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A Report on the Post-Graduation Activities of the 1955 Kansas High School Graduates

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By Alex A. Daughtry

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KANSAS STATE TEACHERS COLLEGE EMPORIA · KANSAS

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This study could not have been completed without the splendid cooperation of principals and guidance directors of the 613 Kansas high schools who supplied the basic information for it. It is hoped that the results of the study will be of value to the secondary school administrators and teachers who made it possible.

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-Alex A. Daughtry

A Report on the Post-graduation Activities of the 1955 Kansas High School Graduates

By Alex A. Daughtry*

SECTION I. INTRODUCTION

What activities do high school seniors enter after graduation? How many and what per cent enroll in colleges or universities? Which institutions do they attend? What factors seem to determine which graduates continue their education? Do the students who seem to be superior in ability enroll in college? If not, what do they do? What reasons do they give for not continuing their formal education?

In the fall of 1955, a study was undertaken at Kansas State Teachers College, Emporia, to provide information which might answer, at least in part, questions such as these. Such information has not previously been available concerning the graduates of Kansas secondary schools. It was believed that a study of the class of 1955 would provide data of importance to high school, college and university staff members in Kansas, and in other states to the extent that they are similar to Kansas.

Conclusions can be drawn from the facts reported in the study, although in general they speak for themselves. Basically, the value of the study is in the descriptive reporting of what actually happened to the boys and girls who graduated from Kansas high schools in 1955.

Information for the study was submitted by superintendents, principals, and guidance workers in 613 of the 649 public and private high schools which were in operation in Kansas during the 1954-55 school year. Of the 20,579 seniors who were graduated from Kansas high schools in 1955, 19,349 or 94.0 per cent were reported on by school officials. The information requested for the first phase of the study will be indicated by the findings contained in this report.

A second phase of the study consisted of gathering information concerning three groups of graduates who seemed to be superior in ability. These groups were: (1) valedictorians and salutatorians; (2) graduates who ranked in the upper third of their classes; (3) graduates who ranked in an upper group on the Kansas High School Senior Comprehensive Examination. The methods employed in treating each of these groups will be discussed later in this report.

A third phase of the study consisted of gathering information directly from graduates who had ranked in the upper group on the Kansas High

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School Senior Comprehensive Examination, but who had not gone to college. Individual inquiries were returned by 364 boys and girls who were in this category. The results of this phase of the study are contained in a separate section of this report.

The data obtained for the study have been tabulated and are presented in Sections III, IV and V of this report. Section II is devoted to the background for the study, while Section VI includes a resume of the findings and recommendations which evolve from them.

Some of the results of the study have been tabulated according to the size of the school reporting. The 613 schools included in the study were divided into four groups, as follows: Group AA, schools with a total enrollment of more than 475 students; Group A, schools with an enrollment of 151 to 475; Group B, schools with an enrollment of 61 to 150; Group BB, schools with an enrollment of 60 or fewer. These categories and designations were chosen because they correspond to the pattern established by the Kansas State High School Activities Association.

Included in the study were thirty-seven schools in Group AA; exactly one hundred in Group A; 209 in Group B, and 267 in Group BB. AA schools reported on 7,436 graduates; A schools on 5,102 graduates; B schools on 4,430 graduates; and BB schools on 2,381 graduates. The size of the graduating classes ranged from one to 797.

Throughout the remainder of this report, the words "college" and "colleges" will be used in a general sense to include universities, four-year colleges and two-year colleges, unless specific reference is made to certain institutions or types of institutions.

SECTION II. BACKGROUND FOR THE STUDY

Increased interest in post-graduation activities. A great deal of attention has been paid in recent years to the post-graduation activities of boys and girls who complete high school. Particularly, there has been much concern over problems related to additional formal, academic education for high school graduates.

Two factors are chiefly responsible for this concern. First, there is an acute shortage of young people preparing for vocations which require education beyond the high school level. This is true in practically every professional and technical field. The demand for chemists, doctors, economists, social workers, accountants, teachers, architects, psychologists, foresters, city managers, and so on is not being met.

Second, there is obviously going to be a tremendous increase in the number of young people who desire to attend college or university. The national birth rate was low during the depression years of the 1930's and remained low during World War II. It began to climb at the close of that war and has remained at a high level. In 1954 there were 4,100,000 live

births recorded in the nation, "not only the largest number in United States history but the highest birth rate in our history," according to Francis H. Horn. (16, p. 39) He went on to point out that "the babies are already born that will increase by 70 per cent the number of young people of college age in 1970."

The situation was summarized recently by Peter F. Drucker, writing in *Harper's Magazine*, who said:

College education in the United States is rapidly becoming "general" education. But in its economic foundation it is predominantly "class" education for a small group of the wealthy or exceptionally able. Today we have two and a half million students in colleges and universities. By 1975 the college population will be at least seven and a half millions—a little less than 50 per cent of the eligible age groups. The jump in high-school graduates alone—20 per cent of the eligible age group a generation ago, almost 80 per cent today—would of itself make inevitable such an explosion in college enrollments. And even seven and a half million college and university students will hardly be adequate to supply the country's need for educated men and women twenty years hence. (8, p. 63)

The problem which this situation poses for higher education is a serious one, and it calls for immediate and far-reaching decisions. One obstacle in the path which leads to those decisions is the lack of factual information concerning present circumstances. While a great deal of research has been done in some areas which relate to the basic problem, more data are needed. The remainder of this section is devoted to a survey of information concerning the current situation.

The demand for college-trained personnel. The most exhaustive study of the current and future demand for professional and technical workers is to be found in America's Resources of Specialized Talent, the report of the Commission on Human Resources and Advanced Training, prepared by Dael Wolfle. The report states:

The developing economy of the United States has placed steadily greater and greater emphasis upon the importance of the trained specialist. During the past half century the number of school teachers in the United States has increased 1¼ times as rapidly as the total population. The number of professional health workers has increased 2½ times as rapidly; the number of engineers, 5 times; and the number of scientists, 10 times. With a population twice as large as that of 1900, the nation employs 4 times as many men and women in the professional fields.

This growth of specialization will continue, for it is an integral part of an expanding technology and dynamic social change. (30, p. 2)

The growth of specialization will result in a continuing demand for college graduates, Wolfle believes. He says:

The social and economic trends which have underlain this growth in past decades are expected to continue, and in continuing to mean a demand for an even greater number of specialists. Obviously the increases cannot continue indefinitely. Farmers and housewives and a great variety of other workers are also needed. But while the increases cannot continue indefinitely, they can continue for many years, and the only safe expectation is that they will. (30, p. 132)

Some concern has been expressed over the possibility that the colleges and universities may enroll and graduate too many persons. This viewpoint was expressed in 1949 by Seymour Harris, who wrote:

Further democratization of education is not only traditionally American and proper, but would contribute in various ways to the country's economic welfare. Nevertheless, in the light of our college graduates' vocational expectations the numbers are, and will be increasingly, excessive. On the one hand, the country faces a large and increasing flow of college graduates; on the other, the professions, cherished goal of a large proportion of college graduates, offer a declining number of employment opportunities relative to the demand. (12, p. 64)

There were some indications at the time Harris was writing that his predictions might be coming true. College graduates were finding it difficult to secure employment in the fields for which they had prepared. Two things happened, however, which changed the picture. The Korean war stimulated business and industry, creating new demands for manpower. At the same time, graduating classes decreased in size as the "bulge" of World War II veterans finished their work.

While consideration must be given to the warning signals put up by Harris and others, the present situation does not indicate any immediate danger of an oversupply of specialized personnel. At least, the problem does not seem grave enough to deter high school graduates from entering college.

The increase in college enrollment. The increase in the number of students enrolling in American colleges and universities has been phenomenal. Writing in January, 1956, John Dale Russell stated:

College enrollments increased more than tenfold between 1899-1900 and

1949-50, from 237,592 to 2,659,031.

As in the case of the high school, the number enrolled in college has increased much faster than the population of college age. In 1899-1900 only 40 students were enrolled in college for each thousand in the 18-21 age group. By 1939-40 the ratio had reached 153 per thousand. Figures for 1954 have not yet been released officially by the U.S. Office of Education but the indication is that the ratio will be in the neighborhood of 280 per thousand. (23, p. 154)

Russell expects that the percentage of young people attending college will continue to increase. He says:

Some estimates that have been made recently indicate that in the next fifteen years college enrollments will reach a level of 40 or possibly even 50 per cent of the population of college age. (23, p. 154)

Ronald Thompson has pointed out that the percentage of collegeage youth attending institutions of higher education "has increased an average of approximately 1 percent a year for the last twenty years, rising from 4 percent in 1900 to more than 30 percent at the present time (1954)." (25, p. 20) Some comparison of the situation in the United States and that in other nations of the world may be gained by the fact that the corresponding figure for Great Britain is five per cent. (5, p. 10) Like Russell, Thompson believes that more college-age youth will continue their education in the future than are doing so now. He predicts:

It seems obvious that we have not reached the peak at 30 per cent. Undoubtedly, we shall not reach for many years the 80 per cent attendance in higher education which we have now reached in the elementary and secondary school level. We may, however, reach 40 per cent or 50 per cent group in attendance in our institutions of higher education. (25, p. 20)

Since the size of the college-age group can be established rather accurately for any particular year within the succeeding eighteen, it is possible to project college enrollments by applying the expected percentages of attendance to the total number in the college-age group. Thompson did this in 1953 for the school years through 1970-71. He projected enrollment in higher education on three bases: assuming 31 per cent attendance; assuming 40 per cent attendance, and assuming 50 per cent attendance.

His projections showed that total enrollment, standing at approximately two and three-quarter millions in 1955-56, should increase to a figure between 2,800,000 and 3,600,000 in 1960-61. By 1970-71, colleges and universities can expect to enroll from 4,200,000 to 6,600,000 students, depending on the percentage of attendance. (25, pp. 22-26)

Thompson emphasized that there are great variations geographically in the proportion of college-age young people who continue their education. The forty-eight states vary in per cent from 15 for Mississippi to 52 for Utah. Kansas has a percentage of 34, behind Utah, Oregon, Colorado, California, Oklahoma and Indiana. (25, p. 30)

Questions concerning the immediate future. The actual and anticipated increases in college enrollment, plus the demand for college-educated workers, have focussed the attention of educators and laymen on some basic questions concerning the future of higher education. They are not new questions, but they have become much more urgent. The time for decision has arrived.

Among the questions to be answered are the following: Who now goes to college? How many young people should go to college? Which ones should go? What factors determine who goes? What factors should determine who goes?

Who should go to college? In 1947, a Commission on Higher Education appointed by the President of the United States devoted Volume II of its report, Higher Education for American Democracy, to "Equalizing and Expanding Individual Opportunity." In this report the Commission recommended that 49 per cent of the young people in the United States should complete at least fourteen years of schooling, on the grounds that this portion of the population "has the mental ability" to profit from a period of schooling of that length. The Commission went on to state: "At least 32 per cent of our population has the mental ability to complete

an advanced liberal or specialized professional education." (20, p. 41)

The implications of this proposal for institutions of higher education are obvious; the increase in enrollment would be tremendous. Consider the present situation, as described in the following quotation from the 1954 Carnegie Report:

Suppose that we follow the school careers of one hundred American boys and girls chosen at random. Assume that current rates of school and college attendance remain constant. Almost all of our group will enroll in the first grade of elementary school, but by the end of the eighth grade, approximately twenty will have dropped out.

Two years later, at the end of the first two years of high school, almost another twenty will have dropped out. And several more will leave before high school graduation. Of the original one hundred, only about fifty-nine will be

graduated from high school.

Of these fifty-nine high school graduates, about thirty will enter college and approximately twelve will be graduated from college. (5, p. 10)

If the recommendations of the President's Commission were put into operation, this pattern would change drastically. Forty-nine of the one hundred boys and girls would enroll in college following high school, and thirty-two of them would remain for four years.

Not all educators agreed with the recommendations of the President's Commission. In 1952, a report on *Nature and Needs of Higher Education* was published by the Commission on Financing Higher Education. This report recommended that higher education should "accept as its first concern the education of those young people who fall approximately within the top 25 per cent in intellectual capacity." (7, p. 48)

Even though this is a more conservative approach than that suggested by the President's Commission, it too represents a policy which would result in a sizeable increase in college enrollments. The Commission on Financing Higher Education agreed with the President's Commission that many more young people could profit from college attendance than are now enrolling in institutions of higher education. It reported that:

in 1950 out of 476,000 young persons 18 years of age who would score 115 or above on the Army test, only 40 per cent actually went to college. And only something over half of these remain to graduate In the top 10 per cent of young persons in terms of intellectual promise . . . about 45 percent go to college, and nearly two thirds of them graduate. In the top 2 per cent of young people, about 56 per cent go to college and nearly three quarters of them graduate. (7, p. 49)

The commission concluded that colleges and universities should take on the task of recruiting and educating a larger proportion of "the top 25 per cent of our young people. It is not sufficient to enroll 200,000 out of 500,000 of such youth. We must strive to raise this number to 300,000 and then to 400,000." (7, p. 49)

Byron S. Hollinshead dealt with this same problem in his book, Who Should Go to College. In terms of college-age young people with an I.Q. of 110 or higher, he stated that:

slightly over 40 per cent graduate from high school and go to college, slightly under 40 per cent are high school graduates but do not go to college, and slightly under 20 per cent do not graduate from high school. In other words, if we isolate the top quarter in ability we find that the colleges are now educating over two fifths of them. (15, p. 10)

A recent study which emphasized the fact that many high school graduates who seem to be superior in ability are not going to college was made in 1954-55 by Charles C. Cole, Jr., for the National Science Foundation. Although it was aimed particularly at securing information concerning the possibility of increasing the supply of technically trained persons, it produced results which are of interest in all fields.

Cole asked the Educational Testing Service to undertake a nation-wide research study which would involve a questionnaire and an aptitude test, both to be administered to a random sample of public secondary seniors and sophomores. This questionnaire was completed and returned by 32,750 seniors from various sections of the United States. They represented approximately 2.6 per cent of the nation's high school seniors at the time the survey was made. The academic aptitude test, although brief, enabled Cole to identify a group of students who, in his opinion, could reasonably be considered as possessing high level ability. Questionnaires for those who scored twelve or higher on the test were analyzed; this group included 9,689 seniors or about 30 per cent of the sample.

Cole found a considerable loss of talent between high school graduation and enrollment in college. He reported:

It would appear that in 1955 there are between 60,000 and 100,000 high school graduates of college ability who failed to enroll in college for financial reasons. There appears to be another group of approximately 100,000 in number who have high ability but who lack any interest in a higher degree. (6, p. 38)

One reason for identifying superior high school graduates, and encouraging them to go to college, is the current and anticipated demand for trained manpower. A second reason for the deep interest in this whole area is the possibility that there will be a need to establish criteria for selection of students, should higher education in general find it necessary to adopt selective admission.

This is a course which has been suggested by some educators, and one which is in practice in some institutions already. Generally speaking, however, any high school graduate who wants to attend college or university can gain admittance somewhere. Whether or not this will continue to be true is a question yet to be answered.

If conditions do develop so that selective principles must be applied, what method of selection should be followed? It will be noted that both the President's Commission on Higher Education and the Commission on Financing Higher Education based their recommendations on the assumption that superior young people could be identified in terms of test scores. Hollinshead wrote in terms of the I.Q., and the report by Cole, just cited,

was based on a group of students selected by scores on a test.

At the Tenth Annual National Conference on Higher Education in 1955, Arthur E. Traxler discussed the methods which should be employed in selecting college students. He pointed out that selection of students for college has always been an important aspect of American education, and that it has increased in complexity in recent years. He stated:

Within the next decade, the selection of college students will become an even more important and difficult problem than it is today. As the bulge in the population resulting from the increased birth rate during and at the end of World War II moves upward through the elementary and secondary schools and world war II moves upward through the elementary and secondary schools and into college, and as the proportion of young people desiring a college education increases, tremendous pressure for admission to college will develop. Even though colleges greatly expand their present facilities, it seems doubtful whether they will be able to provide for more than a fraction of those who apply.

In view of the growing acuteness of the admission situation, it is imperative that the best possible means of selecting college students be used, not only to make sure that individuals are evaluated fairly and thoroughly, but also to promote our national and social welfare. In the relentless struggle between the

promote our national and social welfare. In the relentless struggle between the free world and the forces of communism, a decisive factor may well be the quality of the young people who are chosen and trained for leadership in both the social and natural sciences. (26, pp. 49-50)

Traxler listed six "conventional college entrance criteria," which (1) graduation from an accredited high school, (2) a certain minimum number of subject-matter units, (3) average high school grade or rank in class, or both, (4) the high school principal's recommendation, (5) measured aptitude and achievement, and (6) personal qualities. (26, p. 50)

Emphasis is currently being placed on the fifth criterion, although it is generally assumed that persons who wish to enroll in college will have met the first-graduation from an accredited high school. It seems to be a common assumption that young persons who display certain levels of intelligence, as measured by various tests, should have the opportunity to go to college, since they would supposedly be successful in college work and profit from college attendance.

This assumption may be a valid one, but it is open to some question. Studies have shown that the rank in the high school graduating class is a better predictor of college success than is testing of any type. Harley F. Garrett surveyed all of the literature in this field prior to 1948 and concluded that both high school average and high school rank have greater predictive value than general achievement testing, intelligence testing, or aptitude testing. (10)

Many educators feel that it would be detrimental to education if colleges and universities found it necessary to restrict enrollments. Walter H. Wolff expressed this view recently, as follows:

If the facilities for higher education are not expanded, our colleges will perforce be more selective in their admissions. They may take care of the very top of our intellectual pyramid, but there will be shameful neglect of the many thousands of able young men and women who can become more useful members of society if they receive a sound college education. (29, p. 218)

Francis H. Horn believes that the decisions of educators concerning the problem of "Who should go to college?" may make very little difference in the over-all solution. He stated:

Ronald Thompson, Registrar, Ohio State University, in his valuable report on prospective college enrollments, indicates the first problem which confronts educational leaders is "the decision whether or not to continue to offer a college education to all who are willing and able to take advantage of the opportunity." I believe that that decision has already been made for us. It may have been made as long ago as the Northwest Ordinance, when provision was made for the establishment of what were to become the state universities; certainly as long ago as 1862, when the Morrill Act provided higher educational opportunities for the children of the agricultural and mechanical classes. The American tradition has been one of steadily expanding opportunities for higher education. American young people and their parents will see that opportunities are provided for "a college education to all who are willing and able to take advantage of the opportunity," at least to the extent that this is now true, regardless of whether educators think this is desirable or not. (16, p. 38)

Who goes to college now? In spite of the interest which has been shown in the number of high school graduates who go to college and the number who should go, there is a surprising lack of factual information on the subject. Probably the most ambitious studies in this area have been made in Minnesota and reported in Higher Education in Minnesota (17) and in After High School—What? (4)

The Minnesota Commission on Higher Education, which prepared the report on *Higher Education in Minnesota*, surveyed the Minnesota graduates of 1945, through high school principals, and found that 8 per cent of the boys and 21 per cent of the girls were in college during the first year after graduation from high school. The military situation distorted the figure on boys; the Commission estimated that the true percentage would be 24 if the demands of the armed services had not been a factor. (17, p. 83)

Berdie surveyed the Minnesota seniors during the 1949-50 school year, asking for information on their plans following graduation. He found that 35 per cent of all high school seniors in Minnesota planned to attend college. A follow-up study in the fall, on the basis of a sample of the graduating group, revealed that the number of students who actually attended college was almost exactly equal to the number who planned to attend. However, Berdie found that for every two exceptionally well-qualified students who were planning to attend Minnesota colleges, there was one high school graduate equally well-qualified who was not planning to continue his education. (4, p. 57)

Most studies reported in recent literature have been local in nature. L. B. Ezell and H. H. Tate made a survey of 1,572 students in eight high schools in and around Waco, Texas. They found that 57 per cent of the

senior boys and 44 per cent of the senior girls expected to go to college. (9, p. 218)

Robert R. Wiegman and Paul B. Jacobson reported on a study made by John F. Staehle in Oregon in 1950. It covered the post-graduation plans of 1,320 high school seniors in twenty-five high schools representing various geographical areas of the state. A follow-up on these 1,320 students in the fall disclosed that 427 or 32 per cent of them had continued their education. (28, p. 267)

Data on the number of high school seniors who continue their education, immediately upon graduation or later, are fragmentary and localized. As will be shown in Section III of this study, few of the state departments of education have specific information on this point.

What factors determine who goes to college? A number of factors enter into the decision which each individual high school graduate makes whether or not to go to college. No doubt the various factors carry different weights for each of the more than one million boys and girls who finish their high school work every year. It is doubtful that any formula will ever be devised which will predict the decision which any individual graduate might make.

There are certain factors, however, which in most cases seem to have considerable influence. In a recent publication of the American Council on Education, *Background for a National Scholarship Policy*, compiled and edited by Elmer D. West, the following factors were considered: ability, geographic location, sex, economic factors, the education-family-occupation complex, and the identification and counseling activity. West concluded:

It is doubtful, however, that the influence of any one of these has ever been determined in isolation from the others. Thus "How much money is required to cause a boy or girl at what ability level and under what family education and occupation levels to go how many miles to college when influenced by what community traditions and what counseling activities" might express the complexity of the problem. (27, p. 69)

There seems to be little doubt concerning the importance of ability

There seems to be little doubt concerning the importance of ability as a factor in determining whether or not high school graduates go to college. Whether "ability" is measured by academic achievement or by test results, many studies have shown that the superior graduates go to college in larger numbers than do their classmates. Wolfle found that 53 per cent of the high school graduates who rank in the upper fifth of their classes continue their education, while only 17 per cent of those who rank in the lower fifth continue. (29, p. 149)

He found also that 66 per cent of those graduates who scored the equivalent of 155 or above on the Army General Classification Test went to college. The percentage dropped for each ten-unit interval on the test results, with only four per cent of those students scoring below 65 continuing their education. (29, p. 152)

Hollinshead has reported that most of the graduates who rank at the top of their class tend to enroll in college, but that the loss of talent increases rapidly. He found:

As with the proportion of young people able to graduate, the proportion who go to college increases with ability. Of those who might be called "geniuses," almost all will be in college. The proportion declines in lower levels of ability, following a steady curve until at the 80th percentile about one out of every three young persons will go to college. The greatest loss of talent is therefore among those ranking some distance below the top. This percentage varies, of course, from state to state and from region to region. But however much it varies, the foregoing fact is significant and is seldom pointed out. (15, pp. 72-3)

Cole's study, based on an aptitude test given to 9,689 seniors, showed that more of the graduates who made high scores planned to go to college. Only 34 per cent of the seniors with a score of twelve points said they planned to continue their education, while 69 per cent of those with a score of thirty points intended to enroll in college. (6, p. 36)

A general conclusion which can be drawn from this evidence is that young people with superior academic ability, as reflected in their high school performance and in testing, are more likely to continue their education than are those who seem to be average or below in ability. Although this is true, it is also a fact that many young people with superior ability do not go beyond the high school level and that there is a considerable loss of talent as a result.

Boys tend to go to college in larger numbers than do girls. With regard to sex as a factor in determining college attendance, Wolfle concluded:

More girls than boys graduate from high school. Before World War II the

ratio was usually around 45 boys to 55 girls . . .

Of high school graduates, the percentage of boys entering college is larger than is the percentage of girls. But there seems to be a difference in the timing of their entry; more boys work a year or two between high school and college

In the fall of 1952, 60 per cent of the students who were attending college for the first time were men and 40 per cent were women. (30, pp. 163-4.)

West concluded: "A higher percentage of high-ability boys than of girls continue in postsecondary education." (27, p. 98) Berdie found that

Of the high-ability boys, 25 per cent were not planning to attend college; of the high-ability girls, 38 per cent were planning for activities other than college. Thus, the waste of talent among girls is approximately 50 per cent greater than the waste among boys. (4, p. 59)

It has often been assumed that the most important barrier to higher education for more American youth is a financial one. Typical of the studies which stress this viewpoint is that of Helen E. Goetsch in 1937 and 1938. She found that "the most common reasons reported for not being a regular college student were economic." (11, p. 27) Her studies included 1,023 graduates of twelve Milwaukee high schools, and were limited to students of superior ability as reflected by the Henmon-Nelson

Test of Mental Ability. She concluded that "college attendance for bright boys and girls in Milwaukee is largely dependent on the economic status of their parents." (11, p. 32)

In a study which included 529 graduating seniors in Iowa in 1946, Leo T. Phearman determined that

One of three youth of those who ranked in the upper quarter academically attested to being denied a college education because his family could not afford to provide further education for him. (18)

A similar study, conducted by Leroy E. Barber in Pennsylvania in 1948, showed that the chief reason listed by 111 superior high school graduates for not attending college was "lack of finances." More than one-third of the 111 boys and girls said this was the reason they did not enter college. (3, p. 95)

Berdie stated:

The data presented in this volume, considered with the results of the previous studies, leave little doubt that a family's economic resources determine in part whether or not its children attend college. Children coming from homes on a high economic level plan to attend college to a far greater extent than do children coming from homes lower on the economic ladder. (4, p. 59)

The President's Commission on Higher Education emphasized the importance of the economic factor in determining who does and does not go to college. The Commission stated:

The old, comfortable idea that "any boy can get a college education who has it in him" simply is not true. Low family income, together with the rising costs of education, constitutes an almost impassable barrier to college education for many young people. For some, in fact, the barrier is raised so early in life that it prevents them from attending high school even when free public high schools exist near their homes. (20, p. 28)

Algo D. Henderson wrote recently:

That lack of sufficient funds is a primary cause of the non-attendance of youth at college has been the conclusion of all of the studies of which I am aware, including those by the American Youth Commission, the President's Commission on Higher Education, the New York Commission to Study the Needs for a State University, and the Commission on Financing Higher Education. And those authorities, such as Havighurst, who define the problem as socio-economic rather than purely economic would agree, I am sure, that in the long run it is the financial situation that largely determines the social one. (14, pp. 14-5)

As Henderson implies, some authorities believe that the economic factor has been exaggerated as a barrier to higher education for American youth. They recognize its importance, but they believe that other factors enter into the picture to a greater extent than has been realized.

Barber, whose study has just been cited, found that such factors as "lack of academic interests, lack of serious purpose, preference for work experience, and preference for more challenging work" were frequently mentioned by high-ability graduates who did not go to college. (3, p. 95)

Berdie concluded that lack of money was not the only important factor in determining whether or not high-ability students planned on attending college. He referred to a "substantial number of high-ability youngsters who, as they perceived their situations, could afford to go to college and yet had decided not to attend " (4, pp. 143-4) Havighurst stated:

Financial barriers are the principal reason for not going on to college in the case of about a third of superior youth who do not go, while the other two thirds lack sufficient motivation to go. (13, p. 161)

Floyd W. Reeves listed "limited financial resources" as one of the barriers to higher education, but placed it second to "restricted curriculums and inadequate educational facilities." (21, p. 215) He cited other factors, including geographic barriers and racial and ethnic barriers, as being of considerable importance.

Elmo Roper surveyed a number of high school seniors in 1947. He reported that there was a sizeable group of graduates who said they would not go to college or university even if they were assured of admission. When asked if they would go providing they were offered scholarships which would pay tuition and half of all other expenses, only 32 per cent replied that they would do so. (22, p. 226)

Closely allied to the economic factor, and perhaps inseparable from it, is the factor which may be described as parental occupation or family background. Many studies show that children whose parents are in professional or managerial occupations tend to go to college in greater number than do children whose parents are farmers, laborers, and so on. Is this because of family background, or is it because the parents in the former group usually are in a higher income bracket?

The evidence that such children do continue their education beyond high school is rather conclusive. Wolfle found that: "The occupation of a high school student's father is a good predictor of whether or not he will enter college." Approximately two-thirds of the children whose parents were in professional and semiprofessional work go to college, he found, while only one-fourth of the children whose parents are craftsmen, factory, or unskilled workers continue their education. (30, pp. 158-60) found:

. . . local studies have frequently shown that interest in college-going is greater among students from professional groups than from farm and labor classes. This hypothesis was confirmed by the national study. It reveals that 83 per cent of the boys in the high-scoring group whose fathers are in medicine and 65 per cent of the boys whose fathers are in scientific professions intend to go to college immediately after graduation. Only 38 per cent of the sons of farmers and 25 per cent of the sons of semi-skilled workers intend to go directly to college. (6, p. 36)

Berdie stated that approximately 90 per cent of high school seniors who had fathers in top-level occupations planned to go to college as against only 55 per cent whose fathers were factory laborers. He found also that the difference is greater for all graduates than for those with

superior ability. He reported:

Whereas 92 per cent of the high-ability sons of professional workers planned to attend college and 69 per cent of the high-ability sons of factory workers also had college plans—a difference of 23 per cent—81 per cent of all the sons of professional workers planned to attend college as compared with 30 per cent of all the sons of factory workers—a difference of 50 per cent. (4, p. 60)

Another factor which is known to be influential in determining college attendance is that of geographic location. Berdie found that "Where a person lives has . . . a direct relationship to his chances for attending college." (4, p. 58) John Dale Russell stated:

There is definite evidence from research studies showing that young people living outside commuting distance from an institution of higher education tend to enroll in colleges and universities to a much smaller extent than those living within commuting distance. For example, in the counties of New Mexico in which the accredited institutions of higher education are located, the percentage of youth population attending college is about three times the percentage attending college from counties not having an accredited college or university. (24, p. 41)

Reeves estimated: "The percentage of youth of college age attending college is between two and three times as large in communities where colleges are located as in communities without colleges." (21, p. 216)

The geographic factor operates on the local level—that is, within states or areas of states—as has been indicated. It operates also on the national level. There are surprising variations among the states in the percentage of college-age youth attending college.

Wolfle estimated that this percentage ranged from 10 to 30. He quoted a study made in 1949-50 by Robert C. Story, which reported:

The 10 States having the highest proportion of their local population in college are: Utah, District of Columbia, New York, Idaho, Colorado, Kansas, Oklahoma, Washington, California, and Montana. In considering the geographical distribution of these States, it may be of interest to point out that in the three previous studies the top 10 States (exclusive of D.C.) were all west of the Mississippi. Thus, for the first time in many years an eastern State has gained a place among the upper 10. (30, p. 166)

There are other factors which enter into each individual decision reached by a high school graduate concerning further education. Wolfle has said that "desire for college training" is perhaps the most important of all, since it "has no effective substitute." (30, p. 156) Matrimonial plans, numerous opportunities for employment, the presence or absence of guidance services in the high school—these and many other factors must be considered in combination. Nevertheless, it is possible to isolate and to study important reasons for high school graduates choosing to attend or not to attend college.

Need for additional research. In spite of the interest which has been shown in such problems as who should go to college, who goes to college now, and which factors determine who attends college, it is evident that there is a lack of basic data pertaining to the current situation. This information, for the most part, will have to come from local sources. While nationwide studies are interesting and significant, they are not so useful

to persons immediately concerned with solving the problems as are studies which take into account local conditions.

It was with this thought in mind that the study of the post-graduation activities of the Kansas high school seniors of 1955 was undertaken.

SECTION III. POST-GRADUATION ACTIVITIES OF 1955 KANSAS HIGH SCHOOL GRADUATES

Number and per cent in various activities. Forty of every one hundred 1955 graduates of Kansas high schools enrolled in a college or university in the fall following graduation, according to information supplied by their high school principals. The exact number was 7,823 of the 19,349 graduates included in this study, or a percentage of 40.4. The number of boys attending college was 4,563 or 46.3 per cent of the male graduates, while the number of girls was 3,260 or 34.3 per cent.

More of the 1955 graduates went to college than entered any other type of activity. The number of graduates reported as employed was 4,077 or 26.2 per cent of the total. There was very little difference between the percentage of boys and girls reported as employed.

Business or trade schools attracted 664 of the 1955 graduates. There were 509 graduates who began nurse's training. Military service accounted for 1,098 of the 1955 seniors, while 1,350 girls were married and not otherwise employed.

Miscellaneous activities, not covered elsewhere in the survey form, accounted for 1,006 graduates. The activities of 1,115 graduates were reported as unknown by their principals, while no report was submitted on 707 individuals.

Detailed information on the post-graduation activities of the 19,349 Kansas high school seniors, as reported by their principals, is contained in Table I.

TABLE I
POST-GRADUATION ACTIVITIES OF 1955 KANSAS HIGH SCHOOL
GRADUATES AS REPORTED BY PRINCIPALS

Activity	Ве	oys	G	irls	To	otal
Activity	Number	Per cent	Number	Per cent	Number	Per cent
Employed full time	2619	26.6	2458	25.8	5077	26.2
College or university	4563	46.3	3260	34.3	7823	40.4
Business or trade school	196	2.0	468	4.9	664	3.4
Nurse's training	6	.1	503	5.3	509	2.6
Military service	1070	10.9	28	.3	1098	5.7
Married (girls)			1350	14.2	1350	7.0
Miscellaneous	518	5.3	488	5.2	1006	5.2
Unknown	532	5.4	583	6.1	1115	5.8
Not reported	332	3.4	375	3.9	707	3.7
Total	9836	100	9513	100	19349	100

Information comparable to that in Table I for previous graduating groups in Kansas is not available, nor are there many studies similar in scope in other states. Two studies made in Minnesota, one in 1938 and one in 1945, provide some basis for comparison. In *Higher Education in Minnesota*, prepared by the Minnesota Commission on Higher Education, the post-graduation activities of these two classes are reported. (17)

Two-thirds of the boys who graduated in the Minnesota class of 1945 went into military service almost immediately after graduation. Because of this abnormal situation, the Commission decided that

an adjustment was required to make the results comparable with the findings of the 1938 study and amenable to peace-time interpretation. This adjustment involved the separate analysis of civilian men. (17, p. 85)

Figures compiled on the basis of this adjustment showed that from the Minnesota class of 1945, 54 per cent of the men and 52 per cent of the women went into full time employment. For the Minnesota class of 1938, these percentages had been 48 for the men and 38 for the women. From the Kansas class of 1955, 27 per cent of the men and 26 per cent of the women went to work.

From the Minnesota class of 1945, 24 per cent of the men and 21 per cent of the women enrolled in college or university. These percentages varied only slightly from those reported for the class of 1938, which had been 24 per cent for men and 20 per cent for women. (17, p. 84) As has been reported in this section, 46 per cent of the men and 34 per cent of the women from the Kansas class of 1955 went to college.

Unless there are basic differences between the high school graduates of Minnesota and of Kansas, it would seem that the ten-year period between 1945 and 1955 produced a marked increase in the number of high school graduates enrolling in colleges and universities, and a corresponding decrease in the number going immediately into employment.

Comparisons by size of high school. Some tabulations of data obtained for this study were made on the basis of size of the high schools from which the graduates came. A close examination of these data reveal that size of school seems to have some relationship to post-graduation activities, particularly with respect to enrollment in college. Slightly more than half of the graduates of AA schools (those with an enrollment of more than 475) went immediately to college. The percentage for schools in Group A (with enrollments of 151 to 475) was 37.0, and this percentage dropped to 34.0 for schools in Group B (61 to 150 enrollment). The schools in Group BB (60 and under in enrollment) had a percentage of 29.4 graduates going to college.

The number and per cent of graduates who enrolled in college following their graduation, by sex and according to the size of school they attended are reported in Table II.

TABLE II

	GRAL	OUATION,	GRADUATION, ACCORDING TO SIZE OF SCHOOL ATTENDED	G TO SIZ	E OF SC	HOOL ATTE	NDED		
		Boys			Girls			Total	
Size of School	No. of grads	No. to college	Per cent	No. of grads	No. to college	Per cent	No. of grads	No. to college	Per
Group AA (over 475)	3710	2118	57.1	3726	1608	43.2	7436	3726	50.1
Group A (151-475)	2572	1104	42.9	2530	785	31.0	5102	1889	37.0
Group B (61-150)	2291	917	40.0	2139	591	27.6	4430	1508	34.0
Group BB (60 and under)	1263	424	33.5	1118	276	24.7	2381	700	29.4
Total	9836	4563	46.4	9513	3260	34.3	19349	7823	40.4

There were variations also in the number and per cent of graduates going into other activities. Almost a third of the seniors graduating from schools in Groups A, B and BB were employed full time, while the corresponding percentage in Group AA was only 18.6 of the number of graduates in that group. Business and trade schools drew more than five per cent of the graduates from Group B and Group BB schools, but only 3.9 per cent of the graduates from Group A schools and 1.5 per cent of the graduates from Group AA schools.

There was little difference in the percentages of graduates going into nurse's training from schools of various size, although Groups B and BB were slightly higher than Groups AA and A. The smaller schools, in Group BB, had more graduates going into military service on a percentage basis, but the difference was slight—from 4.3 for Group AA to 7.6 for Group BB.

The variation in per cent of girls getting married was slight, also, ranging from 5.3 for Group AA to 8.3 for Group BB. The principals in Group BB reported that 10 per cent of their graduates were in "miscellaneous activities." No attempt was made to identify these activities specifically, but from comments on some of the survey forms, it was evident that boys employed on the farm and girls living at home were included in this category. Principals in Group AA schools listed only 1.6 per cent of their graduates under the "miscellaneous" heading.

It was evident that principals in smaller schools had much better knowledge of the post-graduation activities of their seniors than did principals in larger schools. Principals in Group BB reported only 2.2 per cent of their graduates in the "unknown" category. The Group B percentage was 2.3 while principals in Group A did not have information on 4.1 per cent of their graduates. Principals in the large schools of the state which made up Group AA, however, reported that they had no information on 10.1 per cent of their graduates.

Certainly it is understandable that the principal of a school with 300 graduates might have more difficulty in getting such information than would the principal of a high school with thirty graduates—and the principal of a school with three graduates should have even less of a problem. The reports would indicate, however, that administrators and guidance personnel in some of the larger schools need to improve their methods of assembling and recording information concerning the post-graduation activities of their seniors. Such information is basic to the operation of a follow-up program and, therefore, to the offerings of the school.

The data on enrollment in college. The fact that 40.4 per cent of the 1955 graduates of Kansas high schools enrolled in college or university in the fall following their graduation is a major finding of this study. The question naturally arises: Is this percentage high or low? An unqualified answer cannot be given, since accurate data on the number and

per cent of high school graduates who go to college in the first year after graduation are not available on a national level or, in many instances, on the state level.

The figure of 35 per cent is often quoted as a "national average" of high school graduates who continue their education. For example, the American Association of Collegiate Registrars and Admissions Officers uses this figure in its publication, Secondary School-College Co-operation. The Association states: "About thirty-five per cent of secondary school graduates enter college, and this is increasing about one per cent a year." (1, p. 2) This is an estimate based on the percentage of an age group enrolled in college or university, rather than on specific information concerning the number of high school graduates of any one year who actually enrolled in higher educational institution the following fall. Probably it is reasonably accurate, but it cannot be regarded as being exactly comparable to the findings in this study.

As will be shown later in this report, only twenty-two of forty-seven states (excluding Kansas) could report the number and per cent of graduates continuing their education in any recent year. Since seven of these states ranked above the Kansas percentage of 40.4 and fifteen of them ranked below that figure, it can be concluded that the record of Kansas as a state is somewhat above the known national average.

Several conclusions can be drawn from the facts on college attendance on the part of 1955 Kansas high school graduates. Boys who graduate from Kansas high schools tend to go to college in larger numbers than do the girls who are their classmates. This same situation was found to exist in the nine other states (California, Delaware, Maryland, Missouri, New Jersey, North Carolina, Rhode Island, Vermont and West Virginia) which could furnish comparable data. All reported a higher percentage of male high school graduates continuing their education in colleges or universities. No state reported more girls than boys going to college after graduating from high school.

Furthermore, it is probable that a larger per cent of the boys who do not immediately continue their education will do so at a later date. This conclusion is based on the fact that 10.9 per cent of the boys went into military service, and it can be assumed that some of them will enroll in colleges or universities after their period of service has been completed. The same possibility exists for the 14.2 per cent of the girls who married soon after graduating, but practical considerations make it doubtful that this will occur in many cases.

Another conclusion which may be reached is that there is very little difference between the records of public high schools and private high schools as far as college attendance by graduates is concerned. Both groups of schools reported that 40 per cent of their graduates were con-

tinuing their education. The public high schools reported a percentage of 46 for boys, 34 for girls, while the private high schools reported that 48 per cent of their male graduates and 34 per cent of their female graduates enrolled in institutions of higher education in the fall of 1955.

Certainly the conclusion can be drawn that there is a need for more information concerning the post-graduation activities of high school seniors. Without an accurate knowledge of what actually happens to graduates of high schools, college admissions officers and high school guidance counselors are forced to rely on assumptions which may not be correct. This information should be available for the nation and for each state, but of most importance is the need for it on the local level.

Variation among schools. This is apparent when the figures on percentage of enrollment in college for the 613 Kansas high schools included in this study are examined. The variation is extreme, from zero per cent to 100 per cent. There were a few schools from which all graduates went to college, and there were some schools from which no graduates went to college.

It should be noted that this extreme variation occurred chiefly in the smaller schools of the state, of which Kansas has many. A school with one graduate who goes to college has a record of 100 per cent, while a school with two graduates, neither of whom goes to college, has a record of zero per cent.

While that explanation may account for the variation found among some schools, it does not answer all of the questions which are raised by a close examination of the figures. Within one county, for example, there are two schools of comparable size. In 1955, one school graduated 132 boys and girls while the other graduated 141. The first reported that 16 per cent of its graduates went to college, while the second reported that 63 per cent continued their education. Such situations require local analysis and local action.

Half of the high schools of the state had fewer than one-third of their 1955 graduates in college in the fall following their graduation. This fact was determined by means of a frequency distribution of the percentages of enrollment in college for the 613 schools included in the study.

The median for all schools was 33.0 per cent, which is 7.4 percentage points lower than the mean of 40.4 for all schools combined. The median for schools in Group AA is 50.7, which compares very closely with the mean of 50.1 for graduates of those schools. For schools in Group A, the median is 36.6, while the mean is 37.0. For schools in Group B, the median is 33.4; the mean for schools in that group is 34.0. For the schools in Group BB, the median is 26.0 and the mean, 29.4.

These facts indicate that there is more variation to be found in the small schools as far as percentage of enrollment in college by graduating

seniors is concerned. Such a result could be expected, since the percentage figure is more susceptible to variation where the number of graduates is small.

A summary of the percentage figures for schools in Groups AA, A, B and BB and for all schools combined is presented in Table III.

TABLE III

PERCENTAGE OF COLLEGE ATTENDANCE FROM 613 KANSAS HIGH
SCHOOL GRADUATING CLASSES, 1955

Per cent	Group AA	Group A	Group B	Group BB	Tota
96-100	0	0	0	2	2
91- 95	0	0	0	0	0
86- 90	0	0	0	0	1
81- 85	0	0	0	0	0
76- 80	0	0	1	2	3
71- 75	0	G	2	3	5
66- 70	1	1	7	8	17
61- 65	3	2	4	2	11
56- 60	3	7	7	12	29
51- 55	12	4	3	6	25
46- 50	4	9	14	16	43
41- 45	3	16	23	16	58
36- 40	5	14	32	24	75
31- 35	2	17	27	28	74
26- 30	0	14	17	15	46
21- 25	1	8	29	22	60
16- 20	3	5	18	28	54
11- 15	0	2	10	26	38
6- 10	0	G	11	11	22
0- 5	0	1	4	45	50
Total	37	100	209	267	613

Variation among schools by county. Kansas has 105 counties, ranging in population from 2,007 to 260,150. Each county has at least one high school, while Sedgwick has sixteen, the largest number of high schools found in any county.

The variation in percentage of 1955 graduates going to college was not so extreme on a county basis as on an individual school basis, but it was still marked. Pawnee county ranked first among the 105 counties of Kansas, with 61.7 per cent of its 1955 graduates continuing their education. Grant county ranked second with 60.0 per cent. It is interesting to note that both of these counties are in the western half of the state, which has only one four-year institution and three two-year colleges.

Ranking last among the counties was Finney, which is also in western Kansas. It should be pointed out, however, that Finney county is represented in the study only by two small high schools; the largest high school in the county, at Garden City, did not submit a report. Information from another source (reports to the State Department of Public Instruction) indicates that 63 per cent of the Garden City high school graduates went to college, most of them to the junior college in that community. Had the Garden City graduates been included in the county total, Finney county would have ranked much higher.

Next to Finney county, Washington county reported the lowest percentage of attendance, with 16.8 per cent of its graduates going to college. A summary of the number and per cent of 1955 Kansas high school graduates who enrolled in college or university, by counties, is presented in Table IV.

As with variations among individual schools, variations among counties are to be expected. The extreme differences among the counties would seem to require some explanation, however, and would indicate that there is a need for close local study of the situation. Comparative data for former years are not available; if information of this type can be gathered and reported over a period of time, trends which will be more meaningful than the report on a single graduating group may appear.

The "proximity" factor and enrollment in college by high school graduates. It has long been assumed that boys and girls graduating from high schools near a college are more likely to continue their education than are those who graduate from schools not located close to an institution of higher education.

To gather objective information on this point about 1955 Kansas high school graduates, principals of the 613 schools participating in the study were asked to place their schools in one of seven categories, which were: (1) in a community with more than one higher educational institution; (2) in a community with one higher educational institution; (3) within ten miles of such an institution, but not in the same community; (4) within twenty-five miles, but more than ten; (5) within fifty miles, but more than twenty-five; (6) within one hundred miles, but more than fifty, and (7) farther than one hundred miles from the nearest college or university.

The results of the survey seem to bear out the assumption that proximity is a factor in encouraging college enrollment on the part of graduating seniors. Almost one-half of the graduates of schools with more than one college in the community continued their education. The percentage dropped only slightly (from 49.0 to 47.9) for schools with one higher educational institution. It fell to 40.0 for schools located within ten miles of a community with a college, and to 34.9 for schools farther than ten miles but within twenty-five miles of such a community.

TABLE IV

NUMBER AND PER CENT OF 1955 KANSAS HIGH SCHOOL GRADUATES WHO ENROLLED IN COLLEGE, BY COUNTIES

County	Number of schools	Number of graduates	Number enrolled in college	Per cent enrolled in college
Allen	5	176	76	43.2
Anderson	6	137	39	28.5
Atchison	5	275	84	30.5
Barber	7	124	42	33.9
Barton	7	330	143	43.3
Bourbon	4	130	63	48.5
Brown	10	163	59	36.2
Butler	14	438	179	40.9
Chase	7	63	27	42.9
Chautaqua	2	71	28	39.4
Cherokee	5	266	107	40.2
	1	286 28	107	35.7
Cheyenne				
Clark	3 5	61	31	50.8
Clay		106	33	31.1
Cloud	8	177	43	24.3
Coffey	5	130	34	26.2
Comanche	3	68	30	44.1
Cowley	8	453	220	48.6
Crawford	12	364	143	39.3
Decatur	4	94	32	34.0
Dickinson	7	264	83	31.4
Doniphan	7	112	40	35.7
Douglas	6	382	137	35.9
Edwards	5	90	37	41.1
Elk	5	69	18	26.1
Ellis	4	175	80	45.7
Ellsworth	5	100	34	34.0
Finney	2	21	2	9.5
Ford	8	226	118	52.2
Franklin	8	222	68	30.6
Geary	3	133	65	48.9
Gove	5	76	27	35.5
Graham	3	58	16	27.6
Grant	1	45	27	60.0
Gray	5	64	25	39.1
Greeley	1	36	18	50.0
Greenwood	11	166	50	30.1
Hamilton	3	42	15	35.7
Harper	4	95	35	36.8
Harvey	6	254	100	39.4
Haskell	2	35	13	37.1
Hodgeman	f 2	33	15	45.5
Jackson	7	113	32	28.3
Jefferson	7	125	24	19.2
Jewell	9	120	28	23.3
Johnson	12	743	421	56.7
Kearny	2	30	8	26.7
Kingman	6	124	32	25.8
Kiowa	4	70	33	47.1
Labette	7	382	152	39.8
	2	37	14	37.8
Lane				

TABLE IV (Continued)

	$egin{array}{c} oldsymbol{\mathrm{Number}} \ oldsymbol{\mathrm{of}} \end{array}$	$\begin{array}{c} \mathbf{Number} \\ \mathbf{of} \end{array}$	Number enrolled	Per cent enrolled
	schools	graduates	in college	in college
Lincoln	4	79	23	29.1
Linn	5	114	42	36.8
Logan	5	77	21	27.3
Lyon	11	281	130	46.3
Marion	11	182	60	33.0
Marshall	9	203	53	26.1
McPherson	10	303	136	44.9
Meade				
	4	93	43	46.2
Miami	6	213	65	30.5
Mitchell	5	107	38	35.5
Montgomery	7	479	256	53.4
Morris	6	91	25	27.5
Morton	2	31	9	29.0
Nemaha	12	203	43	21.2
Neosho	5	235	97	41.3
Ness	7	95	40	42.1
Norton	6	96	32	33.3
Osage	9	121	25	20.7
Osborne	5	109	39	35.8
Ottawa	6	68	16	23.5
Pawnee	5	107	66	61.7
Phillips	5	87	33	37.9
Pottawatomie	9			
		141	41	29.1
Pratt	6	136	75	55.1
Rawlins	3	81	26	32.1
Reno	13	565	274	48.5
Republic	8	112	3 8	33.9
Rice	8	\ 212	82	38.7
Riley	7	189	99	52.4
Rooks	7	134	62	46.3
Rush	5	83	29	34.9
Russell	8	167	63	37.7
Saline	8	351	177	50.1
Scott	2	55	17	30.9
Sedgwick	16	1824	942	51.6
Seward	2	105	45	42.9
Shawnee	8	745	327	43.9
Shawhee Sheridan	2	58	14	24.1
Sherman	3	85	36	42.3
Smith	4	67	22	32.8
Stafford	5	110	50	45.5
Stanton	2	27	13	48.1
Stevens	2	46	21	45.6
Sumner	10	322	111	34.5
Thomas	6	74	28	37.8
Trego	1	46	14	30.4
Wabaunsee	5	73	15	20.5
Wallace	2	34	10	29.4
Washington	9	143	24	16.8
Wichita	1	25	8	32.0
Wilson	8	180	69	38.3
Woodson	3	83	22	26.5
Wyandotte	10	1358	501	36.9
Total	613	19349	7823	40.4

Beyond the ten-mile radius, location did not seem to have much effect on the percentage of college enrollment. In fact, schools which were fifty to one hundred miles from a college had a higher rate of enrollment than did schools twenty-five to fifty miles from the nearest collegiate institution. Schools farther than one hundred miles from a college ranked higher still; however, the relatively small number of schools and graduates in the latter category would tend to make this figure inconclusive.

A complete report on the number of schools, the number of graduates, the number and per cent enrolling in college, with respect to geographical location of the schools in relation to the nearest college, is contained in Table V.

While the generalized conclusion that proximity to a collegiate institution is a factor in determining the number of high school graduates who continue their education can be supported, there are exceptional circumstances which should not be overlooked. A close examination of the figures on percentage of college attendance among graduates of individual high schools in Kansas reveals a number of cases which do not conform to the general pattern. For example, Kansas City, Kansas, in Wyandotte county, has five large high schools within the city limits. Four are public schools and one is private. Three of the schools are below the state average, 40.4, in percentage of graduates entering college. Two are above it. It is obvious that in 1955 factors other than proximity were in operation in Kansas City, which has both a public junior college and a private junior college.

Wichita offers another interesting example. Two large public high schools reported that 60 per cent of their 1955 graduates went to college. A third reported that only 20 per cent of its graduates continued their education. The fourth public high school did not participate in the study. Of the two private high schools in the city, one (an all-girl institution) reported that 30 per cent of its graduates went to college, while the other (which is co-educational) reported that 47 per cent continued their education.

Wichita has a municipal university, a private four-year university and a private two-year college. Factors other than the presence of these institutions in the city seem to have had considerable influence on the number and per cent of Wichita high school graduates who went to college. It is probable that the difference in socio-economic background of the students who attend the three large public high schools had a great deal to do with the variation in percentage of enrollment in college among the graduates of those three schools. The school which reported the low percentage of enrollment has a large number of students from families in the low income brackets. Furthermore, students tend to come and go, as families move to and away from Wichita according to the availability of

TABLE V

NUMBER AND PER CENT OF 1955 KANSAS SENIORS WHO ENROLLED IN COLLEGE, ACCORDING TO GEOGRAPHICAL LOCATION OF HIGH SCHOOL ATTENDED WITH RELATION TO NEAREST COLLEGE OR UNIVERSITY

Locatic	Location of high school	Number of graduates	Number enrolling in college	Per cent	Number of schools
(1) In	(1) In community with more than one higher education institution	3765	1846	49.0	2 3 88
(2) In ed	(2) In community with one higher education institution	4117	1971	47.9	46
(3) W th	(3) Within ten miles, but not in the same community	1481	593	40.0	42
(4) W br	(4) Within twenty-five miles, but more than ten	3803	1329	34.9	177
(5) W th	(5) Within fifty miles, but more than twenty-five	3168	1026	32.4	167
W (9)	(6) Within 100 miles, but more than fifty	2390	819	34.3	121
(7) F3	(7) Farther than 100 miles from nearest higher education institution	625	239	38.2	32
ř	Total	19349	7823	40.4	613

employment. This situation is not so prevalent in the two schools which reported a high percentage of enrollment in college on the part of their 1955 graduates.

In Section II of this report, John Dale Russell was quoted as saying:

There is definite evidence from research studies showing that young people living outside commuting distance from an institution of higher education tend to enroll in colleges and universities to a much smaller extent than those living within commuting distance. For example, in the counties of New Mexico in which the accredited institutions of higher education are located, the percentage of youth population attending college is about three times the precentage attending college from counties not having an accredited college or university. (24, p. 41)

The results of this study confirm Russell's general statement, but they indicate that the effect of a college or university is not so pronounced in Kansas as he found it to be in New Mexico. Twenty-nine of the 105 Kansas counties have at least one institution of higher education. Of these twenty-nine counties, sixteen had a percentage of enrollment on the part of 1955 high school graduates which exceeded the state average of 40.4. Thirteen were lower than the state average.

Much seems to depend on the type of college or university which is available. Publicly supported institutions evidently have more effect on enrollment of nearby high school graduates than do privately supported colleges and universities.

There are examples, however, which run counter to this trend. Of the five counties which have state-supported institutions of higher education, three are above the statewide percentage of enrollment in college by 1955 high school graduates, while two are below it. The high schools in Douglas county, which has the state university as well as a private four-year college, reported that only 35.9 per cent of their graduates enrolled in college in 1955. The state average was 40.4 per cent. Schools in Crawford county, which has a state teachers college, reported that 39.3 per cent of their graduates were in college in the fall of 1955. Ellis county, with a state college, had a percentage of 45.7 for the graduates of its high schools; Lyon county, with a state teachers college and a private fouryear college, had a combined percentage of 46.3 for the graduates of its high schools. Riley county, in which a state college is located, had the highest percentage of enrollment among the five counties with statesupported institutions. Its high schools reported that 52.4 per cent of their graduates were continuing their education at colleges or universities.

No ready explanation for these differences is apparent. Perhaps the most valid conclusion which can be drawn from the facts is that because the differences do exist, there is a need for local study of the factors which operate to encourage or discourage high school graduates with respect to college attendance.

It is difficult to compare the effects which various types of institutions have on college enrollment within their home counties, because ten of the twenty-nine counties have two or three colleges or universities, of varying types. The results show, however, that counties with publicly supported junior colleges have higher percentages of enrollment in college for their high school graduates than do most other counties in Kansas. Allen, Bourbon, Butler, Ford, Montgomery, Neosho, Pratt and Reno counties all have two-year public colleges, and all were above the state average with respect to per cent of 1955 high school graduates who continued their education. The difference ranged from one-half of one per cent, for Butler county, to 14.7 percent, for Pratt county.

Doniphan, Finney and Labette counties, which have publicly supported two-year colleges, were below the state average in percentage of enrollment. The report on Finney county was incomplete, however, and it should be disregarded. Labette county was only .6 of a percentage point under the state average.

The presence of a privately supported two-year college in a county does not seem to have increased the number of high school graduates who continued their education. Cloud and Miami counties have private two-year colleges and no other type of higher educational institution. Cloud county reported only 24.3 per cent of its graduates enrolling in college, while Miami county reported only 30.5 per cent of attendance.

In conclusion, it can be said that the results of this study indicate generally that the presence of a college or university in a county or region seems to increase the probability that the high school graduates of that county or region will continue their formal education. This conclusion must be qualified, however, by stating that the type of institution—which would involve such considerations as curricula offered, cost of attendance, religious affiliation, social program, etc.—seems to have a great deal of influence in determining how strong the effect will be. It would also seem that the importance of proximity as a factor in determining the number of high school graduates who will continue their education has been overemphasized and oversimplified in the literature dealing with this subject.

The "size of high school" factor and enrollment in college by high school graduates. It has already been pointed out in this report that the graduates of the larger high schools in Kansas, in 1955, enrolled in college at a higher percentage rate than did the graduates of the smaller high schools. The relationship between size of school from which the individual graduates and the probability of his continuing his formal education is one which has not been given much consideration in previous studies, so there is little basis for comparison of the Kansas results with those in other states.

Briefly stated, the findings of this study were as follows: Half of the 1955 graduates of Group AA schools enrolled in college or university in the fall following their graduation. Thirty-seven of every one hundred graduates of Group A schools continued their education, while thirty-four of every one hundred graduates of Group B schools did so. Twenty-nine of every one hundred graduates of Group BB schools enrolled in collegiate institutions.

There were numerous examples of individual schools whose records of college attendance by 1955 graduates do not conform to the pattern just cited. Bennington high school reported that four of its five graduates went to college. Eight of the nine graduates of Elmdale high school enrolled in college in the fall of 1955. Of the fourteen graduates of Garfield high school, eleven entered higher educational institutions. All of these were Group BB schools.

On the other hand, Highland Park high school reported that only 23 per cent of its eighty-eight graduates went to college in 1955. Argentine high school, in Kansas City, had a percentage of 32, while Washington high school (located in a suburb of Kansas City) reported that only 19 per cent of its graduates continued their education. These schools were in Group AA.

It seems unlikely that size of school itself is a factor in determining whether or not high school graduates enroll in college; rather, it may be indicative of the presence of other factors, such as the socio-economic background in the area from which the graduates come; the presence or absence of a guidance program within the high school; the tradition of college-going within the community; the amount of attention which has been given to the graduating class by college and university representatives, and so on. It is clear that there is need for additional study in this area.

Colleges attended by 1955 Kansas high school graduates. High school principals, counselors, college deans, registrars, and admissions officers are interested in knowing where high school graduates continue their education, as well as in knowing how many continue.

The 613 principals who participated in the survey were asked to report where their 1955 seniors had enrolled in college. They were asked to name the specific institution in Kansas or to name the state or foreign country to which the graduate had gone to continue his education.

This information was supplied on 7,699 of the 7,823 graduates who were reported to be in college. Of the 7,699 graduates, 6,591 or 85.6 per cent were reported to be attending Kansas colleges or universities. Institutions in other states had enrolled 1,097 or 14.3 per cent of the Kansas graduates, while eleven had gone abroad to study.

In 1955, Kansas had forty-three institutions of higher education accredited by the State Department of Public Instruction and listed in the 1954-55 Kansas Educational Directory, published by the State Department. Twenty-one were four-year colleges or universities, including five state-supported institutions, two municipal universities, and fourteen privately supported colleges and universities. There were fourteen public two-year colleges and eight private two-year colleges. All of them enrolled some of the 1955 graduates of Kansas high schools, with the number of enrollees ranging from six for Miltonvale Wesleyan College to 1,031 for Kansas State College at Manhattan.

The state-supported institutions attracted almost half of the 6,591 graduates on whom reports were made. The next largest group enrolled in the public two-year colleges. Detailed information on the number and per cent of 1955 graduates who enrolled in various types of institutions in Kansas is given in Table VI.

TABLE VI

TYPES OF KANSAS INSTITUTIONS ENROLLED IN BY
1955 HIGH SCHOOL GRADUATES

Type of institution	Number of schools	Number enrolled	Per cent of total
State-supported colleges and university	5	3225	48.9
Municipal universities	2	863	13.1
Private four-year colleges and universities	14	908	13.8
Public two-year colleges	14	1450	22.0
Private two-year colleges	8	145	2.2
Total	43	6591	100

Of the 6,591 members of 1955 graduating classes who went to college in Kansas, 1,031 enrolled at Kansas State College, Manhattan. The University of Kansas was selected by 898 graduates, while Wichita University ranked third with 625. Fort Hays State College was fifth with 500, and Kansas State Teachers College, Emporia, was sixth with 487. Detailed information on the number of male and female graduates attending each Kansas college and university is provided in Table VII.

Graduates of Kansas high schools in 1955 enrolled in colleges and universities in thirty-nine states other than Kansas and in five foreign countries. More graduates went to Missouri schools than to institutions in any other state, with 269 boys and girls enrolling in Missouri colleges and universities. Oklahoma institutions were chosen by 196 Kansas graduates, while 120 picked Colorado colleges and universities. A summary of the

TABLE VII

NUMBER OF 1955 GRADUATES OF KANSAS HIGH SCHOOLS ENROLLING IN SPECIFIED KANSAS COLLEGES AND UNIVERSITIES IN SEPTEMBER, 1955

Kansas college or university	Boys	Girls	Tota
University of Kansas	553	345	898
Kansas State College	647	384	1031
Fort Hays State College	285	215	500
K.S.T.C., Emporia	226	261	487
K.S.T.C., Pittsburg	188	121	309
Washburn University	155	8 3	238
Wichita University	394	231	628
Baker University	44	43	81
Bethany College	26	28	54
Bethel College	29	35	64
College of Emporia	28	40	68
Friends University	51	38	89
Kansas Wesleyan University	44	25	69
Marymount College	0	68	68
McPherson College	34	27	61
Mount St. Scholastica	0	36	36
Ottawa University	43	34	77
St. Benedict's College	61	0	6
Saint Mary College	0	47	4
Southwestern College	49	39	88
Sterling College	21	18	39
Arkansas City Junior College	82	39	12
Chanute Junior College	55	26	8
Coffeyville College	99	52	15
Dodge City College	63	30	93
El Dorado Junior College	65	41	100
Fort Scott Junior College	42	29	7
Garden City Junior College	24	8	33
Highland Junior College	35	14	49
Hutchinson Junior College	128	62	190
Independence Community College	59	40	91
Iola Junior College	30	23	53
Kansas City Junior College	125	72	19'
Parsons Junior College	61	40	10:
Pratt Junior College	82	24	100
Central College	11	6	1'
Donnelly College	20	14	3
Hesston College	10	11	2
Miltonvale Wesleyan College	4	2	
Sacred Heart College	0	21	2
St. John's College	8	5	13
Tabor College	12	5	1'
Ursuline College, Paola	0	16	10
Total	3893	2698	659

TABLE VIII

NUMBER OF 1955 GRADUATES OF KANSAS HIGH SCHOOLS ENROLLING IN COLLEGES OUTSIDE KANSAS

State or nation	Boys	Girls	Total
Alabama	1	0	1
Arizona	3	0	3
Arkansas	9	4	13
California	18	20	38
Colorado	56	64	120
Connecticut	5	0	5
Florida	1	2	3
Illinois	20	22	42
Indiana	23	12	35
Iowa	25	16	41
Kentucky	2	0	2
Louisiana	1	1	2
Maryland	ô	0	6
Massachusetts	9	3	12
Michigan	4	2	6
Minnesota	8	2	10
Mississippi	9	3	3
Missouri	135	134	269
Montana	1	0	1
Nebraska	51	46	97
New Hampshire	1	0	1
New Jersey	1	0	1
New Mexico	5	1	6
New York	5	2	7
North Carolina	1	2	3
Ohio	5	6	11
Oklahoma	117	79	196
Oregon	С	1	1
Pennsylvania	3	3	6
South Carolina	3	0	3
South Dakota	õ	2	7
Tennessee	2	1	3
Texas	32	19	51
Utah	4	1	5
Virginia	1	1	2
Washington	4	2	6
Washington D.C.	1	2	3
Wisconsin	4	6	10
Wyoming	2	1	3
Out-of-state unspecified	30	33	63
Total out-of-state	604	493	1097
Canada	1	2	3
Germany	1	0	1
Greece	0	1	1
Mexico	1	4	5
Switzerland	0	1	1
Total foreign countries	3	8	11
Grand total	607	501	1108

states and foreign coutries to which Kansas graduates went for further education is contained in Table VIII.

How accurate were the reports made by high school principals on the colleges and universities attended by 1955 graduates of Kansas high schools? To provide at least a partial answer to this question, checks were made with the registrars of three Kansas institutions—the University of Kansas; Kansas State Teachers College, Emporia, and the College of Emporia. In each case, the figure supplied by the registrar on the number of 1955 high school graduates was close to the figure given by principals.

The University of Kansas reported that 1,014 Kansas boys and girls enrolled as freshmen in the fall of 1955. James K. Hitt, Director of Admissions and Registrar, said:

These are not exclusively 1955 graduates, and I think it is not at all unlikely that among this group there would be 100, more or less, who had graduated earlier than 1955.

Your figure of 898 1955 seniors who enrolled at K.U. would seem to me not at all out of line with our figures.

At Kansas State Teachers College, Emporia, records showed that 505 freshmen were 1955 graduates of Kansas high schools. The figure reported by principals was 487. Since there were thirty-six schools which did not participate in the study, it would be reasonable to expect the actual figure as reported by the college to be slightly higher than that provided by the study.

The College of Emporia reported sixty-seven freshmen who were 1955 Kansas high school graduates. The figure reported by high school principals was sixty-eight, a difference of one.

The pattern disclosed by the study, with respect to the selection of institutions by Kansas high school graduates, forecasts problems for the future. As the size of high school senior classes increases, the number of graduates seeking admission to the larger institutions (the five state schools and the two municipal universities) will increase, if the percentage established by the class of 1955 remains constant. How long will it be possible for these colleges and universities to accept all applicants? What alternative do they have, particularly the state-supported schools? What can be done to inform the college-bound boys and girls concerning the opportunities at the other institutions in the state?

In the absence of comparative data from other states, it is difficult to draw conclusions from the information concerning enrollment in out-of-state colleges and universities by Kansans. The question may be raised, however, concerning the continuance of the trend. If institutions in other states begin to reach their maximum capacity, they may restrict enrollments by out-of-state students. Indeed, this is being done by some institutions at the present time. The 14 per cent of Kansas graduates who in 1955 went outside Kansas to attend college may enroll at Kansas institutions.

This will tend to add to the student load which will have to be borne within the state, and thus to accelerate the problems connected with increasing enrollments.

Comparison of Kansas with other states. How does the Kansas percentage of 40.4 for college enrollment on the part of a graduating class compare with percentages in other states? Comparable figures are not readily available. A review of published data did not result in accurate information which could be used as a basis of comparison. Consequently, the chief state school officer in each of the forty-seven states other than Kansas was asked to report the number of graduates, the number and per cent enrolling in college, for 1955 or any other recent year.

Replies were received from forty-four of the forty-seven states. Since the replies did not lend themselves to tabular presentation, they are summarized briefly for each state as follows:

Alabama reported that "of the two hundred forty-seven State Accredited High Schools, twenty-three per cent of the graduating seniors went to college in the fall of 1955."

Arizona had a total of 6,039 graduates in 1954, including 3,008 boys and 3,031 girls. Of the total, 2,679 or 44.4 per cent went to college. Separate reports for boys and girls going to college were not available.

Arkansas reported 14,782 graduates in 1954, with the comment: "It has been estimated that approximately 30 per cent of high school graduates enroll in college." No basis for this estimate was given.

California reported 89,895 graduates in 1955. Exact figures for the number going to college were not reported, but it was stated that 70 per cent of the 45,730 boys and 40 per cent of the 44,165 girls enrolled in college. The per cent for the entire group was 55. All figures were for public schools only.

Colorado had a total of 11,281 graduates in the spring of 1954, including 5,713 boys and 5,568 girls. The Department of Education stated that "we have no information in our files showing the number who enrolled in college. We do not know of any agency in the state which has this information."

Connecticut estimated that 7,100 of the 14,206 boys and girls who graduated in 1955 went to college. Exact information was not available.

Delaware had information on all 1955 graduates with the exception of those in Wilmington. Of the 1,622 boys and girls who completed high school in 1955, 426 or 26.3 per cent went to college. The percentage for girls was 23.7, while 28.9 per cent of the boys continued their education.

Florida did not have information on the number of graduates actually enrolling in college, but did have data based on a sampling of 20 per cent of the 1955 graduates. This study indicated that 41 per cent of the 18,438 planned to attend college in the fall of 1955, according to a survey made

prior to graduation. It is interesting to note that 58 per cent of the graduating seniors indicated that they planned to attend college some time, but 17 per cent believed they would have to defer their time of enrollment beyond September, 1955. Information on the Florida graduates was supplied by the Council for the Study of Higher Education in Florida.

Idaho reported that in 1954 the high schools of the state graduated 3,419 boys and 3,331 girls, or a total of 6,750 persons. Exact numbers of 1,197 boys and 1,166 girls were given for college attendance, but it was stated that the "number going to college is based upon 35 per cent which is the per cent we think go to college."

Illinois had 60,170 graduates in 1954, but had no information concerning the number who went to college.

Indiana reported 38,348 graduates in 1955, with no breakdown by sex. Of this total, 13,263 or 34.6 per cent were reported to be in college.

Iowa had "no record of the number and per cent of graduates from high school who enrolled in college last fall. We have also checked with the Board of Regents and they are unable to furnish this information."

Kentucky estimated that 3,450 or 29.8 per cent of the 11, 562 persons who graduated from high school in 1955 went to college. This estimate was "calculated from previous reports."

Maine reported 6,404 graduates in 1954, but did not have information available on those going to college.

Maryland had information on the 1954 graduating group. According to this information, 32.4 per cent of the 6,256 boys and 23.5 per cent of the 7,100 girls went to college in the fall of 1953. The percentage for the total graduating group was 27.6.

Massachusetts had two reports which are of interest. Information on the 1953 class showed that 11,573 or 38.3 per cent of the 30,178 graduates enrolled in college in the fall following completion of their high school work. A survey of the 1954 seniors in high school showed that 11, 636 or 38.7 per cent of the 30,056 individuals planned to go to college. They did not specify an anticipated date of enrollment.

Michigan reported: "We do not have a comprehensive report of the number of high school graduates who enter college . . . for the year 1955 or any other recent year." A survey of this nature was reported to be underway at Michigan State University.

Minnesota said that information on the number and per cent of Minnesota high school graduates who enrolled in colleges in 1955 "is not available in this office." Reference was made to previous studies which have been discussed in Section II. (4)

Mississippi had information on the 1955 graduates of its high schools. Of the 16,031 graduates, 6,588 or 41.1 per cent enrolled in college. The same percentage was reported for both boys and girls.

Missouri reported 27,006 graduates in the spring of 1954. Of this total, 6,512 or 24.1 per cent went to college. The percentage for boys was 25.2; for girls, 23.1.

Montana was unable to furnish the information requested. The reply stated:

Two different surveys of the number of high school graduates who continue in college have had widely different totals and the information in both is under question.

Some people believe we are approximately at the national average for college attendance and another survey shows that we are nearly double the national average for college attendance.

Nevada reported that the information requested was not available.

New Hampshire had 4,593 graduates in the spring of 1954. Of this number, 954 or 20.8 per cent went to a four-year college. In addition, "680 went on to some other form of post-secondary education."

New Jersey reported on 31,368 graduates in 1952, the most recent year for which information was available. Twenty-eight and one-tenth per cent of the graduating class went to college. The percentage for girls was reported to be 21.6; for boys, 35.1.

New Mexico had 5,747 graduates in 1955, but had no information on the number or per cent of the graduates who went to college.

New York had information on the 1953 graduates. This information indicated that 51 per cent of 114,231 seniors continued their education. According to the New York report, "the percentage entering four-year institutions is 40."

North Carolina reported on the 1954 graduating class. Of the 24,625 seniors, 7,711 or 31.3 per cent went to college. The percentage for boys was 33.8; for girls, 29.3. A survey of the 1955 graduates was underway but not completed at the time the report was made.

North Dakota reported on the 5,780 graduates from the "Fully and Minor accredited schools" in 1955. Of these graduates, 2,643 or 45.7 per cent went to college. The North Dakota report stated:

Since the above figures are from the schools in which 84.7 per cent of all the high school students are enrolled, the per cent is quite representative of the state as a whole.

In projecting the above figures for the state as a whole in 1955, it would appear that 6,383 students were graduated from high school and from this group, 2,939 will have enrolled in college.

Ohio did not have information on the post-graduation activities of the 30,642 boys and 32,423 girls who completed high school in 1955, but estimated 18 per cent college attendance.

Oklahoma had 21,626 graduates in 1954. No information on the number going to college was available, but an estimate of "approximately 50 per cent" was made.

Oregon high schools graduated 14,223 persons in 1955. Of this number, 4,205 or 29.6 per cent went to college. Separate reports on boys and girls were not made.

Pennsylvania reported 101,733 graduates in 1955, with 15,715 or 15.4 per cent continuing their education. The number going to college was an estimate.

Rhode Island had 4,161 graduates in 1955. Of this number, 1,814 or 43.6 per cent went to college. The percentage for boys was 46.3; for girls, 41.2.

South Carolina had information on the 1953 graduating group. Of the 13,984 seniors, 4, 071 or 29.1 per cent went to college.

South Dakota high schools graduated 7,163 persons in 1954. Of this group, 3,080 or 43.0 per cent continued their education.

Tennessee had incomplete information on the 1953 graduating class. Of the 17,869 graduates on which information was available, 5,423 or 30.3 per cent had gone to college.

Texas reported "no information concerning the number of our high school graduates that attend college."

Utah also had no information available on any recent graduating class.

Vermont reported that 25.7 per cent of the 3,541 graduates in 1955 had gone to college. The percentage for boys was 27.9; for girls, 23.9. According to the information received from Vermont, this information has been accumulated annually for the past ten years.

Virginia had 22,501 graduates in 1955, with 7,059 or 31.4 per cent going to college. Separate figures for boys and girls were not available.

Washington did not have the data concerning the number and per cent of high school graduates who enrolled in college.

West Virginia reported on the 17,609 graduates in 1954. Of this total, 4,370 or 24.8 per cent went to college. Twenty-nine per cent of the boys and 21.3 per cent of the girls continued their education beyond high school.

Wisconsin had 31,564 graduates in 1954, but had no information on the number going to college.

Wyoming reported 2,893 graduates in 1955, with 1, 428 or 49.4 per cent going to college. Information on percentage of enrollment by sex was not available.

Summary: Of the forty-four states which replied to the request for information concerning the number of high school graduates and the number of those graduates who went on to college, twenty-two furnished such information. Nine other states estimated the number or precentage going to college, while thirteen states reported no information available.

Among the twenty-two states which did have such information, the percentage of college attendance ranged from a low of 20.8 to a high of 51. The estimates ranged from a low of 15.4 to a high of 58.

Seven of the twenty-two states reported a percentage of college attendance which exceeded the Kansas figure of 40.4 for 1955, while fifteen were below that figure.

It is evident that accurate information on the number and per cent of high school graduates going to college is not available on a nationwide basis. It is interesting to note that the estimated percentages are more extreme than the actual percentages reported. Four states estimated that 50 per cent or more of their high school graduates went to college, while only one state actually reported such a figure. Two states estimated that fewer than 20 per cent went to college, while no state which had definite information was below that percentage.

SECTION IV. COLLEGE ENROLLMENT AMONG HIGH SCHOOL GRADUATES WHO SEEMED TO BE SUPERIOR IN ABILITY

Identifying the "superior" graduates. It was not the purpose of this study to devise a method of identifying "superior" high school graduates, nor to test which of several methods might be best. It was one of the purposes of the study, however, to gather information about the postgraduation activities of those individuals who graduated from Kansas high schools in 1955 and who seemed to be superior in ability.

Before the results of the study are presented, it should be pointed out that in spite of the research which has been done in such areas as the prediction of success in college, much remains to be learned concerning attempts to select students who should be encouraged to attend college. The American Association of Collegiate Registrars and Admissions Officers has stated:

Academic potentiality is subject to reasonably objective measurements, but personal characteristics (for which we have to date very poor objective measuring devices) may have as much to do with the student's success or failure in a college as the academic capacities that we can measure more successfully. In this area of intangibles we depend largely on subjective estimates of such qualities as desire, persistence, willingness to study, and adaptability to new situations and people. (1, pp. 13-14)

They say also:

The human personality, with which guidance and admissions officers deal daily, is so complex as to defy both measurement and prediction. It is never safe to assume that we have a balanced picture of the person under consideration or that we have correctly and fully assessed an applicant's possibilities of achievement in the environment he wishes to enter. The wise admissions officer will keep in mind that such factors as determination, challenge, and maturity may cause a rather unpromising applicant to achieve more than a less-motivated person of apparently greater promise. (1/2, p. 14)

Even if more accurate ways of pre-determining success in college can be found, the larger question of the use to which an individual puts his college education remains. Behind all efforts to encourage seemingly superior students to go to college is the implication that they will profit individually from college attendance and that they will become more productive and useful citizens. This implication raises philosophical questions not within the scope of this study, which assumes that young people who seem to be superior in ability, on the basis of their performance in the elementary and high schools and on scores obtained on objective measuring devices, should be encouraged to continue their education. It is further assumed that a situation wherein a large percentage of young people are found to be going to college is a desirable one. The detailed study of the college-attendance record of students who seemed to be superior in ability was made on that basis, and the findings and conclusions are presented from that viewpoint.

Groups studied. Three groups of 1955 Kansas graduates who could be considered superior were selected for study. They were:

- (1) The graduates who were valedictorians and salutatorians of their graduating classes.
 - (2) The graduates who ranked in the upper third of their classes.
- (3) The graduates who ranked at or above the 67th percentile on both phases of the Kansas High School Senior Comprehensive Examination for 1955.

In general, it can be said that almost two-thirds of the seemingly superior students enrolled in college in the fall following their graduation. There was little difference among the three groups as far as percentage of enrollment in college was concerned. The exact figures were: for valedictorians and salutatorians, 61.4 per cent; for graduates in the upper third of their classes, 65.7 per cent; for graduates in the upper group on the Kansas High School Senior Comprehensive Examination, 65.1 per cent.

A number of high schools, particularly the larger ones, did not recognize a valedictorian and salutatorian and consequently were not represented in that phase of the study. It seems probable that this fact accounts for the slightly lower percentage of college attendance of that group in comparison with the other two.

The findings concerning the seemingly superior students who graduated from Kansas high schools in 1955 are in accordance with those reported by Berdie, based on a study made in 1950 in Minnesota. He found that for every two exceptionally well-qualified students who were planning to attend Minnesota colleges, there was one high school graduate equally well qualified who was not planning to continue his education. (4, p. 57)

The Kansas results represent an improvement, however, over the situation in Minnesota in 1938 and 1945. Concerning the 1938 graduating group in Minnesota, Anderson and Berning stated: "Of those who ranked in the highest ten per cent of their classes, no more than half were enrolled in college." (2, p. 37) The Minnesota Commission on Higher Education said: "This generalization for the 1938 study was found to be true for the class of 1945 as well, . . ." (17, p. 87)

Writing in 1954 on America's Resources of Specialized Talent for the Commission on Human Resources and Advanced Training, Dael Wolfle stated: "Approximately 53 per cent of students who finished high school in the top 20 per cent of their classes enroll in college." (30, pp. 149-50) It would seem that this estimate is low, as far as the Kansas graduates of 1955 are concerned, since the percentage was found to be at least 60 for a group larger than that used by Wolfle.

Even though the Kansas situation is encouraging, in comparison with what might have been expected from previous studies, it is evident that there is much room for improvement. At least one-third of the 1955 graduates who seemed to be superior in ability did not go to college. In other words, more than 2,000 boys and girls who had demonstrated superior ability by performance in high school or on objective measuring devices did not continue their formal education after graduating from high school.

Detailed findings and conclusions concerning each of the three groups of seemingly superior graduates will be presented independently.

Valedictorians and salutatorians. Many Kansas high schools follow the practice of designating the graduate with the best academic record as the "valedictorian" of the graduating class, while the graduate with the second best record is honored as the "salutatorian."

The principals of the high schools participating in this study were asked to indicate whether or not their schools followed this practice. Of the 613 schools which took part in the study, 593 supplied this information. The number and per cent of schools, by groups according to size, which did and did not recognize valedictorians and salutatorians in 1955 are shown in Table IX.

TABLE IX

NUMBER OF KANSAS HIGH SCHOOLS WHICH DID AND DID NOT RECOGNIZE VALEDICTORIANS AND SALUTATORIANS IN 1955

Size of	Did re	cognize	Did not	recognize	Total
school	Number	Per cent	Number	Per cent	Number
Group AA (over 475)	17	45.9	20	54.1	37
Group A (151-475)	83	84.7	15	15.3	98
Group B (61-150)	168	82.4	36	17.6	204
Group BB (60 and under)	220	86.6	34	13.4	254
Total	488	82.3	105	17.7	593

It is evident that the practice of designating valedictorians and salutatorians is not so prevalent in the larger schools as it is in the small high schools of Kansas. Only 45.9 per cent of the AA high schools (those with an enrollment of more than 475) recognized a valedictorian and salutatorian in 1955, while more than 80 per cent of the schools in the other three groups followed this practice.

Principals of schools which recognized valedictorians and salutatorians were asked to supply information concerning those individuals. First, they were asked to report the activity in which the valedictorian and salutatorian were engaged in the fall of 1955. If the honor graduates were in college, the name or location of the institution at which they had enrolled was requested.

If the valedictorian or salutatorian had not gone to college, the principal was asked to state why they had not continued their education. The accuracy of these reasons may be open to question, since no attempt was made to have principals check personally with the graduates involved. Since these were outstanding students, however, it is reasonable to assume that the principals would have some personal knowledge of their activities. This knowledge would lend validity to the reasons given for non-attendance at college.

Reports were made on 930 individuals who were either valedictorians or salutatorians. In tabulating the information, no attempt was made to separate the two since it was thought that together they comprised a group of graduates who seemed to be superior in ability.

Seventeen per cent of the valedictorians and salutatorians were employed full time, whereas 26.2 per cent of all graduates were reported to be employed. A comparison of Table X, which contains a report of the post-graduation activities of the valedictorians and salutatorians, with Table I in Section III reveals that the chief differences between the two groups are found in the categories of college enrollment and employment. The valedictorians and salutatorians went to college at a higher percentage rate than did the members of the graduating group as a whole, and fewer of them went to work immediately after graduation.

Comparisons of the other categories reveal differences between the two groups, but they are on a small scale. A higher percentage of the valedictorians and salutatorians enrolled in business or trade schools and in nurse's training, which indicates that they were more inclined to seek further vocational preparation than were their classmates. Fewer valedictorians and salutatorians went into military service—only 1.2 per cent, compared with the 5.7 per cent of all graduates. The per cent of girls who married soon after graduation was slightly higher for the valedictorians and salutatorians than it was for female graduates in general. This would

TABLE X
POST-GRADUATION ACTIVITIES OF 1955 KANSAS VALEDICTORIANS
AND SALUTATORIANS AS REPORTED BY PRINCIPALS

		-				Dow 65.1
Activity	Group AA	Group A Grou	Group B	Group BB	Total	rer cent of total
Employed full time	1	14	55	88	158	17.0
College or university	35	139	195	202	571	61.4
Business or trade school	0	73	14	29	45	4.8
Nurse's training	1	က	10	18	32	3.4
Military service	0	1	1	6	11	1.2
Married (girls only)	73	က	26	45	92	8.2
Miscellaneous	0	63	. 2	24	33	3.6
Unknown	0	0	87	23	4	4.
Total	89	164	310	417	930	100.0

indicate that the girls who had demonstrated their capability in the classroom were somewhat more in demand for matrimony than were their classmates.

Information concerning the post-graduation activities of the valedictorians and salutatorians was not available on less than one-half of one per cent, but such information was not available on almost 10 per cent of all graduates. Evidently the principals and guidance counselors were better informed concerning their honor graduates than on class members who were not so distinguished.

More than 60 per cent of the 930 valedictorians and salutatorians were enrolled in college in the fall following their graduation from high school. This figure can be compared with 40 per cent which is the record of college enrollment established by all 1955 graduates of Kansas high schools.

Five-hundred of the 571 valedictorians and salutatorians who continued their education chose Kansas colleges and universities. Kansas State College, Manhattan, ranked first in this respect with 102 valedictorians and salutatorians enrolling at that institution. Eighty-six selected the University of Kansas, while fifty-six attended Fort Hays State College. Forty-seven enrolled at Kansas State Teachers College, Emporia, and twenty-two at Kansas State Teachers College, Pittsburg.

Together, the five state-supported institutions enrolled 42.6 per cent of the 1955 valedictorians and salutatorians. No other single institution in the state enrolled as many from this group as did any one of the state schools. Seventy-one valedictorians and salutatorians went to other states to continue their education, with ten, the largest group, selecting Colorado institutions.

Why did the other valedictorians and salutatorians not go to college? The principals were asked to state a reason for each individual who did not continue his education. The 284 responses were grouped under nineteen headings. Table XI contains a report on the number and per cent of valedictorians and salutatorians who did not continue their education for each of the nineteen reasons.

Almost a third of the valedictorians and salutatorians did not go to college because they married soon after graduation from high school, or planned to be married in the near future. Lack of financial backing and lack of desire to continue education accounted for approximately another third of the group.

No doubt there was a combination of circumstances operating in many instances. The thirty-six graduates who had no desire to continue education may also have been affected by the availability of employment and the relatively high salaries being paid.

TABLE XI

REASONS GIVEN BY HIGH SCHOOL PRINCIPALS FOR VALEDICTORIANS AND SALUTATORIANS NOT ATTENDING COLLEGE IN 1955

Reason given	Number	Per cent of tota
1. Matrimony	92	32.4
2. Lack of financial backing	50	17.6
3. No desire to continue education	36	12.7
4. Availability of employment	15	5.3
5. Wanted to attend trade school	13	4.6
6. High salaries being paid	12	4.2
7. Indecision as to future plans	12	4.2
8. Military obligation	11	3.9
9. Lack of parental encouragement	11	3.9
10. Desire to earn money immediately	10	3.5
11. Need to support dependents	5	1.8
12. Wanted to get nurse's training	5	1.8
13. Emotional difficulty	3	1.1
14. Illness	3	1.1
15. Family background	2	.7
16. Religion	1	.3
17. Wanted to do secretarial work	1	.3
18. Too immature	1	.3
9. Physical disability	1	.3
Total	284	100.0

Graduates in the upper third. The 613 high school principals who participated in the study were asked to report the number of graduates who went to college from the upper third, the middle third and the lower third of their graduating classes.

These figures were compiled for all schools combined, and for schools in Group AA, Group A, Group B and Group BB. The number of graduates in each group was known; by dividing this total by three, the number of graduates in each third was determined. The per cent of graduates going to college from each third, for the four groups and for all schools combined, could then be computed.

Approximately two-thirds of the persons who ranked in the upper third of their graduating classes in 1955 went to college the following fall. Almost three-fourths of those in the upper third among the larger schools, in Group AA, continued their education. Groups A, B and BB were within a few percentage points of each other, but all were at least 12.9 per cent below the AA schools.

From the middle third of the graduating classes, 39.1 per cent of the graduates went to college. Half of the boys and girls who ranked in the middle third in AA schools continued their education, while the percentage dropped to 32.3 for Group A, 35.6 for Group B and 28.9 for Group BB.

Only 12.8, or slightly more than one in ten, of the graduates who ranked in the lower third of their classes went to college. One-fourth of the lower third graduates from Group AA schools continued their education, but the percentage dropped to 14.3 for Group A, 10.1 for Group B, and 8.9 for Group BB.

The number and per cent of graduates from the upper third, middle third and lower third of their classes who went to college are shown in Table XII.

It is evident that the 1955 Kansas graduates who did well in high school continued their education in larger numbers and at a higher percentage rate than did their classmates who ranked below them in academic standing. It is also evident that a sizeable number of students who seemed to be superior in ability did not go to college.

The use of rank in class as a method of identifying graduates who seemed to be superior in ability is subject to question, particularly in the smaller schools. A high school which graduates three individuals has one in the upper third, one in the middle third and one in the lower third. All may be about equal as far as academic record is concerned—and in comparison with graduates of other schools, they may be superior or inferior. Nevertheless, it is assumed that the findings concerning the college attendance of Kansas graduates according to their rank in class are of some significance, particularly on a statewide basis.

Graduates in an "upper group" on the Kansas High School Senior Comprehensive Examination. The Kansas High School Senior Comprehensive Examination includes a battery of four achievement tests and a general ability test. The achievement tests cover the fields of English, mathematics, social studies and science. They are constructed by the Bureau of Measurements of Kansas State Teachers College, Emporia, with the help of an advisory committee of high school principals.

The five-hour comprehensive examination is administered under the supervision of high school principals in the spring of the year. Participation in the examination is on a voluntary basis; no school is required to take part. In 1955, however, 481 of the 649 high schools in Kansas gave the examination to their seniors. There were 13,977 boys and girls included in this testing program.

Results of the examination are not made public. Each high school principal receives a confidential report which enables him to compare his graduates, individually and as a group, with the graduates of the other schools taking the examination. The report gives the raw score and the percentile rank for each individual on the five tests which make up the examination.

TABLE XII

NUMBER AND PER CENT OF 1955 KANSAS HIGH SCHOOL SENIORS FROM UPPER THIRD, MIDDLE THIRD AND LOWER THIRD OF GRADUATING GROUP, ENROLLING IN COLLEGE OR UNIVERSITY AFTER GRADUATION

Size of	Number of graduates in	Орре	Atten Upper third	ding college o	Attending college or university from: Middle third		Lower third
scnool	each third	Number Per cent	Per cent	Number	Number Per cent	Number	Per cent
Group AA (over 475)	1892	1411	74.6	950	50.2	479	25.3
Group A (151-475)	1479	913	61.7	477	32.3	212	14.3
Group B (61-150)	1257	756	60.1	447	35.6	127	10.1
Group BB (60 and under)	689	383	59.9	185	28.9	70 F-	6.8
Total	5267	3463	65.7	2059	39.1	675	12.8

To select a group of students who, on the basis of the Kansas High School Senior Comprehensive Examination, seemed to be superior in ability, the following procedure was used: Individuals who ranked at or above the 67th percentile on *both* the achievement battery and the general ability test were selected. It would seem that this group should include the upper third of all seniors taking the test. Actually it was not that large, since some seniors who ranked at or above the 67th percentile on the achievement battery did not rank that high on the general ability test, and vice versa.

Of the 13,977 seniors who took the test, 3,617 or 25.9 per cent were tound to qualify for the "upper group" designation. Of the total number, 2,305 were boys and 1,582 were girls.

Principals whose schools took part in the Kansas High School Senior Comprehensive Examination, and who had individuals ranking in the upper group, were asked to submit specific information on those individuals, by name. They were asked to report (1) whether or not the individual went to college; (2) if he or she did not go to college, his or her mailing address; (3) whether or not the individual ranked in the upper third of his graduating class, and (4) the occupation of the father or mother of the individual graduate. Replies were received which included 3,386 or 93.6 per cent of the seniors who ranked in the upper group. Not all replies were complete, but all were usable to some extent.

Almost two thirds, or 65.1 per cent, of the seniors who ranked in the upper group on the Kansas High School Senior Comprehensive Examination went to college in the fall of 1955, according to reports supplied by their principals. It can be concluded from this fact that the more capable students in the Kansas graduating group of 1955 did go to college in considerable numbers, but that there were many graduates who had demonstrated their ability on the examination who did not continue their education.

Some difference in the percentage of attendance according to the size of school from which the individual graduated was found. The figures varied from 59.5 for seniors who graduated from Group B schools to 71.2 for seniors who graduated from Group AA schools. This is in line with the trend which has been noted previously in this study, for graduates of the larger schools to go to college in greater numbers and at a higher percentage rate than do graduates of smaller schools.

The college enrollment record for individuals in the upper group, according to the size of school from which they graduated, is summarized in Table XIII.

Boys in the upper group had a better record of enrollment in college than did the girls. Seventy-four per cent of the boys continued their education, while only 54 per cent of the girls did so. The difference was more

TABLE XIII

ER AND PER CENT OF 1955 SENIORS WHO RANKED IN UPPER ON COMPREHENSIVE EXAMINATION ON WHOM PEROPE

NUMBER AND PER CENT OF 1955 SENIORS WHO RANKED IN UPPER GROUP ON COMPREHENSIVE EXAMINATION, ON WHOM REPORTS WERE SUBMITTED, WHO CONTINUED THEIR EDUCATION

Size of	Number in		Continued	education:	
school	upper group	Boys	Girls	Total	Per cent
Group AA (over 475)	1032	468	267	735	71.2
Group A (151-475)	1147	469	276	745	64.9
Group B (61-150)	885	333	194	527	59.5
Group BB (60 and under)	322	113	83	196	60.9
Total	3386	1383	820	2203	65.1

pronounced among the graduates of the larger schools. In Group AA, 79 per cent of the boys and 61 per cent of the girls went to college, a variation of eighteen percentage points. Group A schools showed a variation of twenty percentage points, from 74 per cent for boys to 54 per cent for girls. Group B had a variation of twenty-three percentage points, from 70 per cent to 47 per cent, while Group BB had a variation of only six points, from 64 per cent to 57 per cent.

Did the seniors who ranked in the upper group on the comprehensive examination also rank in the upper group in their graduating classes? To provide an answer to this question, principals were asked to indicate whether or not each individual in the upper group ranked in the upper third of his class. Results showed that three-fourths of the seniors in the upper group did rank in the upper third, academically. The relationship between the number of seniors who ranked in the upper group and the number who ranked in the upper one-third of their classes was more pronounced among the smaller schools, as is shown in Table XIV.

TABLE XIV

NUMBER OF SENIORS WHO RANKED IN UPPER GROUP ON COMPREHENSIVE EXAMINATION WHO ALSO RANKED IN UPPER ONE-THIRD OF GRADUATING CLASS

Size of		ank in third		t rank in r third	Т	otal
school	Number	Per cent	Number	Per cent	Number	Per cent
Group AA (over 475)	679	69.	303	31.	982	100
Group A (151-475)	782	74.	270	26.	1052	100
Group B (61-150)	636	79.	173	21.	809	100
Group BB (60 and under	242	82.	53	18.	295	100
Total	2239	75.	799	25.	3138	100
Information not supplied on					248	,
Total					3386	,,

The relationship between the occupation of a high school graduate's parents and the probability of his attending college has been of interest to many high school counselors and principals, and to college admissions officers. Wolfle stated:

The occupation of a high school student's father is a good predictor of whether or not he will enter college. The socio-economic factors which are indicated by the father's occupation begin early to influence a child's educational progress and expectations. (30, pp. 158-9)

To provide information on the family background of upper-group Kansas graduates of 1955, high school principals were asked to report the occupation of the father or mother of those graduates who ranked at or above the 67th percentile on the Kansas High School Senior Comprehensive Examination.

Such information was supplied on 2,252 individuals or 66.5 per cent of 3,386 graduates in the upper group on whom inquiry forms were returned. The occupations were classified into the five categories used by Wolfle in studying the relationship between occupation of parent and tendency to go to college. They were: (1) professional and semi-professional; (2) managerial; (3) sales, clerical and service; (4) farmer; (5) factory, craftsmen, unskilled, and similar occupations. Although these classifications are rather broad, they were chosen because they would permit direct comparison with other research which had been done in this same area.

The largest group of parents fell in the fourth category, "farmer," with 31.9 per cent of the 2,252 total. Category five, "factory, craftsmen, unskilled, and similar occupations," accounted for 27.7 per cent, while 14.9 per cent of the parents were in "managerial" occupations. Fourteen and three-tenths per cent were grouped in category three, "sales, clerical and service." The "professional and semi-professional" category included 11.2 per cent of the parents.

Wolfle found that the children of parents in the professional and semi-professional group are much more inclined to go to college than are the children of parents who follow other occupations. (30, p. 160) He reports the percentage of high school graduates who enter college, according to the occupations of their parents, as follows: professional and semi-professional, 67 per cent; managerial, 50 per cent; clerical, sales and service, 48 per cent; farmer, 24 per cent; factory, craftsmen, unskilled, 26 per cent.

The results of the study in Kansas bear out his findings. The situation was somewhat different, in that the study in Kansas included only students who seemed to be superior in ability. Consequently, percentages for all five groups were considerably higher than those reported by Wolfle.

Exact percentages of 1955 Kansas graduates in the upper group who entered college, according to the occupations of their parents, were; pro-

OCCUPATION OF PARENTS OF GRADUATES IN UPPER GROUP WHO DID AND DID NOT GO TC COLLEGE FOLLOWING GRADUATION TABLE XV

Occupation		Q	id go te	Did go to college:		Di	Did not go to college:	o to co	llege:
or patents	Total	Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent
1. Professional and semi-professional	252	140	82	222	88.1	12	18	30	11.9
2. Managerial	336	171	66	270	80.4	30	36	99	19.6
3. Sales, clerical and service	322	151	0.2	221	9.89	37	64	101	31.4
4. Farmer	718	249	201	450	62.7	128	140	268	37.3
5. Factory, craftsmen, unskilled, etc.	621	226	124	350	56.1	117	157	274	43.9
Total	2252	937	576	1513	67.2	324	415	739	32.8

fessional and semi-professional, 88.2 per cent; managerial, 80.4 per cent; sales, clerical and service, 68.6 per cent; farmer, 62.7 per cent; factory, craftsmen, unskilled, and similar occupations, 56.1 per cent.

It will be noted that the range for the five categories, as reported by Wolfle, is forty-one percentage points, while it is thirty-two percentage points for the Kansas study. Categories one, two and three ranked first, second and third respectively in both studies. Wolfle found that category four, "farmer," ranked fifth and last, but the Kansas study showed that this category outranked "factory, craftsmen, unskilled, and similar occupations" by 6.6 per cent.

As previously reported, 65.1 per cent of all graduates in the upper group went to college in the fall following their graduation. This would indicate that the children of parents engaged in professional and semi-professional; managerial; sales, clerical and service occupations are above the mean in rate of college attendance, while the children of farmers; factory, craftsmen and unskilled workers are below. Complete information concerning the results of this phase of the study is found in Table XV.

SECTION V. SUPERIOR STUDENTS WHO DID NOT CONTINUE THEIR EDUCATION

Purpose and plan of the study. Two-thirds of the boys and girls who ranked in the upper group on the Kansas High School Senior Comprehensive Examination in the spring of 1955 went to college the following fall. What happened to the other students who seemed to be superior in ability? Why did they not continue their education? What occupations did they enter?

The purpose of this phase of the study was to gather information directly from a number of graduates who ranked in the upper group. From this information, conclusions could be drawn concerning all seemingly superior graduates who did not go to college.

The principals of high schools which participated in the Kansas High School Senior Comprehensive Examination were asked to supply mailing addresses for graduates who ranked in the upper group on the examination, but who did not go to college. The upper group included those seniors who ranked at or above the 67th percentile on both the achievement and general ability tests which made up the examination.

There were 3,386 boys and girls included in the upper group. Of this number, 1,183 did not go to college, according to information supplied by their principals. Mailing addresses were available for 814 of the 1,183.

Individual inquiry forms were sent to these 814 graduates. The forms were similar in content, but they varied slightly for boys and for girls.

Replies were received from 204 or 48.4 per cent of the girls and 160 or 40.7 per cent of the boys. No attempt was made to secure a larger

response. The inquiry form had been designed purposely so that the respondent would not have to identify himself. Therefore, it was not possible to send a second form to those who had not replied to the first.

Because of the comparatively small number of inquiries sent and returned, it is recognized that this portion of the study cannot be regarded as conclusive. The results do provide information which may be of interest to educators at both the secondary and college levels, and which are indicative of certain trends.

Response from boys. Of the 160 boys who returned inquiry forms, seventy-two were employed full time and twenty-one were employed part time. Forty were in military service, and eleven reported that they were planning to go into military service within the next six months. Eight reported themselves as unemployed. Seven were in college or university (although their high school principals had reported otherwise) and one was in a business or trade school.

The ninety-three who were employed full or part time listed thirty-three occupations in which they were engaged. Twenty-nine were doing farm work. Ten were in construction work. There were nine clerks; six mechanics, four general laborers, four filling station attendants and four truck drivers. Occupations which were being followed by three of the respondents were: carpentry and plumbing, radio and television service, lithography and factory work. There were two salesmen, two stock boys, two welders, two movie projectionists and two oil field workers. Other occupations named once were: working for a lumber company, pipe layer, decorator, transfer and storage worker, painter, parts man, brakeman, weights and measurements inspector, meter reader, accountant, machinist, lineman, lens maker, secretary, dairy worker and society editor.

Sixty-one boys reported that they were employed in the community where they had graduated from high school, while thirty-two were employed elsewhere.

The ninety-three boys who were employed replied to a question concerning their approximate monthly income. Three reported incomes of under \$25 a month, while seven reported incomes of \$300 a month or more. The median salary for the entire group fell within an interval of \$176 to \$200 a month, at approximately \$185.

When asked to check one of eight reasons for not going to college, sixty of 123 boys who replied said that they could not afford to do so. Thirty-five volunteered for or were drafted into military service. Seventeen said they had no interest in going to college, while eleven wanted to begin earning money as quickly as possible. One boy said his high school teachers did not encourage college attendance. None checked the following reasons, which were included among the eight on the list: did not

want to leave home; had no friends going to college; did not receive encouragement from parents for college attendance.

Space was provided for each respondent to state a reason for not going to college if none of the eight which were listed seemed to cover his situation. In this space, three boys said that illness prevented college attendance, while three others listed illness in the family. Two were married, and three could not decide what course of study to follow. Five had to help on the farm. Four had an opportunity to go into business. One did not graduate from high school, and three planned to attend college in the future.

Eighty-nine boys answered the question: "Would you have gone (to college) had you been offered a scholarship or job?" Sixty-three answered yes, thirteen said no, and thirteen said perhaps.

Ten of the above group said they would have needed complete financial assistance to go to college, while twenty-two estimated assistance amounting to more than half of the total expense. Thirteen could have gone to college with financial assistance amounting to less than half of the cost, and five would not have needed financial assistance. Seven said they were not sure how much help they would have needed.

Of the 160 boys who responded, 119 answered the question: "Do you plan to go to college at any time in the future?" Seventy-five do plan to attend college while eleven do not. Twenty-two answered that they might "possibly" attend. Eleven had not reached a decision on college attendance.

Twenty-six are planning to go to college when their military service has been completed, while thirty-one plan to enroll in 1956. Eighteen said that they plan to enroll between 1957 and 1960.

Courses of study which these boys hope to pursue are many and varied. Of the 105 replies to a question on this point, twenty-seven listed engineering, while ten specified agriculture and eight, industrial arts. Other courses listed were electronics, mathematics, physical education, photography, criminology, architecture, journalism, music, theology, English and speech.

It is evident that boys in the upper group who graduated from high school in Kansas in 1955 had little difficulty in finding employment. They went into relatively unskilled occupations, for the most part, at salaries or wages which ranged from a few dollars a month to more than \$300 a month. Most of them, however, were earning less than \$2,400 on an annual basis.

Military service took almost a third of the boys in the upper group who did not go to college, if the 160 who completed the inquiry form can be considered a reliable sample.

The financial problems relating to college attendance were the chief deterrents which prevented boys in the upper group from continuing their education. A sizeable number of boys would have gone to college, or so they stated, if they had had financial assistance in the form of a scholar-ship or job.

Approximately half of the boys in the upper group hope to go to college in the future. The anticipated date of enrollment may be one to four years after graduation from high school, but more education is definitely in their planning. There is no way of knowing how many of the boys will actually follow these plans, of course, but the fact that they are thinking in terms of college attendance must be considered.

Response from girls. Of the 204 girls who returned inquiry forms, 136 were employed full time and five were employed part time. Fifty were married and employed as housewives. Eight were unemployed; four were in business or trade school, and one was in a college or university.

Seventy-six of the 141 employed girls reported an occupation in the clerical or stenographic field. There were eleven bookkeepers, twenty-nine secretaries, twenty stenographers, five cashiers, six secretary-bookkeepers and five stenographer-bookkeepers.

Twenty-eight of the 141 were clerks. Five were employed in housework, while four were telephone operators. Four were receptionists, and three were teletype operators. There were three dental assistants, three waitresses, two I.B.M. operators, two in military service, two society editors, two hospital workers, two laundry workers, two practical nurses, a radio script writer and a cartographer.

Of the 141 who were employed other than as housewives, seventyfour were living in the community where they graduated from high school, while sixty-seven had gone to other communities to work.

The median salary for the 141 employed girls fell in an interval of \$151 to \$175 a month, at approximately \$160. There were two girls who reported salaries under \$25 a month, while two reported salaries in the \$276-\$300 bracket. None were over \$300, and only fourteen were over \$200 a month.

Eight reasons for not attending college were listed on the inquiry form, and each respondent was asked to check one of the eight or to state a reason if none of the eight applied to her situation.

Seventy-two of the 198 girls who replied to this section of the inquiry said that they could not afford to go to college. Forty-two had no interest in going to college, and twenty-nine said that they wanted to begin earning money. Two did not wish to leave home. One stated that her parents did not encourage college attendance, and one had volunteered for military service. No girls checked the following reasons: had no friends going to college; high school teachers did not encourage college attendance.

Forty-three girls did not go to college because they were married. Two listed illness as the reason for not continuing their education, and one mentioned illness in the family. Three could not make up their minds about courses of study to follow. One did not want to take the courses which are required in college, while another was offered a good job and did not feel she could turn it down.

The question was asked: "Would you have gone (to college) had you been offered a scholarship or job?" Sixty-one girls said yes and nineteen answered no. Seventeen replied that perhaps they would have gone under those circumstances.

Seventeen of the above group estimated that they would have needed enough financial assistance to cover all expenses of attending college. Thirty-four said they would have needed more than half of the total amount, while fifteen estimated that less than half would have been sufficient.

Of the 204 girls who returned inquiry forms, 150 answered the question: "Do you plan to go to college at any time in the future?" Fortynine stated that they do plan to attend college, while sixty-five do not. Thirty-six indicated that they were undecided on college attendance at a future date.

Forty-one of those who plan to go to college hope to do so in 1956, while four listed 1957 as the year they plan to begin college work.

The girls who said they plan to go to college in the future listed a variety of programs of study which they hope to follow. Twenty-five said they were interested in business courses, while nine specified elementary education and seven, education in general. Other programs mentioned at least once were: engineering, journalism, English, social science, home economics, nurse's training, history, psychology, agriculture, speech, music, theology, medicine and art. Combinations of these fields were also listed.

Employment was easily found by the girls who ranked in the upper group of their 1955 graduating classes and who did not go to college. About one-fourth of them married and occupied themselves with house-keeping. The others found jobs, usually in some kind of clerical work.

Most of the girls who worked full time received less than \$2,000 on an annual basis. Some salaries went up to \$3,600, but not many. In general, salaries for girls ran about \$25 a month lower than salaries paid to boys.

Matrimony and lack of money were the principal reasons given by girls who ranked in the upper group for not attending college. About one-third of the girls said that financial problems prevented them from continuing their education. It will be recalled that about half of the boys who responded to a similar question gave this answer.

Financial assistance, in the form of a scholarship or part time employment, would have enabled some of the girls to continue. The amount of assistance required was about the same for girls as for boys.

Only one-third of the girls who responded to the question concerning future college attendance plan to enroll. Among the boys, five-eights of the group responding had tentative plans to go to college or university in the future.

Most of the girls who do plan to go to college expect to enroll in 1956. With the boys, the plans tend to be long-range in nature; some of them do not anticipate college attendance for three or four years.

SECTION VI. RECOMMENDATIONS

As a result of the findings of this study, and in addition to the conclusions which may be drawn from them, the following recommendations are made:

1. A continuing study of the post-graduation activities of Kansas high school seniors should be carried on. The data concerning the graduates of a single year are important, but there is always the possibility that the group which has been studied may be an exceptional one in some respects. Information gathered over a period of years would establish trends which should be more meaningful than the data from a single study.

The responsibility for gathering information on each individual graduate will have to rest with the local school officials, but the Kansas State Department of Public Instruction, the colleges and universities in the state, professional organizations such as the Kansas State Teachers Association, and other agencies should cooperate in the task of bringing the information together and making it available to all persons who should have it.

- 2. Comparable studies in other states should be made. The basis for any action program aimed at increasing the number of capable students who attend college or university is accurate information concerning the present situation. That information is not available in most states at the present time, nor is it available on regional or national levels.
- 3. Encouragement should be provided certain groups of Kansas high school graduates who are not now going to college in sufficient numbers. While the percentage of enrollment in college recorded by the 1955 graduates of Kansas high schools appears to be good, in comparison with other states where such information is available, it can be improved. Although forty of every one hundred graduating seniors went to college in the fall of 1955, there were many superior students who did not continue their education.

This presents a challenge to high school administrators and counselors, and to college admissions officers. From the standpoint of the individual graduate, as well as the state and nation, the educational system is not serving its purpose if capable young people are not stimulated to achieve to their capacity.

Information gathered in this study shows that encouragement should be provided to certain groups of Kansas high school graduates, including:

a. Graduates of some of the smaller high schoools of the state. Many smaller high schools have excellent records of college attendance on the part of their graduates. As a group, however, the graduates of the smaller schools have a low percentage-of-attendance record in comparison with the graduates of larger schools.

College admissions counselors should assist local school officials in stimulating college attendance on the part of graduates in the smaller schools by making certain that those schools are supplied with information concerning opportunities at the higher educational institutions in the state. It is possible that the smaller schools have been overlooked by some institutions in their student information programs.

b. Graduates of high schools located more than ten miles from a college or university. As a group, graduates of these schools have a lower percentage-of-attendance record than do the graduates of schools located in or near communities which have at least one institution of higher education.

It would seem impractical to provide higher educational facilities within ten miles of every high school. Consequently, the solution to this problem will have to be along the lines of stimulating college attendance among graduates who do not happen to live within the area served by an institution.

c. Graduates whose parents are not in professional, semiprofessional or managerial vocations. Occupation of parent seems to be an important factor in determining whether or not a graduate goes to college, even among boys and girls of superior ability. Therefore, it would be desirable to provide special encouragement for those graduates whose parents are in the vocational groups which do not have a high percentage-of-attendance record.

Local school authorities will have to identify these graduates, but college and university guidance workers can assist in stimulating them to continue their education.

d. Young women who graduate from high school. More boys than girls tend to go to college. The data accumulated for this study show that many girls who seem to be superior in ability do not continue their education. Various problems are involved in this situation, such as the vocational aspect of college attendance, but the fact remains that there seems to be a considerable loss of talent among capable young women who do not go beyond the high school level with their education.

- 4. Contact should be maintained with the many capable high school graduates who do not enroll in college the first year after their graduation from high school. They find employment, perhaps to save money so that they can attend college at a later date, or they go into military service. Many of them have tentative plans to continue their education, but they may need encouragement in carrying out those plans. High school and college staff members should find methods of encouraging these graduates to resume their formal education.
- 5. Financial aid for superior students should be expanded. Because the cost of attending a college or university is a barrier which prevents many superior students from continuing their education, it is recommended that provision of financial assistance for deserving high school graduates who wish to attend institutions of higher education should be expanded.

Although lack of money is not the only factor which has been found to deter superior students in their educational plans, it is obviously an important one. The financial assistance which should be provided may be in the form of a scholarship, a grant-in-aid, a loan, or part time employment.

Colleges and universities should be alert to the fact that many capable students do have financial problems, and that one method of helping such students is that of keeping costs at a minimum. This applies to such expenses as room and board, social activities, and books and supplies, as well as tuition and fees.

6. In view of the present and anticipated demand for college-educated young people to go into professional and technical vocations, it is recommended that all individuals and agencies concerned attempt to find ways of stimulating and encouraging capable high school graduates to continue their education. The results of this study show that about two-thirds of the seemingly superior graduates of Kansas high schools in 1955 went to college. This means that one-third of the superior group, numbering between 1,500 and 2,00 boys and girls, did not enroll in an institution of higher education. A considerable loss of manpower for the professions and technical vocations is represented here.

It is not to be expected that every young person who demonstrates superior ability should or will go to college, but it is evident that in Kansas, at least, the potential supply of college-caliber students is not being exhausted.

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