

**ACHIEVEMENT STATUS OF ACADEMICALLY TALENTED STUDENTS  
WHO ENTERED THE KANSAS STATE TEACHERS COLLEGE OF  
EMPORIA IN THE FALL OF 1957**

**A THESIS**

**Submitted to the  
Faculty of the Division of Business  
and Business Education and to the  
Graduate Council of the  
Kansas State Teachers College of Emporia**

**In Partial Fulfillment  
of the Requirements for the Degree of  
Master of Science**

**By**

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CHAPTER I

REPORT OF THE BOARD

A. INTRODUCTION

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that these figures represent an average of the results in the above fields may be verified in the following. The "Accumulative Average" already explained is:

There is the same procedure of statistical analysis for a few people that we already, however, and which we have seen, indeed, in the following for a few people. For a few people, indeed, indeed, it may be seen by the use of the system of individual averages, and not in a class when the average of averages is used, and especially in the case of a few people, a certain ability, a surprising ability to a degree to the majority of a few people in general.

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## CHAPTER I

### PURPOSE OF THE STUDY

#### A. INTRODUCTION

Hundreds of academically talented students enter American universities and colleges each year, become completely immersed in the various activities of college life, and never conspicuously give any indication that they differ from the average student, either in scholastic achievement or leadership qualities and traits. Therefore, many of them are never identified as being "talented"; or, if so identified, are neither understood nor effectively stimulated in their academic work.

In America today, there is an intense concern about the early identification, counseling and guidance of its talented students, so that their high potential as future citizens and leaders in the democratic way of life may be realized to the fullest. The "Rockefeller Report" strongly emphasizes that:

There is no more searching or difficult problem for a free people than to identify, nurture and wisely use its own talents. Indeed, on its ability to solve this problem rests, at least in part, its fate as a free people. For a free society cannot commandeer talent: it must be true to its own vision of individual liberty. And yet at a time when we face problems of desperate gravity and complexity an undiscovered talent, a wasted skill, a misapplied ability is a threat to the capacity of a free people to survive.<sup>1</sup>

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<sup>1</sup>Rockefeller Panel On Education, The Pursuit of Excellence, Education and the Future of America, Panel Report V of the Special Studies Project, Rockefeller Brothers Fund, Inc., America at Mid-Century Series (Garden City, New York: Doubleday & Company, Inc., 1958), p. v.



Similarly, in Dr. Conant's preliminary report on the American high school, he states that:

For the welfare of our citizens, for the preservation of our freedom, for the maintenance of our highly industrialized society, many men and women are required with highly specialized skills that are the result of long years of formal education . . . . And only those with certain kinds of ability can hope to complete those arduous academic labors. Those who can, I shall designate as the academically talented. They compose about 15% of the high school population on a national basis.<sup>2</sup>

This nation-wide awakening to the need for making the best possible use of America's talent is not merely the result of Russia's Sputniks, although that achievement most certainly did throw an unmerciful spotlight on America's entire educational system. Educators in this country have long been deeply concerned with this problem of developing the nation's most talented students.

In 1946, President Harry S. Truman established the President's Commission on Higher Education, charging its members with the "task of examining the functions of higher education in our democracy and the means by which they can best be performed."<sup>3</sup> This Commission reported that:

The first goal in education for democracy is the full, rounded, and continuing development of the person. The discovery, training,

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<sup>2</sup>James B. Conant, Some Problems of the American High School: A Preliminary Report of a Study, An Address Before the Eighteenth Annual Convention of National School Boards Association at Miami Beach, Florida (ditto copy of news release, April 18, 1958), p. 5.

<sup>3</sup>Higher Education for American Democracy, a Report of The President's Commission on Higher Education (New York: Harper & Brothers, 1947), copy of Letter of Transmittal from Commission to The President, December 11, 1947.

and utilization of individual talents is of fundamental importance in a free society.<sup>4</sup>

For the past few years, as an aftermath of the phenomenal increase in birthrate in this country during the early 1940's, elementary and secondary schools have already suffered severe classroom congestion, enrollment problems, and a dearth of adequately trained teacher personnel, with a resultant lack of attention to the interests, aptitudes and abilities of individual students.

This tidal wave of students will begin to enter the colleges and universities during the 1959-60 school year. The President's Commission mentioned above estimated that in 1960 a minimum of 4,600,000 students would be enrolled in colleges and universities. Of this total, approximately 2,500,000 would be in junior colleges, 1,500,000 in senior colleges, and 600,000 in graduate and professional schools.<sup>5</sup>

Making a national inventory of talent, the Commission conservatively estimated that:

1. At least 49 percent of our population has the mental ability to complete 14 years of schooling with a curriculum of general and vocational studies that should lead either to gainful employment or to further study at a more advanced level.
2. At least 32 percent of our population has the mental ability to complete an advanced liberal or specialized professional education.<sup>6</sup>

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<sup>4</sup>Ibid., Vol. I, p. 9.

<sup>5</sup>Ibid., Vol. I, p. 39.

<sup>6</sup>Ibid., Vol. I, p. 41.

The President's Committee on Education Beyond the High School, established by President Dwight D. Eisenhower in 1956, anticipated enrollments in 1970 which would be more than double the present 3,000,000.<sup>7</sup>

It would seem apparent, then, that the colleges and universities in this country must take stock of their present status and future potential with regard to adequate programs for identifying, counseling, guiding, training, and fully developing the abilities of the talented youth of America entrusted to their care.

As a result of recommendations proposed by the President's Committee mentioned above, forty-seven states (including Hawaii) are either currently in the process of or planning to conduct surveys of education beyond the high school in their areas.<sup>8</sup>

For the State of Kansas, Dr. Robert Koller (University of Minnesota), assisted by Dr. Pugsley (Kansas State College) and Dr. Evers (Washburn College), is making a complete survey of higher education.

#### B. STATEMENT OF THE PROBLEM

The present study has been made of a selected group of academically talented students to determine relationships between certain

<sup>7</sup>Charles A. Foster, "Education Beyond the High School: Second Report of the President's Committee," Higher Education, 14:8, September, 1957.

<sup>8</sup>Devereux C. Josephs (Chairman), "President's Committee on Education Beyond the High School: Final Report," Higher Education, 14:40-41, November, 1957.

indicated variables at the time of their enrollment and measures of scholastic success achieved during the first four semesters of their college work.

The group under consideration originally consisted of fifty-four freshmen students, representing the upper 10 per cent (less ten students for whom complete data were not available) of a total of 641 beginning freshmen who entered the Kansas State Teachers College of Emporia in the fall of 1957. These students were classified as being "academically talented" whenever they fell within the upper 10 per cent (tenth decile) of the comprehensive score distributions on the college placement examinations administered to them as entering freshmen.

The scope of this study included investigation into the following three major areas:

1. The specific abilities, aptitudes, and/or deficiencies, as measured by the entrance examinations, possessed by these selected students.
2. The proportionate contribution of the two sexes to this academically talented group, as revealed by the entrance-test scores and as measured by scholastic achievement in college.
3. The scholastic achievement of these students, as measured by the grade-point averages for the first two years of their college work.

#### C. DEFINITION OF TERMS

The following definitions apply to various terms used in this study:

Academically talented. Students possessing the mental capacity or sufficient drive to fall within the upper ranges of a given ability or group of abilities have variously been designated as being "gifted" (currently the apparent choice of the majority of writers), "superior," "exceptional," "talented," "fast learner," "atypical," "bright," "unusual," or some similar term.

While all investigators agree that these individuals possess high mental ability, they do not agree as to which mental traits are involved, nor as to the range of the intelligence quotients which constitute any one category. Dr. Conant's interpretation of the "academically talented" refers to "about 15% of the total class."<sup>9</sup> Leta Stetter Hollingworth set an I. Q. of 180 or above for "extraordinarily able" students, while L. M. Terman and Melita Oden chose an I. Q. of 130 and above for "gifted" students. As "bright" students, Fay Adams and Walker Brown included the upper 20 per cent of the school population, with I. Q.'s of 110 or above.<sup>10</sup> Other investigators include anywhere from 5 to 20 per cent of the school population as their standard for the top students.

For purposes of this study, however, the "academically talented" student was considered as one who fell within the upper 10 per cent

<sup>9</sup>Conant, op. cit., p. 6.

<sup>10</sup>Paul Witry (ed.), The Gifted Child, prepared by the American Association for Gifted Children (Boston: D. C. Heath and Company, 1951), pp. 316-18.

(tenth decile) on the comprehensive score distributions for the college entrance examinations.

Identification. Discovery of talent is no longer a mere matter of chance, good luck, or fortune. It is consciously being sought through large-scale, systematic, organized effort in the form of testing for mental ability and for special aptitudes, of inventorying for interests and for personality traits, of classroom observation, of personal interviews, and of counseling and guidance. For purposes of this study, then, "identification" refers to the discovery and recognition of able students through whatever means are available.

Counseling and Guidance. This term refers to individualized or personalized assistance to a student with regard to his personal, educational, or vocational problems in an effort to help him recognize his needs, establish purposive and achievable goals, and make his own decisions, free from compulsion or prescription, as to the most satisfactory means of attaining those goals.<sup>11</sup>

Percentile. The "distribution of values into one hundred groups of equal frequency."<sup>12</sup>

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<sup>11</sup>Carter V. Good (ed.), Dictionary of Education, prepared under the auspices of Phi Delta Kappa (New York: McGraw-Hill Book Company, Inc., 1945), pp. 104, 109.

<sup>12</sup>Henry E. Garrett, Statistics in Psychology and Education (third edition; New York: Longmans, Green and Co., 1948), p. 77.

Decile. The "distribution of values into ten groups of equal frequency."<sup>13</sup>

#### D. METHOD OF PROCEDURE

Sources of data. For a number of years, the Kansas State Teachers College of Emporia has administered a battery of examinations for entering freshmen. The individual tests used in the battery for the entering class of 1957 included:

Schrammel General Ability Test, Form C  
 Barrett-Ryan English Test, Rev. Form I  
 Schrammel-Gray Reading Test, Form B  
 Physical Science Test  
 Biology Test  
 Kansas Senior Comprehensive Test Scores for:  
     Mathematics  
     Social Science  
 Health Problems Entrance Test, 1957 Form.

All entrance examination data, including test scores, percentile scores, and decile rankings were obtained from the files of the Bureau of Educational Tests and Measurements, Kansas State Teachers College of Emporia.

Data relative to enrollments, drop-outs, semester grades and hours of credit, grade-point averages, scholastic honors, and the like were obtained from the Office of Student Services, Kansas State Teachers College of Emporia.

Selection of the study group. A total of 641 beginning freshmen students (398 men and 243 women) entered the Kansas State Teachers College

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<sup>13</sup>Ibid.

of Emporia in the fall of 1957. Inasmuch as this study involved only those students who fell within the upper 10 per cent (tenth decile) of the composite scores on the entrance examinations, 64 students should have been included in the group. However, records for 10 of these students either were not complete or were not available. Accordingly, as shown in Table I, the original group consisted of 54 beginning freshmen, including 23 men and 31 women, who enrolled for the first semester of the 1957-58 school year.

For the second semester of that school year, the group narrowed down to 22 men and 29 women, for a total of 51 students.

Only 3 men and 3 women enrolled for the first summer session of 1958, with 1 woman dropping out the second summer session.

By the first semester of the 1958-59 school year, 10 men had dropped out, leaving only 13 of the original group; while 6 women had dropped out, leaving only 25; for a total of 38 students in the study group.

For the second semester of the 1958-59 school year, 1 male drop-out student re-enrolled, while 2 women dropped out and 1 previous drop-out re-enrolled, for another total of 38 students in the study group.

While the group of students involved in this study was somewhat small, thereby precluding any conclusive findings, it was felt that the study did provide sufficient evidence of trends and probabilities to be worthwhile.

Presentation of data. Conclusions have been presented by indicating relationships between the abilities, aptitudes, and/or deficiencies,



**TABLE I**  
**NUMBER OF TENTH-DECILE FRESHMEN, BY SEMESTER OR**  
**SUMMER SESSION AND BY SEX, FOR THE TWO-YEAR**  
**PERIOD 1957-1959**

Sex	1957 - 58		Summer 1958		1958 - 59		Two Year Total
	1st Sem.	2nd Sem.	1st Sess.	2nd Sess.	1st Sem.	2nd Sem.	
Men	23	22	3	3	13	14	78
Women	31	29	3	2	25	24	114
Totals	54	51	6	5	38	38	192

**READ THUS:** For the first semester of the 1957-58 school year, there was a total of 54 tenth-decile freshmen, 23 men and 31 women, comprising this study group. Read other semesters or summer sessions similarly.

as measured by the entrance examinations, and scholastic achievement in college, as measured by the grade-point averages for the first two years of work. These relationships have been presented in tabular form, with appropriate analysis and discussion in the text of this study.

To measure the scholastic achievement of students involved, their grade-point averages were calculated for the first two years of college work. The averages for six students also included work completed in one or more summer sessions. In cases where a student dropped out of school for one or two semesters and then returned, data were counted as missing for those semesters of non-enrollment, and the student was counted with the original group upon re-enrollment.

The method used in this study to compute grade points was to assign a numerical value to the letter grade employed at this college. The numerical value, or grade points, assigned to each such letter grade is indicated below.

<u>Letter Grade</u>	<u>Grade Points</u>
A	4
B	3
C	2
D	1
F	0
I (incomplete)	0
W (withdrawal)	0

In calculating grade-point averages for any given semester, each student's number of course-credit hours was multiplied by the number of grade points for the letter grade earned in each course. The sum thus derived was then divided by the total number of hours of course credit

carried during that semester. For example, assume that for one semester a student carried five courses for 16 hours of credit, earning grade points as shown in the diagram below. The grade-point average would be

<u>Course Number</u>	<u>Hours Credit Per Course</u>	<u>Course Grade</u>	<u>Points Per Hour</u>	<u>Points Per Course</u>
101	3	A	4	12
106	3	A	4	12
110	3	B	3	9
203	2	C	2	4
359	<u>5</u>	A	4	<u>20</u>
<b>Total</b>	<b>16</b>			<b>57</b>

derived by dividing the total grade points (57) by the total hours of credit (16); or,

$$\text{G.P.A.} = 57 \div 16 = 3.56.$$

The only way to get a grade-point average is a grade system in which each hour of instruction has an assigned numerical value. This is the case of the "graded" or "credit-hour" system. This system of instruction has been developed in a greater degree of complexity and variety than any other system of instruction. It is the only system of instruction in which the student is required to carry a certain number of hours of instruction each semester. This system of instruction is the only one in which the student is required to carry a certain number of hours of instruction each semester. It is the only system of instruction in which the student is required to carry a certain number of hours of instruction each semester.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

For the past few years, and especially since Russia gained the limelight in the race to put the first satellite into orbit, literally hundreds of articles have been written, speeches made, lectures given, and editorials printed on that vast and seemingly unlimited topic of "What's wrong with our American educational system?"

In "Spotlight On Our Schools," Professor Frederick H. Lund of Temple University has written quite a comprehensive and rather scathing report on the school system in the United States, the aims of public education, and the neglect of the nation's ebler students. He also discusses the public criticism that has been thrown at American schools through nation-wide polls, writings, talks, televised interviews of teachers, scientists, admirals, legislators, and other "assumed" experts on education; and answers some of these criticisms.<sup>1</sup>

Not only has our educational system as a whole received an inordinate amount of attention, but an intensified interest has developed in the area of the "gifted" or "academically talented" student. While some educators have long been dedicated to a greater development of our most gifted students (as shown by the tremendous work accomplished by such outstanding leaders as Terman, Hollingworth, Havighurst, Oden, DeHann, and others), this wide-spread emphasis is relatively new. In fact, it

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<sup>1</sup>Frederick H. Lund, "Spotlight On Our Schools," Education, 79:115-25, October, 1958.

was only about a decade ago that Catherine Cox Miles commented that "the gifted, the potential leaders, discoverers, and creators, however, are usually left to develop their own skills in their own way, and in terms of personal initiative alone."<sup>2</sup>

Another major factor leading to today's interest in the academically talented student was the publication in 1951, by the American Association for Gifted Children, of a book entitled The Gifted Child.<sup>3</sup> This book was very widely read, and thus did a great deal to rekindle interest in the education of the more talented students.

The Federal Government, particularly the Office of Education under the Department of Health, Education, and Welfare; national and regional associations of educators and educational administrators, such as the National Education Association and the American Association of School Administrators; hundreds of state and national organizations; and private industry are all contributing to the advancement of this worthwhile project.

In 1957 alone, higher education received more than \$600 million from philanthropic sources, \$150 million of which came from corporations.<sup>4</sup>

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<sup>2</sup>Catherine C. Miles, "Gifted Children," Manual of Child Psychology, edited by Leonard Carmichael (New York: John Wiley and Sons, Inc., 1946), p. 931.

<sup>3</sup>Paul Witty, "The Gifted Student in the American High School," California Journal of Secondary Education, 33:389, November, 1958.

<sup>4</sup>Office of Education, Progress of Public Education in the United States of America, 1957-1958 (Washington, D. C.: United States Government Printing Office, 1958), p. 12.

The Carnegie Corporation recently made grants to three significant projects designed to facilitate exchange of information relative to education of talented students;<sup>5</sup> and both the Ford Foundation and the Rockefeller Foundation have sponsored similar programs.

Very naturally, America today is intensely concerned about the problem of adequately discovering and using to the fullest extent our nation's resources of talent. "It seems clear," said Paul Lomax, "that the discovery and proper guidance of students of high potential ability should be for all kinds of constructive endeavor that are deemed essential to the maintenance and advancement of our great country. . . ."<sup>6</sup>

Howard L. Davis, Chairman of The President's Committee on Scientists and Engineers, agreed with this, saying:

What we need is not a crash program in a few specialized areas, but a revitalization of our entire education system. . . . More than ever before our society needs broadly educated men who have the intellectual ability and the moral conviction to make the rough decisions that determine the course of mankind's advance.<sup>7</sup>

In an address at Kansas State Teachers College of Emporia on November 6, 1956, Dr. Robert Bellam, Professor of Psychology at Hope College, indicated that:

Leadership is one of the most important characteristics an individual may possess. Even though our scientific program is moving

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<sup>5</sup>Elaine Epton, "Extending the Horizons for Academically Talented Youth," The American School Board Journal, 137:53, November, 1958.

<sup>6</sup>Paul S. Lomax, "Business Education in a Space Age," an editorial in The Journal of Business Education, 33:235, March, 1958.

<sup>7</sup>Howard L. Davis, "And I, John, Saw . . .," The North Central Association Quarterly, 33:176-77, October, 1958.

rapidly, the most important thing is the fact that our social organization is becoming so complex that we are in danger of toppling over. Because of this, we need outstanding leadership. This is a field of training which has long been neglected. We need to insert this in the curriculum and find some way of developing this in the students.<sup>8</sup>

A pamphlet on Education of the Gifted, prepared by the Educational Policies Commission, deals with the education of gifted children on all levels--elementary, secondary, and higher. It points out the great social waste resulting from the failure of gifted individuals to receive proper education, emphasizing the need for educational opportunities of all, regardless of social or economic status.<sup>9</sup>

In "Extending the Horizons for Academically Talented Youth," Elaine Exton states that:

As William H. Cornog, superintendent of the New Trier Township High School, Winnetka, Ill., points out in the new yearbook on Education for the Gifted, published by the National Society for the Study of Education (5835 Kimbark Ave., Chicago 37, Ill.): "It is important for a free society such as ours to educate its gifted youth not merely because the most intensive education of them is necessary to society's survival in this age of advanced technology and science but because under the tenets of our philosophy of human rights and equality, we hold it to be the birthright of every man to have as rich and appropriate opportunity for self-realization, for acquiring self-knowledge and self-discipline, as his capacities and aspirations allow him."<sup>10</sup>

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<sup>8</sup>Robert Dallam, Professor of Psychology, Hope College, in an address at Kansas State Teachers College of Emporia, November, 1958. Permission to quote secured.

<sup>9</sup>Educational Policies Commission, Education of the Gifted (Washington, D. C.: National Education Association, 1950).

<sup>10</sup>Exton, op. cit., p. 52.

According to S. A. Kendrick, Vice President, Examinations and Research, College Entrance Examination Board, New York City, in his "In Search of Talent":

A society startled by a show of strength from its enemies, and resolved to develop its resources of talent to the utmost but unwilling to pay the price for refurbishing its educational systems, is apt to turn toward some apparently easy method for discovering talented youth full-grown or capable of rapid development at little expense or trouble.<sup>11</sup>

In addition to the reports submitted by The President's Commission on Higher Education,<sup>12</sup> The President's Committee on Education Beyond the High School,<sup>13</sup> and Dr. Conant's study of the American high school,<sup>14</sup> (see Chapter I, pp. 2, 2, and 4, respectively), probably the most outstanding and most comprehensive report of recent date is the Rockefeller Report on The Pursuit of Excellence.<sup>15</sup>

The Panel on Education of the Special Studies Project, which prepared the Rockefeller Report, includes such outstanding members as:

Nelson A. Rockefeller, chairman of the panel  
 General Lucas D. Clay, chairman, Continental Can Company, Inc.,  
 and former Military Governor, U. S. Zone, Germany  
 John Cowles, president, Minneapolis Star & Tribune

<sup>11</sup>S. A. Kendrick, "In Search of Talent," The Journal of Teacher Education, 9:235, September, 1958.

<sup>12</sup>Higher Education for American Democracy, a Report of The President's Commission on Higher Education (New York: Harper & Brothers, 1947).

<sup>13</sup>Pofter, op. cit., pp. 7-10. <sup>14</sup>Conant, op. cit., pp. 1-15.

<sup>15</sup>Rockefeller Panel On Education, The Pursuit of Excellence, Education and the Future of America, Panel Report V of the Special Studies Project, Rockefeller Brothers Fund, Inc., America at Mid-Century Series (Garden City, New York: Doubleday & Company, Inc., 1958), pp. 1-49.



John S. Dickey, president, Dartmouth College  
 John W. Gardner, president, Carnegie Corporation; president,  
 Carnegie Foundation for the Advancement of Teaching  
 Theodore M. Hesburgh, president, University of Notre Dame  
 Oveta Culp Hobby, president and editor, The Houston Post;  
 former Secretary of Health, Education and Welfare  
 Devereux C. Joseph, chairman, New York Life Insurance Company;  
 former chairman, President's Committee on Education Beyond  
 High School  
 Henry R. Luce, editor-in-chief, Time, Life, Fortune  
 General James McCormack, vice president, Massachusetts  
 Institute of Technology  
 Charles H. Percy, president, Bell & Howell Company; director,  
 Fund for Adult Education, Ford Foundation  
 Anna M. Rosenberg, public and industrial relations consultant;  
 former Assistant Secretary of Defense for Manpower and  
 Personnel  
 Dean Rusk, president, The Rockefeller Foundation  
 Henry A. Kissinger, director of the Special Studies Project,  
 Rockefeller Brothers Fund, Inc.<sup>16</sup>

This Rockefeller Report states that ". . . a free nation's search for talent is always a critical aspect of its national existence."<sup>17</sup> And again, "It is now widely recognized that our society has given too little attention to the individual of unusual talent or potentialities."<sup>18</sup>

The National Defense Education Act of 1958 is the first general law enacted by Congress in many years which provides for the expenditure of federal funds for education. This Act makes possible college student loans, graduate fellowships for future college professors, a better identification of gifted students, and improved equipment for science, mathematics, and language arts instruction. The Act has this to say about the talented student:

In this pursuit of excellence for the individual, the Act does not concern itself with how much bigger our schools should be . . . but

<sup>16</sup>Ibid., pp. vi-vii.

<sup>17</sup>Ibid., p. v.

<sup>18</sup>Ibid., p. 15.

rather with the finding and encouraging of talent, with the improving of the ways and means of teaching, with the furthering of knowledge itself.<sup>19</sup>

The National Education Association's Conference on the Identification and Education of the Academically Talented Student recognized that "educating the academically talented involves total educational planning--curriculum, instruction, administration, guidance, resources, teacher preparation, and community relationships."<sup>20</sup>

In an editorial entitled "Improved Research in Business Education," Dean R. Malsbary indicated that:

We need to study in minutest detail the nature of the person being taught and to examine continually our instructional methods and materials. Only by astute observation and organized inquiry, examination, and analysis can we determine what we are doing that is right, and what we are doing that needs doing better or needs to be completely changed.<sup>21</sup>

Reporting on Conference No. 6 of a series of conferences conducted by the Commission on Research and Service at the Sixty-Third Annual Meeting of the North Central Association in Chicago, March 24-28, 1958, the Association stated that:

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<sup>19</sup>"National Defense Education Act of 1958," School Life, 41:3, October-November, 1958.

<sup>20</sup>Exton, op. cit., p. 53.

<sup>21</sup>Dean R. Malsbary, "Improved Research in Business Education," an editorial in The National Business Education Quarterly, 26:5, Spring, 1958.

Although we have not yet found the best method of educating all youth, we should look at what we are doing. In this search for a better approach, three steps need to be taken:

- (1) Identify competencies through intelligence tests, teacher judgments, and the like.
- (2) Identify skills, weaknesses, talents, maladjustments, and so forth, as factors which must be considered in individual planning.
- (3) Program each youngster. Accelerate if indicated, not necessarily by skipping grades but by resorting to ungraded rooms on the elementary level and to preparation for early entrance to college, on the secondary. Let him specialize in special schools or by special projects in regular schools. The latter seems feasible in most situations.<sup>22</sup>

No review of literature would be complete without reference to Walter S. Monroe's Encyclopedia of Educational Research.<sup>23</sup> In it, Monroe cites all of the many authorities in the field of education of the gifted, covering such areas as definition of "gifted"; their discovery and identification; their physical, mental, emotional, and social traits; placement and grouping; methods of instruction; significance of parents, teachers, school administrators, and the community; and guidance and counseling.

In defining the term "gifted," Monroe states:

For the various investigators interested in the problem, the term "gifted" seems to have different connotations. Terman used an IQ

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<sup>22</sup>Commission on Research and Service, "How Can We Most Effectively Guide and Motivate Superior and Talented High School Students?" The North Central Association Quarterly, 33:193, October, 1958.

<sup>23</sup>Walter S. Monroe (ed.), Encyclopedia of Educational Research (revised edition; New York: The Macmillan Company, 1956), pp. 1-1520.

(Stanford-Binet) of 140 as the lower limit of a gifted group. Hollingsworth, Baker, and others have defined the gifted child as one having an IQ above 130. On the basis of this definition, the "gifted" group includes the most intelligent one per cent of the juvenile population.<sup>24</sup>

But the Rockefeller Report says that "we must not assume that native capacity is the sole ingredient in superior performance. Excellence . . . is a product of ability and motivation and character."<sup>25</sup>

Speaking of mental traits, Monroe stated that:

All investigators concede that gifted children possess high mental ability, but agreement is lacking in regard to the mental traits involved. . . . Gifted children exhibit superior achievements, but the status attained is generally conditioned by concentration of effort on a special goal. Gifted children have been found to have well-marked talents and aptitudes, and an individual's achievement in a particular field is conditioned by his special aptitudes and by his interests.<sup>26</sup>

With regard to physical traits, Monroe reported that:

At one time physical unfitness was commonly believed to be characteristic of the intellectually gifted child, but there is now much objective evidence to refute this hypothesis. Hollingsworth and Terman found the gifted child generally larger and stronger than the unselected, heavier and healthier than the average--with need for encouragement in physical activity.<sup>27</sup>

As to social traits, again Monroe indicated that:

Research on gifted children has shown good social adjustment to be associated with high intelligence. . . . A definite tendency is shown for gifted children to prefer older companions or those somewhat equal to themselves in mental age. However, Hollingsworth, Martens, and Waggener point out that the gifted youth is often socially immature and therefore shy with the older group whose mental pursuits interest him.<sup>28</sup>

<sup>24</sup>Ibid., p. 505.

<sup>25</sup>Rockefeller, op. cit., p. 17.

<sup>26</sup>Monroe, op. cit., p. 506.

<sup>27</sup>Ibid.

<sup>28</sup>Ibid., p. 507.

And finally, speaking of emotional traits, Monroe reported that:

Hollingsworth found that gifted children rated as well as unselected children in emotional stability and that there are fewer neurotics among them than among unselected groups. . . . They are cheerful, prefer to work out their own difficulties, adjust easily to situations, and are prone to develop attitudes worthy of social approval.<sup>29</sup>

Under the heading "Guidance, Counseling, and Testing," the National Defense Education Act of 1958 indicates that:

Every year about 200,000 able young people, some of them exceptionally talented, drop out of high school or turn their backs on college. For nearly half of them, the problem is only lack of money; but all the rest drop out simply because they do not want to go to school anymore. Their lack of wanting is more complicated than lack of money, and indefinitely more complicated to overcome.

Many of them have never found out that they are bright, have never thought of themselves as college material. And nearly all of them have set their sights on goals far beneath their powers to reach, chiefly because no one ever helped them to look farther and higher.<sup>30</sup>

The President's Commission on Higher Education pointed out that counseling was one of the most important instruments for accomplishing the purposes of higher education, saying that the "skillful use of measures of ability, interest, aptitude, and previous educational achievement will enable the counselor to help each student to develop a program of courses and activities adapted to his personal needs."<sup>31</sup>

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<sup>29</sup>Ibid.

<sup>30</sup>"National Defense Education Act of 1958," op. cit., p. 15.

<sup>31</sup>The President's Commission on Higher Education, Higher Education for American Democracy (New York: Harper & Brothers, 1947), p. 66.

Also commenting on the importance of guidance and counseling, the Rockefeller Report states that:

The objective of all educational guidance should be to stimulate the individual to make the most of his potentialities. The fact that a substantial fraction of the top quarter of high school graduates fail to go on to college is a startling indictment of our guidance system. It is not surprising that teachers, trained as they are to deal protectively and helpfully toward young people, should focus a major portion of their guidance efforts on those who seem most in need of help, such as the retarded and the delinquents. But there are students at the high end of the scale who present an equally great problem as far as society is concerned. Within the framework of concern for all, guidance should give particular attention to able students.

.....

An adequate guidance system would insure that each student would then be exposed to the sort of program that will develop to the full the gifts which he possesses.<sup>32</sup>

A fitting summary of this review of literature would be these further comments from the Rockefeller Report:

But the schools cannot do full justice to each young person in developing what gifts he may possess until they face frankly the need to provide different programs for different types and levels of ability. Our schools have made far more progress in identifying different levels of talent than in the development of programs for these different levels. Adequate attention to individual differences means rejecting a rigid policy of promotion by age; and it means sensible experimentation with various kinds of flexibility in the curriculum to meet the varying needs of young people. And especially it means providing unusually able boys and girls with rigorous and challenging experiences.<sup>33</sup>

<sup>32</sup>Rockefeller, op. cit., p. 30.

<sup>33</sup>Ibid., pp. 30-31.

## CHAPTER III

### PRESENTATION AND INTERPRETATION OF DATA

The purpose of this chapter is to present the data collected and to interpret the findings in a manner that will indicate the potential scholastic achievement of the selected group of students, the contribution of the two sexes, and the actual scholastic achievement demonstrated by the group.

#### A. PRELIMINARY TREATMENT OF ENTRANCE-TEST SCORES

Before entering freshmen enroll for their first semester of college work, they are given a battery of tests to help determine their scholastic abilities, aptitudes, and/or deficiencies, and to help their advisors in enrollment counseling. The test scores for each individual examination are arranged, first, into percentile and then into decile groups. From these initial breakdowns, a composite percentile score is obtained, and from that, a final placement of individual students into one of the ten deciles. These data are recorded on special placement cards for each student, a copy of which is furnished the student's advisor.

This study covered only those students who ranked in the upper 10 per cent, or tenth decile, of freshmen who entered the Kansas State Teachers College of Emporia in the fall of 1957. The number of these tenth-decile freshmen, by semester and sex, for the two-year period 1957-1959 is given in Table I, page 10. Their overall percentile scores, I. Q. scores, and decile rankings for each entrance test are listed in

Table II; and in Table III are the number and per cent of men and women who ranked in each decile for each individual test.

#### B. ENTRANCE-EXAMINATION DATA

As indicated in Table I, page 10, 23 men and 31 women ranked in the tenth decile on their composite entrance examination scores. These 54 students formed the initial study group for the first semester of the 1957-58 school year. For the second semester of that school year, 1 man and 2 women dropped out of school, leaving a total of 51 students in the group. The largest number of drop-outs occurred between the last semester of the 1957-58 school year and the first semester of the 1958-59 school year. The number of men in the group dropped to a low 13, and the number of women to 25, for a total loss to the study group of 16 students and a remainder of 38 students. For the second semester of 1958-59, 1 man and 1 woman resumed their school work, but an additional 2 women dropped out, so that the study group leveled off at 38 students.

A study of Table II shows that only three students, Nos. 14, 27, and 30, ranked in the tenth decile for all entrance tests. A check on the achievement of these students, as indicated in Table V, page 39, revealed that Student No. 14 (a woman) accumulated a grade-point average for the two years of 3.80, well into the A grade bracket. (Grade brackets are delimited in Table VI, page 48.) Student No. 27 (a man), who attended only two semesters, earned a grade-point average of 2.86, the B+ bracket. Student No. 30 (also a man) dropped out the first semester of 1958-59, but



TABLE II

ENTRANCE EXAMINATION DATA PERTAINING TO  
TENTH-DECILE ENTERING FRESHMEN WHO  
ENROLLED THE FIRST SEMESTER OF 1957-58

Student Number	Age	Sex	Overall Z-ile Score	I. Q. Score	DECILE RANKINGS									
					I. Q.	English	Reading Gen. Comp.	Reading Comp. Effic.	Reading Rate	Math	Physical Science	Social Science	Biological Science	Health Science
1	19	M	92	127	10	9	8	9	6	9	10	10	10	10
2	17	F	96	125	10	9	10	8	10	9	10	10	10	10
3	17	M	97	119	10	5	10	6	10	9	10	9	10	10
4	17	F	92	117	9	9	8	2	10	10	6	9	7	10
5	17	M	90	128	10	5	10	8	10	10	9	9	10	8
6	17	F	93	120	10	9	10	8	10	9	5	10	7	7
7	18	M	99	129	10	10	10	7	10	10	10	10	10	10
8	21	M	95	125	10	8	10	10	10	9	10	10	10	9
9	17	M	91	123	10	7	10	7	10	10	10	9	10	8
10	--	F	98	123	10	10	10	10	10	10	6	10	9	8
11	17	F	92	126	10	10	9	10	9	9	5	10	10	10
12	18	F	94	120	10	9	10	10	10	9	9	10	10	9
13	18	F	97	126	10	9	10	10	10	10	10	10	10	10
14	18	F	99	132	10	10	10	10	10	10	10	10	10	10
15	17	F	95	123	10	10	10	8	10	10	7	10	10	9
16	18	F	97	126	10	7	7	5	8	10	10	10	9	8
17	17	M	94	121	10	8	10	6	10	10	9	10	7	4
18	--	F	92	128	10	9	10	9	10	10	9	10	9	9
19	18	M	94	127	10	7	7	7	7	10	10	10	10	10
20	17	M	91	116	9	7	10	7	10	9	10	10	10	10
21	17	F	96	133	10	9	10	8	10	10	9	10	3	9
22	--	F	92	114	9	8	10	9	10	7	9	10	10	10
23	17	F	95	124	10	10	10	9	10	8	9	10	10	8
24	17	F	99	129	10	10	10	9	10	10	10	10	10	10
25	--	M	98	134	10	10	10	10	10	10	10	10	9	8
26	17	M	94	122	10	10	10	10	10	10	10	10	9	9
27	--	M	99	130	10	10	10	10	10	10	10	10	10	10
28	--	F	96	126	10	10	10	8	10	9	9	10	10	9
29	18	M	99	131	10	10	10	9	10	10	10	10	10	9
30	18	M	99	129	10	10	10	10	10	10	10	10	10	10
31	18	M	99	133	10	9	10	9	10	10	10	10	10	8
32	17	F	99	133	10	10	10	10	10	9	10	10	9	9

TABLE II (continued)

Student Number	Age	Sex	Overall %ile Score	I. Q. score	DECILE RANKINGS									
					I. Q.	English	Reading Gen. Comp.	Reading Comp. Effic.	Reading Rate	Math	Physical Science	Social Science	Biological Science	Health Science
33	--	F	93	120	10	8	9	5	10	10	8	10	10	8
34	18	F	95	116	9	10	10	10	10	7	9	10	10	9
35	18	M	95	125	10	9	8	9	7	10	10	9	10	9
36	--	M	96	133	10	10	10	10	10	10	10	10	10	7
37	18	F	98	126	10	9	8	9	8	9	6	10	10	10
38	17	F	98	116	9	10	9	5	1	10	10	10	9	9
39	17	F	92	123	10	10	10	8	10	10	9	9	10	8
40	--	M	98	134	10	8	10	9	10	10	10	10	10	9
41	32	F	92	131	10	9	10	9	10	8	7	10	10	9
42	17	F	92	129	10	10	10	9	10	10	10	8	10	9
43	17	F	92	120	10	7	7	6	7	10	7	10	10	9
44	17	F	95	129	10	10	10	10	10	10	7	9	10	8
45	18	M	90	120	10	3	10	9	10	7	10	10	10	7
46	17	F	94	118	10	10	10	9	10	9	6	10	10	10
47	18	F	93	122	10	10	10	10	10	10	8	9	10	9
48	18	M	94	120	10	10	6	10	4	9	10	10	9	8
49	18	F	94	127	10	10	10	8	10	10	6	10	6	9
50	18	F	97	134	10	10	10	10	10	9	10	9	10	9
51	18	M	95	125	10	9	10	8	10	9	10	10	10	10
52	17	M	97	122	10	6	10	9	10	10	9	10	10	10
53	17	F	94	131	10	8	10	7	10	10	9	9	10	10
54	--	F	94	120	10	8	10	6	10	9	8	10	10	10

TABLE III  
NUMBER AND PER CENT<sup>1</sup> OF MEN AND WOMEN IN  
EACH DECILE FOR EACH ENTRANCE EXAMINATION

Test	10		9		8		7		6		5		4		3		2		1	
	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.
I. Q.	No.	22	27	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	%	40.7	50.0	1.9	7.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
English	No.	8	17	5	8	3	4	3	2	1	0	2	0	0	0	1	0	0	0	0
	%	14.7	31.4	9.3	14.8	5.6	7.4	5.6	3.7	1.9	0	3.7	0	0	0	1.9	0	0	0	0
R.G.C.	No.	19	24	0	3	2	2	1	2	1	0	0	0	0	0	0	0	0	0	0
	%	35.1	44.4	0	5.6	3.7	3.7	1.9	3.7	1.9	0	0	0	0	0	0	0	0	0	0
R.C.E.	No.	7	10	8	7	2	7	4	1	2	2	0	3	0	0	0	0	1	0	0
	%	12.9	18.6	14.8	12.9	3.7	12.9	7.4	1.9	3.7	3.7	0	5.6	0	0	0	0	1.9	0	0
R.R.	No.	19	26	0	1	0	2	2	1	1	0	0	0	1	0	0	0	0	0	1
	%	35.1	48.0	0	1.9	0	3.7	3.7	1.9	1.9	0	0	0	1.9	0	0	0	0	0	1.9
Math	No.	16	17	6	10	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0
	%	29.6	31.4	11.2	18.6	0	3.7	1.9	3.7	0	0	0	0	0	0	0	0	0	0	0
P.S.	No.	19	9	4	8	0	3	0	4	0	5	0	2	0	0	0	0	0	0	0
	%	35.1	16.7	7.4	14.8	0	5.6	0	7.4	0	9.3	0	3.7	0	0	0	0	0	0	0
S.S.	No.	19	24	4	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	%	35.1	44.4	7.4	11.2	0	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0

<sup>1</sup>It should be noted that the percentage figures were computed on the basis of the entire study group of 54 students, not on the basis of number of sex.

TABLE III (continued)

Test	10		9		8		7		6		5		4		3		2		1	
	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.	Men	Wom.
B.S.	No. 18	23	4	4	0	0	1	2	0	1	0	0	0	0	0	0	1	0	0	0
	% 33.3	42.5	7.4	7.4	0	0	1.9	3.7	0	1.9	0	0	0	0	0	1.9	0	0	0	0
H.S.	No. 9	11	6	13	5	6	2	1	0	0	0	0	1	0	0	0	0	0	0	0
	% 16.7	20.2	11.2	23.9	9.3	11.2	3.7	1.9	0	0	0	1.9	0	0	0	0	0	0	0	0



returned for the second semester to earn a grade-point average of 2.17, the C grade bracket. A discussion of drop-outs, including follow-up procedures utilized by this college, begins on page 66.

Four students, Nos. 7, 13, 24, and 36, ranked in the tenth decile for all but one entrance test. Two of these lower scores were in Reading General Comprehension, one in English, and one in Health Science. Student No. 7 (a man), one of six students in this study group who also took some summer school work, has earned a grade-point average of 3.79, the A grade bracket; Student No. 13 (a woman), a grade-point average of 3.76, also the A grade bracket; Student No. 24 (another woman), a 3.85, the fourth highest grade-point average earned by the entire study group; and Student No. 36 (another man), a 3.65, the A- grade bracket.

All four of these students, as compared to only one of the three students who ranked in the tenth decile for all entrance tests, have lived up to their scholastic potential as measured by the entrance tests.

Student No. 1, a 19-year-old man, had an overall percentile score of 92 and an I. Q. score of 127. He ranked in the tenth decile in I. Q., Physical Science, Social Science, Biological Science, and Health Science; the ninth decile in English, Mathematics, and Reading Comprehension Efficiency; the eighth in Reading General Comprehension; and the sixth in Reading Rate. Thus, it can be seen that at the time of his entrance he had some deficiency in reading.

To determine whether this deficiency has affected his scholastic achievement in college, a look at Table V, page 39 reveals that during

his first semester he earned 3 hours of A, 9 hours of B, and 3 hours of C for a grade-point average of 3.00, a straight B average. The second semester, he earned 3 hours of A, 9 hours of B, and 2½ hours of C for a grade-point average of 2.83, or a B- grade. His overall grade-point average for the two semesters he was in school was 2.92, or a B- grade.

A study of Table VIII, page 51, shows that the lowest limit to which a grade-point average might fall, in comparison with the total college average, and still be within the upper 10 per cent, is 3.42; or, in comparison with the junior college average only, 3.24, the B<sup>+</sup> grade bracket. Evidently, then, Student No. 1 did not live up to the potential demonstrated by his entrance examination scores.

A check on the course grades which Student No. 1 received revealed that his lowest grades were in history, mathematics, and physical education. His reading deficiency may well have affected his achievement in the first two subjects. The correlation between reading ability and scholastic achievement is briefly touched upon later in this study.

Considerable similar information as to relationships between entrance test scores and specific areas of college achievement may be obtained from a close study of Tables II and V. For instance, how did Students No. 4 and 38, with respective decile rankings of second in Reading Comprehension Efficiency and first in Reading Rate, achieve sufficiently in the other test areas to bring their overall percentile scores up to the tenth decile level? Has their scholastic achievement in college lived up to their demonstrated potential?

Student No. 4 has made only A's and B's during his two years of college, for an accumulative grade-point average of 3.50, the A- grade bracket; whereas, Student No. 38 has earned six hours of C, to bring his grade-point average down to 3.35, the B+ grade bracket. A reading deficiency evidently has not affected too greatly the scholastic achievement of Student No. 4, but it may have that of Student No. 38. Further research into the subject areas in which the C grades were earned by the latter student would furnish a more reliable answer.

None of the rankings for the I. Q. scores fall below the ninth decile; while those for the English scores ranged down to the third decile; for the Reading Comprehension Efficiency scores, down to the second decile; and for the Reading Rate scores, down to the first decile.

On I. Q. scores, 22 men, or 41.7 per cent of the total group of 54 students, and 27 women, or 50.0 per cent of the total group, were in the tenth decile; and 1 man, or 1.9 per cent, and 4 women, or 7.4 per cent, were in the ninth decile.

For English, 8 men, or 14.7 per cent, and 17 women, or 31.4 per cent, were in the tenth decile, with all of the lower rankings being earned by men.

Reading General Comprehension rankings were fairly evenly divided between men and women. The lowest decile was the sixth, with only one man in it.

As noted briefly above, the widest range of decile rankings was in Reading Comprehension Efficiency and Reading Rate. Seven men, or

12.9 per cent, and 10 women, or 18.6 per cent, were in the tenth decile on Reading Comprehension Efficiency; and 8 men, or 14.8 per cent, and 7 women, or 12.9 per cent, were in the ninth decile. From there down, the spread was wide. For Reading Rate, 19 men, or 35.1 per cent, and 26 women, or 48.0 per cent, were in the tenth decile, with a quick drop in numbers and percentages, and a wide spread down to the first decile.

Many studies have been made to determine relationships between language facility and/or reading ability and scholastic achievement, and it has generally been found that there does exist a high degree of correlation between these factors. While it was beyond the scope of this study to determine statistical relationships between individual entrance test scores and individual achievement in specific subject areas, it was noted that 3 students (all men) fell into the lower deciles in English, 4 women into the lower deciles in Reading Comprehension Efficiency, and 1 man and 1 woman (a duplicate of one of the women in the lower deciles of Reading Comprehension Efficiency) into the lower deciles in Reading Rate.

A check of the achievement of the three men in the lower deciles in English revealed that one had an overall grade-point average of 3.09, and had made B's in both Freshman English I and II. Another had a grade-point average of 1.31 (having enrolled for only two semesters), and had made a C in Freshman English I and an F in Freshman English II. The third had a grade-point average of 1.42 (having withdrawn from all courses during his second semester), and had made an F in Freshman



English I, which precluded his enrollment in Freshman English II until he had raised that grade.

There were no specific subject areas with which to compare the decile rankings for the Reading Comprehension Efficiency and the Reading Rate scores, but it was noted that the woman who ranked in the second decile in Reading Comprehension Efficiency ranked in the tenth decile in Reading Rate, and had an overall grade-point average of 3.50, an A-. One of the three women who ranked in the fifth decile in Reading Comprehension Efficiency ranked in the eighth in Reading Rate, and had an accumulative grade-point average of 3.62, also an A-. Another ranked in the first decile in Reading Rate, and had an overall grade-point average of 3.35, a B<sup>+</sup>; while the last one ranked in the tenth decile in Reading Rate, and had an accumulative grade-point average of 3.00, a B, for the one semester in which she was enrolled. The man who ranked in the fourth decile in Reading Rate ranked in the tenth in Reading Comprehension Efficiency, and had an accumulative grade-point average of 2.85, a B-.

Decile rankings on the Mathematics scores did not fall below the seventh decile, and 61 per cent (16 men and 17 women) of the entire group were in the tenth decile. Only 5 students (1 man and 4 women), or 9.3 per cent, were under the ninth decile.

The men far out-performed the women on the Physical Science test, having 19, or 35.1 per cent, in the tenth decile as compared to 9 women, or 16.7 per cent. None of the men ranked below the ninth decile, while 14 women ranged down to the fifth decile.

Only one student, a woman, ranked below the ninth decile in Social Science, with 79.5 per cent of all the students ranking in the tenth decile. Evidently, the students are coming to college with a broad basic knowledge of this subject area.

The spread of scores for Biological Science was considerably wider, ranging from 75.8 per cent in the tenth decile to 1.9 per cent in the third decile.

On the Health Science test, 9 men, or 16.7 per cent, and 11 women, or 20.2 per cent, were in the tenth decile; with only 1 student, a man, ranking in the fourth decile.

A graphic presentation of the range in rankings for men and women on each entrance test, from the tenth decile through the sixth decile, appears in Figure 1. The range in rankings for the five lower deciles was too insignificant to present in graphic form.

### C. SCHOLASTIC ACHIEVEMENT IN COLLEGE

The scholastic potential of this study group having been measured by means of the entrance tests discussed in the foregoing paragraphs, the actual scholastic achievement of the group should be measured next.

Inasmuch as some fields of study require greater ability than do others, with an accompanying effect on grades earned, Table IV was prepared to show the major fields of interest of these tenth-decile students, by student number and sex.

The two fields in which a larger percentage of these students entered than any other field were English and Pre-Engineering. In

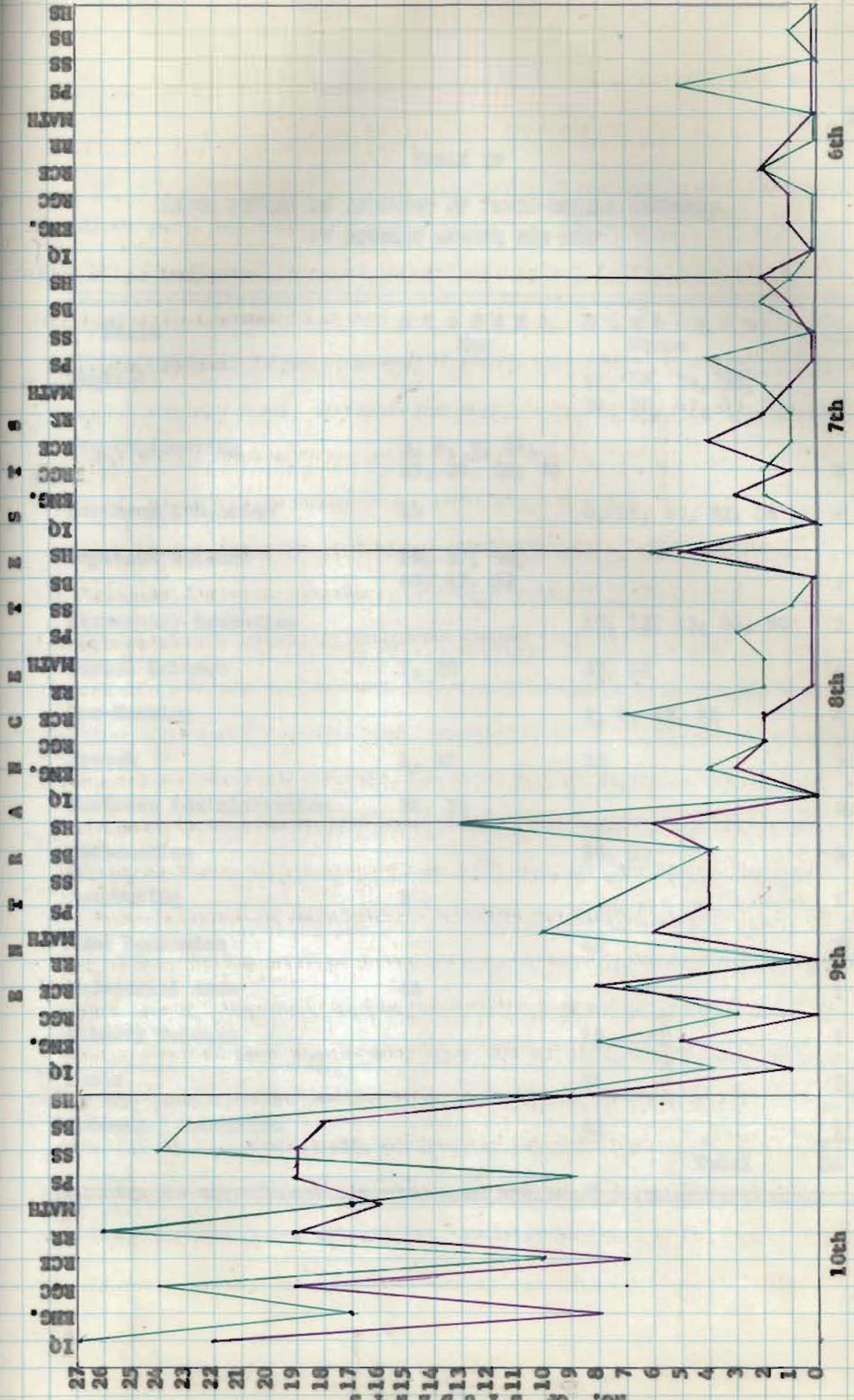


FIGURE 1  
 RANGE IN RANKINGS FOR MEN AND WOMEN ON EACH ENTRANCE TEST, PER DECILE

Men ——— (23)  
 Women ——— (31)

TABLE IV

MAJOR FIELDS OF INTEREST OF TENTH-DECILE STUDENTS,  
BY STUDENT NUMBER AND SEX

Field	Student Numbers		Total
	Men	Women	
English		11, 14, 28, 33, 34, 39, 47, 49	8
Pre-Engineering	3, 8, 9, 17, 25, 29, 35, 36		8
Business Education	18	6, 21, 22, 32, 54	6
Physical Science	19, 27, 30, 40, 45, 52		6
Elementary Education		10, 12, 13, 44, 50	5
Social Science	7, 20	37, 38	4
Pre-Nursing		2, 4, 42, 46	4
Speech	1, 51	23	3
Business Administration	26, 31		2
Mathematics		16, 53	2
Accounting	5		1
Home Economics		41	1
Industrial Arts	48		1
Library Science		15	1
Music		24	1
Secondary Education		43	1
		Total	54

English, there were 8 students (all women), or 15 per cent of the group. There were also 8 students (all men), or 15 per cent of the group, in Pre-Engineering. Business Education and Physical Science were next, each with 6 students, 1 man and 5 women entering Business Education, and 6 men entering the Physical Science field. The remainder of the group entered widely diversified fields of study, as indicated in the table.

Outlined in Table V are the number of hours of each grade earned, by semester, by each student in the study group; the total number of hours earned each semester; the grade-point average for each semester; and the accumulative grade-point average.

As an aid in interpreting the grade-point averages in terms of the more commonly known letter grades, Table VI was prepared to show the inclusive grade points which make up each letter grade bracket.

The highest accumulative grade-point average for the group, as shown in Table VII, page 49, was 3.87, earned by a man and closely followed by a 3.86 grade-point average earned by a woman. None of the men made the top 4.00 grade-point average for any one semester, but at least one woman achieved that high average each semester.

The widest spread in grade-point averages was on the low level, where the men went down as low as 1.42, 1.19, 1.53, and .71 for the four respective semesters, with a low accumulative average of 1.42, a B<sup>+</sup> grade. On the other hand, the lowest semester average for the women was 1.59, with a low accumulative average of 2.52, a B- grade.

TABLE V

NUMBER OF SEMESTER HOURS, PER GRADE, AND GRADE-POINT AVERAGES  
EARNED BY INDIVIDUAL STUDENTS

Student Number	Sex	Semester*	HOURS							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
1	M	1	3.0	9.0	3.0					15.0	3.00	
		2	3.0	9.0	2.5				2.0	14.5	2.83	
		Tot	6.0	18.0	5.5				2.0	29.5	5.83	2.92
2	F	1	9.0	7.0						16.0	3.56	3.79
		2	15.0	3.0						18.0	3.83	
		5	14.0	2.0						16.0	3.88	
		6	5.0	11.0						16.0	3.31	
		Tot	43.0	23.0						66.0	14.58	3.65
3	M	1			8.0	1.0	3.0	12.0	3.0	12.0	1.42	
		2		3.0	3.0	3.5	6.0	12.0		15.5	1.19	1.97
		Tot		3.0	11.0	4.5	9.0	12.0	3.0	27.5	2.61	1.31
4	F	1	7.0	9.0						16.0	3.44	
		2	14.0	3.0						17.0	3.82	
		5	9.0	8.0						17.0	3.53	
		6	3.0	13.0						16.0	3.19	
		Tot	33.0	33.0						66.0	13.98	3.50
5	M	1	7.0	6.0	5.0					18.0	3.11	
		2	.5	15.5						16.0	3.03	
		5	.5	12.0	2.0					14.5	2.90	
		6	7.0	7.0	2.0					16.0	3.31	
		Tot	15.0	40.5	9.0					64.5	12.35	3.09
6	F	1	6.5	8.5	2.0					17.0	3.26	
		2	10.0	4.0	3.0					17.0	3.41	
		5		5.0	5.0				3.0	10.0	2.50	
		Tot	16.5	17.5	10.0				3.0	44.0	9.17	3.06

\*Code for semester number:

- 1 - Fall, 1957
- 2 - Spring, 1958
- 3 - 1st Summer Session, 1958
- 4 - 2nd Summer Session, 1958
- 5 - Fall, 1958
- 6 - Spring, 1959

TABLE V (continued)

Student Number	Sex	Semester	H O U R S							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
7	M	1	15.0	.5						15.5	3.97	
		2	16.0	1.0						17.0	3.94	
		3	5.0							5.0	4.00	
		4	3.0	2.0						5.0	3.60	
		5	12.0	5.0	.5					17.5	3.66	
		6	<u>7.5</u>	<u>5.5</u>						<u>13.0</u>	<u>3.54</u>	3.76
		Tot	58.5	14.0	.5					73.0	22.71	3.79
8	M	1		3.0	10.0	3.0				16.0	2.00	
		2	5.0		10.0					15.0	2.67	
		5	2.0	2.0	5.5	2.0				11.5	2.35	
		6		<u>2.0</u>	<u>3.0</u>			<u>12.0</u>		<u>17.0</u>	<u>.71</u>	1.90
		Tot	7.0	7.0	28.0	5.0		12.0		59.0	7.73	1.93
		9	M	1	6.0	.5	9.0				15.5	2.81
2		6.0		6.0	3.0			15.0	2.20	3.13		
5	1.0	8.0		7.0				16.0	2.63			
6		<u>3.0</u>		<u>13.0</u>				<u>16.0</u>	<u>2.19</u>			
Tot	7.0	17.5		35.0	3.0			62.5	9.83	2.46		
10	F	1		14.0	1.0					15.0	3.93	
2		9.0	6.5					15.5	3.58	3.63		
5		11.0	6.0					17.0	3.65			
6		<u>15.0</u>	<u>3.0</u>					<u>18.0</u>	<u>3.83</u>			
Tot		49.0	16.5					65.5	14.99	3.75		
11		F	1	3.0	8.0	5.0				16.0	2.88	
2	3.0		10.0	3.0				16.0	3.00			
5	.5		5.5	2.0	3.0		5.0	3.0	16.0	1.59		
6	<u>3.0</u>		<u>7.0</u>	<u>5.5</u>					<u>15.5</u>	<u>2.84</u>		
Tot	9.5		30.5	15.5	3.0		5.0	3.0	63.5	10.31	2.58	
12	F		1	12.0	4.0					16.0	3.75	
2		16.0		.5				16.5	3.94			
6		<u>10.0</u>	<u>6.0</u>					<u>16.0</u>	<u>3.63</u>			
Tot		38.0	10.0	.5				48.5	11.32	3.77		

TABLE V (continued)

Student Number	Sex	Semester#	H O U R S							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
13	M	1	9.0	7.0						16.0	3.56	
		2	10.0	5.0						15.0	3.67	
		5	15.0	1.0						16.0	3.94	
		6	15.0		1.0					16.0	3.88	3.97
		Tot	49.0	13.0	1.0				63.0	15.05	3.76	
14	F	1	17.0							17.0	4.00	
		2	14.0	1.0						15.0	3.93	
		5	8.0	7.0						15.0	3.53	
		6	11.0	4.0						15.0	3.73	
		Tot	50.0	12.0					62.0	15.19	3.80	
15	F	1	7.0	2.0	5.0					14.0	3.14	
		2	9.0	4.0	3.0					16.0	3.38	
		5	6.0	3.0	7.0					16.0	2.94	
		Tot	22.0	9.0	15.0					46.0	9.46	3.15
16	F	1	12.0	4.0						16.0	3.75	
		2	8.0	8.0						16.0	3.50	
		5	7.0	7.0	1.0					15.0	3.40	
		6	14.0	3.0						17.0	3.82	
		Tot	41.0	22.0	1.0				64.0	14.47	3.62	
17	M	1	12.0	3.0	9.0	6.0		2.0	15.0	1.60	2.92	
		Tot	12.0	3.0	9.0	6.0		2.0	15.0	1.60	1.60	
18	M	1	6.0	9.0						15.0	3.40	
		2	4.0	5.5	6.0					15.5	2.87	
		5	3.0	3.0	8.5			3.0	14.5	2.62		
		6		8.5	7.5				16.0	2.53	3.85	
		Tot	13.0	26.0	22.0		3.0	61.0	11.42	2.86		
19	M	1	4.0	9.0	4.0				17.0	3.00		
		2	3.0	6.5	7.0				16.5	2.76	3.31	
		3	1.0	5.0					6.0	2.33		
		5	3.0	10.5	3.0				16.5	3.00		
		6	5.0	7.0	3.0				15.0	3.13		
		Tot	16.0	38.0	17.0				71.0	14.22	2.84	



TABLE V (continued)

Student Number	Sex	Semester#	H O U R S							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
20	M	1	3.5	11.5						15.0	3.23	
		2		10.0	4.0					14.0	2.71	
		Tot	3.5	21.5	4.0					29.0	5.94	2.97
21	F	1	7.5	7.5						15.0	3.50	
		2	12.0	5.0						17.0	3.71	
		3	5.0							5.0	4.00	
		4	3.0	3.0	1.0					6.0	3.50	3.07
		5	17.0							17.0	4.00	
22	M	6	8.0	7.0	2.0					17.0	3.35	
		Tot	52.5	22.5	2.0					77.0	22.06	3.68
		1	3.0	11.5	.5					15.0	3.17	
23	F	2	2.0	13.0	1.0					16.0	3.06	
		5		13.0						13.0	3.00	
		6		11.0	4.0					15.0	2.73	2.72
		Tot	5.0	48.5	5.5					59.0	11.96	2.99
24	F	1	5.0	8.0	3.0					16.0	3.13	
		2	2.0	13.0	2.0					17.0	3.00	
		5	5.0	6.0	4.0					15.0	3.07	
		6		8.0	8.5					16.5	2.48	3.07
		Tot	12.0	35.0	17.5					64.5	11.68	2.92
25	M	1	14.5	2.5						17.0	3.85	
		2	13.0	4.0						17.0	3.76	
		5	16.5	10.5	16.5					17.0	3.94	2.17
		6	16.0	3.0						19.0	3.84	
		Tot	60.0	9.5	.5					70.0	15.39	3.85
		1	15.0	2.0	4.5					17.0	3.76	
26	F	2	4.0	5.0	10.0					19.0	2.68	
		Tot	19.0	7.0	10.0					36.0	6.44	3.22
		1	15.0	6.0						18.0	3.43	
27	F	2	11.0	1.0	1.0					18.0	3.61	
		5	15.0	1.0						17.0	3.43	
		6	11.0	1.0						15.0	3.03	
		Tot	42.0	9.0	1.0					65.0	14.71	3.68

TABLE V (continued)

Student Number	Sex	Semester	H O U R S							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
26	M	1	9.0	7.0						16.0	3.56	
		2	14.0	1.0	.5					15.5	3.87	
		3	2.0	2.0						4.0	3.50	
		4	3.0							3.0	4.00	
		5	11.0	2.0	.5					13.5	3.78	
		6	<u>5.0</u>	<u>11.5</u>						<u>.5</u>	<u>16.5</u>	<u>3.30</u>
		Tot	44.0	23.5	1.0				.5	68.5	22.01	3.67
27	M	1	8.0	3.0	3.0	3.0				17.0	2.94	
		2	<u>3.0</u>	<u>6.0</u>	<u>6.5</u>					<u>15.5</u>	<u>2.77</u>	
		Tot	11.0	9.0	9.5	3.0				32.5	5.71	2.86
28	F	1	3.0	5.0	3.0	2.0		2.0		13.0	2.69	
		2	<u>3.0</u>	<u>5.0</u>	<u>3.0</u>		<u>1.0</u>		<u>3.0</u>	<u>12.0</u>	<u>2.75</u>	
		Tot	6.0	10.0	6.0	2.0	1.0	2.0	3.0	25.0	5.44	2.72
29	M	1	11.0	6.0					2.0	17.0	3.65	
		2	16.0	.5						16.5	3.97	
		5	16.0	.5	.5					17.0	3.91	
		6	<u>13.5</u>	<u>.5</u>						<u>14.0</u>	<u>3.96</u>	
		Tot	56.5	7.5	.5				2.0	64.5	15.49	3.87
30	M	1	5.0	1.0	6.0	3.0				15.0	2.53	
		2		3.0	9.5		3.0			15.5	1.81	
		6		<u>6.5</u>	<u>.5</u>	<u>5.0</u>			<u>3.0</u>	<u>12.0</u>	<u>2.13</u>	
		Tot	5.0	10.5	16.0	8.0	3.0		3.0	42.5	6.47	2.17
31	M	1	6.0	1.0	8.0					15.0	2.87	
		2	3.5	12.0						15.5	3.23	
		5	6.0	5.0	4.5					15.5	3.10	
		6	<u>6.0</u>	<u>5.0</u>	<u>2.0</u>				<u>3.0</u>	<u>13.0</u>	<u>3.31</u>	
		Tot	21.5	23.0	14.5				3.0	59.0	12.51	3.13
32	F	1	10.0	6.0						16.0	3.63	
		2	12.0	5.0	1.0					18.0	3.61	
		5	14.0	3.0						17.0	3.82	
		6	<u>11.0</u>	<u>6.0</u>						<u>17.0</u>	<u>3.65</u>	
		Tot	47.0	20.0	1.0					68.0	14.71	3.68

TABLE V (continued)

Student Number	Sex	Semester	H O U R S							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
33	F	1	6.0	4.0	6.0					16.0	3.00	
		Tot	6.0	4.0	4.0					16.0	3.00	3.00
34	F	1	6.0	9.0	1.0					16.0	3.31	
		2	9.0	7.0						16.0	3.56	3.42
		5	5.0	7.0	3.0					15.0	3.13	
		6		9.0	5.0	2.0				16.0	2.44	
		Tot	20.0	32.0	9.0	2.0				63.0	12.44	3.11
35	M	1	4.0	12.0						16.0	3.25	
		2	6.0	10.0	1.0					16.0	3.38	
		5	1.0	13.0						14.0	3.07	
		6	6.0	6.0	3.0					15.0	3.20	
		Tot	17.0	41.0	3.0					61.0	12.90	3.23
36	M	1	11.0	2.0	3.0					16.0	3.50	
		2	12.0	5.0	3.0					20.0	3.45	
		5	15.0	2.0						17.0	3.88	
		6	12.5	3.5						16.0	3.78	
		Tot	50.5	12.5	6.0					69.0	14.61	3.65
37	F	1	3.0	9.0	4.0					16.0	2.94	
		2	2.0	12.5					2.0	14.5	3.14	
		3		3.5	3.0					6.5	2.54	
		4		6.5					2.0	6.5	3.00	3.22
		5		6.0	8.0				3.0	14.0	2.43	
		6		12.0	5.5					17.5	2.69	
		Tot	5.0	49.5	20.5				3.0	75.0	16.74	2.79
38	F	1	7.0	5.0	3.0				3.0	15.0	3.27	
		2	8.0	6.0					15.0	14.0	3.57	
		5	8.0	7.0	2.0				15.0	17.0	3.35	1.43
		6	4.0	11.0	1.0					16.0	3.19	
		Tot	27.0	29.0	6.0					62.0	13.38	3.35

TABLE V (continued)

Student Number	Sex	Semester	HOURS							Total Hours	Semester C. P. A.	Accum. C. P. A.
			A	B	C	D	F	I	W			
39	F	1	10.0	5.0	1.0					16.0	3.56	
		2	5.0	9.0	1.0					15.0	3.27	
		Tot	15.0	14.0	2.0					31.0	6.83	3.42
40	M	1		14.0	3.0					17.0	2.82	
		2	4.0	12.0						16.0	3.25	
		Tot	4.0	26.0	3.0					33.0	6.07	3.04
41	F	1	15.0	3.0	1.0					19.0	3.74	
		2	16.0	1.0						17.0	3.94	
		5	8.0	6.0				2.0		14.0	3.57	
		6	16.0					2.0		16.0	4.00	
		Tot	55.0	10.0	1.0			4.0		66.0	15.25	3.81
42	F	1		8.0	4.0	3.0				15.0	2.33	
		2		7.0	3.0					10.0	2.70	
		Tot		15.0	7.0	3.0				25.0	5.03	2.52
43	F	1	14.0	2.0						16.0	3.88	
		2	16.0							16.0	4.00	
		5	12.0	2.5	.5				2.0	15.0	3.70	
		6	12.0	3.0	1.0					16.0	3.69	
		Tot	54.0	7.5	1.5		3.0		2.0	63.0	15.27	3.82
44	F	1	4.0	11.0						15.0	3.27	
		Tot	4.0	11.0						15.0	3.27	3.27
45	M	1		5.0	5.0	7.0			3.0	12.0	1.42	
		2		13.0					15.0			2.52
		Tot			5.0	7.0			18.0	12.0	1.42	1.42
46	F	1	6.0	9.0	1.0					16.0	3.31	
		2	14.0	3.0		7.5			1.0	17.0	3.82	
		5	17.0	1.0				5.0	1.0	18.0	3.94	
		6	12.0	5.5	.5			5.0	2.0	18.0	3.64	2.15
		Tot	49.0	18.5	1.5		10.5	5.0	2.0	69.0	14.71	3.68

TABLE V (continued)

Student Number	Sex	Semester*	H O U R S							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
47	F	1	12.0	3.0	1.0					16.0	3.69	
		2	16.0	1.0						17.0	3.94	
		3	3.0	3.0						6.0	3.50	
		4		5.0						5.0	3.00	
		5	4.5	11.5						16.0	3.28	
		6	8.5	8.0						16.5	3.52	3.52
		Tot	44.0	31.5	1.0				76.5	20.93	3.49	
48	M	1	1.0	9.0	7.0					17.0	2.65	
		2	6.0	8.5	2.0					16.5	3.24	
		5	5.0	5.0	7.0			2.0		19.0	2.58	
		6	8.0	5.5	3.5			2.0		19.0	2.92	3.43
		Tot	20.0	28.0	19.5			4.0		71.5	11.39	2.85
49	F	1	17.0							17.0	4.00	
		2	14.0		3.0					17.0	3.65	
		5	11.0	3.0						14.0	3.79	
		6	15.0							15.0	4.00	
		Tot	57.0	3.0	3.0					63.0	15.44	3.86
50	F	1	6.0	4.0	5.0					15.0	3.07	
		2	6.0	8.0	3.0					17.0	3.18	
		5	7.0	6.0	1.0	3.0				17.0	3.00	
		6	2.0	8.0	8.0					18.0	2.67	
		Tot	21.0	26.0	17.0	3.0				67.0	11.92	2.98
51	M	1	3.0	5.0	8.0					16.0	2.69	
		2		8.0	6.5					14.5	2.55	
		Tot	3.0	13.0	14.5					30.5	5.24	2.62
52	M	1	5.0	6.0	6.0					17.0	2.94	
		2	5.0	2.5	5.0	3.0				15.5	2.61	
		5			8.5	7.5			1.0	16.0	1.53	
		6		3.0	6.0		5.0		1.0	14.0	1.50	
		Tot	10.0	11.5	25.5	10.5	5.0		2.0	61.5	8.58	2.15

TABLE V (continued)

Student Number	Sex	Semester	H O U R S							Total Hours	Semester G. P. A.	Accum. G. P. A.
			A	B	C	D	F	I	W			
53	F	1	15.0	3.0						18.0	3.83	
		2	3.0	14.0						17.0	3.18	
		5	5.0	8.0						13.0	3.38	
		6	11.0	5.0						16.0	3.69	
		Tot	34.0	30.0						64.0	14.08	3.52
54	F	1	10.0	5.0	1.0					16.0	3.56	
		2	8.0	6.0	1.0					15.0	3.47	
		5	9.0	7.0						16.0	3.56	
		6	5.5	10.0	.5					16.0	3.31	
		Tot	32.5	28.0	2.5					63.0	13.90	3.48

TABLE VI  
 INCLUSIVE GRADE-POINTS COMPRISING  
 EACH LETTER GRADE BRACKET

Letter Grade	Inclusive Grade Points
A	3.75 - 4.00
A-	3.50 - 3.74
B+	3.25 - 3.49
B	3.00 - 3.24
B-	2.50 - 2.99
C+	2.25 - 2.49
C	2.00 - 2.24
C-	1.50 - 1.99
D+	1.25 - 1.49
D	1.00 - 1.24
D-	.01 - .99
F	.00
I	.00
W	.00

For purposes of comparison, the range of grade-point averages for the first semester of the 1957-58 school year (the only such data currently available) is given in Table VIII to show just what the upper 10 per cent of students in this study group earned.

**TABLE VII**  
**COMPARISON OF GRADE-POINT AVERAGES**

The grade-point averages earned by men and women representing the upper 10 per cent of the freshman class ranged from a low of 2.18 to a high of 4.00, with an average grade-point average of 3.27. The range for the sophomore class was from a low of 2.18 to a high of 4.00, with an average grade-point average of 3.27. The average grade-point average for the junior class, the grade-point averages were 2.70 to 4.00, with an average of 3.27; and for the senior class, the range was from a low of 2.18 to a high of 4.00, with an average of 3.27. The average grade-point average (inclusive of graduate students) was 3.44 for the total college, high 10% grade.

Semester	GRADE-POINT AVERAGES	
	High	Low
<b>1st, 1957-58</b>		
Men	3.97	1.42
Women	4.00	2.33
<b>2nd, 1957-58</b>		
Men	3.97	1.19
Women	4.00	2.70
<b>1st, 1958-59</b>		
Men	3.94	1.53
Women	4.00	1.59
<b>2nd, 1958-59</b>		
Men	3.96	.71
Women	4.00	2.44
<b>Two-year accumulative</b>		
Men	3.87	1.42
Women	3.86	2.52

The average grade for the first semester of 1957-58 for junior college students was 2.33, and for total college, 2.37, but for the 10% grade bracket chosen, the study group had an average grade of 3.15, the straight A grade bracket.



For purposes of comparison, the range of grade-point averages for the first semester of the 1958-59 school year (the only such data currently available) is given in Table VIII to show just what the upper 10 per cent of each class did during that year.

The grade-point averages of the 90 students representing the upper 10 per cent of the freshman class ranged from a low of 3.18 to a high of 4.00, with an average grade-point average of 3.59. The range for the sophomore class was from a low of 3.30 to a high of 4.00, with an average grade-point average of 3.65. The composite junior college average, then, was 3.24, just one-hundredth of a point from being a B<sup>+</sup> grade.

For the junior class, the grade-point averages ranged from a low of 3.53 to a high of 4.00, with an average of 3.77; and for the senior class, from a low of 3.6 to a high of 4.00, with an average of 3.84. The composite total college average (exclusive of graduate students) was 3.42, a very high B<sup>+</sup> grade.

Shown in Table IX is a comparison of the average grades made by the tenth-decile students with those made by (1) junior college students only, and (2) by the entire undergraduate student body (referred to in succeeding tables as "total college" but exclusive of graduate students). The average grade for the first semester of 1957-58 for junior college students was 2.50, and for total college, 2.55, both in the B- grade bracket; whereas, the study group had an average grade of 3.13, the straight B grade bracket.

TABLE VIII  
 COMPARISON OF THE AVERAGE GRADES MADE BY THIRTY-DECILE STUDENTS  
 RANGE OF GRADE-POINT AVERAGES FOR THE FIRST SEMESTER  
 OF THE 1958-59 SCHOOL YEAR REPRESENTING  
 THE UPPER 10 PER CENT OF EACH CLASS

Class	Total Students	Upper 10%	Highest G.P.A.	Lowest G.P.A.	Average G.P.A.	Composite Jr. Coll.	Composite Tot. Coll.
Fr.	904	90	4.00	3.18	3.59		
Soph.	676	68	4.00	3.30 2)7.48	3.65 - - - - - 3.24		
Jr.	642	64	4.00	3.53	3.77		
Sr.	485	49	4.00	3.67 4)13.68	3.84 - - - - - 3.42		

(Composite - based on an average of the following three previous years)

	1957-58	1956-57	1955-56
Fr. 1st Sem.	3.59	3.45	3.58
Fr. 2nd Sem.	3.53	3.46	3.56
Jr. 1st Sem.	3.55	3.59	3.61
Jr. 2nd Sem.	3.57	3.59	3.77

**TABLE IX**  
**COMPARISON OF THE AVERAGE GRADES MADE BY TENTH-DECILE STUDENTS**  
**WITH THOSE MADE BY JUNIOR COLLEGE STUDENTS ONLY**  
**AND BY THE ENTIRE UNDERGRADUATE STUDENT BODY**

Semester	AVERAGE GRADES		
	10th-Dec. Students	Jr. Coll. Only	Total College
1st, 1957-58	3.13	2.50	2.55
2nd, 1957-58	3.64	2.52	2.59
1st, 1958-59	3.18	2.50 <sup>a</sup>	2.57 <sup>a,b</sup>
2nd, 1958-59	3.10	2.51 <sup>a</sup>	2.58 <sup>a,b</sup>

<sup>a</sup>Estimated - Based on an average of the following three previous years:

	<u>1957-58</u>	<u>1956-57</u>	<u>1955-56</u>
a. 1st Sem.	2.50	2.43	2.58
2nd Sem.	2.52	2.46	2.56
b. 1st Sem.	2.55	2.50	2.65
2nd Sem.	2.59	2.58	2.57

For the second semester of 1957-58, the average grade for junior college students was 2.52, and for total college 2.59, again both in the B- grade bracket. The study group raised its average grade to 3.64, the A- grade bracket.

The average grades for the junior college students and for the total college were estimated for both semesters of the 1958-59 school year, since actual figures had not yet been computed by the school. These estimated figures were based on an average of the 1957-58, 1956-57, and 1955-56 school years.

For both semesters of 1958-59, the estimated average grades of junior college and the entire undergraduate student body fell into the B- grade bracket; while those of the tenth-decile students fell from the A- to the straight B grade bracket.

The per cent of men and women in each grade bracket, based on the semester grade-point average, is shown in Table X. It would have proved effective to compare these percentages with those of the men and of the women junior college students only, and with those of the entire undergraduate student body, but the latter two sets of data were not available.

Therefore, it seemed feasible to compare the average grade-point averages of the men and the women with those of the entire undergraduate student body, as shown in the last two columns of Table X. A similar comparison with the grade-point averages of men and women junior college students only would have been desirable, but again such data were not available.

TABLE X  
 PER CENT OF MEN AND WOMEN IN EACH GRADE BRACKET BASED  
 ON SEMESTER GRADE-POINT AVERAGES

Semester	M E N														10th Dec. Average G. P. A.	College Average G. P. A.														
	A		A-		B+		B		B-		C+		C				C-		D+		D		D-		F		W			
	%	%	%	%	%	%	%	%	%	%	%	%	%	%			%	%	%	%	%	%	%	%	%	%	%	%	%	
1st, 1957-58 23 Students	8.70	13.04	8.70	17.39	34.77	--	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	2.83	2.45
2nd, 1957-58 22 Students	13.63	--	13.63	13.63	40.91	--	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	4.55	2.77	2.45	
1st, 1958-59 13 Students	23.08	7.69	--	23.08	30.77	7.69	--	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	7.69	3.00	--	
2nd, 1958-59 14 Students	14.29	7.14	21.42	14.29	14.29	--	14.29	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	7.14	2.82	--	
	W O M E N																													
Semester	A		A-		B+		B		B-		C+		C		C-		D+		D		D-		F		W					
1st, 1957-58 31 Students	25.81	25.81	16.13	19.34	9.68	3.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.42	2.71	
2nd, 1957-58 29 Students	31.02	27.59	13.79	17.25	6.90	--	--	--	--	--	--	--	--	--	--	--	--	3.45	--	--	--	--	--	--	--	--	3.50	2.77	--	--
1st, 1958-59 25 Students	28.00	24.00	16.00	16.00	8.00	4.00	--	--	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.36	--	--
2nd, 1958-59 24 Students	25.00	29.17	12.50	8.33	16.67	8.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.38	--	--	--

Men. For the first semester of 1957-58, a total of only 47.83 per cent of the men were in the combined A, A-, B+, and B grade brackets. A look at Table VIII, page 51, revealed that (although the figures were based on the first semester of 1958-59, since they were the only such data currently available) a first-semester freshman should have at least a 3.18 grade-point average, or a B, to fall within the upper 10 per cent of his class. Had these students lived up to their potential, they would all have been in the A to B grade brackets.

Even worse, their average grade-point average of 2.83, which was considerably below that of the 3.59 for the upper 10 per cent of the 1958-59 freshman class, was only .38 of a point higher than that of 2.45 for the entire undergraduate student body of men.

The second semester achievement of the men was even less impressive than that of the first semester, with a total of only 40.89 per cent in the combined four top grade brackets. Again, the average grade-point average of 2.77 was not significantly higher than the 2.45 for the entire undergraduate student body of men.

In the first semester of the 1958-59 school year, however, the men began to show some slight improvement. Such improvement may have been the result of more maturity, more effective study methods, increased drop-outs on the part of the poorer students, or a combination of these and other related factors. A total of 53.85 per cent of the students were in the four top grade brackets, with a 3.00 average grade-point average.

This average can be directly compared with the lowest grade-point average, a 3.30, which a student might have to fall within the upper 10 per cent of the sophomore class. There is a .30 of a point difference, the difference between a B<sup>+</sup> and a straight B. While there is a difference of only .24 of a point in comparison with that of 3.24 for the composite junior college students, both representing a straight B grade, there is a difference of .42 of a point in comparison with that of the composite 3.42 for the entire undergraduate student body, the latter again representing the difference between a B<sup>+</sup> and a straight B.

The improvement in achievement of the men continued in the second semester of 1958-59, when 57.14 per cent were in the four top grade brackets. Their average grade-point average, however, fell back to 2.82, the B- grade bracket. A total of 28.57 per cent fell in the C to F grade brackets, thereby greatly lowering the group average. Next fall's enrollment should indicate whether or not most of these low achievers continue in college or drop out, since the end of the second year is frequently the dropping-out point for many students.

Women. For the first semester of 1957-58, a total of 87.09 per cent of the women were in the combined A, A-, B<sup>+</sup>, and B grade brackets. While this percentage does not include all of the women in this study group, of course, it does represent approximately a 40 per cent increase over the men for the same period. None of the women had an average below that for a C<sup>+</sup>, while 17.40 per cent of the men fell below that grade bracket.

The women's average grade-point average of 3.42 was only .17 of a point lower than that of the 3.59 indicated in Table VIII, page 51, for the upper 10 per cent of the freshman class; and was .71 of a point higher than the 2.71 for the entire undergraduate student body of women, the difference between a B<sup>+</sup> and a B-.

The second semester's achievement by the women was even more impressive, with a total of 89.65 per cent in the combined four top grade brackets. Only 10.35 per cent of them failed to fall within the B grade bracket, the higher portion of which represents the lowest level to which an average might fall and still be within the upper 10 per cent of the class. In comparison, 59.11 per cent of the men fell below that B grade bracket, with 18.20 per cent falling below the C<sup>+</sup> grade bracket.

The women's average grade-point average of 3.50 was .73 of a point higher than the 2.77 for the entire undergraduate student body of women, the difference between an A- and a B-.

Just the opposite of the men, however, the women began to show some drop in achievement during the first semester of 1958-59. There were only four women drop-outs between the last semester of 1957-58 and the first semester of 1958-59, as compared to eight for the men; but this factor alone should not have played too significant a role, unless those drop-outs represented four of the better students in the women's group.

A check on Table V, page 39, revealed that Students No. 12, 28, 39, and 42 were the women drop-outs concerned. Student No. 12 at that time had a grade-point average of 3.85, well into the straight A grade



bracket. She resumed her college work during the second semester of 1958-59, to earn an accumulative grade-point average of 3.77. Students No. 28, 39, and 42 had respective grade-point averages of 2.72, 3.42, and 2.52. The loss of the straight A student, then, had some minor effect upon the average grade-point average for the group, but the 4.00 per cent figure in both the C<sup>+</sup> and C- grade brackets had an even greater effect.

This drop in achievement continued for the women in the second semester of 1958-59, when only 75.00 per cent were in the four top grade brackets. While the per cent of A- grades increased by more than 5 per cent, and there were no grades below C<sup>+</sup>, the per cent of B-'s and C<sup>+</sup>'s more than doubled.

Comparing the two-year achievement of the men and women: 89.94 per cent of the women fell into the A to B grade brackets, whereas only 49.93 per cent of the men were in the same grade bracket. At the lower levels, only 1.86 per cent of the women were in the C to F grade brackets, while 17.97 per cent of the men fell there.

Total tenth-decile group. Another comparison was made, in Table XI, of the per cent of the tenth-decile group in each grade bracket with that of junior college students only and of the entire undergraduate student body. It should be noted that the only grade data currently available for purposes of such a comparison with respect to the junior college students and the entire undergraduate student body were those

TABLE XI

COMPARISON OF PER CENT OF TOTAL TENTH-DECILE GROUP IN EACH GRADE  
BRACKET WITH THAT OF JUNIOR COLLEGE STUDENTS ONLY  
AND OF THE ENTIRE UNDERGRADUATE STUDENT BODY

Semester	A		B		C		D		E		S		Other <sup>a</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1st, 1957-58	21	38.89	28	51.85	3	5.56	2	3.70						
10th-Decile	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Jr. College <sup>b</sup>	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total College <sup>b</sup>	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2nd, 1957-58	20	39.22	26	50.98	2	3.92	2	3.92	1	1.96				
10th-Decile	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Jr. College <sup>b</sup>	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total College <sup>b</sup>	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1st, 1958-59	17	44.74	17	44.74	4	10.52								
10th-Decile	94	12.12	473	60.53	737	92.98	214	26.58	62	7.79				
Jr. College	233	9.34	980	37.97	1120	39.84	273	9.13	101	3.72				
Total College														
2nd, 1958-59	16	42.11	16	42.11	5	13.16	1	2.62						
10th-Decile	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Jr. College <sup>b</sup>	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total College <sup>b</sup>	---	---	---	---	---	---	---	---	---	---	---	---	---	---

<sup>a</sup>"Other" includes the grades "F," "W," "I," and "N," for which no credit is earned.

<sup>b</sup>Data available only for the 1st semester, 1958-59.

of the first semester of 1958-59. Comparable data pertaining to subsequent semesters will become available at a later date, but they had not been computed at the time of this study.

For the first semester of 1957-58, 21 tenth-decile students, or 38.89 per cent, had an A average; 28, or 51.85 per cent, a B average; 3, or 5.56 per cent, a C average; and 2, or 3.70 per cent, a D average.

For the second semester of 1957-58, 20 tenth-decile students, or 39.22 per cent, had an A average; 26, or 50.98 per cent, a B average; 2, or 3.92 per cent, a C average; and 2, or 3.92 per cent, a D average. One student, or 1.96 per cent, had withdrawn from school during the semester, and thus fell in the "other" category.

For the first semester of 1958-59, 17 tenth-decile students, or 44.74 per cent, had an A average, as compared to 94, or 12.12 per cent, for junior college students only, and 233, or 9.34 per cent, for the entire undergraduate student body. In the B grade, there were again 17 tenth-decile students, or 44.74 per cent, as compared to 473, or 60.53 per cent, for the junior college students only, and 980, or 37.97 per cent, for the entire undergraduate student body. In the C grade, there were only 4 tenth-decile students, or 10.52 per cent, as compared to 737, or 92.98 per cent, of the junior college students, and 1120, or 39.84 per cent, of the entire undergraduate student body. There were no tenth-decile students in the D grade; whereas 214, or 26.58 per cent, of the junior college students, and 273, or 9.13 per cent of the entire undergraduate student body fell in that category. In addition, 62, or

7.79 per cent of the junior college students, and 101, or 3.72 per cent, of the entire undergraduate student body fell in the "other" category because of "failure," "withdrawal," "incomplete," or "no credit" grade entries.

For the second semester of 1958-59, 16 tenth-decile students, or 42.11 per cent, had an A average; 16, or 42.11 per cent, a B average; 5, or 13.16 per cent, a C average; and 1, or 2.62 per cent, a D average.

The bar chart presented in Figure 2 was prepared to show the overall scholastic achievement of the entire group of original tenth-decile students (including those who failed to complete all four semesters of work), in terms of the per cent of men and of women whose accumulative grade-point averages placed them in the upper 10 per cent of their class.

As indicated in Table VIII, page 51, the lowest grade-point average which a sophomore (which would be the classification of this study group during the second school year) could earn and still fall within the upper 10 per cent of his class was 3.30, the B<sup>+</sup> grade bracket. Accordingly, percentages were given only for the A, A-, and B<sup>+</sup> grade brackets. Any grade-point average falling below the B<sup>+</sup> grade bracket is indicative of the student's failure to measure up to his potential as determined by the freshman entrance examinations.

Only 8.70 per cent of the men in this study group fell into the A grade bracket, as compared to 25.81 per cent of the women. Again, only 8.70 per cent of the men fell into the A- grade bracket, as



compared to 22.58 per cent of the women; and no men fell into the B + grade bracket, as compared to 16.13 per cent of the women.

For the men, then, only 17.40 per cent measured up to their scholastic potential--a very poor showing. For the women, 64.52 per cent measured up to their scholastic potential--more than three times as many as the men--but still considerably below the possible 100 per cent as determined by the entrance examinations.

#### D. HONOR ROLL RECOGNITION

Kansas State Teachers College of Emporia recognizes outstanding scholastic achievement by announcing three special honor rolls each semester: the "Top 10" students in each class, the "Straight A," and the "B" honor rolls.

As the names indicate, to be on the "Top 10" Honor Roll, a student's semester grade-point average must be one of the ten highest for his class; to be on the "Straight A" Honor Roll, he must have received no grade other than an A; and to be on the "B" Honor Roll, he must have received no grade lower than a B.

Scholastic recognition earned by tenth-decile students over the two-year period 1957-1959 is shown in Table XII. For the first semester of 1957-58, 6 students (1 man and 5 women), or 11.4 per cent, were on the "Top 10" honor roll; 3 (1 man and 2 women), or 5.6 per cent, on the "Straight A" roll; and 16 (4 men and 12 women), or 29.6 per cent, on the "B" roll; making a total of 46.6 per cent on at least one of the three honor rolls.

TABLE XII

TENTH-DECILE STUDENTS APPEARING ON THE "TOP 10," THE "STRAIGHT A,"  
AND/OR THE "B" HONOR ROLLS FOR THE TWO-YEAR PERIOD 1957-1959

Student Number	1957-58						1958-59					
	1st Semester			2nd Semester			1st Semester			2nd Semester		
	Top 10	A	B	Top 10	A	B	Top 10	A	B	Top 10	A	B
2					X		X		X			X
4			X			X			X			X
5						X			X			X
7	X	X		X		X	X		X			X
10	X		X						X			X
12			X	X		X			X			X
13			X			X	X		X			X
14	X	X		X		X	X		X			X
16			X			X						X
18			X									
20			X									
21			X			X	X	X				
22									X			
24	X		X	X		X	X		X			X
26			X				X		X			
29			X				X		X			X
31						X			X			X
32			X						X			X
35						X			X			X
36									X			X
38						X			X			X
41				X		X	X		X		X	
43	X		X	X	X		X		X			
44			X						X			
46						X			X			
47	X	X		X		X	X		X			X
49											X	
53			X			X			X			X
54			X									
Totals	6	3	16	7	2	16	11*	1	18	--	2	13
No. Enrolled	54			51			38			38		
%	11.4	5.6	29.6	14.0	4.0	32.0	28.9	2.6	47.4	--	5.3	34.2
Total %	46.6			50.0			78.9			39.5 (incomplete)		

\*Two students were tied for 10th place, making an actual total of 11 students.

Read thus: Of the 54 tenth-decile students enrolled for the first semester, 1957-58, 46.6 per cent were on one of the three honor rolls; 6, or 11.4 per cent, were on the Top 10 roll; 3, or 5.56 per cent, on the "A" roll; and 16, or 29.62 per cent, on the "B" roll. Read in like manner for succeeding semesters.

For the second semester of 1957-58, 50 per cent of the group was on one of the three honor rolls: 7 students (1 man and 6 women), or 14.0 per cent on the "Top 10" roll; 2 (both women), or 4.0 per cent, on the "A" roll; and 16 (4 men and 12 women), or 32.0 per cent, on the "B" roll.

For the first semester of 1958-59, 78.9 per cent of the group was on at least one of the three rolls: 11 students (3 men and 8 women), or 28.9 per cent, including a tie for tenth place, making an actual total of 11 students, on the "Top 10" roll; 1 (a woman), or 2.6 per cent, on the "A" roll; and 18 (5 men and 13 women), or 47.4 per cent, on the "B" roll.

All of the data for the second semester of 1958-59 were not available, the top ten students of each class not having been selected, but 39.5 per cent of the group was on either the "A" or the "B" honor roll. Only 2 students (both women), or 5.3 per cent, were on the "A" roll; and 13 (3 men and 10 women), or 34.2 per cent, were on the "B" roll.

Looking at the overall honor recognition, one may note that the women far surpassed the men in this area of scholastic achievement. Of the total number of 25 students who were on one of the three honor rolls during the first semester of 1957-58, 19 were women--76 per cent. Of the 25 students on one of the three honor rolls during the second semester of 1957-58, 20 were women--80 per cent. Of the 30 students honored during the first semester of 1958-59, 22 were women--73.33 per



cent; and of the 15 students on the two known honor rolls during the second semester of 1958-59, 12 were women--again, a high 80 per cent.

#### E. DROP-OUTS

As indicated in Table I, page 10, the original study group consisted of 23 men and 31 women, for a total of 54 students. At the beginning of the second semester of 1957-58, 1 man and 2 women had dropped out of school, reducing the number of students in the group to 51. A big drop occurred at the beginning of the first semester of 1958-59, with 10 men and 6 women having dropped out of the original group, leaving only 38 students. For the second semester of 1958-59, 1 man and 1 woman re-enrolled, but an additional 2 women dropped out, still leaving a total of 38 students in the study group.

For purposes of comparison, Table XIII was prepared to show the number of men and women drop-outs within each of the ten decile groups established for the 1957 freshman class for the periods September 1957 to January 1958, January 1958 to September 1958, and September 1958 to January 1959.

The greatest total number of drop-outs for the September 1957 to January 1958 period occurred in the third-decile group, with 10 men and 6 women dropping out, for a total of 16. For the January 1958 to September 1958 period, the greatest total number of drop-outs occurred in the fourth-decile group, with 3 men and 15 women dropping out, for a total of 18. For the September 1958 to January 1959 period, the

TABLE XIII

COMPARISON OF NUMBER OF TENTH-DECILE DROP-OUTS WITH THAT OF OTHER DECILE GROUPS

Deciles	Drop-Out Period			Total
	9/57-1/58	1/58-9/58	9/58-1/59	
I - Men	9	5	6	20
Women	5	5	2	12
Total	14	10	8	32
II - Men	3	7	3	13
Women	9	7	3	19
Total	12	14	6	32
III - Men	10	5	2	17
Women	6	8	1	15
Total	16	13	3	32
IV - Men	6	3	2	11
Women	1	15	3	19
Total	7	18	5	30
V - Men	8	5	2	15
Women	3	9	0	12
Total	11	14	2	27
VI - Men	6	7	3	16
Women	2	6	2	10
Total	8	13	5	26
VII - Men	6	6	4	16
Women	2	9	2	13
Total	8	15	6	29
VIII - Men	4	8	0	12
Women	3	4	4	11
Total	7	12	4	23
IX - Men	2	7	1	10
Women	0	6	1	7
Total	2	13	2	17
X - Men	1	9	1	11
Women	1	4	2	7
Total	2	13	3	18
Totals				
Men	69	72	26	167
Women	37	85	20	142
Grand Totals	106	157	46	309

(Including many students) but who had not enrolled for the current

greatest total number of drop-outs occurred in the first-decile group, with 6 men and 2 women dropping out, for a total of 8.

A composite total of 106 students (69 men and 37 women) dropped out of school during the September 1957 to January 1958 period; during the January 1958 to September 1958 period, 157 students (72 men and 85 women); and during the September 1958 to January 1959 period, 46 students (26 men and 20 women); for a grand total of 309 drop-outs (167 men and 142 women), or 48.2 per cent of the entire freshman class for 1957. As indicated for the tenth-decile group only, the greatest number of drop-outs for the entire freshman class of 1957 occurred between the end of the first year and the beginning of the second year of college work.

Similarly to the tenth-decile group, the number of men drop-outs exceeded those of the women in all but the second and fourth decile groups. On composite totals, however, the number of women drop-outs exceeded those of the men for the January 1958 to September 1958 period.

The problem of school drop-outs, their causes and effects, has been the subject of many research studies. It was beyond the scope of this study to delve into the many ramifications of the problem, but it was felt that some attention might well be given to this college's follow-up procedure on its student drop-outs.

Each semester the Office of Student Services sends out a form letter to any student who had been enrolled during the previous semester (excluding summer sessions) but who had not enrolled for the current

semester, requesting that the student complete and return a survey sheet covering reason for termination of college work, plans for future re-enrollment, and suggestions or comments. A copy of the form letter and its attached survey sheet appears in Appendix A.

If the drop-out student replies, his response is tabulated, forwarded in report form to the president of the college, and a copy of the report filed in the Office of Student Services. Should the student fail to reply, however, no further attempt of any nature is made to contact him and encourage his resumption of college work.

The question is: "Is this an adequate follow-up procedure on drop-outs?" A check on the 16 drop-outs within this study group revealed that responses to the follow-up letter were received from only 6 students, just 37.5 per cent.

Student No. 3, a man, indicated that he had dropped out to enter military service, and that he had no plans to resume his college work. Student No. 20, another man, also entered military service, but he planned to resume college work in the fall of 1961. A lack of funds was the reason for dropping out given by Student No. 30, another man, but he planned to, and did, resume school the second semester of the 1958-59 school year. A lack of funds was also the reason given by Student No. 39, a woman, and Student No. 45, a man, both of whom planned to resume school the first semester of the 1959-60 school year. Student No. 42, a woman, dropped out of school to be married. She had ultimate plans to resume college work, but no definite date for re-enrolling.

In summary, then, this school lost 16 of its most academically talented freshmen of 1957--nearly 30 per cent--within a short, two-year period. There is a high probability that it will lose even more by the beginning of the third year. In an effort to recoup that lost academic talent, the college sent out one, and one only, form letter as a follow-up on the drop-out students. Only 6 of the 16 replied.

## CHAPTER IV

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The basic purpose of this study was to show the achievement status of a selected group of academically talented students who entered the Kansas State Teachers College of Emporia in the fall of 1957 in comparison with specific abilities, aptitudes, and/or deficiencies as measured by their college entrance examinations. The proportionate contribution of the two sexes was also considered, both as to selection for the study group and as to scholastic achievement as measured by the accumulative grade-point averages earned during the first two years of their college work.

Summary. The data and results of this study were presented in five major sections: (1) preliminary treatment of entrance-test scores, (2) entrance-examination data, (3) scholastic achievement in college, (4) honor roll recognition, and (5) drop-outs.

In the first section, the preliminary treatment of college entrance-examination scores and the method of selecting the study group were discussed. The study group was selected on the basis of achievement on the battery of tests given freshmen entering this college in the fall of 1957. The original study group consisted of 54 students (23 men and 31 women) whose composite test scores ranked them in the upper 10 per cent (tenth decile) of their class. Through student drop-outs, the original group narrowed down to 38 students by the end of the second school year.

Specific entrance-examination data were studied in the second section. It was found that only 3 students (2 men and 1 woman) ranked in the tenth decile on all entrance tests, demonstrating an exceptionally high potential for scholastic success in their college work. A review of their achievement, however, revealed that only one of these students (the woman) had actually lived up to that potential by earning an accumulative grade-point average which placed her within the upper 10 per cent of her class. To be in that upper 10 per cent of the class, it was found that a student must have earned an accumulative grade-point average within the range of 3.25 to 3.49, the B<sup>+</sup> grade bracket.

Four other students (2 men and 2 women) ranked in the tenth decile on all but one of the entrance tests. All 4 of these students lived up to their scholastic potential, 3 having earned accumulative grade-point averages which placed them in the straight A grade bracket, and 1 having earned an average which placed him in the A- grade bracket.

The widest range of decile rankings was in Reading Comprehension Efficiency and Reading Rate, and it was pointed out that a relatively high degree of correlation exists between language facility and/or reading ability and scholastic achievement.

In the third section were presented data on the actual scholastic success achieved by the study group over the two-year period. For purpose of better interpretation of the grades earned, in terms of ability required, the major fields of interest of these tenth-decile students were given by student number and sex. Also outlined for each student

were the number of hours of each grade earned, by semester, the total number of hours earned each semester, the grade-point average for each semester, and the accumulative grade-point average.

A comparison was made of the grade-point averages earned by men and by women, both by semester and for the two-year period. Various other comparisons of grade-point averages and percentages were made between tenth-decile students and junior college students, and between tenth-decile students and the entire undergraduate student body.

The highest accumulative grade-point average for this study group was 3.87, earned by a man and closely followed by a 3.86 average earned by a woman, in comparison with that for the entire undergraduate student body of 3.88. The lowest accumulative grade-point average for the men in this study group was 1.42, a D+ grade, as compared to 2.52, a B- grade, for the women.

Of the entire study group, only 17.40 per cent of the men measured up to their scholastic potential, in comparison with 64.52 per cent of the women.

The data presented in the fourth section helped emphasize the fact that the women far surpassed the men in the matter of scholastic achievement. Of the total number of 25 students who were on one of the three honor rolls published by the college for the first semester of 1957-58, 19 were women--76 per cent. For the second semester of that school year, 20 out of 25 students on the honor rolls were women--80 per cent. Of the 30 students honored during the first semester of



1958-59, 22 were women--73.33 per cent; and of the 15 students on the two known honor rolls for the second semester of that year, 12 were women--again, a high 80 per cent.

The fifth section presented a discussion of the problem relative to student drop-outs and the college's procedure for follow-up on those students. First, it was found that this school had lost 16, or nearly 30 per cent, of its most academically talented freshmen of 1957 within a two-year period.

Second, it was found that the Office of Student Services each semester sends out a form letter to any student who had been enrolled during the previous semester (excluding summer sessions) but who had not enrolled for the current semester, requesting that the student complete and return a survey sheet covering reason for termination of college work, plans for future re-enrollment, and suggestions or comments.

Third, it was found that only 6 students of the 16 drop-outs within this study group responded to the follow-up letter, and that no further attempts were made to contact the remaining 10 drop-outs in an effort to encourage them to resume their college education.

Of the 6 replies received, 2 men indicated that they had dropped out to enter military service. Only 1 planned to return to college after his discharge from the service. Three students (2 men and 1 woman) indicated a lack of funds as the main reason for their dropping out of school. One of the men resumed his college work the second

semester of 1958-59, and the other 2 students plan to re-enroll for the 1959-60 school year. One woman dropped out of school to be married, and she indicated ultimate but no definite plans to resume her college education.

Conclusions. As a result of the data presented in this study, several general conclusions have been drawn concerning the academically talented student in college, as follows:

(1) The early identification, counseling, and guidance of the academically talented student should be a matter of intense concern to college administrators, the faculty, students, and society as a whole.

(2) No specific program, either for the identification, counseling, or guidance of the academically talented student, or for the full development of his abilities after identification, has been promulgated at the Kansas State Teachers College of Emporia.

(3) While the study group concerned was too small to produce conclusive evidence, there is a strong indication that the relationship between scholastic potential, as measured by the college entrance examinations, and scholastic achievement, as measured by grade-point averages, decreases from one semester to another.

(4) A greater per cent of the talented women live up to their potential than do the men, especially during the first year of college. A qualifying factor, however, might very well be the varying degrees of ability required by the different fields of study which the students enter.

(5) The women display greater ability than do the men in language facility and reading, but the men show greater ability in mathematics, physical science, and quantitative thinking.

(6) A greater percentage of the academically talented women remain in school for a longer period of time than do the men.

(7) This college is losing too great a per cent of its academically talented students through drop-outs, with no adequate procedure for follow-up to encourage continuation or resumption of college work.

Recommendations. On the basis of the information presented in this study, the following recommendations are submitted:

(1) That the Kansas State Teachers College of Emporia promulgate, as soon as possible, a specific program for the early identification, counseling, and guidance of the academically talented student.

(2) That a special "honors" program utilizing course enrichment, acceleration, homogeneous grouping, or a combination of these plans, be adopted by this college at an early date.

(3) That a staff of professionally trained guidance personnel be assigned to interview, counsel, and guide the academically talented students throughout their entire college program.

(4) That the college compute and maintain under one central control more detailed information as to student semester grades, grade-point averages, grade averages for each class, scholastic rank of a student in his class, achievement by the two sexes, and various percentages pertaining to these and related factors.

(5) That exit interviews be conducted with all students known to be dropping out of school, and that a more effective procedure be established for follow-up of drop-outs.

(6) That a follow-up study be made of this same study group to determine their scholastic achievement for the last two years of their undergraduate work, and that similar studies be made of larger groups of academically talented students (perhaps the upper 15 per cent of a class) to corroborate the findings of this study.

CONTENTS

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REPUBLIC OF THE PHILIPPINES  
MANILA, PHILIPPINES

APPENDIX A

As part of our research program, I am writing these  
minutes and was pleased for the full cooperation of this  
year, but did not attend for this meeting.

I would appreciate your listing on the survey sheet a reason,  
or reasons, for your lateness. **APPENDIX** as my complete set  
records. The year immediately following a post-grad  
course addressed to you.

Please feel free to contact this office at any time you wish  
or my to if service.

Sincerely yours,

Henry S. [Signature]

Henry S. [Name], Director,  
Bureau of [Name]

22

Enclosure (2)

KANSAS STATE TEACHERS COLLEGE  
EMPORIA, KANSAS

APPENDIX A

As part of our personnel procedure, I am writing those students who were enrolled for the fall semester of this year, but did not enroll for this semester.

I would appreciate your listing on the survey sheet a reason, or reasons, for your withdrawal so that we may complete our records. For your convenience, I am enclosing a postage-paid, return-addressed envelope.

Please feel free to contact this office at any time you think we may be of service.

Cordially yours,

*Harry J. Waters*

Harry J. Waters, Director  
Student Services

rjs

Enclosures (2)

KANSAS STATE TEACHERS COLLEGE OF EMPORIA

STUDENT SERVICES OFFICE

The Student Services Division has completed a check of this semester enrollees against last semester students. We find that you did not enroll for this term. We would appreciate your taking time to answer the following questions for us.

College classification \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_

Reason for termination of college work (double check most important reason if more than one)

\_\_\_\_\_ To enter military service. Drafted or enlisted? \_\_\_\_\_

\_\_\_\_\_ To accept employment. Doing what? \_\_\_\_\_

\_\_\_\_\_ To enroll elsewhere. Where? \_\_\_\_\_

What course? \_\_\_\_\_

\_\_\_\_\_ To be married.

\_\_\_\_\_ Lack of funds.

\_\_\_\_\_ Scholastic difficulties

\_\_\_\_\_ Illness (your own or in family) \_\_\_\_\_

\_\_\_\_\_ Other: \_\_\_\_\_

Do you plan on enrolling at Emporia State at any time in the future? \_\_\_\_\_

When? \_\_\_\_\_ What course? \_\_\_\_\_

Is there anything the college could have done to help you continue your education?

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ (name)

\_\_\_\_\_ (street address)

\_\_\_\_\_ (city and state)