort Scott, Garden City, and Iola, with averages between 20.0 and 25.0%; (2) three institutions, El Dorado, Hutchinson, and Parsons, with averages between 33.0% and 36.6%; and (3) three institutions, Arkansas City, Independence, and Kansas City, with averages between 40.0% and 41.0%. Of the last group Arkansas City has 100% for 1929-30, which raises its average materially. Annual averages of the group are 28.1% for 1929-30, in which Fort Scott is omitted; and 25.6% for 1930-31. From that year the annual averages decrease until in 1932-33 the average is 24.6%; then the average increases to 30.1% for 1933-34. It is interesting to note that the averages for the last two years are the lowest although the last year shows

TABLE XX

THE PERCENT OF GRADUATES FROM THE PUBLIC JUNIOR COLLEGES OF KANSAS WHO CONTINUE TO COLLEGE THE NEXT YEAR[4]

	1929-1930	1930-1931	1931-1932	1932-1933	1933-1934	Average
Arkansas City	100	28.7	28.3	15.5	25.6	40.6
Coffeyville	22.9	27.1	26.2	25.8	22.0	24.8
El Dorado	36.6	56.4	38.5	25.5	25.8	36.2
Fort Scott	----	30.3	25.8	25.0	25.6	21.3
Garden City	27.8	23.5	16.1	15.8	26.8	22.0
Hutchinson	29.6	41.5	36.4	26.1	37.2	36.4
Independence	32.0	26.8	41.9	50.0	43.3	40.8
Iola	36.6	25.0	17.6	18.4	13.2	21.0
Kansas City	52.8	52.6	32.3	26.9	28.5	40.6
Parsons	35.1	29.2	42.9	16.9	32.1	33.7
Average	38.1	35.6	30.6	24.6	30.1	

Read table thus: Of the Arkansas City Junior College graduates in 1929-30, 100% continued their education in a four-year college or a university; for 1931-32 28.3% continued; and for 1933-34, 25.6% continued. The average for the five years is 40.6%. The average for the nine institutions for 1929-30 is 38.1%. (Only nine of the junior colleges are given for 1929-30 as the data for the Fort Scott Junior College is not complete for that year.)

an increase of 5.5% over the average for the previous year. Arkansas City has the highest percent for any one year, with 100.0%, and the lowest, with 15.5%; therefore it is the most inconsistent. Coffeyville has been the most consistent with a range of 5.1%, and Fort Scott follows closely with a range of 5.2%. There are seven different years for which some one of the schools had less than 20.0% and five of 50.0% or

[4] Computed from data compiled by Rees Hughes, op. cit.

higher. El Dorado has the second highest with 56.4% for 1930-31.

In 1933-34 the public junior colleges of Kansas graduated 747 students out of a student body of 2940. The Table shows that 80.1% of these graduates continued their college work in 1934-35.

To consider the problem from another angle, Table VII shows that in 1933-34 an average of 72.0% of the sophomores were graduated; and Table VI shows that the graduating class in 1933-34 was 38.0% of the freshman class of 1932-33. To contrast with these figures is the fact that for the current year, as shown in Table IX, the academic subjects were 75.3% of the entire curricula. No drastic change had been made in the curricula from 1933-34 as shown in Table IX. It should also be noted that while some of the academic curricula, such as English, may be taken by students not desiring preparatory training, also some of the non-academic curricula must be taken by students desiring certain preparatory training. This conclusion coincides with those of Chapter IV[5] that the public junior colleges of Kansas do lay too much stress on the academic courses.

Previous studies of the junior college transfer to the

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[5] Cf. ante., p. 70.

university as reported by Wells are:[6] McDowell reports that for twelve public junior college studied, 80.0% of their graduates in 1915 continued; for 1916 it was 79.0%, and for 1917 it was 67.0%. In studying eleven California colleges in 1916 Thomas found that an average of 74.0% of their graduates continued; Campbell in a study of 83 junior colleges found that of the 1927-28 graduates of the 26 public junior colleges which were included 53.0% of the graduates continued their education in 1928-29; and Hanna, in a study of 2812 graduates of 36 junior colleges scattered over the southern and western part of the United States for the period 1925-27, found that 40.5% of them actually entered the next year.[7] It should be noted that the averages given for the public junior colleges of Kansas are distinctly lower; however, none of the other studies have been made since 1920.

The success of these junior college transfers is also one of importance. The junior college has felt that the junior college student must not be handicapped in the least, and as a result the junior colleges have often tried to duplicate the universities, thus causing many junior colleges

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[6] W. C. Wells, op. cit., p. 251 ff.

[7] J. V. Hanna, "Student Retention in Junior College." Journal of Educational Research, vol. 12, p. 8, June, 1920.

to greatly emphasize the preparatory function as was suggested by Eells.[8] Nevertheless, the junior college student who competes with a "native" university student is naturally compared with him. A number of studies have been made of the success of the junior college transfers, but before stating the results of these studies it is only fair to keep in mind that these junior college transfers are measured with a university "yard-stick." These various studies are summarized by Eells in this way:[9]

> These studies vary widely in character and reliability. Some are little more than bare statements of opinion; some are based upon a careful statistical treatment of adequate data. On the whole they show marked success for the junior college in the exercise of the preparatory function. The University of Texas and the University of California seem to be the only institutions where there is a marked inferiority, and in the latter case there was distinct superiority on the part of the men. It is quite significant of the success of the junior college in its preparatory function that there is such a variety of judgment and evidence in its favor.

In addition, the analysis of the success of the transfers from the public junior colleges of Kansas to the University of Kansas has been summarized by OBrien as follows:[10]

> In the four years, beginning with 1929-30, 498 students from the Kansas public junior colleges enrolled in the University of Kansas.

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[8] W. C. Eells, op. cit.

[9] Ibid., p. 273

[10] F. P. OBrien, op. cit., p. 40 f.

An analysis of the scholarship index for the last two years of this period discloses that the junior college transfers as a group are consistently deficient in 'college' work in comparison with other students of similar rank, and that in the professional schools the deficiency is still more marked.

The percentage of these public junior college transfers whose average grades were below 'C' was so large, both in college and professional schools, as to indicate a relatively low quality of work on the part of these students.

As a third indication of their success, the transfer students from public junior colleges failed to secure elections to Phi Beta Kappa, an honorary scholastic group, in proportion to their numbers.

It appears that these junior colleges have cheapened instruction to the extent of seriously depreciating its quality, and that the result of their experience may serve as a warning to others whose purpose is to maintain a junior college for its useful service rather than for less worthy purposes.

At the present time the emphasis appears to be changing so that the preparatory function will receive less and less emphasis. Wells has stated:[11]

It is not surprising that the terminal courses have been slower in coming into their own than preparatory courses. The latter were first emphasized in most of the junior colleges, particularly those that developed from high school. Accrediting agencies have all stressed the preparatory function. Laws, when passed, have often specified that work shall be given equivalent to the freshman and sophomore work in the university. The junior college has been a small institution, in many cases too small to justify more than a single curriculum, and that must needs be of the preparatory type. Terminal work is relatively expensive, and necessarily requires larger institutions before differentiation of curricula is economically or educationally justifiable. Preparatory work was the pioneer stage, but it is time now to advance to another stage.

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[11] W. C. Wells, op. cit., p. 209.

Conclusions

Each of the public junior colleges of Kansas, except Iola with 9[illegible] students, has an enrollment of over 200 students. This is well above the minimum requirements of 50 and 60 students which are set by the various accrediting agencies. All except Iola pass the minimum size for efficient operation which has been set at 150 and 200 by OBrien and Koos. The present average enrollment of these junior colleges is lower than the average junior college enrollment of the United States, but the latter is increased by 27 junior colleges each having over 700 students enrolled. Hutchinson, with an enrollment of 428 students, is the largest of the Kansas public junior colleges.

In one year, 1933-34, the enrollment of these ten institutions decreased; but there is a slight increase for 1934-35. Three of the junior colleges, Iola, Kansas City, and Parsons, have had decreased enrollments for at least the last two years; and Iola shows an average decrease for the six-year period. The other nine schools show average increases from 4.8% to 25.7%; and two of these, Fort Scott and Garden City, have increased every year during the six-year period since 1929-30.

Although there is a positive correlation of .78±.09 between the average number of high school graduates and the

average junior college enrollment, and although five of the districts have an average of less than 150 high school graduates, only two of the junior colleges have an average of less than 200 enrolled. Both of the smallest-average enrollments are between 140 and 149. It should also be noted that one of these two, Garden City, now has an enrollment of over 200 students.

The tendency for students to complete their courses is shown first by the ratio of the sophomore class to the freshman class the previous year. The last two years have the smallest percentages, although the last year has a slight increase over the previous one. The second method of showing the tendency is the ratio of the junior college graduates to the freshman class of the previous year, which shows a gradual decrease for the last two years. To contrast with those tendencies are the fact that the percentage of sophomores in the entire enrollment has increased in recent years and the percentage of sophomores to graduate shows a steady increase since 1930-31.

The study indicates that in every case except Kansas City, for which the figures are not available, the operating expenses have decreased since 1931-32; and OBrien states that the operating expenses per student enrolled are unduly low for efficient work of college calibre.

The sources of revenue for these institutions are tuition for non-resident students and taxation. In each case the valuation of the district has decreased since 1929-30, and the present reported levies were too low to possibly raise the proper amount for operating costs. The tuitions for non-resident students varied from no stated amount to $178.00 annually. Most of the institutions are not collecting a sufficient tuition from their non-resident students that the district tax-payers need not help pay for the education of the non-resident students. At the same time some of the schools appear to have collected more from these students than the tuition rate would specify. Even those junior colleges having no stated rate have collected some tuition. All of them also charge activity fees.

The curricula offerings of these public junior colleges have on the whole increased both in number of semester hours and in variety of work offered. Iola alone shows fewer hours offered now than in 1928-29. El Dorado offers the same, and for Kansas City the 1934-35 offering is larger than it was in 1927-28 and less than it was in 1929-30. The general increase in the non-academic subjects shows that the variety of work offered has also increased. The public junior colleges of Kansas with an average offering of 216.6 semester hours is distinctly below the standards found by Koos' study

of 1921 and by the Hollingsworth-Wells study in 1930, but it is above that set by Whitney in 1928 and close to the median found by Wells in his study of 1933.

Of the non-academic offerings, the educational and the engineering courses are offered by all of these junior colleges except Iola. The most semester hours of work are offered in commerce, as four schools offer from 29 to 65 hours each. With the exception of commerce and printing the semester hours of the non-academic group are well distributed among the various subjects. Four of these schools have more than 30.0% of their curricula in non-academic offerings. However, these four are the same ones which offer from 29 to 65 hours of commerce, and one of them also offers 36 hours of printing. The average of the present offerings of the public junior colleges of Kansas show a smaller percent of non-academic offerings than did those of Wells' study of 279 junior colleges in 1930.

The faculties of these public junior colleges of Kansas are distinctly superior in the number and types of degrees held when compared to the studies of McDowell and Koos. However, the faculties of these schools are underpaid; and although many of them receive salaries on the level paid high school teachers, they have excessive teaching loads thus lowering the quality of their work. The excessive teacher-

load is also shown by the fact that Wells, in 1934-35, found the average student ratio of the junior colleges in the United States to be one to eighteen. While if Hughes' figures are used and the same method of counting the part-time instructors is used, the student-teacher ratio for the ten public junior colleges of Kansas is found to be one to twenty-eight.

These ten junior colleges have enabled more of the individuals, in their respective communities, to continue their education beyond the high school. Although this increase was not so great as it was in California, it has enabled an average of 45% of the high school graduates of these districts to continue during the six-year period beginning 1929-30.

These junior colleges have held some of the more intelligent and talented youth of the community, for since 1930-31 over 90% of the college students taking the first two years of college work were attending the home junior college. Previous studies show that approximately 50% of the junior college students would be able to attend college elsewhere if there were no college in that vicinity.

This study shows that the median ratio of 60.8% of sophomores to the freshmen of the previous year is greater than for similar studies of the United States as a whole, but it is less than for California junior colleges in 1928-29.

Likewise, the ratio of junior college graduates to the freshmen of the previous year for the Kansas schools is higher than it was for a previous general study, and the percent of sophomores to the entire enrollment is increasing. These facts indicate increased holding power for the public junior colleges of Kansas.

These junior colleges have contributed also to the standard of the community by bringing in intelligent and talented individuals both for faculty members and for students. In the last four years over 28% of the student bodies of the institutions have been non-resident students.

These schools have to a certain extent failed in enabling the members of their communities to have more efficient preparation for their daily work and for living, as the proper emphasis has not been placed on such phases of the junior college work as vocational training and counseling services to the students. No study of the libraries of these institutions is available.

Too much emphasis has been placed on the preparatory function by the public junior colleges of Kansas. A smaller percent of their graduates continue to college than of the graduates of various other junior colleges of the United States, as shown by previous studies; and in spite of this, these Kansas schools place greater emphasis on the academic

curricula than do the colleges studied by Wells and others. Furthermore, it should be pointed out that quite likely all junior colleges tend to overemphasize the pre-academic and pre-professional curricula.[12]

Several recent studies have been made of the success of junior college transfers to colleges or universities as measured by comparing them with "native" university or college students. It should be noted that while there is a great variation in the character and reliability of these studies, that on the whole their results are favorable for the junior college transfer. The University of Texas and the University of California showed marked inferiority for them. To this may be added the results of the recent study at the University of Kansas in which the junior college transfers are found inferior in scholarship index, average grades, and proportional election to Phi Beta Kappa. This last study is particularly pertinent since it was made this year of the junior college transfers from the ten public junior colleges of Kansas.

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[12] Doak S. Campbell, editorial, "Junior College Curricula." Junior College Journal, vol. 2, pp. 42-44, 416-19, May, 1932, and May, 1933.

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