



1985

An Analysis of Leonard Koos' Concept of the Junior College

Katherine A. Smith
Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_diss



Part of the [Education Commons](#)

Recommended Citation

Smith, Katherine A., "An Analysis of Leonard Koos' Concept of the Junior College" (1985). *Dissertations*. 2430.

https://ecommons.luc.edu/luc_diss/2430

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](#).
Copyright © 1985 Katherine A. Smith

AN ANALYSIS OF LEONARD KOOS' CONCEPT OF
THE JUNIOR COLLEGE

by

KATHERINE A. SMITH

A dissertation Submitted to the Faculty of the Graduate
School of Loyola University of Chicago in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Education

January

1985

ABSTRACT

Katherine A. Smith

AN ANALYSIS OF LEONARD KOOS' CONCEPT OF THE JUNIOR COLLEGE

Leonard V. Koos can rightly be called the Patriarch of the Junior College because of his scientific and comprehensive study entitled The Junior College. In this two volume work Koos reported the results of his exhaustive study of the junior college both through personal visits to junior colleges and study of relevant literature.

Koos identified twenty-one special purposes of the junior college and divided them into five general classifications,

1. Educational Goals
2. Organizational Goals
3. Goals Related to the University
4. Goals Related to the High School
5. Goals Related to the Community in his 1924 study.

Of the two most important were offering the first two years of work acceptable to colleges and universities and completion of the education of the terminal student. These same twenty-one special purposes are still regarded as purposes for junior colleges of the 1980s.

Koos examined the junior high school because of the various changes that were taking place in the four year high schools, changes that would profoundly affect the organization of American education. His books The Junior High School and The American Secondary School addressed the area of secondary education and evaluated the progress and future of secondary education in America.

Koos was interested in the field of guidance because of its impact on the secondary school and its students. His book, Guidance in Secondary Schools served administrators, and counselors and was also used as a textbook in higher education. There was an immediate need for vocational and educational counseling because increasing numbers of students were continuing their education beyond high school.

Koos' research was not limited to the junior college and junior high school. Among his other research was a basic study of the university faculty load which he completed in 1917. Other research publications dealt with public school development. Of Leonard Koos' 150 published articles, reports and monographs as well as sixteen books and 25 bulletins, surveys and yearbooks, the most significant for American Public Education in his work on the Junior College.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
Chapter	
I. BIOGRAPHICAL OVERVIEW AND SURVEY OF WORKS BY LEONARD V. KOOS .	1
II. THE JUNIOR COLLEGE OF THE 1920S	17
III. EVALUATING THREE TYPES OF JUNIOR COLLEGES	61
IV. THE JUNIOR COLLEGE: YESTERDAY AND TODAY	92
V. SUMMARY AND CONCLUSIONS	113
BIBLIOGRAPHY	121
Appendix	
A. I. PUBLIC JUNIOR COLLEGES	134

CHAPTER I

BIOGRAPHICAL OVERVIEW AND SURVEY OF WORKS BY LEONARD V. KOOS

To appreciate the function and purpose of the junior college, as well as Professor Koos' contribution to the development of this important educational institution, it is necessary to examine the development of the modern American secondary school. The development of modern sciences and the growing industrial needs of the United States had a marked development on secondary curricula. In addition to technological needs, equality of opportunity remained a major principle which guided educational expansion. In his essay on Education, Emerson expressed this sentiment so clearly:

. . . the poor man, whom the law does not allow to take an ear of corn when starving, nor a pair of shoes for his freezing feet, is allowed to put his hand into the pocket of the rich, and say, you shall educate me, not as you will, but as I will: not alone in the elements, but, by further provision, in the languages, in sciences, in the useful and in the elegant arts. The child shall be taken up by the State and taught, at the public cost, the rudiments of knowledge, and at last, the ripest results of art and science.¹

In the early national period, from 1800-1830 secondary education consisted of the Latin Grammar School and the Academy; the high school did not emerge until the second half of the nineteenth century. The Latin Grammar School prepared the children of the elite for college.

¹ Ralph Waldo Emerson. Education, an Essay and Other Selections, (Boston: Houghton Mifflin Company, 1909), p 1.

In the early nineteenth century, the Latin Grammar school was eclipsed and largely replaced by the Academy. The Academy, which met the needs of the less affluent, quickly became the secondary school most generally found in the first half of the nineteenth century.

By 1890 the frontier had almost ceased to be, and with the entrance of New Mexico and Arizona into the Union in 1912, the Continental United States was formed. Immigration and natural increase caused the population to grow from thirty million in 1860 to more than one hundred million by 1920.

The first American high school was established in Boston in 1824 to educate boys who were not planning to attend college. Entrance into high school was by examination, and very few of the poor or working class students applied. The impoverished youth oftentimes were unable to complete the elementary grades because they were needed to help on the farm or to work in the factory in order to supplement the family income. The high school curriculum at that time included English, mathematics, science, history, geography, philosophy, bookkeeping and surveying. In 1827 Massachusetts passed a law which required towns of four thousand to erect a high school although not all towns conformed. The growth of the high school was slow at first due to competition from the well established academies as well as the reluctance of the populace to accept additional taxation. In 1825 the high school population was fewer than twenty-five thousand. By 1890 there were some twenty-five hundred high schools that enrolled more than two hundred thousand students. By 1900 there were six thousand high schools that enrolled over five hundred thousand students.

Between 1900 and 1930 dramatic changes occurred in secondary education: the vocational guidance movement had begun prior to 1910, junior colleges multiplied and flourished, and the junior high school emerged primarily to bridge the gap which was widening between the elementary and the high school. The Commission on the Reorganization of Secondary Education which was appointed by the National Education Association in 1918 made its report entitled "Cardinal Principles of Secondary Education,"² which listed the following as the objectives of secondary education: "health, command of fundamental processes, worthy home membership, vocation, citizenship, worthy use of leisure, and ethical character."³ They were developed "to guide education in a democracy."⁴ The Smith Hughes Act was passed, and the Progressive Education Association was organized. These important developments marked this period as an important one in the reorganization of secondary education.

The growth in the number of students pursuing secondary education was beginning to transform the high school from an exclusively academic preparatory institution into one that also offered vocational and terminal studies. The Committee of Ten reaffirmed the college preparatory function. The Report of the Committee of Ten is still considered by many leading educators as one of the most significant educational documents issued in the United States. The main emphasis of the report

² "Cardinal Principles of Secondary Education." United States Bureau of Education, Bulletin, 1918, No. 35 (Washington: Government Printing Office, 1937), p. 9.

³ Ibid.

⁴ Ibid.

concerned readjustment within the conventional four year high school.

The Committee of Ten unanimously agree:

that every subject which is taught at all in a secondary school should be taught in the same way and to the same extent to every pupil so long as he pursues it, no matter what the probable destination of the pupil may be, or at what point his education is to cease. Thus, for all pupils who study Latin, or history, or algebra, for example, the allotment of time and the method of instruction in a given school should be the same year by year.⁵

The Committee working under the leadership of Charles W. Eliot, President of Harvard University, had been urging the "shortening and enrichment of school programs." The Committee of Ten in its report on the programs of study proposed made the following observations:

In preparing these programmes, the Committee were perfectly aware that it is impossible to make a satisfactory secondary school programme, limited to a period of four years, and founded on the present elementary school subjects and methods. In the opinion of the Committee, several subjects now reserved for the high schools--such as algebra, geometry, natural science, and foreign languages,--should be begun earlier than now, and therefore within the schools classified as elementary; or as an alternative, the secondary school period should be made to begin two years earlier than at present, leaving six years instead of eight for the elementary school period.⁶

The final report of the Committee of Ten was based on reports of subject area conferences. The Classical Languages Conference recommended that Latin be introduced in the grades below the ninth. The Modern Languages conference offered a similar recommendation. The Mathematics Conference suggested the continuation of the usual eight years of arithmetic, but opted for concrete geometry and for algebraic expressions and simple equations. The Science Conference wanted its subject

⁵ Report of the Committee of Ten on Secondary School Studies, (New York: American Book Company, 1894), p. 17.

⁶ Ibid.

matter included in the elementary grades. The remaining conferences recommended reorganization of elementary school curricula which would give more recognition to their subjects.

The Report of the Committee on College Entrance Requirements appearing in 1899 also recommended considerable reform in the grades immediately below the ninth. The committee further agreed that the work of the seventh and eighth grades "must be enriched by eliminating nonessentials and adding new subjects formerly taught only in the high school."⁷ It was their contention that such reforms would be implemented more easily if they made these grades a part of the high school. They also believed that the seventh grade and not the ninth grade is the natural turning point in a child's life. It is in the adolescent period that a child needs greater variety of material and wiser direction. Among other recommendations made by this committee was the change from the one-teacher regimen to a system of special teachers for each subject offered in the curriculum.

The establishment of the junior high school resulted from the recommendations of several national committees which included the Committee of Ten on Secondary School Studies, Committee on Economy of Time, and Committee on College Entrance Requirements. Junior high schools were introduced in Columbus, Ohio in 1908, Berkeley, California and Concord, New Hampshire in 1910 and Los Angeles in 1911. Although statistics cited by various authors differ, there may have been more than twenty-five hundred junior high schools by 1940. The junior high

⁷ Leonard V. Koos. The Junior High School, (New York: Ginn and Company, 1927), p. 5.

school was needed to bridge the gap between the elementary grades and secondary education, to aid the adolescent in understanding this important period of growth, to provide more realistic academic and vocational counseling, and to provide a guidance program to direct him or her in making intelligent choices in advanced study or suitable career selection. The function of the junior high school was to retain pupils in school by offering courses more interesting and challenging as well as more beneficial than the repetitious course work offered in the usual upper elementary grades. It was to offer the student some choice of studies, individual instruction, and guidance and direction. Most progressive educators approved the program which began secondary education with the seventh grade.

One of the most effective, creative and enthusiastic supporters of the junior high school was Leonard V. Koos, (born March 9, 1881, died April 20, 1976), teacher, principal, superintendent, scholar and professor. To understand why Koos devoted his energy and ability to studying the junior high school and junior college throughout his seventy-six year professional career, we must begin with his youth and background.

Leonard Vincent Koos, was born in Chicago, Illinois, March 9, 1881. His parents, Adam Koos and Mary Zimmerman Koos immigrated from Europe, his father from Prussia at eighteen, and his mother from Switzerland at the age of fourteen. Of the family of six children, Leonard was the third child and the eldest of the three sons. German was the language spoken in the home, and Leonard was introduced to English when he entered first grade in Yates City, Illinois in 1887. Adam Koos was a

tailor and because of the economy was forced to move often to provide sufficient income for his large family. The family located in Aurora, Illinois, Clarence, Iowa and finally Yorkville, Illinois where they remained until Leonard began his teaching career.

Mary Koos was a Catholic and wanted her family to adopt her religious values. Adam Koos, a religious man but not of the same religious persuasion, did not insist that the family attend church regularly. Leonard was close to his mother and respected her religious beliefs and values. Influenced by her zeal he dedicated his life to humanitarian causes. Leonard was christened "Leonhardt" and was called affectionately "Leo" by his brothers and sisters. The Koos family was a large and happy one in spite of their modest economic circumstances. The feeling of great warmth emanated from this close-knit family. Very early Leonard first experienced tragedy when his brother died at a young age of cancer. The entire family realized the tremendous loss of this alert, independent and affectionate individual. Koos remembered this tragedy for many years, and that memory and the continuous efforts of his father and mother to give him a happy home and a good education increased his ambition to achieve a measure of success.

Leonard was a happy, energetic and vigorous child always interested in learning and using his time judiciously. Because he enjoyed music, he took lessons on the flute, became an adept performer, and joined a band, which played on weekends to earn money for his future education. Tailoring was another aptitude he developed from working with his father. Though he was good at his father's profession, his strong inclination toward learning prevented him from adopting his

father's vocation. Leonard wanted to advance himself, and he believed it was only by furthering his own education that he could pursue his humanitarian interests.

In 1900 Leonard Koos began his career in teaching. He saw an advertisement placed in the Kendall County Record by the School Board for a teacher for their one-room school situated near the village of Minooka in a district about twenty miles from Koos' home in Yorkville, Illinois. The position would be for two months at a salary of thirty dollars per month. Koos passed an examination administered to him by the superintendent to become certified to teach.

The board was pleased with Koos' performance and extended a contract to him for the academic year 1901-02. At the end of his contract, Koos decided that he must secure additional education if he chose to remain in the field of education. He wanted to attend the University of Michigan, but because of the prohibitive cost of tuition, board and fees he decided to attend Oberlin College in Ohio. The college was founded in 1833 by two youthful missionaries, the Reverend John J. Shipherd and Philo P. Stewart who were inspired by the example of an Alsatian pastor John Frederick Oberlin. They wanted to found a college and colony on the western frontier "to train teachers and other Christian leaders for the boundless most desolate fields in the West." Oberlin's academic programs were offered by the College of Arts and Sciences and the Conservatory of Music, both deeply committed to academic excellence.

In 1902, Koos began his undergraduate studies at Oberlin. His preparation for entrance into college was thorough. The only deficiency

was in Latin and he satisfied that requirement by attending Oberlin Academy. Koos had no difficulty with his program of studies and earned high grades in his first year. To help defray expenses he used his expertise as a tailor for mending and repairing other students' clothing, and on the weekends he performed on the flute at college functions.

During the summer he worked in the village of Shabbona as a door-to-door salesman selling hardware products to the farmers. To occupy his evenings, Leonard taught a course in penmanship at the local high school. The students as well as the President of the Board of Education were very satisfied with the course he offered and asked him to teach seventh and eighth grades in the fall at a salary of sixty-five dollars a month for nine months. He accepted the offer for one year and notified Oberlin College that he would return at the end of his contract. Koos was responsible for developing the curriculum for the seventh and eighth grades, and he performed his tasks so admirably that he was invited back to Shabbona after he completed his baccalaureate degree.

Koos returned to Oberlin College the following year, 1904, much to his satisfaction, completed his course work without difficulty, and earned the bachelor of arts degree in 1907. After graduation, Koos returned to Shabbona, Illinois, where he served as superintendent of the twelve grade school system for only one year. Unfortunately, the townspeople were not interested in changing their school system and opposed Koos' attempt at reorganization. Realizing the hopelessness of the situation, Koos submitted his credentials to a teacher placement agency.

When a superintendency in Red Falls, Minnesota was offered to Koos at a salary of one thousand one hundred and fifty dollars for the

academic year 1908-09, Koos immediately accepted this attractive offer in a school district far more progressive than Shabbona. During his four year tenure he received one of the first grants in Minnesota for vocational education. He used the twenty-five hundred dollar award to hire two teachers, one to teach home economics, and the other to teach agriculture and industrial arts. In the spring of 1912 he was offered a superintendency in Glencoe, Minnesota at a salary of twenty-two hundred dollars per year. Koos, now thirty-one years of age, had successfully served as a competent teacher and able superintendent.

Koos had accomplished a great deal in a short period of time; he realized that if he wished to continue his educational career he must secure additional graduate training. The prestige of German universities noted for training scholars in scientific knowledge and original research through the seminar method attracted many Americans to Berlin, Bonn and Munich. Leonard Koos wanted to be among them but unfortunately for him the United States entered World War I and he was forced to cancel his plans.

Koos selected the University of Chicago for his graduate training since many of its faculty were trained in Germany. Eminent faculty have included John Merle Coulter, John Dewey, James Rowland Angell, Robert James Havighurst and Charles Hubbard Judd.

Throughout his professional career, John Dewey exerted a great deal of influence on American education through his position as educator, philosopher and psychologist. Known as the dean of twentieth century American educators, Dewey's educational reforms had a profound effect on education throughout the world. At the University of Chicago,

his reform movements in educational theory and practice were tested in the University Laboratory School which he founded.⁸ Through his writings and teaching on learning by doing he became well known as the prophet of progressive education.

William Rainey Harper, the founding president of the University of Chicago, created one of the most comprehensive and liberal universities in the world. Emphasis was placed on graduate study and research, a university press and intellectual freedom. He secured the support of wealthy philanthropists including John D. Rockefeller which enabled him to begin the university with some of the most advanced ideas and finest instructors, equipment and buildings in the United States. According to Brick:

Harper put into practical operation educational ideas that previously were incoherent and unorganized. For the first time in educational history, he built on the University of Chicago campus an integrated corporate, and strong educational institution which he called a junior college. He started a junior college at Morgan Park Academy that, during his lifetime, was a unit of the university.⁹

Koos began his graduate studies in the summer session of 1914 with the famous educator Charles H. Judd. Judd was the director of the school of education and was well known at all levels of education through his writings, addresses and work for national committees and associations. He recommended that Koos conduct a study for the North central Association on the different interpretations that various high schools within the association had regarding the granting of credits.

⁸ John Dewey. The School and Society, Revised ed. (Chicago: The University of Chicago Press, 1915), p. 11.

⁹ Michael Brick. Forum and Focus for the Junior College Movement, (New York: Teachers College, Columbia University, 1964), p. 20.

Koos accepted the challenge, and designed a questionnaire which he circulated to high school teachers and administrators throughout the North Central Association. When the completed questionnaires were tabulated, he presented the findings to the committee who approved the meport and published it. Koos used this material for his own dissertation "The Administration of Secondary School Units."¹⁰ Leonard Koos received his doctor of philosophy degree in educational administration in June of 1916.

Dr. Judd recommended Koos to the President of the University of Washington where he was offered a position as Associate Professor of Administration at the age of thirty-five. His salary was two thousand five hundred dollars for the 1916-17 academic year. While he was at the University of Washington, research was definitely encouraged, and Koos centered his research efforts on the junior high school and the junior college. The two extensions of secondary education interested him because of their profound impact on secondary education.

Koos was promoted to professor in his second year at the University of Washington, and two years later, in 1919, he transferred to the University of Minnesota as professor of Secondary Education and Inspector of Private Secondary Schools. Koos published steadily while at the University of Minnesota. During his ten year stay he produced nine books including: The Junior High School in 1920, The High School Principal: His Training, Experience, and Responsibilities and a two volume book entitled The Junior College in 1924, The Junior College Movement in

¹⁰ Leonard V. Koos. The Administration of Secondary-School Units, (Chicago: The University of Chicago Press, 1917).

1925, Trends in American Secondary Education in 1926, The American Secondary School and The Junior High School: Enlarged Edition in 1927, and The Questionnaire in Education in 1928. He wrote Private and Public Secondary Education at Minnesota but it was not published until after he joined the faculty of the University of Chicago. Thus, Koos' most productive years of writing were while he was at the University of Minnesota.

In his book, The Junior College, Koos discussed the functions and purposes of this institution and the means of achieving them. He presents data concerning the grades to be included, admission requirements, the program of studies, the subjects of study, methods of adapting the work to differences in pupils, the advisory system, the social organization, the staff, and the housing and equipment. It is a brief but comprehensive monograph. In The High School Principal: His Training, Experience, and Responsibilities, Koos makes a penetrating study of the organizers, the principals, who decide how the schools should be run and how tens of thousands of students are to be educated. This book gives a good insight into the qualifications needed by this important group of leaders. It is a useful book for administrators and teachers who are thinking of becoming principals. In the two volume book entitled, The Junior College in 1924, and The Junior College Movement in 1925, Koos presents a comprehensive yet scientific study of this important area of education.¹¹ His interest in this aspect of education was developed while he was at the University of Chicago. The President of the Univer-

¹¹ Leonard V. Koos, The Junior College Movement, (Boston: Ginn and Company, 1925).

sity, William Rainey Harper intrigued Koos with his ideas on the junior college as well as his position as secretary of the North Central Association of Colleges and Secondary Schools Committee which evaluated junior colleges and contributed to Koos' interest in research. The Junior College Movement is a classic in the field.

In 1921 Koos had been asked by Charles Judd if he would be interested in doing a definitive study of the Junior College for the Commonwealth Fund Project. Officers in charge of the fund wanted particular areas in education studied. They had asked a small committee of eminent educators to suggest the areas. Judd asked Koos if he would be interested in making a definitive study of the junior college movement. Koos was indeed interested and taught a seminar on the junior college at the University of Chicago before beginning the project. A stipend of ten thousand dollars was awarded to him by the Fund, and the university gave him released time during the 1921-22 academic year. He completed this massive study of the junior college in 1925. With the completion of the Commonwealth Fund Project and his textbook on the Junior College, his professional research interest had moved from the junior high school to the grades associated with the upward extension, the junior college.

After the publication of The Junior College, Koos was considered one of the leading authorities on secondary education. In defining the Junior College, Koos sees its "development within the context of a gradual reorganization of the whole field of education. He feels this reorganization is culminating in a clear line between the functions of the lower two years and the upper two years of higher education."¹²

¹² Leonard V. Koos. "Emphasis," Junior College Journal, 34, (March

While at the University of Minnesota, Koos received offers from Yale University as well as the University of California at Berkeley. President Coffman of the University of Minnesota invited him to serve as Assistant President and Research Professor at the University. Had Koos accepted the offer made to him in 1926, he would have had the distinction of being awarded the first chair in higher education in the United States. Deanships were offered to him by the Universities of Nebraska, Washington, Minnesota, Cincinnati, Kansas, and Illinois. But Koos never regretted not having accepted any of these offers since he preferred to remain in the instructional rather than the administrative field of education. His primary interests remained teaching and research.

Koos joined the University of Chicago faculty in the fall of 1929 and remained there until 1946. His reasons for joining the faculty at the University of Chicago were primarily its outstanding reputation as a centre for research and advanced study, its distinguished faculty, and its renowned undergraduate and graduate schools. He taught courses in American Secondary Education, High School Curriculum and the Junior College. During the years 1930 to 1940 he served as editor of the School Review. Koos retired from the University of Chicago in 1946 but remained there until 1949 as editor of the Junior College Journal and director of Research for the American Association of Junior Colleges.

Koos enjoyed numerous summer teaching assignments including Ohio State, Harvard, the University of California at Berkeley, Columbia, and Michigan. He did a tremendous amount of consulting work for various states and was very popular on the lecture circuit.

Koos served as a visiting lecturer and graduate student adviser at the University of Florida from 1949 until the winter of 1976. His interest in community college research continued through 1975, and just before he died at the age of ninety-four on April 20, 1976, he was planning an analytical autobiography.

Other publications include: Farmers' Law (Minnesota Edition), The Administration of Secondary School Units, The Junior College, Guidance in Secondary Schools (with G. N. Kefauver), Administering the Secondary School (with others), Integrating High School and College, Junior High School Trends, and The High School Principal: His Training, Experience and Responsibilities,

This study examines Koos' contribution to the Junior College, which includes the curriculum and instruction, faculty, the various types of junior colleges, and an examination of Leonard Koos as an educator.

CHAPTER II

THE JUNIOR COLLEGE OF THE 1920S

The Junior College was established in the United States at the close of the nineteenth century. No one is certain when the idea for the Junior College originated, but Henry P. Tappan, in his 1852 inaugural address as president of the University of Michigan, recommended "the transfer of the work of the secondary departments of the university to the high schools."¹ Another university President Col. W. W. Folwell, of the University of Minnesota felt, in 1869, that the secondary school of the larger centers would be able to undertake the work of the freshman and sophomore years.²

William Rainey Harper, whose name is synonymous with the Junior College Movement, is often referred to as the father of the junior college. As the first President of the University of Chicago, Harper gave the first two years, freshman and sophomore, a division of its own which he called the "Academic College." University College was the division including the junior and senior years. As early as 1892 these divisions were identified as "Junior College" and "Senior College."³

¹ A. A. Gray. "The Junior College" (Master's Thesis, University of California, 1915), p. 2.

² A. Ross Hill. "The Junior College." In Transactions and Proceedings of the National Association of State Universities, 13, (1915), p 22.

³ Catalogues of University of Chicago, 1892-93 and 1896-97.

After this reorganization of the university, Harper's influence was directed toward the high schools and the small colleges located around the country. He tells us simply his views on the relationship of the first two years of university work to the high school;

The work of the freshman and sophomore years is only a continuation of the academy or high-school work. It is a continuation not only in subject matter studied, but in method employed. It is not until the end of the sophomore year that the university methods of instruction may be employed to advantage.... At present this constructive period of preparation, covering six years, is broken at the end of the fourth year, and the student finds himself adrift. He has not reached a point when work in any of his preparatory subjects is finished.⁴

President Harper considered his views to be of paramount importance, and he tried hard to organize a plan to put his theories into practice. In a meeting at the University of Chicago in 1902, he chaired a session with representatives of the schools affiliated with the university and he recommended that a committee be appointed to study the entire educational system with a view toward the adoption of the following plan:⁵

1. The connecting of the work of the first eight grades of the elementary school with that of the secondary schools.
2. The extension of the work of the secondary schools to include the first two years of college work.
3. The reduction of the work of these seven years {sic} thus grouped together to six years.
4. The enabling of the best class of students to do these six years of work in five years.

⁴ William Rainey Harper. The Trend in Higher Education, (Chicago: The University of Chicago Press, 1905), p. 378.

⁵ William Rainey Harper. "The High School of the Future," The School Review, Vol. 11, 1903, p. 1.

One year later, at the seventeenth annual conference of the academies and high schools affiliated with or cooperating with the University of Chicago, the committee's concluding report recommended the extension of the high school to include two additional years.⁶

Under President Harper's direct influence and encouragement, Joliet High School organized a junior college department in 1902 by adding two years to its regular course. Thus, this institution is the first public Junior College to be founded in the United States.⁷

Another concern of Harper was the small college. In 1900 in an address before the National Education Association he said:

In my opinion the two most serious problems of education requiring solution within the next quarter century are, the problem of the rural schools, which falls within the domain of lower education; and secondly, the problem of the small college, which lies within the domain of higher education. The second problem is at the same time serious and delicate, because the greatest interests, both material and spiritual, are at stake.⁸

The plight of the small college was well known to students of higher education and it is interesting to see how the great educator tried to remedy it. Harper admitted the struggle of the small college when he said:

While, therefore, 25 per cent of the small colleges now conducted will survive and be all the stronger for the struggle through which they have passed, another 25 per cent will yield to the inevitable, and one by one take a place in the system of educational work, which though in one sense lower,

⁶ William Rainey Harper. "The General Conference," The School Review, Vol. 12, 1904, p. 15.

⁷ Leonard V. Koos. The Junior College Movement, (New York: AMS Press, 1970), p. 238.

⁸ William Rainey Harper. The Trend in Higher Education, (Chicago: University of Chicago Press, 1905), p. 349.

is in a true sense higher. It is surely a higher thing to do honest and thorough work in a lower field than to fall short of such work in a higher field. Another group, (50 per cent) of these smaller institutions will come to be known as "junior colleges." There are at least 200 colleges in the United States in which this change would be desirable.⁹

With all his energy and enthusiasm and with funds to promote his idea, President Harper suggested to several struggling colleges that they affiliate with the University of Chicago. In this way they would limit their offerings to two years beyond their regular academy work and at graduation the student would then enter the junior year at the university without examination. Although the plan was a good one it did not receive acceptance at the time. It did catch on at a later date when many of the state universities, notably Missouri, as well as the smaller institutions, took the lead in implementing Harper's plan. Harper introduced and put into practice many innovative ideas. He will be remembered fondly by advocates of the junior college movement for building on the University of Chicago campus a strong, integrated, corporate educational institution, Morgan Park Academy which he called a junior college.¹⁰ Thus Harper personally encouraged the establishment of both public and private junior colleges and projected their imprint on secondary and higher education.

⁹ Ibid., p. 378.

¹⁰ Eells points out that the distinction of being the first American institution to reach the decision to eliminate completely freshman and sophomore work belongs to the University of Georgia, where the plan was formally adopted by the trustees in 1859. The plan was not carried into effect because of the Civil War. The situation is described in E. Merton Coulter, Life in the Old South, published in 1928. See Walter Crosby Eells, "Abolition of the Lower Division: Early History," Junior College Journal, VI (January, 1926), p. 93-95.

William Rainey Harper was only one of many educators who had theorized about the desirability of the junior college. Alexis F. Lange was a contemporary of Harper, and as head of the Department of Education at the University of California, his influence on the junior college movement is well known. Lange emphasized postgraduate work in the public high school, and he encouraged the development of the junior college as part of the public school system of California. Another educator, President R. R. Jesse of the University of Missouri, in an address before the North Central Association of Colleges and Secondary Schools in 1896 said:

The first two years in college are really secondary in character. I always think of the high school and academy as covering the lower secondary period, and the freshman and sophomore years at college as covering the upper secondary period. In the secondary period and in at least the first two years at college not only are the studies almost identical, but the character of teaching is the same.¹¹

and at the same meeting President J. Draper of the University of Illinois in discussing President Jesse's address stated:

We can not tell just where the high-school course is to end and the college course commence. We all believe that they are continuous and ought to be uninterrupted. The different circumstances of different communities will have much to do with fixing the point where the high-school course shall stop and the college course begin. That point will be advanced higher and still higher as communities grow in size and increase in knowledge, in culture, in means, and in all the instrumentalities for educational development and progress.¹²

¹¹ R. R. Jesse. Proceedings North Central Association of Colleges and Secondary Schools, 1896, p. 789.

¹² J. Draper. Proceedings North Central Association of Colleges and Secondary Schools, 1896, p. 789.

These are clear statements of the junior college idea, but it was William Rainey Harper who brought the ideas into concrete reality. Harper laid the foundations for the junior college, and it was Leonard V. Koos, who, as a colleague remarked, "uncovered its foundations."

Leonard Koos devoted a lifetime to research and teaching. Of particular interest to him was the junior college which he believed held an important place in America's educational system. He investigated every aspect of the junior college in his comprehensive study in which he used a wide variety of factual material, questionnaires, and visits to over two hundred public and private junior colleges in operation during the period 1921-22 and 1922-23. Our task will be to investigate these findings to illustrate the importance of the junior college when it was established in the early decades of the twentieth century and then to attempt to project from the results of the investigations the future development of this important educational unit.

The junior college came into existence about the beginning of the present century, however it was discussed publicly as early as 1875. At the National Educational Association in that same year William Watts Folwell, the University of Minnesota's first president, suggested that there be developed a strong system of secondary schools that would include an upward extension of the high school program through the first two years of college. He wanted the state of Minnesota to inaugurate such a program and he called this type of school the junior college. Because he feared that some colleges and universities could not educate the people he said:

If we mean to educate the people beyond those rudiments essential to the bare existence of men in civilized states... we

must build up the secondary schools. The economy of bringing these institutions within reach of youth residing at their homes is too obvious for comment; but there is still a higher economy, of more account than any pecuniary saving.¹³

We know that the junior colleges grew rapidly and we know that the first junior colleges, both public and private began in Illinois around 1900. Koos tells us:

The first private junior college was Lewis Institute of Chicago established in 1896.... The first public junior college was that developed in 1902 by extending upward by two years the Joliet Township High School and this unit has maintained an uninterrupted existence ever since.¹⁴

After two decades of growth, there were some two hundred and seven junior colleges in the United States. Of this number forty-six were public junior colleges, twenty-four state institutions and one hundred thirty-seven were private institutions.

The public junior college was maintained by city high school or junior college districts. The period of most rapid growth for this type of institution was in the middle of the second decade of the century. These public junior colleges were under the direction and control of local school authorities. They were popular and developed rapidly because they were upward extensions of the public school system. Since they were often free of tuition and in the center of a community, they attracted a large percentage of the population.

¹³ William Watts Folwell. University Addresses, (Minneapolis: H. W. Wilson and Company, 1909), p. 112.

¹⁴ Leonard V. Koos. "Rise of the People's College," The School Review, (March, 1947), p. 142.

Normal schools existed in the mid-19th century--before the junior college. State institutions were the last type of junior college to come into existence. They were under the control of whatever authorities directed the institution of which they were a part. Their chief attraction seemed to be the type of programs they offered, e.g., those institutions in California which offered preparation in engineering, in Wisconsin schools where teacher preparation was an outstanding department, and in Idaho which offered a strong program at the Polytechnic Institute. The state of Texas had two outstanding institutions namely Grubbs Vocational and John Tarleton Agricultural College. The clientele of the state institutions were students interested in special programs which were often located in an area some distance from home.

Private junior colleges came into existence first and were the most popular of the three kinds of institutions. They were operated under the auspices of a particular church or religious group such as the Methodist, Lutheran, Baptist, Catholic, Presbyterian, Latter Day Saints, Christian and Episcopal. They developed for many reasons, but the chief one seems to be the movement for standardization of institutions of higher education. Because of inadequate teaching staffs, resources and facilities, many institutions were not able to qualify as four year colleges, so they became private junior colleges, thus finding a place in the school system.

Geographically junior colleges were spread throughout most of the United States. Only eleven of the forty-eight states in 1921-22 did not have junior colleges. There was a definite preference for them in the southern, mid-western and Pacific Coast states. Public junior colleges

were primarily developed in the midwest and California. Many small junior colleges were affiliated with state institutions and appeared in the mid and far west. Private units were developed in all sections of the country but a high concentration of them appeared in Missouri and the Southern States.

From these patterns we can see that the public junior college, as well as the state institution, is a western and mid-western phenomenon. In the case of the private institutions we note that one half appear in the southern group of states while two-thirds are located in the mid-western group. The small number of junior colleges appearing in New England and the Middle Atlantic states is to be noted. This could be due to the large number of outstanding private institutions such as Harvard, Yale, and Dartmouth. But it also might be due to the fact that the Eastern section of the country had a longer and richer educational tradition than other sections of the country.

The junior college is more than an "isthmus connecting the mainland of elementary and secondary education with the peninsula of professional and advanced training." The special purposes of the junior college as outlined below reveal that it is an institution with a definite mission which includes the education of a large proportion of the population as well as profoundly influencing the levels of education above and below it. In his monumental work The Junior College, Koos gave one of the best treatments of the stated purposes of the junior colleges. Under a grant from the Commonwealth Fund, Koos had made an exhaustive study of every dimension of the junior colleges by direct observation and by a thorough study of the literature. He reviewed

twenty-two articles and addresses published in educational periodicals, and consulted such authorities on the junior college as James R. Angell, Frederick E. Bolton, J. Stanley Brown, P. P. Claxton, J. H. Coursault, William Rainey Harper, A. R. Hill, Charles H. Judd, A. F. Lange, George E. Vincent and Charles Zueblin. In addition materials collected from all the junior colleges in operation at the time were used. These catalogs covered the period 1920-21. Fifty-six institutions, of which twenty-three were public and thirty-three private, contributed to this study. Of the public institutions studied, four were established in normal schools, and three were in state institutions of junior college grade. The remaining junior colleges were those connected with city, township or county high schools. There were seventeen private colleges located in southern states and sixteen in other states.

In this study Koos identified twenty-one separate purposes of the junior college and divided them into five general classifications. Koos' study concentrated on the first two years of the undergraduate college or grades thirteen and fourteen. An analysis of the special purposes as outlined by Koos in his study The Junior College will aid us in determining the rightful place of the junior college in our school system.

The first general classification of purposes identified by Koos included the nine affecting education in the two years under consideration or grades thirteen and fourteen. The first two of these nine are those most commonly associated with the junior college, viz., service to transfer students and to terminal students. Most junior colleges accept these purposes as valid. The first is providing a comprehensive educa-

tional program of such quality that it will not jeopardize the future career of the student transferring to a four year college. Of all the special purposes listed by the author, this is the one most certain to be performed. The second purpose is providing the terminal student with a complete course of study rather than the first two years, or half, of a four-year program. This purpose offers to those students the "provision of opportunities for rounding out their general education."¹⁵ Students are assured a complete program rather than something preliminary to advanced training.

The third stated purpose is to offer the student final occupational preparation which can be completed in the junior college. Koos makes clear that preparation that can be completed in the high school is termed trade, while preparation requiring four or more years beyond the high school is termed professional. But yet a third kind of preparation is provided by the junior college, that is for the semiprofessions, e.g., agriculture which would include soils and soil technology, and poultry husbandry; commerce which would include such semiprofessions as bookkeeping, shorthand, typing, and office training; and home economics, to name but a few of the semiprofessions. Since the junior colleges were designed as terminal institutions for many students, the curriculum, therefore, was composed of both liberal and technical studies. The liberal arts could be terminal or preparation for the university, and the technical studies a preparation for semiprofessional positions.

¹⁵ Leonard V. Koos. The Junior College (Minneapolis: University of Minnesota, May, 1924), Vol. I, p. 18.

The fourth purpose, that of popularizing higher education, received a wide response from its friends because of its importance to the very existence of the junior college. The lowering of the cost of education on this level or bringing it nearer the home of the student were considered vital because cost and proximity are the most significant determinants of the number of students who will avail themselves of the opportunities offered by higher educational institutions.

The fifth purpose was continuing home influences during immaturity. The late teens are a critical period for the young student, and attendance at a junior college, rather than at a larger university, reduces a great deal of stress and anxiety because of the friendly and cooperative faculty and student body at the smaller, local school.

The sixth purpose of affording attention to the individual student was certainly valid at the time Koos identified it because junior colleges at that time had small classes and small enrollments which enabled the student to be given closer attention by the faculty.

The seventh purpose of offering better opportunities for leadership is similar to the sixth since it derives from the same principle. With a smaller enrollment a student has a better opportunity of developing leadership traits than a student would have in a school with a larger student body.

Purpose eight, offering better instruction in these school years, is based more on common sense than on empirical evidence. The logic of this claim that the junior college teaching staff can devote all its time to teaching responsibilities is offered since the junior college is not a research institution.

It is well known that junior college teachers are recruited from secondary schools where excellence in teaching is stressed. In four year colleges, especially those associated with graduate schools, instruction in freshman and sophomore classes is often delegated to graduate students who frequently spend more time on their own graduate studies than they do on classroom preparation.

The ninth purpose of allowing for exploration gives the student an opportunity to take two years of college before deciding on a profession or career choice, rather than making a vocational decision immediately upon high school graduation.

The second general classification of purposes involves the organizational goals of the junior colleges. Four similar purposes affecting the organization of the school system are clearly distinguished. They are:

1. Placing in the secondary school all work appropriate to it,
2. Making the secondary school period coincide with adolescence,
3. Fostering the evolution of the system of education,
4. Economizing on time and expense by avoiding duplication.¹⁶

The four purposes have common features or attributes and by placing all work on the secondary level in the high school or extending the period of the high school from the twelfth grade through the fourteenth grade they encompass the ideal solution to the problems of evaluation and economizing.

¹⁶ Koos, The Junior College, p. 17.

The fifth purpose in this general classification of organizational goals concerns the plight of the smaller and weaker colleges. According to the responses received from questionnaires and experts in this field, the smaller and weaker four year colleges should model themselves after the strong junior colleges in this system of which this two-year unit is such an important and vital part.

The third general classification includes the purposes affecting the university. There are three purposes under this classification. The first purpose is "relieving the university." James W. Reynolds in his book,¹⁷ cites two examples which demonstrate the cooperation between the junior college and the four year college or university. For example, the engineering college of the University of California has relied on the junior colleges of that state to train the freshman and sophomore engineering students. Innovative curriculum development worked out by the junior colleges provides the smooth transition from the sophomore year of the junior college to the third year of the engineering college. Under this arrangement the students profit by saving exorbitant tuition fees while completing acceptable courses which they may transfer toward their engineering degrees. For example, junior colleges in the state of Florida relieved Florida Atlantic University from the task of offering the first two years of college. The entering students registered for their junior year, an ideal arrangement and one indicative of the value of the junior college.

¹⁷ James W. Reynolds. The Junior College, (New York: The Center for Applied Research in Education, Inc., 1965), p. 13.

The second purpose of "Making Possible Real University Functioning," enables the university to free itself of the first two years of college and allows it to use its staff, faculty and facilities to promote programs of higher education that are in harmony with the highest ideals of the academic community.

Koos in commenting on the third purpose under this "university" classification, "to assure better preparation for university work," says

Those who propose . . . it look to see an improvement in the preparation of students for university work, but they fail to mention the grounds for their hopes. These may be implicit in purposes 6 (to afford greater attention to the individual student), 8 (to offer better instruction in those school years) and 9 (to allow for exploration) as already presented.¹⁸

The fourth general classification affecting instruction in the high school include two purposes. Purpose one is improving high school instruction. The close relationship of the junior college with the high school normally exercises a favorable influence on the lower unit according to the well established principle that a higher unit has a positive influence on the standards of a lower unit. A college or university located near a high school exerts a positive influence on the high school.

The second purpose--Caring Better for Brighter High School Students-- is reflected when the junior college serves the interest of the more capable students by offering advanced coursework as well as allowing them to make up any course deficiencies without a serious loss of time. Such a situation occurs when a student reaches the fourth year

¹⁸ Leonard V. Koos. The Junior College Movement (Boston: Ginn and Company, 1925), p. 26.

with less than four units of credit required for graduation. Since the junior college offers course work in the high school the student may progress without any loss of time.

The fifth general classification "Affecting the Community of Location" has two purposes: "Offering Work Meeting Local Needs," and "Affecting the Cultural Tone of the Community." Koos had in mind that these purposes would meet the vocational and social needs of the citizens of the community. The Junior College would offer vocational preparation for the industries and businesses located in the community while some of the social needs would be met through its educational programs. He also believed that the instructional and administrative staff would exercise a positive influence through their roles as teachers, administrators and guidance workers. Even the aesthetic experience provided by the junior college building, the campus, the physical plant and the various educational programs would, it was hoped, have a positive effect on the cultural tone of the community. This result would be accomplished not only through the graceful lines of the building itself, and the lush and luxurious landscaping of its grounds, but particularly through programs that would stimulate and excite students to complete their work so that they would become more productive personally as well as members of society. The community relationship which Koos identified anticipated the renaming of junior colleges after the 1950s as community colleges.

Accomplishing the special purposes of the junior college as enumerated by Koos was a lofty undertaking, and since all of the purposes were realized, the junior college became an effective educational force throughout the United States. According to Koos:

There can be no doubt that a movement which develops through these variations and to such proportions during such a brief period of time, for itself and on account of its relationships to other units in the educational system, is deserving of more scrutiny than it has had, both for the purpose of evaluating it, and, in the event of its being found a desirable addition to the educational system of marking out appropriate lines for its future development.¹⁹

In summary the twenty-one special purposes as outlined by Koos give us good reasons why the junior colleges should be developed and encouraged to continue. The junior college, relatively unknown at the opening of the century, has developed at an astounding rate. By 1920-21 in just two decades it had reached a total number of over two hundred units, and this rapid increase in the number of junior colleges could be due to the unique service rendered by it. Also of significance was the contribution it made in the educational, social, and economic environment. The junior college, through its varied programs, would affect the entire system of education by perfecting secondary education, finding a place for the small college in the educational system, and acting as an effective force in the university. Its effectiveness was primarily in developing differential characteristics for each level of educational instruction and in eliminating repetition of course material and expanding or enhancing the educational process so the students could realize their full potential.

The primary function of the junior college is to offer to its students two years of coursework that will be acceptable to colleges and universities. To learn how the junior college performs that task will be through an analysis of the curricula offerings as listed in their

¹⁹ Leonard V. Koos. The Junior College, (Minneapolis: University of Minnesota, 1924), p. 13.

catalogs and comparing them with courses and requirements of other colleges of arts and sciences. Very often there is a discrepancy between the courses listed in the catalog and the actual offering of the courses. This occurs when a new department or institution is developed and due to lack of registrations the courses do not materialize. Koos concludes "that neither the average amount of reduction nor the extent of disappearance of particular courses is large enough to warrant discrediting to any large extent the results of any subsequent conclusions involving the description of the junior college offerings."²⁰ When courses are listed and not offered the result is a reduction in the number of semester hours offered by a particular institution. But it has been proven that if a total of 225 to 250 semester hours of academic work is offered by the junior colleges and properly distributed it "will meet satisfactorily the needs of the function of the junior college here under consideration, i.e., the giving of the first two years of work in colleges of liberal arts."²¹

Another question to be answered is whether the junior colleges can effectively offer the first two years of work in training toward the professions of law, medicine, engineering, and agriculture. Whether the instructors in junior colleges compare favorably with their counterparts in colleges and universities is another question to be answered, and finally whether the students' work will be accepted toward the baccalaureate degree at other colleges and universities.

²⁰ Koos, The Junior College, p. 43.

²¹ *Ibid.*, p. 60.

Koos used the catalogs and bulletins of junior colleges that were listed in the Educational Directory, and from contacts which he made through visitations at particular schools or from other researchers in the field. The 1921 study included catalogs and bulletins from twenty-three public institutions and thirty-five private junior colleges. Of the public junior colleges, sixteen were municipal which meant they were a part of the city, township or county systems. Seven were state institutions of which four were normal schools. Of the public institutions, fourteen were in north central states, and seven in California. Nineteen of the thirty-five private junior colleges were exclusively for women. The private junior colleges were located in various states--nine in Missouri, eight in north central states and eighteen in the southern states.

The curriculum offerings of the fifty-eight widely scattered public and private junior colleges were examined to determine if indeed the junior colleges could offer the first two years of college work. In order to have uniformity all credits were reduced to the same unit, i.e., the semester hour. The public junior colleges listed the average total number of semester hours of 255.0 while the private junior college offering was 192.0 semester hours, and an average of 214.6 semester hours for all the fifty-eight junior colleges involved in this study. When the data for state junior colleges in normal schools are removed the average amount of work decreases to 219 semester hours. When data are removed from three institutions which are offering work beyond the second year and yet claim to be junior colleges, the average number of hours for this group drops to 160.4 semester hours.

In comparing the work offered by public and private junior colleges in several fields it was shown that there is very little difference in the offerings. Information on the number of semester hours in selected fields for the public junior colleges and the private junior colleges follow.

Public Junior Colleges:

English 17.7 semester hours,
Public speaking 3.0 semester hours,
Modern languages 42.1 semester hours,
Psychology 3.1 semester hours,
Physical education 2.7 semester hours,

Private Junior Colleges

English 16.0 semester hours,
Public speaking 2.8 semester hours,
Modern Languages 38.6 semester hours,
Psychology 2.9 semester hours,
Physical education 2.9 semester hours.

The public junior colleges exceeded the private junior colleges in offerings in mathematics, science, social subjects, music, agriculture, commerce, engineering, industrial and occupational. The private junior colleges offered more semester hours in bible and religion, education and home economics.

Many different courses are listed in the catalogs of the various junior colleges but often these courses are not actually offered due to small enrollments, or the nature of the college, i.e., a newly developed institution or department. A comparison of the work in progress during the school year with that listed in the catalog is important in finding out how effective the junior college is in offering the first two years of work acceptable to colleges and universities.

In order to obtain this information, Koos visited fourteen junior colleges, nine public, and five private, a fourth of the fifty-eight colleges contributing to the data. Koos found the following results. Five public junior colleges offered less work during the school year than was listed; two offered more courses, and two offered exactly what they listed. Of the private junior colleges, three offered less work, one offered exactly what it listed, and the other junior college offered more work than was specified in the catalog.

In these nine catalogs there are a total of 2025 semester hours, an algebraic sum of correction of 191 1/2 semester hours or an average percent of unfavorable difference of 9.5. If this difference is applied toward all public junior colleges, it would reduce the total amount of semester hours from 255.0 by almost 25 semester hours or to 225 to 230 semester hours. In checking the private junior college, three offered less coursework, one offered exactly what it scheduled, and one offered more work than was specified in the catalog. The private junior college catalogs used showed a total of 985 semester hours offered with a sum of correction of 53 semester hours or an average of 5.4 percent. Applying these figures to all the private junior colleges used, we could get a reduction in semester hours from 192.0 as listed in the catalogs to 180.0 semester hours which were actually offered. Even though there are reductions in the amount of work offered by the junior colleges, it can be concluded that such reductions will not interfere significantly with the findings of the study. Neither the reduction in courses offered nor the disappearance of them will not discredit any conclusions with regard to the junior college offerings.

To continue the study Koos compared the work offered in the junior colleges in freshman and sophomore years with that offered in standard four year colleges of liberal arts. For the junior colleges the results of the analysis of the work outlined above were used. But there must be a similar measurement required for the liberal arts colleges. Koos utilized the catalogs of one hundred and fourteen four year college institutions, and twenty of them colleges of liberal arts in universities. All institutions were approved by an accrediting agency. The institutions were selected randomly. An attempt was made to use junior colleges from all sections of the country. The results of this study revealed that with one exception the amounts of work offered in each subject-group in the colleges of liberal arts exceed that offered in the junior colleges. The difference in the amount of work offered in each subject group is much greater in the colleges in universities but there are notable differences in the four year colleges. The junior college was almost equivalent in the amounts of work offered in the academic subject mathematics. This favorable comparison included only the public junior colleges. The junior college exceeded both the four year colleges and colleges in universities in occupational courses which included agriculture, commerce, engineering and industrial, home economics and other occupational areas.

There was no discrepancy between the total number of courses listed in the catalogs and those actually offered by the four year colleges and units in liberal arts universities. However, the total average offering in the first two years exceeds those of all junior colleges by fifty percent. The public junior colleges fare somewhat

better because the excess in course offerings is smaller. Also noted were the course offerings in the first two years in university colleges of liberal arts which were more than double those in junior colleges. This comparison is unfavorable to the junior college and might easily suggest its demise. However, there were encouraging signs for the continuation of the junior college movement. The junior colleges in 1921 were seriously attempting to remedy these deficiencies. Private junior colleges were securing more scientific equipment so they could offer competitive work in science. In regard to the percentage distributions of academic subjects, the junior colleges were making progress in offering more qualified coursework to compete with the four year colleges and liberal arts units in the university. A plus for the junior college was the offering of a tremendous number of occupational courses far in excess of that in other institutions.

A study was also made of the work taken by a group of two hundred students during their first two years of attendance at the University of Minnesota. An attempt was made to determine some measure of the degree to which all the work taken by these students is or is not spread evenly over the curriculum. The subject of mathematics was used to demonstrate this point. There were 540 quarter hours of mathematics taken by the 200 students. The courses were higher algebra, solid geometry, college algebra, trigonometry, analytic geometry, and calculus each for a total of thirty credit hours. Three courses, solid geometry, analytic geometry and calculus, were taken by two percent (four students) or less of the 200 students. Since these courses represent a range of fifteen credits they represent 50% of the total possible work in the field.

These three courses were taken by one, three and one respectively of the 200 students. This represents a total amount of credit of 25 quarter hours or 4.6 percent of the total amount of work taken in mathematics. For the other three courses namely, higher algebra, college algebra and trigonometry, 37, 19 and 47 students registered for the courses. These figures represent a total of 515 credit hours or 95.4 percent of all the work taken in mathematics. According to Koos,

We can see that there is a difference between the proportion of the range of work in mathematics represented in the courses taken by 2% or less of the students and the proportion of the total credit covered by these courses when weighted by the number of students by whom they are taken. A half of the credit range of the courses accounts for less than a twentieth of the total credit involved.²²

For Koos, this example illustrates,

that it does not seem beyond the bounds of reasonable expectation to assume that the total offering of regular college work in junior colleges can be kept to something like 250 semester hours without sacrificing the interests of those who contemplate completion of a four-year liberal arts curriculum, and in view of the fact that the offerings to freshmen and sophomores in standard colleges, are padded by courses seldom if ever taken by underclassmen, the writer feels secure in concluding that the stronger junior colleges--if not already prepared to do so--will shortly be able, as far as the curriculum is concerned, to realize their ambition of offering the first two years of college work.²³

Was it possible for the junior college to offer a strong two year curriculum similar to that offered in the conventional college of Arts and Sciences as well as offering premedical and pre dental work and in the freshman and sophomore or professional curricula open to the high school graduate in agriculture and engineering? A similar study was

²² Leonard V. Koos. The Junior College Movement, (New York: AMS Press, 1925), p. 41.

²³ Ibid., p. 44.

made using the curricula of eighteen professional fields. Included in the tabulations were a total of two hundred and thirty curricula or an average of twelve curricula per professional line. The curricula used were those from standard colleges located around the country. Most of the universities were public or private but state universities were used for lines such as agriculture, forestry and mining.

The work was divided into two large groups called general and special which was to distinguish the materials for general and specialized education. Under general was listed work in English, foreign language, mathematics through calculus, courses in the social studies which included the first course in economics, philosophy, psychology and all courses in "pure science." Under special education was placed all work for special groups or applied courses such as "business English, mathematics of investment, agricultural chemistry, and educational psychology. Also placed under this heading were courses beyond the first course in economics. A major proportion of the coursework was in pharmacy, education, agriculture and home economics.

The results of the study showed "that the following groups of students could meet all or essentially all of their requirements of the first two years, professional or preprofessional, in junior colleges with a general offering of the subjects and courses already specified: law, medicine, dentistry (two-year preprofessional or combination curricula), nursing (degree curricula), education, journalism, and chemistry."²⁴

²⁴ Leonard V. Koos. The Junior College Movement, (New York: AMS Press, New York: 1925), p. 58.

In addition, the requirement of the one-year pre-dental course could be fully met and approximately two-thirds to three-fourths of the coursework in commerce, agriculture, home economics, and all engineering groups except chemical engineering and architecture could be met. A large percentage of the work required in chemical engineering could also be taken. In the pharmacy, forestry, and architecture about half of the requirements could be satisfied. If the junior colleges were unable to offer any of the special work required, the students would be required to transfer after their freshman year to other colleges or universities. Koos study shows that large junior colleges could meet the general requirements for the first two years of work in pre-profession preparation as evidenced by the junior college offerings as listed in their catalogs of 1921-22.

In regard to professions with special requirements such as commerce, pharmacy, agriculture, forestry, home economics, civil, electrical, mechanical, and chemical engineering, mining and architecture, Koos found the junior colleges offering work in some of these areas. In commerce the amount of special work in the curricula is 12.6 semester hours and stronger junior colleges can offer such work. In pharmacy which requires a large amount of special work, the student took almost half of the total work required during his or her two years or about thirty semester hours. The junior colleges could take care of the general training but the student would be required to attend another institution for the special work required.

The number of hours of special work required in the first two years of curricula in agriculture, forestry and home economics was 29.0

(agriculture); 34.0 (forestry); and 23.6 (economics) semester hours.

The junior colleges were prepared to offer some of the courses but for specialized work the students needed to transfer to agricultural and mechanical schools or other schools offering those particular programs.

Based upon Koos' analysis, strong junior colleges were capable of offering work for the following professional groups:

- A. By two years of work exclusively or almost exclusively general rather than special:
 - 1. Law (pre-legal or combination curricula)
 - 2. Medicine (pre-medical or combination curricula)
 - 3. Dentistry (combination curricula)
 - 5. Nursing (pre-nursing or combination curricula)
 - 7. Education (pre-education or first two years of four-year curricula)
 - 9. Journalism
 - 17. Chemistry

- B. By two years of work usually for the most part general, but also in considerable part special (usually the first two years of four-year curricula): in considerable part special (usually the first two years of four-year curricula):
 - 8. Commerce
 - 10. Agriculture
 - 12. Home economics
 - 13. Civil engineering
 - 14. Electrical engineering
 - 15. Mechanical engineering
 - 16. Chemical engineering

- C. Until the two-year preprofessional curriculum exclusively general is fully established, by a one-year preprofessional curriculum exclusively general:
 - 4. Dentistry (pre-dental curriculum)

- D. Until the place of the occupation in question either as a profession or semiprofession is established, by one year of general work applicable to professional curricula:
 - 6. Pharmacy (in the case of some four-year curricula in pharmacy two years of such general work would be acceptable)

- E. Until the junior college plan is thoroughly established and particular junior college units... are specially equipped and

manned to give the two full years of work, or until curricula are modified to prescribe a larger proportion of work of a general nature, by one year or general work applicable to professional curricula:

11. Forestry
18. Mining
19. Architecture²⁵

The studies investigated by Koos in 1921-22 indicated that the junior colleges were prepared to offer to students two years of work acceptable for transfer to four year colleges and universities. Another issue was if the course work would be accepted by institutions of higher learning? Those involved in the movement realize that universities in the West and Midwest would accept the work done in approved junior college units and look favorably on their development. Since the junior college is capable of offering two years of college work an issue to be considered is will this coursework be accepted by institutions of higher learning? Those involved in the movement realize that those universities in the West and Midwest do accept the work done in approved junior college units and look favorably on their development. However, the four year colleges were not as receptive in accepting the work done in the junior colleges. In order to discover the attitude and practices of these institutions, Koos designed a simple form of questionnaire which he distributed to over 200 Registrars in four year colleges located throughout the country. There were two stipulations in the selection of the respondents. Only four year colleges were selected and a representation from both recognized and unrecognized colleges were used. One hundred sixty-eight Registrars returned the questionnaires. The forms

²⁵ Koos, The Junior College, pp. 76-77.

were sent to registrars but the responses were returned by various officers such as presidents, acting presidents, deans, secretaries, etc. The number of responses and those responding were as follows: registrars (72), deans (40), presidents (29), secretaries (8) as well as a few responses from vice-presidents, acting presidents, recorders, and chairmen of committees on admission. The large number of responses received from deans and presidents is explained by the fact that oftentimes they serve in both capacities. Presidents and deans are also more familiar with institutional policy than other officers in the institution, and this was an important part of the questionnaire.

Questionnaires were returned by recognized and unrecognized colleges from the East which included the New England and Middle Atlantic States (with Maryland), South, the southern states, West and Middle West which included the remaining states. Replies from the East were from thirty-two of the Recognized Colleges and ten from the Unrecognized Colleges: the South returned fourteen from the Recognized Colleges and seventeen from Unrecognized Colleges: from the West and Midwest seventy-five replies came from Recognized Colleges while twenty were from Unrecognized Colleges. The results revealed that "with very few exceptions all institutions receiving applications for advanced standing by students who have been in attendance in junior colleges admit the students to such standing."²⁶

It was shown that one hundred four of the one hundred eight schools follow this practice. Of the four remaining colleges, one answered no, one very few, the third college admitted freshmen work only

²⁶ Koos, The Junior College Movement, p. 80.

and the fourth college did not answer. The Eastern group of colleges were the exception. "The results indicate that admission to advanced standing by those students who have completed their work is all but universal practice."²⁷

According to Koos, a survey of credit acceptance practices followed by colleges and universities could be summarized under five headings:

1. Two thirds of the colleges received applications for advanced standing from students who have done work in junior colleges.
2. Practically all of those receiving applications admitted the candidates to advanced standing.
3. The more common types of recognition followed in approximately equal numbers of cases, were the "hour for hour" and the recognition only of courses open to freshmen and sophomores.
4. A few insisted upon examinations covering the work for which credit is asked,
5. A small proportion of colleges volunteered information that the credit is conditionally rather than finally granted, permanency of credit acceptance depended on success in the institution to which the student transfers; others mentioned a maximum of the usual amount of credit earned in two college years.²⁸

Another question asked by Koos was, "what do you take to be the attitude of your college toward the junior college movement?" The attitude of the respondents were:

for the country as a whole, the attitude is one of encouragement rather than discouragement. The exception is the group of eastern colleges which shows a slight preponderance of negative attitude toward this new movement in higher education.²⁹

²⁷ Koos, The Junior College, p. 81.

²⁸ Koos, Junior College, p. 82

²⁹ Koos, Junior College, p. 83.

There are many reasons for the encouragement of the junior college movement. Koos' identification follows:

1. Fifteen point out the effect of the junior college in offering the opportunities of a higher education to many who cannot otherwise have them, i.e., popularizing higher education in bringing it nearer and lowering its cost to the student;
2. Eleven refer to the advantages, moral, educational, etc., accruing to students who are diverted from swelling the freshman and sophomore groups in larger colleges and state universities, and the resulting avoidance of "congestion" in such schools;
3. Six point to the desirability of having the weaker private four-year colleges become strong junior colleges; while smaller numbers mention;
4. The superior scholarship possible in junior colleges;
5. The "feeding of junior and senior years" in four-year colleges by the junior units;
6. The "natural break" between general and special work at the end of the sophomore year;
7. The removal from the four year college of those who want only two years of preprofessional work;
8. The "bridging the gap" between high school and college work.³⁰

Students enter college at a very early age--some as early as seventeen or eighteen. They have not acquired moral and social maturity but are exposed to the moral dangers presented at a large university. Although parents admitted their chief reason for having their sons and daughters remain at home for the first two years was financial, their fear of moral corruption was certainly another major factor.

Since the size of the classes in the junior college is much smaller than in the large universities, it is possible that the individual student will receive more attention. At the large university there

³⁰ Koos, Junior College, pp. 84-5.

is little likelihood of decreasing enrollment so the possibility of the student receiving any individual recognition or attention during the early years is not great. The junior college being small can offer more individual attention to the student in contrast to the "depersonalization" of the large university.

All colleges and universities have many extracurricular organizations--literary, musical, social and religious which provide the student with opportunities to get valuable training in leadership roles. Although not all types of extracurricular organizations offer equal opportunities for training, the smaller the enrollment, the greater the chances that a student can develop leadership skills through laboratory experience in leadership.

Any higher education unit can exist, but not for long, if it does not have quality teaching to support it. The junior college prides itself on its superior teaching faculty. It has been junior college practice to recruit the highly seasoned high school instructor who has proved himself an efficient, disciplined and intellectual being. This claim of superiority in teaching faculty was supported by a comparison of the experience, teaching load and remuneration of junior college teachers with that of similar teachers in a variety of other institutions of higher learning. Six hundred and one instructors were studied in the investigation, and they were distributed as follows: 189 in public colleges; 90 in private northern junior colleges; 25 in southern private accredited junior colleges; 30 in southern private unaccredited junior colleges; 25 in normal school junior colleges; 121 in four-year colleges; and 121 in universities.

One measure of evaluating teacher preparation, although an arbitrary one, is the highest degree held. The investigations revealed that some junior college teachers had no baccalaureate degree; they did however have adequate preparation in the field in which they teach, for example, in the department of French. All college and university personnel possessed degrees, and the master's degree was held almost equally by the faculty of both the public and northern private junior colleges, and the colleges and universities. The doctor's degree was held by some members of the faculty of the colleges and universities but rarely by those of the junior college faculty.

An even more interesting comparison is that of the highest degree held by college and university teachers giving instruction to freshmen and sophomores. Twenty-two instructors were in the college group and sixty-five in the university group. Among the college group, 40.9 percent held bachelor's as the highest degree, 40.9 percent held master's degrees, and 18.2 percent also held doctor's degrees. In the university group 33.8 percent held only bachelor's degrees; 55.4 percent master's degrees; and 10.8 percent also held doctor's degrees. This data is similar to that for the junior college faculty although slightly superior to it. In comparing the degrees held by instructors in the colleges and universities with those held by instructors in junior colleges "the standards operative in higher institutions are less attainable for junior colleges."³¹

³¹ Ibid., p. 193.

Three-fourths of the public and northern private junior college teachers had adequate preparation in their subject fields. The college and university faculty had good preparation in their subject fields but the results indicated that more training was necessary for the junior college faculty.

Another interesting phase of Koos' study concerned the number of different departments in which the faculty participated.

1. Three fifths of public and northern private junior college instructors teach in one department only; slightly more than a fourth teach in two departments with small numbers teaching in more departments;
2. In four year colleges three fourths of the instructors teach in one department; more than one fifth teach in two departments;
3. The university faculty teach exclusively in a single department.³²

The colleges therefore are similar to the junior college in having their faculty teach in more than one department. The junior college teachers have more training in education than either the college or university faculty, and hence would seem to have an advantage in teaching superiority over the other groups.

The median load for public junior college instructors teaching on the junior college level was 13.5 clock hours per week. The median load for instructors in northern private junior colleges was 1.4 hours greater than for that of instructors in public institutions. For instructors in four year colleges the teaching load was similar to that of public junior colleges. The university faculty have a much lower teaching load than do junior college and college instructors. The find-

³² Koos, The Junior College, p. 197.

ings of the study reveal:³³

The experience in teaching accumulated by junior college teachers as compared to that of teachers in four year colleges and universities indicates that the junior colleges fall short in that area. This would seem to occur because of the recency of this unit. The older institutions, quite logically have more experienced faculty due to their longer history as teaching institutions.

Faculty salaries in public junior colleges compare favorably with those in higher institutions. The position of instructor in an institution of higher learning is however, more prestigious than that of the junior college teacher.

It was concluded with regard to the degrees held and the length of training received, the colleges and universities are far ahead of the junior college. However, because of the junior college's brief existence it was to be commended. The junior college did well when compared to other institutions in special preparation for subjects taught. They lagged behind others, however, in the subjects in which students took less work during the first two years of college. Koos recommended that the junior colleges seek to improve their performance on standards similar to that operating in four year colleges and universities. In training in education, in experience, in teaching load, and in salaries, the instructors in junior colleges compared favorably with instructors in other colleges and universities. The teaching load was heavier than that of the university instructor but similar to the load of the four year college instructor. The salary for the junior college instructor

³³ Koos, The Junior College, p. 205.

was lower than that of the college or university instructor but the disparity is not significant. The public junior colleges received higher marks on all of these items than did the private junior colleges.

A considerable amount of information was gained from Koos' investigation of the junior college, especially with regard to strengthening this educational unit. Teachers were sought who possessed better preparation in their specializations. It was strongly recommended that the teaching be limited to one department. The idea that teaching on both the high school level and the junior college level simultaneously is degrading to the instructor was nonsense. Koos believed that it can and should be done, and that it did not violate college standards but instead elevated the standards in high school work, and insured that the teacher would be working in his or her own discipline, not trying to teach in an area in which he or she lacked an adequate background.³⁴

One of the major reasons for the establishment and the development of the junior college was the popularization and democratization of higher education, which occurred in both the intellectual and economic areas. In order to analyze the intellectual democratization of the students, it was necessary to consider the mental capacities of those who attended the junior colleges, i.e., for the "rounding out" of the education of those who will not, cannot or should not "go on."

The mental tests of those students enrolled in junior colleges were compared in two ways: (1) within the junior colleges themselves; (2) with groups of junior college level students in other higher institutions. The Army Alpha Test and the Thurstone Test for College Fresh-

³⁴ Koos, The Junior College, p. 213.

men were both used. The Alpha Test was used because of the large amount of literature available on it as well as the number of higher institutions which had previously used it. Other tests were available but Koos believed that these tests were more applicable to this study.

It has been proven by the results of these scores on the Army Alpha Tests that the distributions of levels of mentality for freshmen in junior colleges and state universities were similar. However, in the distributions of the medians there were marked contrasts. In contrasting the medians for Yale and Oberlin universities there were a marked difference of 159.5 for Yale and 148.4 for Oberlin. The reason for such discrepancy between the medians for these schools may have been due to the strictly male enrollment at Yale and the enrollment of female and male students at Oberlin. It may be further explained that men score about ten points higher on the Alpha Test than women.

The Thurstone Test revealed that the students in junior college and colleges and universities scored almost identically.

From the results of the scores on the Alpha and Thurstone tests, the mental acuity (ability) of junior college students is certainly indicative of college work. We also note that the junior college student is about equal with students in most colleges and universities on the Alpha and Thurstone Tests.

The results of test scores obtained on the Army Alpha Test reveal students who receive higher scores on the tests will usually continue their education while those ranking in the lower level will be eliminated.³⁵

³⁵ Koos, The Junior College, p. 109.

Stephen S. Colvin made the same observation in a study of a similar sort of students at Brown University. He stated:

The tendency to eliminate the less intelligent students is indicated when we inspect the record of the Class of 1922. In this class, 334 men took the Brown tests. Of these 115 had left college by the end of their sophomore year. Of those leaving, 14 per cent stood high in their psychological tests; 41 per cent received average scores; and 45 per cent low scores. . . . Substantially the same results are found in connection with the Army tests.³⁶

College freshmen and the literate "white draft" compared on the Alpha tests revealed that college students came from the higher level of the mental distribution.

A conclusion can be drawn that high school education seems to be the most that students who ranked in the low groups on test scores can hope to obtain since the American ideal of democratic education does not make any provision for them. The colleges and universities likewise do not feel that it is their mission to educate this particular group of students.

Without reorganization of our educational system it will not be possible to locate a proper place for the education of the lower group with regard to additional schooling or training. This is about as certain to happen as the acceptance of the concept of democratic higher education. Then without reorganization it will be long before mental democratization can be achieved. The hope for such students is not to be sought through the current college and universities but in junior colleges or institutions where the first two years are terminal grades. The junior college is the place where such hope is manifest since it

³⁶ Stephen S. Colvin, "The Use of Intelligence Tests," Educational Review, 62, (September, 1921), pp. 134-35.

already has as one of its purposes training for those who can and should and for those who cannot and should not continue their education.

An important point to be made here is "the presence of a higher institution in a community almost doubles the proportion of its population securing the benefits of the first two years of college education."³⁷ "Propinquity of higher institutions affects the proportions favorably and tends to popularize higher education." Another factor in favor of the presence of the junior college is the fact that parents often settle in communities with junior colleges so that their children will be able to attend an institution of higher learning.

In studies of over two thousand students in twenty-eight different institutions it was revealed that college attendance while living at home is much less expensive than college attendance while living away from home. The cost of living away from home at state institutions is less than at private junior colleges. The cost of living away from home at public junior colleges is lower than in either of the other types of institutions.

Therefore it can be stated that the public junior college supports the economic democratization of higher education. This is true because the parents indicated that they could not afford to send their children away to college. The students as well attending all types of higher educational institutions indicate they would be deprived of the opportunities of higher education if they had to attend college away from home. The most significant factor revealed in the democratization process is evidenced by the number of sons and daughters of fathers in the lower

³⁷ Koos, The Junior College, p. 124.

levels of occupational groups in attendance in public junior colleges. These students representative of lower-level occupational groups are not registered in other institutions. It is obvious therefore that the public junior college has a greater influence on the economic and social democratization of educational opportunity.

To many parents and students the cost of a four year college education is insurmountable. With the completion of two years at home this exorbitant figure is reduced significantly and both parents and students can cope more easily with the expense of the remaining two years of college. Another factor in completing the two years at home is the student has matured in these two years and it is possible that he will be able to complete the two remaining years of college more easily than he would if he had elected to attend school away from home in the beginning.

The junior college should be encouraged to continue since its role as an educational institution has a definite and necessary place in our educational system.

Koos made a comprehensive study of the junior college movement by investigating every facet of it in order to support its potential as a serious force in higher education. To uphold his investigation he used factual material. He visited seventy junior colleges, and numerous institutions of higher learning. He sent out and collected answers to thousands of questionnaires, observed work done in hundreds of classes, traveled twenty thousand miles to collect the data which included interviews with hundreds of presidents, deans, registrars, students and parents. Through the statistics and data compiled by Koos it is now

easier to evaluate the types of junior colleges and indicate their place in our school system.

The average junior college is capable of offering most of the work taken by students during their first two years in colleges of liberal arts. The junior colleges are remiss in their offerings in the requirements of the first two years of work in preprofessional and in professional coursework, but it is possible that sizeable units can give all the general and special work required. Junior colleges are attempting to strengthen this area by employing faculty members trained in scientific areas required for preprofessional and professional students.

Oftentimes the junior college does not compare favorably in instruction with other institutions of higher learning. The junior college instructors do not hold master's or doctor's degrees and they are not adequately trained in their teaching specialty. They do however compare favorably with other higher institutions in educational training, in experience and in remuneration. Knowledge of subject matter is not viewed as extraordinary but they are exemplary models in instructional procedure.

The junior college is able to provide adequately for the first two years of those who can and should continue their college degree. It is more capable than other institutions in providing education for those who should not or cannot go on. The junior college provides an adequate program for this group of students and manifests an extraordinary interest in them by providing in these culminal years general and special occupational (curricula) which terminates at the end of the second year--the close of the junior college period.

Because the junior college is located near the students it is possible for more of them to obtain two years of college at a lowered cost. This saving of tuition and board together with their income from part time employment will enable them to complete the remaining two years at a college of their choice. The junior college encourages the home influences and reduces the threat to social and moral guidance. Individual attention is more accessible at the junior colleges since it is possible for instructors to identify and socialize with their students. This eliminates the "depersonalization" that exists at other higher institutions. The vast amount of laboratory practice in leadership provides the student with a maturity required in any career choice.

How effectively the junior college performs its function is revealed in the method of instruction offered in the junior colleges to freshmen and sophomore students. The coursework is comparable to that offered to students in the college of liberal arts as evidenced by the results of numerous questionnaires obtained from various administrators in four year colleges and universities who responded favorably on this item. Junior college students are accepted as transfer students and their record of accomplishment compares favorably with other liberal arts students. When the grades of junior college students are compared in their junior year to other students in standard colleges their grades are as good or better than the students who originally enrolled in the four year college or university.

Because of the recency of the movement the junior college is not able to offer the course requirements for the first two years of work in preprofessional and in professional curricula. However, the large

junior colleges can effectively offer all the general and special work required in the preprofessional and professional areas. In the area of professional competency junior college instructors lack sufficient graduate training and do not have adequate training in their subject area. However, the junior college instructor compares favorably with other four year college instructors with respect to training in education, in experience, and remuneration. The junior college teacher rates superior in instructional procedure.

Another plus for the junior college is the attainment of the bachelor's degree by its students at leading institutions of higher education. The junior college is attempting to strengthen its departments, by achieving higher standards and by offering to its students a type of instruction more suitable to their needs than that available at present day colleges and universities where freshman and sophomore teaching assignments are looked upon disdainfully by the faculty rather than as a challenge to them.

The junior college is capable of educating those who should continue their education beyond the first two years of college. It is also capable of educating those who should not go on after the two year period because it is better designed for this particular group of students than other institutions of higher education. This is obvious by the concern expressed for them by the faculty. They are terminal students who are closely supervised and encouraged to meet the goals set by them at the beginning of their junior college career. They are not dropouts or low achievers but students capable of adding their talents to areas in business, industry, commerce, and education. The ten

reasons why the junior college should be encouraged as listed by Koos are as follows:

1. To give the first two years of curricula (A) in liberal arts and (B) in preprofessional and professional work (where these professional curricula begin with the first college year).
2. To assure instruction as good as, or better than, that on the same level in other higher institutions.
3. To provide terminal general education for those who cannot or should not go on to higher levels of training.
4. To develop lines of semiprofessional training.
5. To popularize higher education.
6. To make possible the extension of home influences during immaturity.
7. To afford more attention to the individual student.
8. To improve the opportunities for laboratory practice in leadership.
9. To foster the inevitable reorganization of secondary and higher education.
10. To bring together into a single institution all work essentially similar in order to effect a better organization of courses and obviate wasteful duplication.³⁸

The earlier chapters of this study have given justification of the junior college movement. In the next chapter a brief treatment of the more important findings will be examined to show clearly why the junior college should take its place in the educational system.

³⁸ Koos, The Junior College, p.538.

CHAPTER III

EVALUATING THREE TYPES OF JUNIOR COLLEGES

From the very beginning, in 1921 when William Rainey Harper persuaded the school authorities in Joliet, Illinois, to offer two years of coursework beyond the high school, the junior college attracted the attention of the educational community, and like its predecessors, the common school and the high school, soon took its place in the educational system between secondary and higher education. As a new unit, offering types of courses that appealed to large numbers of students in urban as well as rural communities, there was little doubt that this unit would become a popular and vital part of the educational system because of its appeal to a diverse student population. Its avowed purpose was offering the first two years of college. The previous pages of this study have attempted to provide justification for the junior college movement. As a new unit in the educational system it held up fairly well when its components, namely, course offerings, semester hours of credit and instruction were compared to those of the four year colleges and universities. In a new unit such as the junior college there are inevitably some deficiencies as well as many strengths. The purpose of this chapter is to review briefly some of the more important characteristics of the junior college which secured it a prominent place in our educational system.

In the twenties, thirties and following decades, the junior college was judged by the quality of its programs, the success of its students, and credentials of its faculty.

The best test of any movement or institution is its ability to perform its assigned task. The junior college had already made a favorable impression by offering the first two years of college work that would be acceptable at four year colleges and universities. It was deficient, however, in meeting the requirements for the first two years of preprofessional curricula even though it offered all the general and special work needed by students when they transferred to higher institutions. A distinction between general and special subjects will heighten our understanding of this point. The area of general education includes English, foreign language, mathematics through calculus, courses in social studies such as economics, philosophy and psychology, and pure science. Special education includes courses which are for special groups or are "applied" courses such as "business" English, mathematics of investments, agricultural chemistry, educational psychology, as well as courses in commerce, pharmacy, education, agriculture, home economics and engineering.

In addition to providing the first two years of college for students who transferred to four year schools, another major role of the junior college was training a large proportion of the population who did not plan to continue their education beyond these two years. For these particular students a variety of programs in agriculture, automobile mechanics, oil production, nursing, secretarial subjects, home economics as well as training in the fields of business, engineering, and applied

arts were available. Evidence reported in questionnaires and obtained through visits to Deans, Chairs and other administrative officers in junior colleges revealed the development of semiprofessions should be an important function of this educational unit. The logical place for the development of the semiprofessional curricula should be in educational institutions where such training covers the terminal years.

An important part of the evaluation was concerned with instruction, and Koos found that the instructional staff of the junior college lagged behind that of the colleges and universities in number of degrees held and length of training. With respect to training in the field of education, in experience, in teaching load and in salaries, the faculty of the junior college compared favorably with faculties in other higher institutions. For the junior college to become a more viable educational unit, it needed to secure more experienced teachers with advanced degrees in their major disciplines.

In visits to junior colleges in 1921 Koos discovered from looking over academic records, that junior college students perform as well as their counterparts from four year institutions. The data was based upon the average grades earned in the third college year by junior college students and third year students from liberal arts colleges.¹ In a similar study he found "that there seems to be no appreciable difference in the degrees of success in the work of their junior years of junior college graduates and of those who do their first two years of work in a standard university."²

¹ Leonard V. Koos. The Junior College, (Minneapolis: University of Minnesota, 1924), p. 27.

The junior college had many unusual and valuable traits but one of the most important was reducing tuition cost. This saving afforded many students the opportunity to complete the additional two years, receive their baccalaureate degree, and enter a profession, a pattern of progress which was uncommon prior to 1921. In addition to this economy there was another prime consideration, namely, the favorable attitude of parents toward continuing the home influence during these critical years of social immaturity. This element of security and safety was a social force to be reckoned with because at that time the moral hazard to students living away from home was regarded as serious. Since large institutions lacked adequate staffs to monitor student behavior, the junior college provided the beginning student with the advantages of a safe, inexpensive and productive two year experience. There was no substitute for the individual attention offered the student in junior college units. This concern and interest prevented the "depersonalization" which so often characterized the larger institutions affected by the "freshman flood."

The superiority of the junior college extended to another important area by providing laboratory practice in leadership. Since there were no upperclassmen to vie with for positions of student responsibility, the junior college enabled more students to gain valuable experience and know-how in leadership positions.

The need for reorganization in secondary and higher education was inevitable during this period of growth in the junior college. Even leaders in education did not comprehend or understand the gradual but

² Ibid., p. 237.

imperceptible changes that were creeping into secondary and higher education. One such change was the increasing age of the college student from 15 or 16 in the 1880s to the age of 18 around the middle of the 19th century. A Harvard College president wrote about the advanced age of the freshman student and said,

In the four consecutive years beginning with 1762, the average age of the students on entering college was sixteen years and two months, . . . while in the four consecutive years beginning with 1860 it was seventeen years and eight months. . . . In the first of the above-mentioned groups of classes, nearly a third were under fifteen when they entered entered. . . . On the other hand, in the . . . , last group . . . there was but one under fifteen and only eighteen under sixteen.³

Koos obtained access to the admission records at Harvard College beginning with the opening of the 19th century to the year 1916. What he discovered was beginning with 1830 and ending at 1880 the median age of the college student advanced from sixteen years three months to eighteen years and seven months which amounted to an increase of two and a third years.⁴

An interesting point was that the materials of instruction of one hundred years ago were easily understood and comprehended by that particular aged student while the materials of instruction of the eighteen year old student of the 1920s were of a more complex and comprehensive nature. It was well known that Emerson and Lowell entered Harvard as freshmen at ages 14 and 15 respectively. Bryant and Longfellow entered college as sophomores at 15 years of age. They were the exception rather than typical students. What was revealed in the ages of

³ Massachusetts Teacher. (1866) XIX pp. 342 ff.

⁴ Leonard V. Koos. The Junior College Movement (New York: AMS Press, 1970), p. 192.

entering freshman was that they shared one common characteristic: "they show large proportions of students beginning what was a hundred years ago regarded as college work at an age much below that of college and university freshmen at the present time."⁵ Another signal for the need of reorganization in higher education was the change in admission requirements. Latin and Greek remained a stable requirement throughout most of the 19th century. In 1822 Yale added arithmetic to its entrance requirement. It was not until the middle of the next decade that such elementary school subjects as English grammar and geography were added to the entrance examinations. The first high school subject to be added to the list of entrance examinations was algebra and that was introduced in 1840. Then "higher" algebra and plane geometry (Euclid) were added. By the end of the 19th century the requirements of algebra through quadratics, plane geometry, ancient history, French or German, and English literature were added to those in classics. Thus the requirements for admission doubled during the period of a century changing from seven or eight units to fourteen or fifteen. Hence at least two more years of liberal education were required for admission to college than formerly, and this addition explained the advancing age of the freshman college student.

Another subtle change closely aligned with the increase in admission requirements was the downward shift of a large number of subjects in the college curriculum. Koos made a survey of three Eastern colleges, namely, Amherst, Williams and Yale to discover the shift of courses from upper to lower college level. Ancient languages and liter-

⁵ Ibid., 194.

atures were the only fields which did not change in the college curriculum. Modern language changed from being a sophomore course in the 1830s and 1840s to becoming a freshman course at the opening of the 20th century. A first course in the history of English literature changed from a junior and senior status course in the 1860s and 1870s to a freshman course in recent years. Trigonometry, a sophomore course in 1825, was shifted downward to the freshman year. All other courses in mathematics were shifted downward and those preceding geometry were shifted into the secondary school. The sciences also were included in the depression of courses. Courses in physics ("natural philosophy") and general chemistry were junior and senior courses in the 1830s and 1840s but became freshman courses at a later time. Other subjects to join the downward shift were philosophy, ethics, logic, and economics.

This shift of courses did not end with the college or university. It had also spread into the secondary-school offerings. English grammar, geography, arithmetic, algebra through quadratics, plane geometry, ancient history, French and German, and English literature found a place in the secondary school curricula. They became requirements for the freshman and sophomore years. English grammar, geography, and arithmetic eventually reached the elementary school. In the process of change there was no dilution of course material. Instead, in some instances, e.g., plane geometry and American history, the content of course material became more comprehensive and difficult than it had been prior to the shift from the college to the high school level.

Koos compared the courses in the college of a century ago with those at the time of his investigation. The comparisons were with pres-

ent day college texts as well as with high-school texts and sometimes with both. After the comparison of the subjects of English literature, rhetoric and composition, plane geometry, physics, chemistry, general history, American history and economics, Koos found that the depression of courses into the lower years did not cause them to lose their value or vitality in the process.

Koos wanted to find out if there was a relationship between the organization of the curricula and the advancing age of the college student over the past one hundred years. In order to see whether such a relationship existed, he used a sampling of catalogues of several New England colleges at ten year intervals for the period 1825-1915. A summary of the changes for the period 1825-1925 for Amherst and Williams reflect the magnitude of the changing organization of the college curriculum. In 1825 the curricula for both colleges were fully prescribed and changed in the next twenty years to slightly optional and finally largely elective with the major system. "In other words, they moved step by step from the complete prescription of a restricted secondary school, through gradually increasing freedom comporting with the increasing age of the student, to an elective program which assumes sufficient maturity on the part of the student to assure wise selection of subjects and courses, and which opens up the opportunity for specialization."⁶

The most important function of the major system was that it enabled the student to prepare for an occupation. Other minor functions associated with the selection of the major were student interest in

⁶ Ibid., p. 206.

subject matter and the student's respect for an esteemed instructor. However, occupational preparation was ranked number one by a survey of over two hundred alumni of one respected college in the Mid West. In conclusion Koos noted that it was inevitable that ultimate reorganization would produce "(1) the first two collegiate years as the typical termination of the period of general and secondary education for those who contemplate going on to higher levels and (2) the bringing of higher education proper somewhere in the vicinity of the present junior collegiate year."⁷

No comprehensive study of the junior college movement would be thought complete unless it addressed the manner in which it performed its assigned tasks. Koos studied three types of junior colleges to determine how successfully they performed their special functions. Included in the evaluation were:

1. junior colleges in city or high school districts, namely the public junior colleges;
2. private junior colleges, and
3. those connected with teachers' colleges and normal schools known as normal school junior colleges.

Koos' investigations showed the accomplishment of the following purposes to be its major contributions:

- 1a. To give the first two years of college curricula in liberal arts and/ or
- 1b. in preprofessional and professional work (where these professional curricula begin with the first college year).
2. To assure instruction as good as, or better than, that on the same level in other higher institutions.

⁷ Ibid., p. 260.

3. To provide terminal general education for those who cannot or should not go on to higher levels of training.
4. To develop lines of semiprofessional training.
5. To popularize higher education.
6. To make possible the extension of home influences during immaturity.
7. To afford more attention to the individual student.
8. To improve the opportunities for laboratory practice in leadership.
9. To foster the inevitable reorganization of secondary and higher education.
10. To bring together into a single institution all work essentially similar in order to effect a better organization of courses and obviate wasteful duplication.⁸

The first category addressed was performance of the special purposes in public, private, and normal school junior colleges. The stronger junior colleges of all three types were capable of providing the first two years of curricula in liberal arts and in preprofessional and professional work. The public junior colleges led the private junior colleges in average number of course offerings which included English, public speaking, ancient languages, modern foreign languages, mathematics, science, social science subjects, bible and religion, philosophy, psychology, physical education, music, art, agriculture, commerce, education, engineering and industrial home economics and other occupational areas. The average number of semester hours offered by the public junior colleges was 255. The average number of semester hours offered by the average private junior college was 192. Figures were not available on the performance of the normal school junior colleges in

⁸ Ibid., pp. 319-20.

this area but Koos' visits to these institutions assured him that these colleges did qualify as easily in this area as the better junior colleges in city and high school districts. Economically, for a junior college to offer the type of programs needed to compete with four year colleges and universities, it must offer between 225 and 250 semester hours of coursework. To do this properly the junior college must enroll no less than one hundred fifty students. That figure had not been reached by a large proportion of any type of junior college by the year 1921-22. For the junior college to continue as a vital and vibrant educational unit, it needed to recruit more strenuously and conscientiously to attract more students into its various programs. This action was necessary if the junior college was to remain academically and economically sound.

Strong junior colleges, according to Koos, should be able to provide the first two years of satisfactory preparation for law, medicine, dentistry, nursing, education, journalism, chemistry, commerce, agriculture, home economics, civil engineering, electrical engineering, mechanical engineering, chemical engineering, mining, pharmacy, forestry, and architecture.⁹

The public junior colleges tended to make more progress than the private junior colleges in preprofessional and professional work because the public junior colleges were universally coeducational while the private ones were segregated, and primarily women's institutions. Koos found that professionalization of women's training lagged behind men's.

⁹ Koos, Junior College, p. 77.

Another important function of junior colleges was providing instruction as good as, or better than, that on the same level in four year institutions. This high quality instruction was offered by the public and normal school junior colleges whose teachers had the advantages of more graduate training, experience, and higher salaries than those in private junior colleges. There was, however, a need for faculty development in the private junior colleges.

All three types of junior colleges were more suitable than the four year colleges or universities for providing terminal general education for those who could not or should not go on to higher levels of education. Virtually all junior colleges not associated with institutions offering four year programs qualified for this purpose. However, many junior colleges, public, state and private, had hopes of becoming four year colleges which indicated that their interest was in the four year curriculum rather than the needs of the students not continuing their education beyond the junior college level.

The private junior colleges did not make as rapid progress toward mental democratization as did other junior colleges according to the evidence of the lower median Army Alpha test scores attained by private junior college students. These lower scores were attributed partially to the fact that the private junior colleges drew their primarily female clientele, with similar backgrounds, from the southern states with eleven-year rather than twelve-year school systems. Since they were private institutions they were not as responsive to democratic adjustments as were the public and normal junior colleges. The public junior colleges served their local communities which were composed of a variety of

personalities which naturally brought about greater and more rapid democratization.

The junior colleges not attached to four year colleges and universities were extremely sensitive to the needs of their students and for the same reason they provided terminal education for those who could not or should not go on, they were also leaders in developing semiprofessional lines of training for their students. The public units were the first to develop this training as they were in providing vocational training. Private junior colleges, however, led in the development of programs in home economics and teacher preparation.

An important consideration of the junior college and one that merits special consideration is its contribution to teacher-training. A survey of its 1921-22 graduates included six public, seven northern private (primarily in Missouri), eight southern private and two normal school junior colleges and revealed the following percentages of students irrespective of sex engaged, in teaching:

TABLE 1

A Study of the Percentage Distribution of
Recent Graduates of Junior Colleges
Engaged in Teaching

	SIX PUBLIC	SEVEN NORTHERN	EIGHT SOUTHERN	TWO NORMAL
MALE & FEMALE	1.2	43.3	41.8	13.7
FEMALE ONLY	2.0	45.4	55.1	16.7

Some private institutions sent few of their students into teaching upon the completion of the two year program of studies while other units sent most of their students into the elementary classroom and a few into high school classrooms. A survey by Koos, revealed that two thirds of the graduates of one junior college were placed in high school teaching positions. Koos discouraged the practice of having junior college students teaching in the high school or even in the elementary school. He made the following statement concerning this practice: "It is obvious that the semiprofessional teacher-training function of the private college, although at present its predominant one, is hardly legitimate and affords no satisfactory permanent field of service to that unit."¹⁰ Instead, he thought that students interested in a teaching career should be encouraged to obtain a baccalaureate degree from a recognized institution noted for its excellence in liberal arts and sciences.

It should be quite clear that the lower cost of tuition in public junior colleges contributed tremendously to the popularization of higher education. Koos was unable to prove that public junior colleges, owing to the advantage of propinquity, were more capable than the private junior colleges in popularizing higher education. Koos encountered several obstacles in comparing the various types of junior colleges. One of these obstacles centered around the size of the communities in which colleges were located. Usually public units were located in large cities. Private junior colleges were often segregated institutions while the public were always coeducational. Many of the private junior colleges were located in areas with large Negro populations whom they

¹⁰ Koos, Junior College Movement, p. 327.

did not plan to serve."¹¹ Usually there were more than one institution in a particular locality offering work on this level and it was not always possible to secure data to determine whether the public junior college was in a better position than the others to popularize higher education. Koos acknowledged that, after all the studies on popularizing higher education were assessed, the number of private colleges finally represented turned out to be so small and widespread that the results were inconclusive.

Public and normal junior colleges, according to their catalogs, were more interested than private junior colleges in popularizing higher education by lowering the cost of education or bringing it within reach of its students. The factors of cost and proximity were important influences on decisions concerning college attendance. When an institution of higher learning such as a junior college was located in a community, the proportion of students who registered for the two year college education almost doubled.

In a study of two thousand students in twenty-eight different institutions, Koos found that living at home was much cheaper than living away from home. Since public junior colleges were located in large communities "the argument of popularization through lowered cost--and it was a powerful argument--applied more particularly to this type of unit than to other types."¹² The standard four year institutions were less expensive than the private junior college. The public junior colleges were be less expensive than the other two types.

¹¹ Koos, Junior College, p. 542.

¹² Koos, Junior College Movement, p. 154.

One of the reasons why the private junior colleges enrolled a smaller proportion of the population of their local communities was their denominationalism. Since the private junior college primarily enrolled members of the denomination with which it was associated, it did not attract as large a proportion of the population of the community as the public junior college. Koos believed that in time, with the breakdown of denominationalism, the private colleges would attract more of the local population, a phenomenon which would insure greater democratization of the private junior college, one of the goals sought by all types of junior colleges.

Koos ranked private junior colleges, public junior colleges and normal school junior colleges in terms of their fulfilling the function of affording more attention to the individual student. The minimum enrollment of two hundred students in these various units offered no obstacle to their provision of individual counseling to their students.

Koos believed that reorganization of secondary and higher education was the direction in which educators were leaning. In surveys conducted by Koos, he found that of the work offered in the first two years of standard colleges a fifth was secondary and another fifth partly secondary and the total proportion of the work listed as secondary and partly secondary amounted to two fifths of the total offering.¹³ A check of the textbooks used in high schools and colleges in an English course--History of English literature--revealed that they were more alike than different. In other subjects he also found similarities. He did, however, find qualitative differences in almost all

¹³ Koos, Junior College, p. 526.

subjects in favor of the college courses because they were more comprehensive and sophisticated. Koos' main findings were "that curricular offerings in the high school and in the college during freshman and sophomore years have much in common and as administered involve a large amount of repetition by the individual student. . . Koos felt confident that the extent of repetition found exceeded the actual needs and that a more efficient organization of secondary and higher education would have obviated most of it."¹⁴ A solution to this problem must be a curricular reorganization that would prevent instructors on both levels from duplicating courses. Koos believed that continuous articulation of secondary and college educators would avoid such repetition.

All three types of junior colleges were able to provide opportunities for laboratory practice in student leadership with the exception of certain teachers' colleges with large enrollments of third year and fourth year students. This large enrollment sometimes prevented first and second year students from qualifying for leadership positions in student activities. Data collected indicated that the private units led the other types in performing this function because of their smaller student body.

Junior colleges seeking teachers' college status had reintroduced high school work to provide student teaching facilities for those students who would be entering high school teaching but they did not establish high school courses to provide the foundations of education courses required for elementary school teachers. Consequently neither this unit nor the private school which withdrew its affiliation with the

¹⁴ Ibid., p. 530.

academy or the high school was able to fulfill the function of reorganizing secondary education.

The other junior colleges mentioned had lost or given up their high school affiliations and hence did not qualify for this important function. It was well known that the high school work had disappeared in the normal school. Bonner, in his article, "Statistics of Public High Schools, 1917-1918" related how the public secondary school had grown since 1890, and how it was gaining on the private school. The percentage of growth in the public high school was from 60.8 to 87.2 per cent. This growth represented all institutions of this type. The percentage of students registered in these institutions grew from 68.1 to 91.2. With the increase of students in the secondary units it was not surprising that the public junior colleges in city and high school districts were the ones most effective in bringing about better organization of courses and obviating wasteful duplication.¹⁵

No evaluation of the Junior College would be complete without a thorough discussion of the Normal School, the educational unit whose primary function was the training of teachers. It was through studying the Normal School that Koos hoped to discover the effect the Junior College would have upon:

1. the available source of teacher-training student body
 - a) numerically and
 - b) in mentality and

¹⁵ H. R. Bonner. "Statistics of Public High Schools, 1917-1918," United States Bureau of Education Bulletin, 19, (1920), pp. 11, 16.

2. the dominance of the professional attitudes in teacher training institutions.¹⁶

Koos investigated the possibility of having junior college work offered in conjunction with the normal school as well as the effect of this work on recruitment of candidates for teacher training. All institutions depended heavily upon the recruitment of students from the immediate area or surrounding community. The Normal School had an obligation to the state to prepare a sufficient number of students as certified teachers for the various institutions under its control, primarily elementary schools. If the junior colleges were to attract students from the teacher training curricula it would indeed interfere with the major function of this institution which was the preparation of teachers. Koos tried to find out to what degree the junior college had made inroads into the supply of candidates for teacher training. He could not obtain detailed data from a large enough sample of normal schools with and without junior college units, however, and therefore had to find an indirect answer to the question. He obtained important data on the sex distributions of freshmen in two normal schools with junior colleges. Table 2 examines the distribution of students.

An explanation of the classifications used includes: the "Regular Normal" curriculum for students preparing for teaching in the primary, intermediate, grammar grade and in rural communities. High school teacher training groups prepared for teaching in smaller high schools. They enrolled in the first year of a three year program. Students preparing to teach special subjects were placed in the "special" curric-

¹⁶ Koos, Junior College, p. 551.

TABLE 2

Distribution by Sex and Curriculum of First
Year Students in Two Normal Schools in
Wisconsin and Median Army Alpha
Test Score for Each Group

Curricula	Men		Women		Total	
	Number	Median Score	Number	Median Score	Number	Median Score
Regular Normal	15	127.5	214	120.3	229	120.4
High school teacher-training	31	136.9	52	125.0	83	129.6
Special teacher- training	90	115.0	63	124.2	153	119.7
Junior college	66	134.2	21	141.3	87	135.4
Totals	202	127.0	350	123.3	552	124.5

ula. The table reveals two important points, namely, the large number of men in the junior college group and the small number of men enrolled in the normal groups. Another similarity was the equal distribution of students from the community. For example, in one institution of the 75 students enrolled 22 were enrolled in the regular normal and 28 in the junior college curriculum. Of the 22 enrolled in the regular normal only one was male; of the 28 registered in the junior college, only 6 were female. Koos discovered in his research with administrators in these institutions that male students very seldom enrolled in normal schools irrespective of the presence of a junior college offerings. The

small proportion of women enrolled in junior college curricula was indicative that the junior college curricula attracted such small numbers of female students preparing for a teaching career that the number was negligible. In visits to three other normal schools and teachers colleges with junior college units, Koos found that the situation was similar.

A significant question concerning the normal school was whether offering junior college work affected the quality of candidates for teacher-training. Koos found that there was no effect since the junior college enrollment was largely male and male students rarely registered for normal school curricula; therefore there was little danger that superior students would be registering in the junior college rather than the normal school. In his investigation Koos also found that women enrolled in the junior college had high scores on the Army Alpha test indicating that they were a select group.

Another study was made similar to the one made in Wisconsin which showed the distribution of scores obtained on the Army Alpha Test by first year students in regular normal and junior college curricula in two normal schools of Wisconsin, and by students in regular normal curricula from the local community and from outside in one of these institutions. The institution was the San Diego California Teachers College. The information was made available to Koos by administrators and the tests were given by Mrs. Gertrude S. Bell director of Tests and Measurements. At the time the tests were given there were 65 women but no men in the teachers college group; there were 56 men and 52 women respectively in the junior college group. There were more women in the

San Diego junior college group than there were in the Wisconsin junior college. These figures indicated larger inroads on the available teacher-training student body in California than in Wisconsin. Another interesting statistic revealed medians for junior college men were higher than those of both junior college and teachers college women. From these results Koos concluded that "even if the provision of junior college curricula cuts in numerically on the available supply of candidates for teacher training, it does not affect the quality of candidates as indicated by mental test scores."¹⁷

Another investigation into the normal school concerned whether junior college work reduced the quality of candidates for teacher-training. Since the junior college enrollment was primarily male it was not likely that the few male registrants who did register for regular normal curricula would drain off a significant number of superior students and thus leave less competent students for the teacher-training units. This question was, however, an important one, and merited considering the results of mental tests given to two groups of students.

Educational experts were both for and against the establishment of junior college work in normal schools and voiced their objections and warm approval. The following pro and con selections from position statements offer clear information on the issues. E. L. Silver in his article dated 1921 stated: "The normal school was created for a special purpose. Its existence is justified on the grounds of peculiar adaptation to the ends it serves, the preparation of teachers. . . . The normal school activities should be a sort of specialized industry, not

¹⁷ Ibid., p. 557.

an educational department store."¹⁸

Silver again justified his belief that the introduction of junior college curricula indeed impairs the performance of this primary function when he wrote:

The normal school should be an institution of characteristic atmosphere. It is my observation and belief that no academic college can produce from a department of education therein . . . teachers with that ready skill, pedagogical insight, and professional mind-set that a good single purpose normal school gives. . . . The junior college, as an adjunct, has nothing in common with the professional school for teachers. The student in the junior college probably has no well defined, specific end in view; or, if he has, that end is far removed. . . . He is a bird of passage, a preparatory student for the university or senior college. . . . The normal school will lose prestige when it assumes to prepare for these.¹⁹

In defense of junior college work, Professor Guy E. Maxwell wrote: our junior-college work supplements and aids the professional training of teachers in the following ways:

1. It provides a broader scholastic foundation for prospective teachers who plan to do departmental or higher grade work, or to teach in the junior high school. . . .
2. The prospective teacher with ambition to pursue special fields in later university study, seeks the privilege of beginning his studies in the normal school. . . .
3. Our junior-college work provides the opportunity and emphasizes the necessity for higher scholarship for teachers. . . .
4. The junior-college work leads naturally and effectively into the four-year professional curriculum for teachers and supervisors in elementary education. . . . The four-year teacher-training curriculum of the near future therefore rest upon two basic years of general culture which now form the junior college. When the four-year teacher-training curriculum comes, the junior college will be superseded though not abandoned. During the transition period the junior college is a desirable

¹⁸ E. L. Silver, "Should the Normal School Function As a Junior College?" National School Digest, 40, (May 1921), pp. 558, 582.

¹⁹ Ibid.

means of making the curriculum or content subjects "pay for themselves." When normal schools become four-year colleges with power to grant degrees, their junior colleges, as such, will be absorbed.²⁰

5. Our junior-college work has brought three and four times as many young men into elementary education as were previously preparing for this form of service. . . .
6. The presence of young men in the normal school (brought about by the junior college work) tends to promote a saner atmosphere among the young women students. . . .
7. The junior-college group foster athletics and other school enterprises and develop and justify a school enthusiasm and esprit de corps that are a boon to every prospective teacher.
8. The junior-college work has a definitely stimulating effect upon the faculty of the institution. It enables the school to secure more scholarly men and women and to hold them longer against the competition of larger and stronger institutions.²¹

Koos' investigation on the fifth point made by Professor Maxwell, concerning the attraction of young men into the system through the efforts of the junior college presented these facts: Of the fifty-one junior college graduates of 1921 in two Wisconsin normal schools, eighteen transferred at the opening of the next year to the third year of the high school teacher-training curricula. All but two of these transfers were men. Other students, most of them men, transferred to these curricula before completing the two years of junior college work.

In his visits to five normal schools in which junior college units were maintained, Koos found no unfavorable influences on the teacher-training function. He found, on the contrary, the junior college had a

²⁰ The italics are Koos' not President Maxwell.

²¹ Guy E. Maxwell. "The Junior College Question--The Other Side." National School Digest, 40, (June 1921), p. 600.

positive effect on the primary function of the institutions he visited.

In considering the private college, Koos felt it must seek ways to lower its tuition charge in order for it to continue as a viable and important educational unit. The private junior colleges were capable of rendering an important service for years to come, but to continue they must seek financial aid through their church affiliation or endowments.

From the preceding evaluation of the junior colleges, it was proven that the junior college maintained in connection with city and high school districts were the most effective in achieving their purposes. Koos then attempted to answer the question about the best way to incorporate the junior college into our secondary school organization. The concept of a six-four-four plan of organization was proposed in 1915 by a committee of the North Central Association of Colleges and Secondary Schools.

The main subdivisions of elementary and secondary education should therefore be as follows:

First--The Elementary School, six grades.

Second--The Lower Secondary, to include the Seventh, Eighth, Ninth, and Tenth years, of the usual school course.

Third--The Upper Secondary, to include the present Eleventh and Twelfth Grades of the usual High Schools and the Freshman and Sophomore years of the usual American Colleges.

Whether it would take a student four or three years to complete the curriculum of either of these stages of Secondary Education would depend upon whether he was able to carry at one time three or four studies and whether the school year consisted of thirty-six or forty-eight weeks.

The Lower Secondary should be organized and administered so as to make it possible for one who was preparing to enter the upper secondary to complete the curriculum in three years; whether others would take three or four or five years would depend on their individual needs and attainments.²²

An area in which Koos was interested was the junior high school, a transitional institution. The older eight-four organization was disappearing and a regrouping which called for beginning the period of secondary education two years earlier would begin in the seventh grade. An article by Supt. O. C. Pratt of Spokane indicated that of 60 cities with populations of 100,000, 26 had junior high schools in operation and 20 more were in the process of preparing for them. Only 14 reported that they had no junior high schools or plans for them. Superintendent Pratt acknowledged that the "junior high school is . . . the coming plan or 'organization."²³ Pratt's data also indicated "that the almost universal grouping of the 6 high school years is 3 in the junior, and 3 in the senior, unit."²⁴

The extension of the period of the secondary education downward, to divide it into two units, did not seem practical. This would make for a 3 unit secondary school with 3 years in each of the two lowest and two years in the last of the units. A more practical solution seemed to

²² Proceedings of the Twentieth Annual Meeting of the North Central Association of Colleges and Secondary Schools, pp. 27-28. Koos' report was adopted by the North Central Association.

²³ C. Pratt, "Status of the Junior High School in Larger Cities," School Review, 30, (November, 1922), pp. 663-670.

²⁴ Ibid.

be the division of the eight year secondary school into two units of four years each and administration of them in the same manner as the present day junior and senior high schools.

This concept of six-four-four organization of Education was proposed by the North Central Association of Colleges and Secondary Schools. Both Professor H. L. Miller, of the University of Wisconsin, and principal of the Wisconsin High School, and Professor William H. Proctor of Leland Stanford Junior University also recommended a similar organization of the eight secondary years.²⁵

The advantages of incorporating the junior college years in the new secondary school rather than in the old system of the three-three-two organization is more conducive to achieving purposes 3, 4, 5, 9 and 10. (See p. 10.) In relating purpose 9 and 10--allowing for exploration, and placing in the secondary school all work appropriate to it--this plan would help to solve the problem of uniting the various parts of the system. This plan would include the economy of time, and would advance the more capable students and would provide better care for brighter high school students.

Other reasons for supporting the four-four plan were improving high school instruction by better preparation in subject matter that would follow through the "close association of the work in junior college years with that immediately below, the higher standards of student performance in the upper years of the present high school period

²⁵ H. L. Miller. "The Junior College and Secondary Education," Wisconsin Journal of Education, (March, 1922), pp. 47-51, and William M. Proctor. "The Junior College and Educational Reorganization," Educational Review, 65, (May, 1923), pp. 275-320.

that should result from their contact with work in junior college years, and the better laboratory, library, and other facilities that would be at hand for use in connection with these upper years of high school work."²⁶ However, Koos believed that the trend must be "toward welding the junior college years solidly and intimately to those immediately below, the point of juncture becoming indistinguishable."²⁷

SUMMARY OF THE EVALUATION OF THE TYPES OF JUNIOR COLLEGES

The relationships of the types of institutions namely, the public junior college, the private junior college, the normal state junior college and the large college or university giving junior college work will be reviewed with reference to their achievement of junior college purposes.

Criteria:

1. A high degree of assurance of achieving the purpose
2. Moderate, but not a high degree of assurance
3. Relatively little or no assurance

Purposes:

- 1a. Giving the first two years of liberal arts curricula
- 1b. Giving the first two years of preprofessional and professional curricula

²⁶ Koos, Junior College, p. 568.

²⁷ Ibid., p.27.

2. Assuring instruction as good as or better than that on the same level in other higher institutions
3. Providing terminal general education for those not going on
4. Developing lines of semiprofessional training
5. Popularizing higher education
6. Extending home influences during immaturity
7. Affording more attention to the individual student
8. Improving opportunities for laboratory practice in leadership
9. Fostering the inevitable reorganization of secondary and higher education
10. Bringing together into a single institution all work essentially similar to effect better organization of courses and obviate wasteful duplication.²⁸

The comparison indicates that the public junior college has a high degree of assurance of all the special purposes mentioned. The private and normal school types did not rank as high since both showed relatively little or no assurance on performing purpose #9 Fostering the inevitable reorganization of secondary and higher education and purpose #10 Bringing together into a single institution all work essentially similar to effect better organization of courses and obviate wasteful duplication. Koos indicated the importance of these purposes when he wrote, "because of their profoundly significant bearing on the full meaning of the junior college movement; reorganization would be inadequate indeed if it did not provide for their complete performance."²⁹ The private junior college performed with a moderate degree of success on purposes 1B Giving the first two years of preprofessional and profes-

²⁸ Koos, Junior College, p. 538.

²⁹ *Ibid.*, p. 572.

sional curricula; #2 Assuring instruction as good as or better than that on the same level in other higher institutions; #4 Developing lines of semiprofessional training; #5 Popularizing higher education and #6 Extending home influences during immaturity.

The Normal School Junior College performed with a moderate degree of success on purpose #3 Providing terminal general education for those not going on; #4 Developing lines of semiprofessional training; #5 Popularizing higher education; #6 Extending home influences during immaturity and #8 Improving opportunities for laboratory practice in leadership.

The Large College or University had a high degree of assurance on achieving purposes #1A Giving the first two years of liberal arts curricula; 1B Giving the first two years of preprofessional and professional curricula, and #2 Assuring instruction as good as or better than that on same level in other higher institutions which were characteristic of the junior college movement. On the remaining purposes they had little or no assurance of performing these purposes.

The conclusion drawn from these facts was that the public junior college was the educational unit to be developed and strengthened if the junior college movement was to survive and take its place as a distinctive and important unit in the educational system. The private junior college and the normal junior college, although important and necessary units, would have to alter their image by raising standards and strengthening faculty in order to become competitive and serious educational units. The poor performance shown by the "large college or university" was summed up aptly when Koos wrote that they "call atten-

tion again to the ineptitude of the typical present-day organization to the requirements of the situation."³⁰

The next chapter titled Yesterday and Today should convince the reader that the junior college movement has survived and served its students in an intellectual and dignified manner by providing outstanding instruction and service that will motivate them to achieve their goals, ideals and purposes.

³⁰ Koos, The Junior College, p. 572.

CHAPTER IV

THE JUNIOR COLLEGE: YESTERDAY AND TODAY

The Junior College of the the 1980s has become the greatest bargain in the educational world because it offers two years of college and some vocational courses at low cost. It has flourished throughout the twentieth century in spite of the depression in the 1930s and the unpredictable shortages of both students and money in the 1970s and 1980s. It is a great bargain for a wide range of students because it offers the resources to students who plan to continue their education in a four year college or university or for terminal students who require only two post secondary years of preparation for a career. And the junior college also provides educational opportunities for those who cannot afford to live away from home while attending college; for those who cannot afford tuition at other colleges; for those who have had academic difficulties and need another opportunity to prove themselves; for those who were unable to attend a four year college because of low grades, and finally for those who were unsure if they wanted to attend college. In other words the junior college provides educational opportunities for a large number of students who otherwise would be unable to attend and to prove themselves in college. Throughout this century, the democratic spirit so generally manifested in the junior college has contributed significantly to its success and popularity.

In the beginning of the twentieth century William Rainey Harper, President of the University of Chicago, encouraged school authorities in Joliet, Illinois to offer two years of classwork beyond the senior year of high school. Successful students would then be accepted by the University of Chicago in its senior college (third and fourth years of college work). Hence, the junior college was instituted. Apparently President Harper and others in the field felt a need for such an institution to spare the university the necessary chore of preparing students in the first two college years. He believed that this unit would free the university to prepare students for specialization, its major role. The junior college was therefore closely aligned with the university. The junior college had a similar affiliation with four year colleges that opted to become strong junior colleges due to financial strain which prevented them from maintaining strong programs in arts and sciences. And representatives of the universities and high schools at one time recommended that these first two years be added to the high school thus extending it upward to include these first two years. The junior college could be seen as a liaison among the high school, the university, and some four year colleges. Other colleges were content to train the person not the specialist, and regarded the junior college as a threat to their existence. The junior college justified its existence by servicing these educational units in a professional and satisfactory manner by fulfilling the special purposes as outlined by Leonard V. Koos and enumerated in chapter 2.

The close association of the university with the junior college was inevitable. To better understand this association it was necessary

to review the views held by the university and its faculty regarding the primary purpose of the first two college years. During the years 1870 to 1900 the population of the United States doubled. Enrollment in higher education increased four and one half times. Since its main function was dissemination of knowledge, it became increasingly difficult for the university to disseminate the vast amount of advanced scientific and other knowledge that continued to accumulate. It became necessary that the university take decisive action because the increased enrollment which represented large classes was resented by the faculty who recognized that some of these students were unprepared and unready for specialized and intensive work required in the junior year. L. E. Blauch described the ideal university student as

A person ready for specialization and capable of preparing for a career as a scholar, researcher, or professional worker. This definition implied that the individual's general or liberal education was basically finished, that he was 'ready.' The idea was reinforced by the theory and practice traditional in western continental Europe, exemplified in the gymnasium and the lycee, the institutions which led directly into the specialized training of the university.¹

In order to fulfill its major research obligation, the university wisely restricted its student body to students with a potential for scholarship and research. Along with the assessment of these potentials came many proposals and recommendations among which was the separation of the university into upper and lower divisions. This idea was the forerunner of the junior college movement. President William Rainey Harper in 1892 created two major divisions at the University of Chicago namely the "academic college," and the "university college." In addi-

¹ L. E. Blauch. "Reorganization on European Lines Appears Imminent," School Life, 9, No. 4, (December, 1923), pp. 77-97.

tion to President Harper of the University of Chicago, President Henry P. Tappan of the University of Michigan in his inaugural address in 1855 suggested transferring the secondary work to the junior college or high school. Other educational leaders agreed with Presidents Harper and Tappan by addressing this same issue. Such competent educators as William W. Folwell of Minnesota, Edmund J. James of Illinois, Richard H. Jesse of Missouri, Andrew S. Draper of Illinois and David Starr Jordan of Stanford, all distinguished scholars, believed that the University's primary role was educating the potential scholar and researcher, and that the first two years should not be under its domain.

Thus the junior college received its greatest impetus from the university. This impetus was due to the university's experimentation with the lower division units which resulted in the development of the junior college. Ellwood Cubberley in 1912 gave his impression of the junior college movement:

A term used by the University of Chicago, the University of California, and a few other institutions of higher learning, to designate that part of the four-years' college course embraced in the freshman and sophomore years, the college course being thus divided into a junior college of two years, and a senior college of two years. The outline of instruction, or the requirements as to work and electives, vary in the two divisions, being more largely prescribed in the lower division than in the higher. One object of the division is to make a separation between what is pure college work and what is the beginning of university work; another is to form a basis for the radiation of professional instruction, beginning with the junior year; another is to encourage small colleges of limited endowment to limit their work to that of the junior college, and then make the transfer of their students easy by admitting them to the senior college; and another is to encourage the larger and better equipped high school to gradually add a thirteenth and a fourteenth year to the high school course of instruction, and thus stimulate the building up of junior colleges in the larger cities. The term has thus, by

transfer, also come to mean a two years' course of instruction beyond the four-year high school, and a number of city school systems today speak of having the first year, or both years, of a junior college. The legislature of California in 1906 authorized cities to establish such course of instruction, covering two years beyond the ordinary high school course and a number of city high schools have now added one year, and a few are planning to add two years. A number of colleges in the Mississippi Valley have entered into junior college relations with the University of Chicago. With the rapid increase in students in the larger colleges and universities; with the rapid growth the ability to provide advanced instruction; and with the shrinking of the endowments and income of the smaller colleges, relatively if not actually, the junior college idea is likely to make much more rapid progress in the next decade than it has in the past.²

The most remarkable growth of the junior college took place in those states where the leadership in the university was provided by outstanding dynamic and productive individuals. The junior college grew rapidly throughout the Midwest through the efforts of President Harper. The University of California and Stanford were responsible for the remarkable growth in California. The universities of Minnesota, Missouri, Michigan and Texas were responsible for the spread of junior colleges in their states. This close relationship between the junior college and the university has continued unabatedly to the present day.

Throughout history each educational institution began to operate in response to a particular need. The junior college was no exception. Before the junior college was developed various educational units had preceded it and were instrumental in its development such as the free public high school and the four year college. The Latin Grammar School was brought to the United States by the early settlers. The social, political and educational ideas of the European immigrant were embodied

² In Paul Monroe (ed.), Cyclopedia of Education, (New York: The Macmillan Company, 1912), III, p. 573.

in its outlook. Very early the settlers realized that the classical curriculum of the Latin Grammar School would not suit their needs. In 1743, Benjamin Franklin advocated the Academy, a secondary school, that would emphasize a particular type of training for those students who did not want to attend college. The Academy was replaced by the free public high schools around 1875. The growth of the public high school was phenomenal because it served the needs of all the population. According to Brubacher, "This upward extension of the elementary school was an excellent symbol of the upward reach of energetic and ambitious economic classes on the march. Often known as the 'poor man's college,' it was intended to have a terminal curriculum; that is, its curriculum was intended to cater to the life anticipations of its middle-class clientele rather than prepare them for higher 'education.'"³

At the turn of the century only four per cent of college age students were attending college. By the middle of the century over thirty per cent were registered, and the President's Commission on Higher Education had recommended that forty-eight per cent could be enrolled for at least two years of college work.⁴ In another decade and a half the Educational Policies Commission of the National Education Association called for postsecondary education.⁵

³ John W. Brubacher. A History of the Problems of Education, (New York: McGraw-Hill Book Co., 2nd edition), p. 91.

⁴ President's Commission on Higher Education, Higher Education for American Democracy, I, (Government Printing Office, Washington, D.C., 1947), p. 41.

⁵ Universal opportunity for Education Beyond High School, (National Education Association, Educational Policies Commission, Washington, D.C., 1964). The report of the Commission on the Reorganization of Secondary Education in 1918 called for universal secondary education

The Committee of Ten advised the National Education Association membership in 1893 that the high school should be a selective institution. The Commission on the Reorganization of Secondary Education informed the NEA in 1918 that a high school education must be provided for every student up to the age of eighteen. This pronounced change from selectivity to universality in a quarter of a century was a major revolution.⁶

Brick tells us that historically four basic social and economic forces led to the junior college idea.⁷

1. desire for equality of opportunity,
2. use of education to achieve social mobility,
3. technological progress, and
4. acceptance of the concept that education is the producer of social capital.

The most important of these forces was the desire for equality of opportunity. This indeed was a major consideration for the European migration. The early settlers were anxious to discard the old ways of doing things which had denied them the right to education, employment and advancement. It was only through the process of education that equality would be realized. As early as 1642 parents in Massachusetts were instructed "to teach their children and apprentices to read and understand the principles of religion and the capital laws of the coun-

until the age of eighteen.

⁶ L. Cremin. "The Revolution in American Secondary Education, 1893-1918," Teachers College Record, 56, (March, 1955), pp. 295-308.

⁷ Michael Brick. Forum and Focus for the Junior College Movement, (New York: Teachers College, Columbia University 1964), p. 2.

try, and to give them training in some honest lawful calling, labour or employment, that may be profitable for themselves, or the country."⁸

In 1647 a law was passed in Massachusetts which required all communities of the colony to maintain schools so that all children would be educated. A precedent for universal education was established when the old Deluder Satan Act was passed which guaranteed that all children were to be educated and the cost was to be borne by the states through taxation.

By the nineteenth century, there was strong public opinion that education was now for all people which was supported by Presidents and educators alike. President Washington believed national education should be expanded; Jefferson stated "the ultimate result of the whole scheme of education would be the teaching of all children of the state reading, writing and common arithmetic."⁹

President Lincoln in his first message to Congress stated that "the leading object of the government for whose existence we contend is to elevate the conditions of men; to lift artificial weights from all shoulders; to clear the paths of laudable pursuit for all; to afford all an unfettered start and a fair chance in the race of life."¹⁰ By the middle of the nineteenth century the principle that every child must

⁸ William Brigham (ed.), The Compact with the Charter and Laws of the Colony of New Plymouth, (Boston: Dutton and Wentworth, 1836), pp. 270-71.

⁹ John Dewey. The Living Thoughts of Thomas Jefferson, (London: Cassell & Co., 1941), pp. 115-16.

¹⁰ Special session message to Congress by Abraham Lincoln, July 4, 1861, in James D. Richardson, "A Compilation of the Messages and Papers of the Presidents, 1789-1897," (Washington, D.C.: United States Government Printing Office, 1898), VI, p. 30.

receive an education was firmly established. The President's Commission on Higher Education removed all barriers to educational opportunity when it stated:

American colleges and universities must envision a much larger role for higher education in the national life. They can no longer consider themselves merely the instrument for producing an educational elite; they must become the means by which every citizen, youth, and adult is enabled and encouraged to carry his education, formal and informal, as far as his native capacities permit.¹¹

Free public elementary education was championed and secured in the middle of the nineteenth century through the concerted efforts of one of the greatest educators namely, Horace Mann of Massachusetts. Others including Henry Barnard of Connecticut and Thaddeus Stevens in Pennsylvania also fought for this principle. Robert M. Hutchins, president of the University of Chicago, stated that the junior college would be the school for high school students to attend since it was conveniently located in the community. Another eminent educator, William H. Kilpatrick in his retirement speech from Columbia University stated that "the Junior College bids fair to become well nigh universal."¹²

In 1924 the junior college became known as the community college and became a model for institutional development at the post high school level. By 1924 over 2,250,000 students were enrolled in more than 1000 community junior colleges. Every state in the union claimed junior college units which served state-wide needs at this post high school level. Community colleges in Illinois, California, Washington, Florida,

¹¹ President's Commission on Higher Education, Higher Education for American Democracy, (New York: Harper and Brothers, 1947), I, p. 101.

¹² Junior College Journal, V, (December, 1934), p. 134; VIII, (April, 1938), p. 341.

New York and Michigan enrolled two-thirds of the first-time-in college students. Educational leaders predicted that by 1970 over fifty per cent of college age students would be enrolled in the junior college.¹³

The creation of the junior college enabled students to attend school from the elementary level through the secondary period to its culmination--the two year junior or community college. Thus the junior college, a late nineteenth century phenomenon, rose in response to an appeal made by our earlier presidents and educators, Washington, Jefferson, Lincoln, Mann, Hutchins and Dewey that secondary and higher education was not a privilege but a right for every citizen in the republic.

An important characteristic that the junior college developed from its close association with the colleges and universities was its similarity to the first two years of the four year college. The universities of the mid-nineteenth century were liberal arts institutions that trained the few rather than the many. They were not able to keep pace with the new changes that demanded specialized skills. What was needed was a more functional type of higher education.

Some of the more liberal educators spoke out and attempted to introduce applied courses in the arts and sciences into the classical curriculum. Wayland Brown, president of Brown University in 1841, published "Thoughts on the Present Collegiate System of the United States," and in it he showed his displeasure with the classical curriculum because it did not provide society with the expertise required for technological and economic advancement. Other educators who wanted to

¹³ C. C. Calvert. "A Half-Century of Junior Colleges," Junior College Journal, XVII, (February, 1947), p. 247.

introduce arts and science courses into the classical curriculum were James Marsh of the University of Vermont, Eliphalet Mott of Union College, and Philip Lindsley of the University of Nashville. But it was not until 1862, when the Federal Government made land grants for the development of agricultural and mechanical education available through the Morrill Act that changes in the curriculum were forthcoming.

The land grant colleges stimulated monumental changes in higher education because they were the first institutions to acknowledge applied science and mechanical arts and to place them in the curriculum. They also freed American higher education from the purely classical tradition. President Welch of Iowa State Agricultural College noted in 1871 "that knowledge should be taught for its uses; that culture is an incidental result." The land grant colleges reinforced the principle that every American should be entitled to some form of education. The land grant colleges showed the democratization principle at work in higher education.

In the early twentieth century educators were asking significant questions such as can the liberal and the practical courses be combined in higher education, and should post-high school education be available to all who might profit from it, or should it be reserved for only a special group. Higher education became a significant force in improving the social and economic status of the electorate after 1940. The highly trained person became more valuable to society than the semiprofessional. Technological progress changed the complexion of the work force by eliminating many routine and unskilled positions. There were now new occupations which required additional training beyond the high school,

and the junior college was in a strategic position to educate laboratory technicians, junior accountants, medical and dental secretaries, aviation mechanics, and those aspiring to a number of other semiprofessional occupations. With advanced technology more positions were available to those who were trained in the various professions.

Robert J. Havighurst in his article "The Junior College in American Society," gives significant information on the far-reaching effects that this unit has had upon the social, economic and intellectual life of the typical American rural and urban community. Havighurst informs us that only eight junior colleges with an enrollment of one hundred students were in existence at the opening of the twentieth century. By 1915 that enrollment figure had increased to 2,363 students and the junior colleges numbered seventy-four. In the beginning the junior colleges were private institutions, and it was not until 1947 that public junior colleges outnumbered the private units. The enrollment in public junior colleges, however, exceeded that of private junior colleges by 1921 and that decade officially marked the emergence of the junior college known today as the "community college."

Havighurst divided the colleges into two groups. The first were either academies or seminaries that offered a few college courses, some courses in music and art, and vocational courses which prepared students for a business career. These units were primarily church operated, small, and rural or located in small cities.

The second type, namely the community college, became popular after World War I in California, Texas and a few other states where there were too few private four year colleges to accommodate rising

enrollments. These community colleges had to provide a diversity of programs at low cost, and be accessible to a large student population with differing academic backgrounds and needs. The community colleges had to have an open door policy with programs suited to its clientele. The success of these junior colleges was reflected in the 1963 enrollment figures which showed that nationally fourteen per cent of college students were enrolled in junior colleges. In the same year, the Chicago Junior Colleges enrolled more first and second year students than Loyola, De Paul, Northwestern, the Chicago Branch of the University of Illinois and Roosevelt University combined.¹⁴

Not only were the junior colleges popular in small cities but in larger ones as well. The most significant contribution of the junior college according to Havighurst has been its "open door" policy which afforded numerous students an opportunity to attend college who might otherwise have been denied it because of lack of funds, low grades, poor high school grades, etc. The community college provided an opportunity for middle class America, the poor, the impoverished, the minority students and newly initiated citizens who wished to become acquainted with the customs and practices of their adopted country.

Professor Havighurst also maintains that the junior colleges represent three traditional forces which continued strong and will do so in the future. They are:

¹⁴ Robert J. Havighurst. "The Junior College in American Society," in Junior College Student Personnel Programs: Appraisal and Development, A Report to Carnegie Corporation, Nov. 1965. (New York: 1965). p. 1.

1. The drive for educational opportunity, interpreted as free access to post-secondary institutions with relatively easy admission regulations.
2. The persistence of the community idea in American education. The Junior college movement is national only in its geographical extension. It is consciously and explicitly a local community institution, responsive to community needs, and especially those of working-class and lower middle-class people.
3. Belief in the efficacy of general, liberal education as distinguished from technical-vocational education. Educational theorists have been frustrated by the stubborn preference of junior college students for the liberal arts courses which keep open for them the way to a four-year college degree. Most junior colleges of any size offer terminal vocational courses of training for the "semi-professions," such as minor positions in banks, laboratory technician jobs in hospitals and doctors' and dentists' offices, office-machine operations, secretarial work, police and engineering positions. The courses have had good practical results, their graduates getting satisfactory positions. Still, the liberal arts course is the most popular, though its vocational value is questionable for the average junior college student.¹⁵

Havighurst believes that these traditional forces which have continued strong will do so in the future. He predicted that the junior college can improve the mass culture through its participation in educating the working-class and the lower middle-class population. It could provide the opportunity for students to use their leisure in the pursuit of cultural goals. The junior college student has more time than the Ph.D. or other professionals to enjoy the cultural events provided by various foundations such as the National Endowment of the Arts. This enrichment is denied the people with more education since they have the least leisure. Ironically though the highly educated may set the standards of culture, they do not have the opportunity to become culture bearers.

¹⁵ Ibid.

The United States Office of Education predicted that the college population will increase seventy-five per cent from 1963-1973. This information was based on the assumption that the same number of students would attend college in 1963-1973 as they did between 1953-1963. It would be the junior college that will expand to meet the increase rather than the four-year colleges because:

1. The four-year colleges would not be able to expand rapidly enough to meet the increasing demand, especially since they were severely limited by their capacity to house students who are not living at home. Many students, unable to get housing in colleges away from home, will turn to the local junior college.
2. The four-year colleges would probably become more selective in their admissions policies, thus shunting off many applicants of marginal ability or school record to less selective junior colleges.¹⁶

Since the junior college is a "commuter college" it has the greatest potential for expansion and is the least expensive in the state system. The junior college has the task of educating the culturally disadvantaged--Negroes, Spanish Americans, Puerto Ricans, and rural white migrants, as well as children of European immigrants. Junior colleges will be called upon to educate these groups because unemployment is higher among them than in other sections of the population. The junior college will be expected to educate the large adult population who require training due to career change or self-improvement. Havi-ghurst's conclusion was that

The commitment of the American society to the maintenance and expansion of opportunity for post-secondary education will be realized primarily through the junior colleges, which may have to double their total enrollment during the next five years. The junior college must meet a variety of needs that other

¹⁶ Ibid

higher institutions cannot or will not meet. It must do this at relatively low cost. During the critical years that lie immediately ahead, the junior colleges will have to meet emergencies due to rapid expansion of the college age population, while the four-year colleges adjust themselves to the new situation.¹⁷

In "Hard Times, Then and Now: Public Schools in the 1930s and 1980s" which appeared in the February 1984 Harvard Educational Review, David Tyack of Stanford University and and Elisabeth Hansot of the University of Nevada at Reno gave an excellent portrait of the public schools during this period. They show that educators in the 1980s face an inordinate number of problems, many more than beset their counterparts in the 1930s. The loss of public esteem which occurred in the 1980s was the most damaging and demoralizing episode in the history of public education. The influence that the university had upon the junior college movement developed in the late nineteenth and early twentieth centuries when the university and the faculty assessed the functions proper to the university. The dissemination of knowledge was acknowledged to be its major role. During this period as the population doubled so did the enrollment in higher education which increased four and one half times.¹⁸

The greatest period of growth for the junior college was the decade of the 1960s. Many changes in the social and economic conditions after World War II contributed to this extraordinary growth. America, now a major world power, had changed dramatically from agriculture to industry. The population had increased tremendously and thousands had

¹⁷ Ibid.

¹⁸ "Biennial Survey of Education in the United States, 1950-1952," U.S. Office of Education, (1955, chap. 4, sec. 1), p. 6.

moved from rural areas to cities. Sputnik caused the nation to reassess its educational priorities in order to compete with the Russians.

According to a reminiscence of The Depression-era, "From 1929 to 1933 the Great Depression produced awesome changes in the economy of the United States. The gross national product dropped from \$103.1 to \$55.6 billion; personal income dropped from \$85.9 to \$47.0 billion; and unemployment rose from 3.2 to 24.9 percent. The Dow Jones average of 65 stocks plummeted from \$125.43 to \$26.82. Corporations also felt the economic pinch as their profits fell from \$8.6 to minus \$2.7 billion."¹⁹

By comparison with the private economy which ended in catastrophic losses for individuals, banks, companies and stockholders, public education remained stable and expansion of institutions continued. The effects of the Depression between the years 1920 and 1950 may be seen in various trends which included the increase in the length of the school term as well as an increase in daily attendance. The drop in school attendance and high school completion took place during World War II rather than in the Depression. An interesting statistic revealed that expenditures per pupil continued to rise except during the years 1932-34, the worst period of the Depression for our schools.

The National Education Association, together with Phi Delta Kappa another professional organization, published the good work of the schools. These organizations were seeking political support for

¹⁹ Black social worker quoted in Studs Terkel, Hard Times: An Oral History of the Great Depression (New York; Pocket Books, 1970), p. 113, U.S. Bureau of the Census, "Historical Statistics of the United States: Colonial Times to 1970." (Washington, D.C.: GPO, 1975), I, pp. 224, 135, 241, 219, 236; Broadus Mitchell, "Depression Decade: From the New Era Through the New Deal, 1929-41." (New York: Reinhart, 1947).

increased state aid for public education.

Educators continued to seek professional autonomy during the 1930s. "Radicals, conservatives and liberals in the profession all tended to agree that educational decisions should be made by experts. School people restricted admission to educational positions by raising certification standards and protected jobs by passing tenure laws."²⁰

The Depression caused fluctuations in the economy of the 1930s. School administrators, however, were able to deal with deflation of prices more easily than educators of the 1970s who had to deal with inflation. During the Depression, enrollments continued to grow and the public esteemed their teachers and schools. Despite economic problems, professional morale remained high during this period. But the 1980s produced many more headaches for educators when they had to face reduced funding as well as a decline in public confidence while educators of the 1930s faced only a shortage in dollars.

Today educators are faced with three serious problems: declining enrollments, reduced funding, and most serious of all, a declining confidence in public education. The current study cannot investigate solutions to these problems. That would entail a separate study.

Historically, Americans saw education as the great emancipator. It was to provide a good job, be the route to individual achievement and the "open sesame" to educational and social advancement. With an adequate education, one could find all doors open. Since education would glorify the individual, then the populace had only to attend an

²⁰ The publications of the Educational Policies Commission of the NEA are a good index to mainstream thinking among educational leaders of the period.

institution of higher education to achieve individual goals. In order to serve a great number of students, studies were called for and recommendations were made. The states studied their resources to discover how best to serve the needs of their students. Recommendations were made that opportunity for education beyond the high school should be available to all.

It is especially interesting to note, according to Tyack and Hansot that enrollment increased during the depression but in the 1970s and 1980s the reverse was true. Apparently the great disaster of the 1970s and 1980s, a monumental one, was the loss of public confidence in teachers and the educational process. When teachers were asked in 1961 if they were satisfied with their careers, and if they were beginning over again, if they would select teaching as a career, over half of the U.S. teachers said they "certainly would." Not so when this question was asked of teachers in the 1980s. A substantial number said they would not select teaching as a career if they were to start over again. What caused this change of attitude in two short decades? In a recent article in the Community and Junior College Journal, President Reagan gave high praise to educators and when asked what he would do to provide greater access to higher education he responded:

The past three and one half years have been good for our nation. Our economic recovery is now a powerful economic expansion. More new jobs have been created and more Americans are working than at any time in our history. The improved economy has permitted America to provide over \$230 billion this year for education-- an increase of more than \$15 billion from the previous year. . . We now know that excellence in education can be brought back. As I said, a great renewal is now under way all across America. The American people have issued a mandate: return excellence to our classrooms. And in communities everywhere, that's what is happening. School boards, legislators, teachers, parents, and civic leaders are

supporting the reform movement. That kind of grassroots caring is priceless--with it, we can work wonders.²¹

President Reagan seems to think education and educators are performing well in the 1980s while Tyack and Hansot paint a totally different picture which is neither bright nor promising for any educational unit. Perhaps a brief review of the growth and development of the educational system from its beginning until today will offer a solution to this dilemma.

At the end of the nineteenth century there was a growing concern over the nature of the first two years of the university which were frequently referred to as the lower division. Administrators in the universities and the high schools agreed to extend the high school upward to include these two years. The universities believed strongly in specialization and research, so they welcomed a new institution that could provide the first two years of college work. The student would then be ready for specialization, and the university would provide it in the junior and senior year. Serious graduate work leading to the Ph.D. would climax the student's career. However, the four year colleges did not like this arrangement because their mission was to educate the person not the specialist.

Thus the junior college was developed to provide the student with the first two college years. Other factors were manifest but educationally the important influence was the quality of the relationship maintained by the junior college with the university, the four year college

²¹ Dale Parnell. "Decision Makers, President Reagan--Defining the Two-Year College," Community and Junior College Journal, 54, (August/September 1984), pp. 18-21.

and high school.

Two educational giants who gave impetus to the junior college movement were William Rainey Harper of the University of Chicago who in 1892 created two divisions of the university the "academic college" and the "university college," and the other Alexis F. Lange, Professor of English who joined the faculty of the University of California in 1890. Lange's distinguishing contribution was as head of the Department of Education from 1906 to 1924 when he exerted his influence by encouraging the development of junior colleges in the state of California as well as nationwide. These capable educators provided the impetus and encouragement required for the development of the junior college.

CHAPTER V

SUMMARY AND CONCLUSIONS

Dr. Leonard V. Koos, a pioneer in the junior college movement, has had a distinguished career in education. His long list of publications including his definitive two-volume work The Junior College, published by the University of Minnesota Press, and numerous others on many aspects of secondary and post secondary education testify to his productivity. The Junior College became the fundamental contribution to later researches carried out by several generations of students of higher education.

Dr. Koos graduated from Oberlin College in 1907, and studied at the University of Chicago where he received the A.M. degree in 1915 and the Ph.D. in 1916. He was a teacher and superintendent in Illinois and Minnesota for ten years; a professor at the Universities of Washington, Minnesota, and finally Chicago. He taught courses on the junior college in seven universities. When he retired from the University of Chicago as professor emeritus he continued to lecture at other universities including the University of Florida. He edited The Junior College Journal from 1946 through 1949.

His professional career began at nineteen when he began teaching in rural one-room schools in Illinois at a salary of thirty dollars per month. After he received his bachelor's degree he taught and served as an administrator in the public schools of Minnesota and Illinois. After

receiving his Ph.D. he joined the faculty of the University of Washington. He later taught at the University of Minnesota and in 1929 returned to his alma mater, the University of Chicago where he remained for seventeen years until he retired in 1946. His university teaching career spanned thirty years and he spent them in three institutions, the Universities of Washington, Minnesota and Chicago. He also lectured at Harvard, University of California, Columbia and the University of Michigan.

Koos derived his interest in the junior college from William Rainey Harper, President of the University of Chicago. His interest was further developed through his work with the North Central Association of Colleges and Secondary Schools where he served as secretary of a committee making a study of administrative organization at the time he was completing his doctorate.

He contributed over fifty articles on the junior college to the professional literature. These articles covered a variety of topics such as organization, purposes, students, and faculty of the junior college. In addition to the articles he authored the Junior College which still remains a classic in the field.

Dr. Lotus D. Coffman, President of the University of Minnesota, urged Koos to transfer his appointment to a professorship of higher education, but Koos was not interested since he had several projects to complete in his field of secondary education which he did not wish to abandon.

Through the Commonwealth Fund of New York City and the University of Minnesota which provided funds for the completion and publication of

his monumental text The Junior College, Koos assumed the role of a dedicated professor and scholar. Koos tells us in the preface of this work that what he has attempted was "a comprehensive evaluation of the movement as a whole and of its several forms of manifestation, and a marking out of what seem, in view of the results of the investigation, appropriate lines of future development."¹

Koos influenced the growth and development of the junior college through his research activities; through his service and active participation in the American Association of Junior Colleges where he served as editor of the Journal | through his position of director of research when the journal was first published. Another major contribution of Koos occurred in 1921 and 1922 when he identified the purposes of the junior college. In his research, he demonstrated the same meticulous approach that characterized all his work. At that period in the development of the junior college, he identified the major purposes of the junior college which follow:

1. Offering two years of work acceptable to colleges and universities
2. Completing education of students not going on
3. Providing occupational training of junior college grade
4. Popularizing higher education
5. Continuing home influences during immaturity
6. Affording attention to the individual student
7. Offering better opportunities for training in leadership
8. Offering better instruction in these school years

¹ Leonard V. Koos. The Junior College (Minneapolis: University of Minnesota, 1924), p. vii.

9. Allowing for exploration
10. Placing in the secondary school all work appropriate to it
11. Making the secondary school period coincide with adolescence
12. Fostering the evolution of the system of education
13. Economizing time and expense by avoiding duplication
14. Assigning a function to the small college
15. Relieving the university
16. Making possible real university functioning
17. Assuring better preparation for university work
18. Improving high school instruction
19. Caring better for brighter high school students
20. Offering work meeting local needs
21. Affecting the cultural tone of the community²

Koos also remarked that,

Although the first purpose in the minds of its advocates is the offering of two years of standard college work acceptable to higher institutions, the hopes entertained for it far exceed this original service. The ambitions entertained for this new institution comprehend types of training better suited to the needs of the increasing proportion of the population which the junior college is expected to attract, especially general and occupational types of training adapted beyond the work of these two years. All these new types of training are to be provided under conditions which will foster, better than can prevalent conditions, the intellectual and social welfare of individual students. Advocates of the junior college anticipate that its general introduction will affect profoundly, but in constructive ways, the organization and functioning of our system of education; it will permit the consummation of the secondary school, will assure the small college an unquestionable function in the educational system, and will encourage the university to differentiate its activities from those of the lower schools, much of whose work it is now called upon to do. They also look for the junior college,

² Koos, Leonard V. The Junior College. (Minneapolis: 1924), pp. 14-15.

through courses offered and through its cultural influences, to be highly serviceable to the community of location. Other hopes are entertained for the junior college, but these are the predominant ones.³

The junior college merited consideration as a result of its astounding growth from an unknown institution at the opening of the twentieth century to an institution with over two hundred units by 1922. Junior colleges were located throughout three fourths of the states and in all sections of the country. They were expected to serve a large proportion of the population, previously unserved, through their programs suited to the needs of transfer students and those who would terminate at the end of the two year period.

Each of the twenty-one special purposes has been discussed in an earlier chapter. The growth of the junior college has been shown and today enrollment is up twenty per cent in the City Colleges of Chicago according to Dr. Salvatore Rotella, Chancellor of the Community Colleges in the City of Chicago. The junior college will continue to remain an important force in our educational system because of the efforts of Dr. Leonard V. Koos, a pioneer in the junior college movement.

The junior college, a product of the numerous social changes of the twentieth century, continues as an invaluable educational unit due to its past performance. There has never been any debate over the qualitative soundness of the junior college programs. It will continue to play a vital role according to an article which appeared in the 1964 Junior College Directory. which stated: fifty-nine point one per cent of the junior colleges in the United States are accredited by regional

³ Ibid., p. 22.

accrediting associations. The junior college will continue to exercise the transfer function. It will offer more programs in technical education for the terminal student. A major task will continue to be offerings in adult education and community service. The junior colleges have become vital colleges which are increasing their offerings to meet the individual needs of their communities.

The Junior College was developed nurtured and studied by Leonard V. Koos, and it is a success because of his contribution to the movement through his research, writing and related scholarly activities, particularly his professional consulting. Leonard Koos served as a consultant to individual junior colleges throughout the United States. And an important contribution to the junior college movement was through his students. Among the prominent students was B. Lamar Johnson, professor of higher education, University of California, Los Angeles. Johnson served as head of the Junior College Leadership Program at UCLA and authored numerous publications concerning the junior college.

Another Koos student, Maurice Seay, Professor of higher education at Western Michigan University, and former educational director of the W. K. Kellogg Foundations was responsible for distributing substantial grants to ten major universities throughout the United States to develop junior college leadership centers.

Still others are Dr. James W. Reynolds, an authority in junior college curriculum and instruction as well as a professor and junior college consultant at the University of Texas, and Dr. S. V. Martorana, an authority on junior college finance and legislation, who served as vice-chancellor for community and technical colleges of the State

University of New York and later as junior college specialist in the U. S. Office of Education.

Leonard V. Koos was a significant force in the history of the development of the junior college through his identification of its special purposes. A distinctive method of research characterized all his works. Koos believed strongly that the junior college was capable of providing the first two years of the four-year college. He reached this conclusion when he wrote:

Thus not only does the junior-college offering give promise of meeting the needs of the situation in providing the first two years of work in colleges and universities, not only have the new units made excellent progress toward achieving an adequate instructional situation, and not only do graduates of accredited junior colleges compare favorably in scholarship with those who have done their work in a standard university, but the new unit is well on its way to a recognition by universities and colleges of work done by its students.⁴

Koos continued his interest in the junior college long after his retirement. Excerpts from the closing statement of an address he made in 1964 at the American Association of Junior Colleges indicate that interest:

We have come rather close to a consensus on the purposes of the community college. . . . While the formulation . . . has some implications for service to the individual, it is cast mainly in terms of service to society. In order to achieve a fully effectual individual-social balance for the community college it is incumbent on us to extend our knowledge of the student far beyond our present limited understanding of him. I do not make this assertion to attract attention to my current effort at synthesis. The assertion is made, instead, to do what I can to rally all persons concerned with the recent dynamic addition to our sequence of units in the American educational system to cooperate in attaining a comprehensive understanding of the population it is expected to serve.⁵

⁴ Leonard V. Koos. The Junior College Movement, (Boston: Ginn and Company, 1925), p. 99.

Leonard V. Koos dedicated his entire life to the development of secondary and post secondary education. His influence on the junior high school and the junior college will continue to provide direction and valuable information for those who work in secondary and higher education.

⁵ Leonard V. Koos. "Largely Reminiscent: Plus the Commonwealth Fund Project." Junior College Journal, 34, (May, 1964) pp. 13-18.

BIBLIOGRAPHY

Selected References

I. Primary Sources

A. Books

Koos, Leonard V. The Junior High School. Introduction by Henry Suzzallo. New York: Harcourt, Brace and Co., 1921.

_____. The Junior College. Vols. I and II. Minneapolis: University of Minnesota, 1924.

_____. The High-School Principal--His Training, Experience, and Responsibilities. Boston: Houghton Mifflin Co., 1924.

_____. The Junior-College Movement. Boston: Ginn and Co., 1925.

_____. The Junior High School, Enlarged Edition. Introduction by Henry Suzzallo. Boston: Ginn and Co., 1927.

_____. The American Secondary School. Boston: Ginn and Co., 1927.

_____. Private and Public Secondary Education: A Comparative Study. Chicago: The University of Chicago Press, 1931.

_____. Guidance in Secondary Schools, In Collaboration with Grayson N. Kefauver. New York: The Macmillan Co., 1932.

_____; Hughes, J. M.; Hutson, P. W.; and Reavis, W. C. Administering the Secondary School. New York: American Book Co., 1940.

_____. Integrating High School and College. The Six-Four Plan at Work. New York: Harper and Brothers, 1946.

_____. Junior High School Trends. New York: Harper and Brothers, Publishers, 1955.

_____. The Community College Student. Gainesville: University of Florida Press, 1970.

_____. The Junior-College Movement. New York: AMS Press, 1970.

B. Articles

- Koos, Leonard V. "Teacher-Training Departments in North Central High Schools," The School Review 25 (April 1917): 249-256.
- _____. "Space-Provisions in the Floor-Plan of Modern High School Buildings," The School Review 27 (October 1919): 573-599.
- _____. "The Flexibility of Requirements for Admission to Colleges East and West." The School Review 28 (June 1920): 436-450.
- _____. "The Peculiar Functions of the Junior High School: Their Relative Importance." The School Review 28 (November 1920): 673-681.
- _____. "Current Conceptions of the Special Purposes of the Junior College." The School Review 29 (September 1921): 520-529.
- _____. "Where to Establish Junior Colleges." The School Review 29 (June 1921): 414-433.
- _____. "Junior-College Courses in 1920-21." I. The School Review 29 (October 1921): 586-592.
- _____. "Junior-College Courses in 1920-21." II. The School Review 29 (November 1921): 668-678.
- _____. "The Interpretation of Guidance." Junior-Senior High School Clearing House 8 (September 1922): 8-11.
- _____. "Recent Conceptions of the Aims of Elementary Education." Elementary School Journal. 24 (March 1924): 61-69.
- _____. "The Junior High School and College Entrance." The School Review. 32 (September 1924): 494-507.
- _____. "The Trend of Reorganization in Higher Education." I The School Review 32 (October 1924): 575-586.
- _____. "The Trend of Reorganization in Higher Education." II The School Review 32 (November 1924): 656-666.
- _____. "The Junior-College Curriculum." The School Review 35 (November 1927): 657-672.
- _____. "Recent Growth of the Junior College." The School Review 36 (April 1928): 256-266.
- _____. "Progress and Problems of Secondary Education in California." School Life 14 (January 1929): 81-83.
- _____. "The National Survey of Secondary Education." The North Central Association Quarterly 5 (September 1930): 219-224.

- _____. "Progress of the National Survey of Secondary Education." School Life 16 (May 1931): 171-172.
- _____. "The United States Office of Education." Journal of the National Education Association 20 (December 1931): 322.
- _____. "Business Education: The Present Status." The Junior College Journal 2 (January 1932): 191-198.
- _____ and Kefauver, Grayson N. "The Concept of Guidance." The School Review 40 (March 1932): 204-212.
- _____. "Program of Guidance in the Junior College." (Abstract) Junior College Journal 2 (May 1932): 443.
- _____. "A National Survey of Secondary Education--A Preliminary Summary." The North Central Association Quarterly 7 (September 1932): 206-215.
- _____. "For Better American High Schools." School Life 18 (September 1932): 4-5.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum Methods of Teaching and Study, and Supervision.) The School Review 41 (January 1933): 60-66.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 41 (February 1933): 129-146.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--(Continued.)) The School Review 41 (March 1933): 213-226.
- _____. "Trends in Secondary-School Programs of Studies." The School Review 41 (September 1933): 497-507.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 42 (January 1934): 59-66.
- _____. "How to Use the Findings of the National Survey of Secondary Education." The North Central Association Quarterly 8 (January 1934): 347-355.
- _____. "The Rise of the American High School." The Illinois Teacher 22 (January 1934) 141-142
154-156.
- _____. "Training of Junior College Teachers." (Editorial) The Junior College Journal 4 (January 1934) 163-164.

- _____. "The National Survey of Secondary Education and Its Significance for The Registrar." Bulletin of the American Association of Collegiate Registrars 9 (July 1934): 279-292.
- _____. "Consumer Education in the Secondary School." The School Review 42 (December 1934): 737-750.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 43 (January 1935): 60-67.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 43 (January 1935): 60-67.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 43 (February 1925): 132-147.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 43 (March 1935): 209-228.
- _____. "Relating the Secondary Curriculum to Life." The Illinois Teacher 23 (June 1935): 325,328.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 44 (January 1936): 58-66.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 44 (February 1936): 132-148.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 44 (March 1936): 212-228.
- _____. "Desirable Types of Junior-College Organization." The School Review 44 (May 1936): 372-382.
- _____. "Selected References on Secondary-School Study and Supervision, and Measurement." The School Review 45 (January 1937): 60-68.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 45 (February 1937): 130-146.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 45 (March 1937): 213-228.

- _____. "A Quarter-Century with the Junior College." The Journal of Higher Education 9 (January 1938): 1-6.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 46 (January 1938): 57-66.
- _____. "Selected References on Secondary Instruction." (III. The Subject Fields--Continued.) The School Review 46 (March 1938): 212-227.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 47 (January 1939): 56-66.
- _____. "Is New York Different?" The Junior College Journal 9 (March 1939): 291-292.
- _____. "Some Essentials in Student Personnel Work." The Junior College Journal. 10 (May 1940): 602-609.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision and Measurement.) The School Review 49 (January 1941): 60-68.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 49 (February 1941): 131-148.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 49 (March 1941): 213-228.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 49 (March 1941): 213-228.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 50 (March 1941): 212-230.
- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 50 (January 1942): 61-68.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 50 (February 1942): 128-146.
- _____. "The Bachelor's Degree to College Sophomores: Considerations Pro and Con." The School Review 50 (September 1942): 494-503.

- _____. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 51 (January 1942): 50-55.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 51 (February 1943): 106-119.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) School Review. 51 (March 1943): 173-186.
- _____. "Organizational Relationships of Junior College and High School." American Association of Collegiate Registrar's Bulletin. 18 (June 1943): 399-407.
- _____. "The Superiority of the Four-Year Junior High School." 51 (September 1943): 397-407.
- _____. "Final Report on the Kansas City Junior-College Experiment." The North Central Association Quarterly. 18 (October 1943): 194-199.
- _____. and Owens, Amy F. "Selected References on Secondary-Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement. The School Review 52 (January 1944): 51-57.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 51 (February 1944): 105-120.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 52 (March 1944): 172-184.
- _____. "Junior-College Administrators and Their Scope of Function." The School Review 52 (March 1944): 143-150.
- _____. "Opinions of Administrators on Organizing the Junior College." The School Review 52 (April 1944): 215-227.
- _____. "How to Democratize the Junior-College Level." The School Review 52 (May 1944): 217-284.
- _____. "Local Versus Regional Junior Colleges." The School Review 52 (November 1944): 525-531.
- _____, and Owens, Amy F. "Selected References on Secondary Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 53 (January 1945): 50-55.

- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 53 (February 1945): 102-119.
- _____. "Leonard V. Koos on the 6-4-4 Organization of Public Education." School and Society 62 (August 1945): 101.
- _____, and Owens, Amy F. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 54 (January 1946): 49-55.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 54 (March 1946): 166-178.
- _____. "Program for Grades 11 to 14." Nation School 37 (June 1946): 29-30.
- _____. "The Junior College and District Organization." The School Review 54 (September 1946): 389-400.
- _____, Knoell, Dorothy, and Owens, Amy F. "Selected References on Secondary-School Instruction." (I. Curriculum, Methods of Teaching and Study and Supervision, and Measurement.) The School Review 55 (January 1947): 50-56.
- _____. "Selected References on Secondary-School Instruction." (II. The Subject Fields.) The School Review 55 (February 1947): 103-118.
- _____. "Rise of the People's College." The School Review 55 (March 1947): 138-149.
- _____. "Selected References on Secondary-School Instruction." (III. The Subject Fields--Continued.) The School Review 55 (March 1947): 170-182.
- _____. "A Junior-College Plan for Maryland." The School Review 55 (June 1947): 324-338.
- _____. "The Junior College's Full Scope of Function." (Editorial) Junior College Journal 18 (October 1947): 55-56.
- _____. "Junior-College Teachers: Degrees and Graduate Residence." Junior College Journal 18 (October 1947): 77-89.
- _____. "Is the Junior College Secondary or Higher Education?" Junior College Journal 18 (November 1947): 113-114.
- _____. "Junior-College Teachers: Subjects Taught and Specialized Preparation." Junior College Journal 18 (December 1947): 196-209. Junior College Journal 18 (December 1947): 196-209.

- _____. "Second Year of the Research and Service Committees." (Editorial) Junior College Journal 18 (December 1947): 171-230.
- _____. "Who Should Go to College?" (Editorial) Junior College Journal 18 (January 1948): 229-230.
- _____. "Junior-College Teachers: Preparation in Education." Junior College Journal 18 (February 1948): 332-344.
- _____. "State Superintendents for the Community College." (Editorial) Junior College Journal 18 (March 1948): 363-364.
- _____. "Junior-College Teachers: Background of Experience." Junior College Journal 18 (April 1948): 457-469.
- _____. "A Community-College Plan for Pennsylvania." I. The School Review 57 (April 1948): 202-216.
- _____. "Programs of Junior-College Teacher Preparation Imperative." (Editorial). Junior College Journal 18 (April 1948): 423-424.
- _____. "A Community College Plan for Pennsylvania." II The School Review 57 (May 1948): 286-294.
- _____. "On Locating Community Colleges." (Editorial) Junior College Journal 19 (December 1948): 175-176.
- _____. "Programs of Junior-College Teacher Preparation." Junior College Journal 19 (February 1949): 333-346.
- _____. "Junior-College Teachers' Co-operations." Junior College Journal 19 (March 1949): 399-411.
- _____. "Administering Teachers' Co-operations." (Editorial) Junior College Journal 19 (March 1949): 369-370.
- _____. "A Community-College Plan for Pennsylvania." I. The School Review 57 (April 1949): 202-216.
- _____. "A Community-College Plan for Pennsylvania." II. The School Review 57 (May-June 1949): 286-294.
- _____. "Report on Research and the Junior College Journal." Junior College Journal 19 (May 1949): 526-531.
- _____. "Essentials in State-Wide Community-College Planning." The School Review 57 (September 1949): 341-352.
- _____. "Preparation for Community-College Teaching." Journal of Higher Education 21 (June 1950): 309-317.

_____, and Wiegman, Robert R. "A Community Plan for Oregon." I The School Review 59 (March 1951): 140-152.

_____, and Wiegman, Robert R. "A Community Plan for Oregon." II The School Review 59 (April 1951): 221-232.

_____. "Junior High School Reorganization after a Half-Century." (I. Growth and Status of Reorganization.) The School Review 61 (October 1953): 393-399.

_____. "Junior High School Reorganization after a Half Century." (II. Purposes of, and Grade-Grouping for, Reorganization.) The School Review 61 (November 1953): 479-487.

_____. "Junior High School Reorganization after a Half Century." (III. The Curriculum and Other Features.) The School Review 61 (December 1953): 527-540.

_____. "School Organization in Recent Textbooks." The School Review 64 (March 1956): 129-135.

_____. "Educational News and Editorial Comment." The School Review 64 (March 1956): 101-107.

_____. "Emphasis." Junior College Journal 34 (March 1964): 1.

_____. "Largely Reminiscent: Plus the Commonwealth Fund Project." Junior College Journal 34 (May 1964): 13-18.

II. Secondary Sources

A. Books

Bogue, Jesse Parker. The Community College. New York: McGraw-Hill Book Co., 1950.

Bossing, Nelson L. Principles of Secondary Education. New Jersey: Prentice-Hall, Inc., 1955.

Brick, Michael Forum and Focus for the Junior College Movement. New York: Teachers College, Columbia University, 1964.

- Brubacher, John S. A History of the Problems of Education. New York: McGraw-Hill Book Co., 1966.
- Brubacher, John S., and Rudy, William. Higher Education in Transition. A History of American Colleges and Universities, 1636-1968. New York: Harper & Row, Publishers, 1968.
- Butler, J. Donald. Four Philosophies and Their Practice in Education and Religion. New York: Harper & Row, Publishers, 1968.
- Catalogues of University of Chicago, 1892-93 and 1896-97.
- Cremin, Lawrence A., and Barnard, Frederick A. P. Report on the Committee on Secondary School Studies. New York: Arno Press and the New York Times, 1969.
- Dewey, John. The School and Society. Chicago: University of Chicago Press, 1915.
- Eells, Walter C. The Junior College. Boston: Houghton Mifflin Co., 1931.
- Emerson, Ralph Waldo. Education, An Essay and Other Selections. Boston: Houghton Mifflin Co., 1909.
- Fields, Ralph R. The Community College Movement. New York: McGraw-Hill Book Co., 1962.
- Folwell, William Watts. University Addresses. Minneapolis: H. W. Wilson Co., 1909.

Fretwell, Elbert K. Founding Public Junior Colleges. New York: Bureau of Publications, Teachers College, Columbia University, 1954.

Gleazer, Edmund J. Jr. This is the Community College. New York: Houghton Mifflin Co., 1968.

_____. Project Focus: A Forecast Study of Community Colleges. New York: McGraw-Hill Book Co., 1973.

_____. The Community College: Values, Vision, and Vitality. Washington, D.C.: The Shell Companies Foundation, Incorporated, and the and the W. K. Kellogg Foundation, 1980.

Gray, A. A. The Junior College. Master's Thesis. University of California, 1915.

Harlacher, Ervin L. The Community Dimension of the Community College. New Jersey: Prentice-Hall, Inc., 1969.

Medsker, Leland L. The Junior College: Progress and Prospect. New York: McGraw-Hill Book Co., 1960.

North Central Association of Colleges and Secondary Schools. Proceedings, 1896.

Reich, Jerome R.; Krug, Mark M.; and Biller, Edward L. Building the Modern World. New Edition. New York: Harcourt Brace Jovanovich, Inc.

Potter, Robert E. The Stream of American Education. New York: Van Nostrand Reinhold Co., 1967.

U. S. Bureau of Education. Cardinal Principles of Secondary Education.
Bulletin, 1918, No. 35. Washington, D.C.: Government Printing
Office, 1937.

Report of the Committee of Ten on Secondary School Studies. New York:
American Book Co., 1894.

Tappan, Henry P. University Education. New York: Arno Press and the
New York Times, 1969.

B. Articles

Conger, George Ringland III. "Leonard V. Koos: His Contribution to
American Education During Half a Century." Ed.D. dissertation,
Florida State University, 1968.

Conger, George R. and Schultz, Raymond E. "Leonard V. Koos: Patriarch
of the Junior College." Junior College Journal 40 (March 1970):
26-31.

Hill, A. Ross. "The Junior College." In Transactions and Proceedings
of the National Association of State Universities. 13, 1915.

Tyack, David and Hansot, Elisabeth. "Hard Times, Then and Now: Public
Schools in the 1930s and 1980s." Harvard Educational Review 54
(February 1984): 33-36.

Wattenberger, James L. "Leonard V. Koos: Leader of Pioneers." Communi-
ty and Junior College Journal. 47 (October 1976): 50-51.

Zook, George F. "A Tribute to L. V. Koos." (Editorial) Junior College Journal 20 (September 1949): 1.

APPENDIX A

I. PUBLIC JUNIOR COLLEGES

In order to provide complete and detailed information concerning the junior college, Koos sent out inquiries to obtain as precise a number as possible of the junior colleges in existence as of 1922. Koos contacted state universities and state departments of education to obtain lists of junior colleges. He then obtained published lists of junior colleges primarily from those appearing in McDowell's study and in the National Directory of the Bureau of Education. In addition to the above, Koos consulted authorities during his visitations to the junior colleges, and he contacted officers in charge of those junior colleges he did not visit for lists of junior colleges that might have come to his attention. When Koos received the lists he made visitations to the schools or if that was not possible he sent questionnaires to them. The questionnaires were carefully examined and tabulated. In some instances three or four requests were made to the schools in order to secure complete and accurate information and figures.

The lists that follow do not include institutions offering three or four years of work but only those institutions offering one or two years and only those institutions which are known as junior colleges or whose officers designated them as such.

TABLE 3

Public Junior Colleges

City & State of Location	Name of Institution	Auspices	Year Estd	Enrolment		
				1st yr	2nd yr	Total
Arizona						
Phoenix	Phoenix Junior Col.	High Sc Dis	1920	61	1	66
California						
Azusa	Citrus Union Jr. Col.	High Sc Dis	1915	16	0	16
Bakersfield	Kern Cty Jr. Col. High	High Sc Dis	1913	62	12	74
El Centro	El Centro Jr. Col.	High Sc Dis	1922	34	..	34
Eureka	Eureka Jr. Col.	High Sc Dis	1915	36	12	48
Fullerton	Fullerton Jr. Col.	High Sc Dis	1913	120	36	156
Hollister	San Benito Jr. Col.	County High				
		School Dis	1919	35	17	52
Modesto	Modesto Jr. Col.	Jr.Col.Dis	1921	61	0	61
Ontario	Chaffey Jr. Col.	Jr.Col.Dis.	1916	172	31	203 a
Pomona	Pomona Jr. Col.	High Sc Dis	1916	49	0	49
Riverside	Riverside Jr. Col.	High Sc Dis	1916	149	37	186
Sacramento	Sacramento Jr. Col.	High Sc Dis	1916	53	11	64
San Mateo	San Mateo Union Jr Col	Jr. Col Dis	1922	37	9	46
Santa Ana	Santa Ana Jr. Col.	High Sc Dis	1915	111	38	149
Santa Maria	Santa Maria Jr. Col.	High Sc Dis	1920	14	1	15
Santa Rosa	Santa Rosa Jr. Col.	High Sc Dis	1917	31	9	40
Taft	Taft Jr. Col.	High Sc Dis	1922	19	2	21
Illinois						
Chicago	Crane Jr. Col.	City Sc Dis	1911	483	182	665
Chicago	Medill Sch of Commerce	City Sc Dis	..	78	47	125
Joliet	Joliet Jr. Col.	High Sc Dis	1922	90	22	112
Iowa						
Burlington	Burlington Jr. Col.	City Sc Dis	1920	32	20	52
Fort Dodge	Fort Dodge Jr. Col.	City Sc Dis	1922	42	..	42
Mason City	Mason City Jr. Col.	City Sc Dis	1918	55	3	58
Red Oak	Red Oak Jr. Col.	City Sc Dis	1922	36	..	36
Kansas						
Arkansas	Arkansas City Jr. Col.	City Sc Dis	1922	..	..	..
Fort Scott	Fort Scott Jr. Col	City Sc Dis	1919	19	8	27
Garden City	Garden City Jr. Col.	City Sc Dis	1919	27	10	37
Massachusetts						
Springfield	Springfield Jr. Col.	City Sc Dis	1917	48	0	48
Michigan						
Bay City	Bay City Jr. Col.	City Sc Dis	1922	..	..	..
Detroit	Detroit Jr. Col.	City Sc Dis	1915	..	..	1227
Grand Rapids	Grand Rapids Jr. Col.	City Sc Dis	1914	174	86	260 b
Highland Pk	Highland Pk Jr. Col.	City Sc Dis	1918	102	60	162
Pontiac	Pontiac Jr. Col.	City Sc Dis	1918	27	0	27
Minnesota						
Coleraine	Itasca Jr. Col.	Independent				
		Sc Dis	1922	..	..	..

Ely	Ely Jr. Col.	City Sc Dis	1922	..	..	..
Eveleth	Eveleth Jr. Col.	City Sc Dis	1917	48	13	61
Hibbing	Hibbing Jr. Col.	School Dis	1916	..	..	151
Pipestone	Pipestone Jr. Col.	City Sc Dis	1919	19	0	19
Rochester	Rochester Jr. Col.	City Sc Dis	1915	48	11	59
Virginia	Virginia Jr. Col.	City Sc Dis	1921	37	2	39
Missouri						
Kansas City	Kansas City Jr. Col.	City Sc Dis	1915	508	149	657
St. Joseph	St. Joseph Jr. Col.	City Sc Dis	1915	89	23	112
New Jersey						
Newark	Newark Jr. Col.	City Sc Dis	1918	..	..	..
Oklahoma						
Muskogee	Muskogee Jr. Col.	City Sc Dis	1921	28	0	18
Texas						
El Paso	Jr. Col. of the City of El Paso	City Sc Dis	1920	36	15	51
Washington						
Everett	Everett Jr. Col.	City Sc Dis	1916	7	0	7

a) Not including Federal Board Students.

b) Does not include ninety-nine students in special groups.

c) Discontinued in June, 1922.

TABLE 4

Junior Colleges in State Institutions

City & State of Location	Name of Institution	Auspices	Year Estd	Enrolment		
				1st yr	2nd yr	Total
California						
Arcata	Humboldt State Teachers Col.	State	1921	15	0	15
Chico	State Teachers Col.	State	1921	19	6	25
Fresno	State Teachers and Junior Col.	State	1921	..	..	303
Los Angeles	Southern Branch of State University	State Univ	1919	680	400	1080
San Diego	State Teachers Col.	State	1921	166	54	220
San Jose	State Teachers Col.	State	1921	74	15	89
Santa Barbara	State Teachers Col.	State	1921	..	..	65
Idaho						
Pocatello	Idaho Technical Inst.	State	1915	143	59	202
Minnesota						
Winona	Winona State Teachers Col.	State	1919	18	5	23
New Mexico						
Roswell	New Mexico Military Institute	State	1916	26	18	44
North Dakota						
Bottineau	Forestry State Normal	State	1915	13	4	17

Wahpeton	State School of Science	State	1919	29	10	39
South Dakota						
Madison	Eastern South Dakota Normal School	State	1921	22	9	31
Spearfish	State Normal School	State	1920	13	11	24
Texas						
Alpine	Sul Ross State Normal School	State	1920	46	32	78
Arlington	Grubbs Vocational College (a)	State	1917	66	15	81
Stephenville	John Tarleton Argiculttural Col.	State	1917	148	40	188
Utah						
Cedar City	Branch Agricultural College	State	1913	bb(b)..	..	..
Wisconsin						
Eau Claire	State Normal School	State	1916	..	..	..
La Crosse	State Normal School	State	1911	113	21	134
Milwaukee	State Normal School	State	1911	..	..	450 c
Oshkosh	State Normal School	State	1911	..	..	..
Stevens Point	State Normal School	State	1911	37	17	54
Superior	State Normal School	State	1911	53	61	114

a) Now designated as the North Texas Agricultural College.

b) No data.

c) Approximate

TABLE 5

Private Junior Colleges

City & State of Location	Name of Institution	Auspices	Year Estd	Enrolment		
				1st yr	2nd yr	Total
Alabama						
Tuscaloosa	Alabama Central Female Col.	Private	1919	5	1	6
Marion	Marion Institute	Private	..	46	18	64
Arizona						
Thatcher	Gila Junior College	Latter Day Saints	1922	..	..	..
Arkansas						
Conway	Central College	Baptist Church	1921	18	19	28
Eureka Spgs	Crescent College	Private	1910	25	15	40
Mountain Home	Mountain Home Inst.	Baptist Church	1921	17	5	22
California						
Berkeley	A to Zed Junior Col.	Private	1922	23	5	28
Los Angeles	Westlake School for Girls	Private	1917	7	0	7

Oakland	California Concordia College	Lutheran Church	..	9	11	20
District of Columbia	Fairmont Seminary	Private	1922	20	9	29
Florida	De Funiak Springs	Palmer College	Private	..	..	..
Georgia	Athens	Lucy Cobb Institute	Private	..	31	21
	Cuthbert	Andrew College	M.E.Church, South	1914	31	23
	McRae	Southern Georgia College	M.E.Church South	1917	36	11
	Sparks	Sparks College	M.E.Church South	1920	25	11
	Waleska	Reinhardt College	M.E.Church South	1914	31	23
	Young Harris	Young L. G. Harris College South	M.E.Church South	1916	43	29
Idaho	Rexburg	Ricks Normal Col.	Latter Day Saints	1916	47	27
Illinois	Carlinville	Blackburn College	Private	1916	48	28
	Elgin	Elgin Junior College	Private	1914	50	15
	Elmhurst	Elmhurst Junior College	Evangelical Synod of North Amer.	1919	38	10
	Godfrey	Monticello Seminar	Private	1915	72	43
	Lake Forest	Ferry Hall	Lake Forest	1869	29	5
	Mount Carroll	Frances Shimer School	Private	1911	45	23
	River Forest	Concordia Teachers College	Lutheran Synod of Missouri	1909	66	37
Indiana	Collegeville	St. Joseph's College	Catholic Church	1913	21	14
	Fort Wayne	Concordia College	Lutheran Synod of Missouri	1916	..	..
	Vincennes	Vincennes University	Private	1916	..	..
Iowa	Forest City	Waldorf College	Lutheran Church	1920	16	8
	Lamoni	Graceland College	Latter Day Saints	1914	51	41
Kansas	Harper	Harper College	Church of Christ	1904	25	20
	Highland	Highland College	Private	..	..	..
	McPherson	Central Academy and				

	College	Free Methodist Church	1916	25	17	42
Winfield	St. John's Lutheran Church	Lutheran Synod of Missour	..	16	19	35
Kentucky						
Danville	Kentucky College for Women	Presbyterian Church	1914	31	17	48
Elkton	Morton-Elliott Jr. College	M.E.Church South	1921	6	0	6
Hopkinsville	Bethel Woman's College	Baptist Church	1916	54	18	72
Lexington	Hamilton College for Women	Transylvania College	1903	33	12	45
London	Sue Bennett Memorial School	M.E.Church South	1921	17	4	21
Millersburg	Millersburg College	Private	1918	6	1	7
Russellville	Bethal College	Baptist Church	1919	39	18	57
Russellville	Logan College	M.E.Church, South	1917	30	20	50
Williamsburg	Cumberland College	Baptist Church	1913	43	26	69
Louisiana						
Mansfield	Mansfield Female College	M.E.Church South	1913	46	30	76
Maryland						
Forest Glen	National Park Seminary	Private	1915	176	113	289
Massachusetts						
Bradford	Bradford Academy	Private	1919	54	22	76
South Lancaster	Atlantic Union College	Adventist Church	..	..	..	..
Minnesota						
Duluth	Villa Sancta Scholastica	Sisters of Saint Benedict	1910	23	9	32
Faribault	St. Mary's Hall	Episcopal Church	1917	12	0	12
Minneapolis	Stanley Hall and Junior College	Private	1914	6	0	6
St. Paul	Concordia College	Lutheran Synod of Missouri	1905	20	20	40
Mississippi						
Clinton	Hillman College	Private	..	40	32	72
Holly Springs	Mississippi	Presbyterian				

	Synodical Col.	Church	1917	30	24	54
Port Gibson	Port Gibson Female Col.	M.E.Church, South	..	8	6	14
Vicksburg	All Saints Col.	Episcopal Church	1909	2	4	6
Missouri						
Albany	Palmer College	Christian Church	1919	29	15	44
Columbia	Christian College	Christian Church	1913	78	34	112
Columbia	Stephens College	Baptist Church	1913	204	145	349
Concordia	St. Paul's College	Lutheran Synod of Mo.	1918	24	13	37
Fayette	Howard-Payne Col.	M.E.Church, South	1913	42	28	70
Frederick- ton	Marvin Col.	M.E.Church, South	1916	25	9	34
Fulton	Synodical Col.	Presbyterian Col.	1916	14	12	26
Fulton	William Woods Col.	Christian Church	1913	69	37	106
Kansas City	St. Teresa Jr. Col.	Sisters of St. Joseph	1916	12	7	19
La Grange	La Grange Col.	Baptist Ch.	1917	27	9	36
Lexington	Central College for Women	Methodist Ch.	1916	45	21	66
Marblehill	Will-Mayfield Col.	Baptist Ch.	1919	13	8	21
Mexico	Hardin Col.	Baptist Ch.	1901	64	35	99
St. Louis	Forest Park Col.	Private	1917	..	..	..
St. Louis	Jr. Col. of the Sacred Heart	Ladies of the Sacred Heart	1919	18	14	32
St. Louis	The Principia	Private	1911	61	21	82
Nebraska						
Blair	Dana College	Danish Luth. Col.	1898	25	20	45
Seward	Lutheran Seminary	Lutheran Synod of Mo.	1905	26	19	45
Wahoo	Luther College	Augustana Synod	1908	16	0	16
New York						
Bronxville	Concordia Institute	Lutheran Synod of Mo.	1905	26	19	45
Brooklyn	Packer Col. Inst.	Private	1910	64	47	111
Millbrook	Bennett School of Liberal & App. Arts	Private	1906	56	43	99
North Carolina						
Louisburg	Louisburg Col.	M.E.Church, South	1909	27	18	45
Mars Hill	Mars Hill Col.	Baptist Ch.	1921	13	1	14
Montreat	Montreat Normal	Presbyterian				

		Church, South	1915	13	2	15
Oxford	Oxford Col.	Private	1921	22	18	40
Raleigh	Peace Institute	Presby. Ch.	1919	32	12	44
Raleigh	St. Mary's School	Episcopal Ch.	1900	25	22	47
Rutherford	Rutherford Col.	M.E.Church, South	1919	27	10	37
Weaverville	Weaver Col.	M.E.Church, South	1912	22	25	47
Ohio						
Glendale	Glendale Col.	Private	1916	8	3	11
Oklahoma						
Durant	Oklahoma Presbyterian College for Girls	Prebsy. Ch.	..	13	5	18
Oregon						
Milton	Columbia Col.	M.E.Church, South	1908	12	7	19
Portland	Columbia University	Cong of the Holy Cross	1921	8	0	8
Portland	St. Mary's Col.	Sisters of the Holy Name	1916	22	8	30
St. Benedict	Mount Angel Col.	St. Benedict's Abbey	1920	18	10	28
Pennsylvania						
Reading	Schuykill Sem.	Evangelical Association	1915	..(a)..	..	..
Scranton	St. Thomas Col.	Catholic Ch.	1918	55	46	101
South Dakota						
Sioux Falls	Augustana Col.	Norwegian Luth.	..	32	5	37
Wessington	Wessington Springs Junior College	Free Methodist Church	1918	12	7	19
Tennessee						
Athens	The Athens School	M.E.Church, South	1910	26	1	27
Cleveland	Centenary College	M.E.Church, South	1917	16	10	26
Henderson	Freed-Hardeman Col.	Private	..	..	..	..
Madisonville	Hiwassee College	M.E.Church, South	..	17	11	28
Martin	Hall-Moody Normal School	State Baptist Convention	1918	38	8	46
Nashville	Lipscomb College	Private	1921	30	20	50
Nashville	Ward-Belmont	Private	..	450	100	550
Pulaski	Martin College	M.E.Church, South	1914	27	12	39
Texas						
Clarendon	Clarendon College	M.E.Church, South	1898	112	46	158
Decatur	Decatur College	State Baptist Convention	1898	..(b)..	..	..

Greenville	Burleson College	State Baptist Conventio	1909	69	27	96
Greenville	Wesley College	M.E.Church, South	1912	140	75	215
Jacksonville	Alexander College	M.E.Church, South	1913	69	18	87
Marshall	Marshall College	State Baptist Convention	1916	60	40	100
Meridian	Meridian College	M.E.Church, South	1911	34	29	63
Plainview	Wayland Baptist Col.	State Baptist Convention	1913	103	28	131
Rusk	Rusk College	Baptist Church	1918	..(b)..	..	..
San Antonio	Westmoorland College	M.E.Church South	1917	45	15	60
Sherman	Carr-Burdette College	Private	1915	57	30	87
Tehuacana	Westminster College	Methodist Prot. Church	1915	6	0	6
Terrell	Texas Military Col.	Private	1915	28	12	40
Thorp						
Springs	Christian College	Church of Christ	1916	23	11	34
Utah						
Ephraim	Snow Normal College	Latter Day Saints	1912	42	5	47
Logan	Brigham Young Col.	Latter Day Saints	1913	48	16	64
Ogden	Weber Normal Col.	Latter Day Saints	1922	90	30	120
Salt Lake City	Westminster College	Presbyterian Church	1914	29	7	36
Virginia						
Abingdon	Martha Washington	M.E.Church, South	1922	..	..	..
Abingdon	Stonewall Jackson College	Presbyterian Church	..	20	18	38
Blackstone	Blackstone College	M.E.Church, South	1915	35	11	46
Bristol	Sullins College	Private	1917	75	42	117
Bristol	Virginia Intermont College	Baptist Church	1912	63	50	113
Daleville	Daleville College	Church of the Brethren	1910	12	8	20
Danville	Averett College for Young Women	Baptist Church	1919	16	11	27
Marion	Marion Jr. College	Lutheran Church	1912	14	17	31
Petersburg	Southern College	Private	1912	14	6	20
Roanoke	Virginia College	Private	1914	59	48	107
Staunton	Mary Baldwin Sem.	Private	..	..	..	38
Washington						
Parkland	Pacific Lutheran Col.	Norwegian Lutheran Col.	1920	6	0	6
Spokane	Spokane College	Private	..	..	..	..

West Virginia					
Philippi	Broadus College	Baptist Church	1917	18	12 30
Wisconsin					
Milwaukee	Concordia College	Lutheran Synod			
		of Mo.			

- a) Not reported.
- b) Data not supplied in usable form.

APPROVAL SHEET

The dissertation submitted by Katherine A. Smith has been read and approved by the following committee:

Dr. John M. Wozniak, Director
Professor, Foundations of Education,
Loyola University of Chicago

Dr. Gerald L. Gutek,
Dean, School of Education and Professor, Foundations of Education,
Loyola University of Chicago

Dr. Mark M. Krug,
Professor of Education in History and the Social Sciences at
the Graduate School of Education,
the University of Chicago

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

12/7/84
Date


Director's Signature