A COMPARISON OF THE KANSAS STATE TEACHERS COLLEGE FRESHMEN OF 1934 AND OF 1924 IN REGARD TO CERTAIN ACADEMIC AND PERSONAL DATA

A THESIS

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

By

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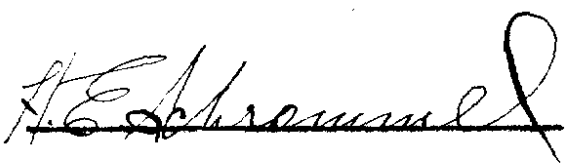
Approved for the Major Department



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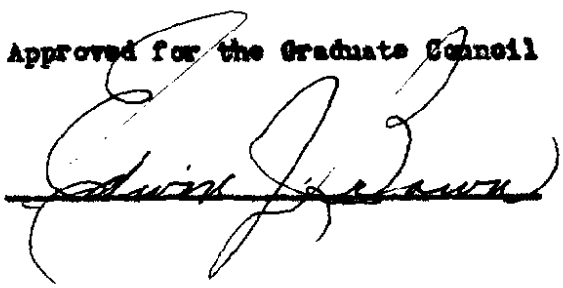

ACKNOWLEDGMENT

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CHAPTER I

INTRODUCTION

Statement of the Problem

This problem was undertaken for the specific purpose of determining the degree of relationship existing between the freshmen of 1934 and those of 1924 in regard to certain academic and personal data.

The study consists of a series of problems based on records filled out by the students of the two classes. Consideration has been given to such questions as to whether or not freshmen of ten years ago were more intelligent than present day students who are entering college; whether they were younger or older; whether they were more nearly self-supporting financially or less so; and other similar questions aimed to center attention around data concerning the activities of the student.

A survey in the nature of personnel research with the Freshman Information Cards has not been carried out previously at the Kansas State Teachers College of Emporia. The fact that there has been need for such an investigation is evidenced by the lack of objective material either for advisory purposes or for vocational direction.

The field of personnel research is in only its earliest stages as related to objective data for educational purposes. Few teachers colleges or universities have done extensive work with personality or character data for their own intrinsic value alone. The research carried on at the University of Iowa is an example of a study made to determine the pos-

sibility of predicting, at the time of entrance, a student's success or failure in college.[1] A survey has also been made of 10,000 Iowa High School seniors in comparison with the University of Iowa freshmen as a foundation for educational and vocational guidance.[2]

In most instances, the copious information blanks regarding family data and personal interests which college entrants have been required to fill out have been too lightly regarded. These data have been of little permanent value either toward aiding the faculty to help the student adjust to college situations, or toward aiding administrators to give personal and vocational guidance to the student.

Source of Data

At the Kansas State Teachers College of Emporia, each year before enrollment takes place, freshman entrants are given a battery of tests. At this time, they are also asked to fill out what is known as a Freshman Information Card. These cards contain a series of questions concerning the student's family and his personal life. Each student is asked to fill out the blanks contained on the card to the best of his ability. Sample copies of the blanks for 1934 and 1924 are included in the appendix.

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[1] J. B. Johnson, "Predicting success or failure in college at the time of entrance." School and Society, XII (December, 1929), 772-776.

[2] J. R. Gerberich and G. D. Goddard, "A personnel survey of 10,000 Iowa high school seniors." School and Society, XXX. (October, 1929), 515-520.

It will be noted that there has been a slight change in form. A revision of the 1924 form with some additions constitutes the present card. The fundamental data, such as age of student, home address, age of father and mother, amount of schooling of parents, occupation of parent, etc., remain basically unchanged. The only material difference in the two forms is the addition on the 1934 card of information concerning honors the student has received, such as highest scholastic rating, individual music honors, National Honor Society membership, etc. There is also an additional section including material concerning the student's choice of vocation, and what influenced him to come to the Kansas State Teachers College of Emporia.

The data for the body of this study are arranged in two groups. Group I refers to the 552 students of the September, 1934, freshman class. Group II refers to the 742 entrants of 1924.

The reliability of the material depends entirely upon what the students themselves have cited as true. The writer has assumed the veracity of the individuals reporting the data.

The data used for this study are purely objective: they have been tabulated directly from the Freshman Information Cards filled out by the students themselves.

The study is based on what the student actually said about himself: the facts as they exist, not as they should appear, not in the manner in which they would be most spectacular, but as they are objectively presented on the cards.

Preview of the Organization of the Study

This study will be treated under the following main topics:

Chapter I. Introduction

Chapter II. The Grouping of Freshman Students into Deciles

Chapter III. Comparison of Family Residence of Students of the Two Groups

Chapter IV. Comparison of Family and Home Environment Data of the Two Groups

Chapter V. Comparison of Age and Other Physical Data of the Two Groups

Chapter VI. Comparison of Various Educational Data of the Two Groups

Chapter VII. Data Related to Vocational Guidance

Chapter VIII. Summary Chapter

Bibliography

Appendix

The major divisions and chapters have been selected as a means of sectioning the material for adequate treatment. Each chapter contains one or more pertinent problems. These chapters are not to be considered as separate units, but as integral parts of a study proposing to show objectively the relationship existing between the freshmen of 1934 and those of 1924 in regard to academic and personal data.

CHAPTER XI

DETERMINING THE DECILE RANK OF THE TWO CLASSES

At the beginning of each semester, the incoming freshmen of the Emporia Teachers College are given a battery of tests in order that their degree of preparation may be determined.

In September, 1934, the 582 freshmen students were administered the following tests:

Army Alpha Intelligence Test, Form VIII

Inglis Vocabulary Test, Form B

Barrett-Ryan English Test, Form X

Haggerty Reading Test, Sigma III, Form B

The Every Pupil Scholarship Test in High School Spelling (April 1932)

The Every Pupil Scholarship Test in Arithmetic (April 1930)

The freshmen of ten years ago, 1924, were required to take a battery of tests consisting of:

Army Alpha Intelligence Test, Form V

Inglis Vocabulary Test, Form B

Barrett-Ryan Literature Test, 1924 Edition

Kansas Silent Reading Test, Test III

Thurstone Psychological Examination

Pressey-Richards American History

Buckingham-Stevenson, Geography, The United States, Place, Form I

Spelling Test, Kansas State Teachers College

Civics Test, Kansas State Teachers College

On the basis of these tests the students in each of the two groups included in this study were classified into ten sections. The raw scores made on each of the tests of the battery were weighted in such a manner that each test contributed its equitable proportion toward the student's total score. The weighting was somewhat arbitrary; it depended on the proportional length of the several tests and the relative importance of each according to the judgment of those administering the tests.[3]

After the scores which each student had made on the tests were weighted, these derived scores were totalled. The distribution of the total scores was then, in each instance, divided into ten approximately equal groups. The students whose scores constituted the lowest 10 per cent composed Decile I; the next lowest 10 per cent, Decile II; the third lowest 10 per cent, Decile III; and so on up to the highest 10 per cent, who composed Decile X. In this and the following chapters, the deciles will be referred to as I, II, III, IV, V, VI, VII, VIII, IX, and X. Decile I will always refer to the lowest 10 per cent, and Decile X to the highest 10 per cent.

The range of the distribution of scores of the several tests was illustrated by the scores made on the Army Alpha Intelligence Test by the classes of 1934 and 1924.

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[3] H. E. Schrammel and E. R. Wood, "Success and failure of college students." Studies in Education, Number III, (January, 1931), 9-13.

Table I, presents the distribution of scores made on the test by the freshmen of the class of 1934.

Table II, presents the distribution of scores made on the intelligence test by the freshmen of the class of 1924.

It will be observed that for the 1934 class the range of scores for Decile I on the Army Alpha Test was from 80 to 115; for Decile II, from 85 to 135; and so on to Group X, which had a range from 150 to 190. Also, the median score of each decile from I to X was higher than the median score of the preceeding decile. Each successive median from I to X, except that of Group V, was higher than the third quartile of the preceding group; and each successive first quartile from Group I to X, except that of Group VIII, was higher than the median of the preceding group. In Deciles II, III, VII, and X, the first quartile was higher than the third quartile of the preceding group. The quartile deviation ranged from 6.1 in Decile VII to 12.1 in Decile I. For the whole group, the quartile deviation was 16.1; the standard deviation, 25.2; and the sigma of the median, 1.65.

The range of the scores of the 1924 students of Decile I on the intelligence test was from 40 to 110; of Decile II, 65 to 135; and of Decile X, 115 to 190. The greater range in scores within the deciles for the class of 1924 was probably due to a difference in the weighting which determined the decile rank of the student. The median score for each decile was higher than the median of the preceding decile. The first quartile of Deciles II, III, VII, IX and X was greater than the median for the preceding decile. The quartile deviation ranged from 7.1 in Decile II to 11.6 in

TABLE I

DISTRIBUTION OF ARMY ALPHA TEST SCORES MADE BY THE FRESHMAN ENTRANTS OF THE CLASS OF 1934

Scores	Deciles I	II	III	IV	V	VI	VII	VIII	IX	X	Total
190										2	2
185										7	7
180										5	5
175										8	8
170									1	11	12
165								5	7	13	25
160								7	10	6	23
155						1	6	7	14	7	35
150					1	4	8	15	17	1	46
145				2		8	18	10	2		40
140				3	4	18	16	11			52
135		1		6	20	11	5	2			47
130			7	7	14	10	2				40
125			9	15	10	4	1				39
120		5	18	9	6	1					37
115	1	8	12	7	1						29
110	1	13	7	2	1						24
105	3	14	2	1							20
100	10	4	1								15
95	7	3									10
90	7	2									9
85	5	2									7
80	2										2
75	9										9
70	4										4
65	5										5
60											
55											
50	2										2
Total	56	52	84	84	57	57	56	55	51	60	552
Q 3	100.5	115.6	126.4	134.6	137.6	143.5	150.	157.3	162.4	179.4	152.5
Med.	90.7	110.4	121.6	127.7	133.7	139.1	146.1	151.5	157.3	171.4	132.6
Q 1	75.5	105.7	116.5	122.	128.1	134.5	143.8	146.4	153.2	165.4	120.3
Q	12.1	5.	5.	6.3	5.	4.4	3.1	6.	4.6	7.	16.1
SD											25.2

Read Table Thus: On the Army Alpha Test, the highest score of Decile I fell in the interval 115 to 119; the next highest score fell in the interval 110 to 114; 3 scores fell in the interval 105 to 109; and so on. The total number of students in the Decile was 56; the first quartile score for the Decile was 75.3; the median 90.7; the third quartile 100.5; and the quartile deviation 12.1. The column for each group is read in the same manner.

TABLE XI

DISTRIBUTION OF ARMY ALPHA TEST SCORES MADE BY THE FRESHMAN ENTRANTS OF THE CLASS OF 1924

Scores	Decile I	II	III	IV	V	VI	VII	VIII	IX	X	Total
190										1	1
185										5	5
180							1			4	5
175									5	10	15
170								1	7	10	18
165							8	6	4	13	25
160						1	5	5	13	5	27
155						2	5	10	8	5	30
150					2	6	2	14	15	1	40
145				1	2	5	10	5	14	2	42
140					6	7	13	6	5	4	41
135		1	2	3	8	8	17	7	5	1	47
130			2	4	11	16	8	10	1		52
125		1	10	6	15	10	7	6	2		59
120		7	9	9	13	9	4	2			53
115		6	7	11	6	6	1	2		1	42
110	1	6	13	12	7	5	3	1			46
105	2	8	16	8	6	1					41
100	5	8	8	4				1			27
95	5	8	5	5	4	1					24
90	7	14	8		1	1					31
85	6	5	4								15
80	8	5									13
75	9	3			1						13
70	3	1									4
65	8	1									9
60											
55											
50	1										1
45											
40	1										1
Total	54	78	82	85	79	76	76	74	78	60	723
Q 3	93.2	112.	121.4	124.9	132.8	141.1	147.	156.1	163 2	176.5	147.4
Med.	83.1	100.2	110.4	116.9	125.6	131.9	139.4	147.6	154.2	169.2	128.5
Q 1	75.8	93.6	103.6	109.6	115.6	118.1	132.8	133.5	148.6	160.	110.2
Q	8.7	7.1	8.9	7.7	8.6	11.5	7.1	11.1	7.2	8.2	18.6
SD											26.3

Read Table Thus: On the Army Alpha Test, the highest score of Decile I fell in the interval 110-114; the next highest score in the interval 105-109; 5 scores fell in the interval 100-104, etc. The total number of students in this decile is 54; the first quartile for the decile is 75.8; median 83.1, third quartile 93.2, and the quartile deviation is 8.6. The column for each decile is read in the same manner.

Decile VI. The Q for the whole group was 18.6; the standard deviation, 24.3; and the sigma of the median, 1.38.

TABLE III

A COMPARISON OF THE MEDIANS AND QUARTILE DEVIATIONS, BY DECILE, OF THE SCORES MADE ON THE ARMY ALPHA INTELLIGENCE TEST BY THE FRESHMEN OF 1934 AND THOSE OF 1924

Deciles	Class 1934	Class 1924	Class 1934	Class 1924
	Medians		Quartile Deviations	
I	90.7	83.1	12.1	8.7
II	110.4	100.3	8.	7.1
III	121.6	110.4	6.	8.9
IV	127.7	125.6	6.3	7.2
V	133.7	125.5	4.8	8.6
VI	138.1	131.9	4.4	11.5
VII	146.1	139.4	3.1	7.3
VIII	151.5	147.8	6.	11.1
IX	157.3	154.2	4.6	7.2
X	171.4	169.2	7.	8.3
Whole Class	132.6	125.5	16.1	18.6

Read Table Thus: The median of Decile I for Group I is 90.7; Decile I of Group II is 83.1. The average median for Group I is 132.6; the average for Group II is 125.5. The Q of Decile I Group I is 12.1; of Group II, 8.7. The average Q for Group I, 16.1, for Group II, 18.6.

In Table III, the various measures of central tendency and variability for the two groups were listed in parallel columns so that they might be more readily compared. The medians were given for each decile of Group I (1934); and for each decile of Group II (1924). It will be noted that in every instance from Decile I to X, the medians of the class of 1934 exceeded those of the class of 1924. In Decile III, there was a difference of 11.2 points between the two medians in favor of the class of 1934. The median of the tenth decile in 1924 was 169.2

and for the 1934 class it was 171.4, a difference of 2.1 points; this was the smallest difference between the medians for any of the deciles.

Whether a difference between the median score of the two groups of 4.1 points is of sufficient size to be significant demands further consideration. To secure further information, it was necessary to compute the P. E. of each median and the P. E. of the difference of the two medians, and to divide the actual difference by the P. E. difference. The P. E. of the first median is .822; the P. E. of the second median is .867; and the P. E. difference of the two medians is 1.195. The difference in the two medians divided by the P. E. difference yields a ratio of 3.43. This means that there are 99 chances in one hundred of a true difference. Hence, the difference on this intelligence test in favor of the 1934 class is highly reliable and merits serious consideration. Between the two medians for the whole groups there is a difference of 4.1 points in favor of the 1934 group.

Columns three and four of Table III were the Quartile deviation for each decile for the two groups. The Q for each decile in Group II was greater in every instance, except Decile I, than the Q for Group I. Hence not only did the medians of Group I exceed those of Group II, but also the quartile deviations were less in every instance except in Decile I. This advantage of the 1934 class, however, was only apparent. It was undoubtedly due to the weighting of test scores in determing the decile groups. The 1934 system was perhaps superior to the plan used in 1924. It will be observed, however, that for the total distribution both the Q and the S. D. were smaller for the 1934 group than for the 1924 group.

Another significant point in the comparison of the two groups lies in the fact that the class of 1924 took Form V of the Army Alpha Intelligence Test and the class of 1934 took Form VIII. According to a recent investigation, Form VIII has been found to be as much as eight points more difficult than Form V.[4] Hence, if both groups had been administered the same form of this intelligence test the 1934 group should have ranked even more above the 1924 group than it did.

These data tend to show that freshman entrants have noticeably improved in the last ten years in their ability to perform on intelligence tests. This improvement may be due to greater familiarity with tests in general, to greater uniformity in the preparation given to students, or to differences in actual intellectual capacity.

Relation of Test Scores Other Than Intelligence Test to Decile Rank

The decile ranking of the freshmen of 1934 was the composite ranking of each student's several scores. However, it is significant to note that there was a high correlation between the students' scores on the intelligence test and the scores of the other tests administered. For Group I the following coefficients were obtained:

	r
Army Alpha Intelligence Test and English Test	.63 ± .0178
Army Alpha Intelligence Test and Englis Vocabulary	.86 ± .0788
Inglis Vocabulary and English Test	.87 ± .0165[5]

[4] Christine Brannen, "The revision of the Army Alpha Intelligence Test" unpublished Master's thesis, Kansas State Teachers College of Emporia, Kansas, 1935).

[5] Randall A. Welever, "A study of the correlation between intelligence, English composition, and vocabulary," (unpublished study, Bureau of Educational Measurements, Kansas State Teachers College of Emporia, Kansas 1935), pp. 1-3.

For the Freshmen of 1924, the following correlations have been determined:

Army Alpha Intelligence Test and American History	.71 ± .012
Army Alpha Intelligence Test and General Science	.49 ± .019
Army Alpha Intelligence Test and Psychological Examination	.78 ± .001
Army Alpha Intelligence Test and Kansas Silent Reading	.58 ± .017
Army Alpha Intelligence Test and English Literature	.59 ± .016
Army Alpha Intelligence Test and Geography	.54 ± .018
Army Alpha Intelligence Test and Inglis Vocabulary	.75 ± .001
Army Alpha Intelligence Test and Civics	.52 ± .018
Inglis Vocabulary and English Literature	.67[6] ± .014

All of the coefficients for unmixed four times their P. E.s and are therefore significant. Some of them, notably those between the intelligence test and vocabulary; intelligence test and English, and vocabulary and English are exceptionally high. This signifies that each of the various tests of the battery tends to differentiate fairly consistently between students of superior and inferior preparation.

Table IV, gives the number and per cent of men and women that compose each decile of the classes of 1934 and 1924.

Of the students in the 1934 class, the men composed 40.2 per cent and the women 59.8 per cent. It will be observed that a relatively larger per cent of the scores of the men ranked in the lower deciles than in the higher deciles with the exception of Decile X, which contained 12.6 per cent of the men and 9.1 of the women.

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[6] Unpublished data, (Bureau of Educational Measurements, Kansas State Teachers College of Emporia, Kansas, 1924).

TABLE IV

THE NUMBER AND PER CENT OF STUDENTS OF EACH SEX COMPOSING EACH DECILE OF THE CLASS OF 1934 AND 1924

Decile	Part I A				To-tal	Part II A		Part I B				To-tal	Part II B	
	Men		Women			Men	Women	Men		Women			Men	Women
	No.	%	No.	%	No.	%	%	No.	%	No.	%	No.	%	%
I	32	14.4	25	7.	55	5.8	4.8	18	7.9	32	7.4	50	2.4	5.1
II	24	10.8	29	8.8	53	4.4	5.3	33	14.5	46	8.9	79	4.4	3.2
III	18	8.1	36	10.6	55	3.3	6.3	25	11.5	44	8.5	70	3.5	5.9
IV	22	9.9	32	9.7	54	4.	5.8	19	8.4	54	10.5	73	2.6	7.3
V	18	8.1	39	11.8	57	3.3	7.1	31	13.7	52	10.	83	4.2	7.
VI	22	9.1	35	10.6	57	4.	6.4	27	11.9	56	10.9	83	3.6	7.6
VII	19	8.6	37	11.2	56	3.4	6.7	20	8.8	56	10.9	76	2.7	7.6
VIII	18	8.1	38	11.5	56	3.3	6.9	15	6.6	67	13.	82	2.	9.
IX	21	9.5	32	9.7	53	3.8	5.8	17	7.5	62	12.	71	2.2	8.4
X	28	12.6	30	9.1	58	5.1	5.4	21	9.3	40	7.8	61	2.8	5.4
Total	222	100.	330	100.	552	40.2	59.8	227	100.	515	99.9	742	30.5	69.4

Read Table Thus: Part I-A and Part II-A of Table IV represent the class of 1934. Part I-B and Part II-B represent the class of 1924. In Part II-A (Class of 1934) in Decile I 5.8 per cent of the whole class were men. In Part II-B only 2.4 per cent of the whole class were men. Read the remaining items in the same manner.

Of the students of the 1924 class, 30.5 per cent were men and 69.4 women. In comparison with the freshmen of 1924, there were 9.79 more men in the 1934 class. These data tend to indicate that more men were attending Teachers College in 1934 than in the period ten years previous.

Summary

1. The freshmen of 1934 were found to be markedly superior in their performance on the intelligence test to the freshmen of ten years ago. The median of Group I exceeds that of Group II by 4.1 points. The P. E. dif-

ference of the two medians was 1.95.

2. In Group I, the correlations of the intelligence test scores with the other tests of the battery were found to be, in all instances, above .60.

For the freshmen of 1924, the correlation of the Inglis Vocabulary with the English Literature test was found to be .67, or exactly the same as that of the Inglis Vocabulary and the English Test.

3. The data revealed that there are 9.7 per cent more men attending this college in 1934 than were attending ten years ago.

CHAPTER XIX

A COMPARISON OF THE FAMILY RESIDENCE OF THE TWO GROUPS

College administrators, especially of state-supported schools, frequently inquire about the section of the state from which their students come, and why more students come from certain counties than from others. It was with this point of view in mind that the following table has been devised from information listed by the entrants.

Table V presents the number and the per cent of the total number of students coming from each county in Kansas in each of the two classes, 1924 and 1934.

It is interesting to note that from 56 of the 105 counties in Kansas, more students came to Kansas State Teachers College in 1924 than in 1934.

Eighteen counties: namely, Bourbon, Cherokee, Clark, Decatur, Finney, Geary, Hamilton, Labette, Lane, Leavenworth, Lincoln, Linn, Norton, Rush, Russell, Smith, Trego, and Wabaunsee, had from one to ten students enrolled as freshmen in 1924, whereas in 1934 no students came from these respective counties.

At the present time, students are enrolled from only four counties that had no students in this college in 1924.

Of course, the fact must be taken into consideration that there were more students in the class of 1924 than there are in the class of

TABLE V

NUMBER AND PER CENT OF STUDENTS COMING FROM EACH COUNTY IN KANSAS--CLASS OF 1934 AND 1924

County	Freshmen of 1934		Freshmen of 1924	
	Number	Per Cent	Number	Per Cent
1. Allen	3	.6	7	1.0
2. Anderson	2	.4	3	.4
3. Atchison	3	.4	5	.7
4. Barber	13	2.4	5	.7
5. Barton	3	.6	4	.5
6. Bourbon			2	.3
7. Brown	7	1.3	9	1.3
8. Butler	6	1.1	13	1.9
9. Chase	7	1.3	5	.7
10. Chautauqua	6	1.1	1	.1
11. Cherokee			2	.3
12. Cheyenne				
13. Clark			3	.4
14. Clay	5	.9	3	.4
15. Cloud	3	.6	7	1.
16. Coffey	21	3.8	16	2.3
17. Comanche	2	.4	3	.4
18. Cowley	3	.6	4	.6
19. Crawford				
20. Decatur			1	.1
21. Dickinson	11	2.	8	1.2
22. Doniphan	1	.2		
23. Douglas	5	.9	3	.4
24. Edwards	4	.7	6	.9
25. Elk	4	.8	9	1.3
26. Ellis				
27. Ellsworth	4	.7	7	1.
28. Finney			4	.6
29. Ford	8	1.5	14	2.
30. Franklin	13	2.4	7	1.
31. Geary			5	.7
32. Gove				
33. Graham				
34. Grant				
35. Gray				

Read Table Thus: In 1934, 3 students, or .6 per cent, of the total number of freshmen came from Allen County. In 1924, 7 students or 1.0 per cent of the freshmen class, came from Allen County. Read the data for the other counties in the same manner.

TABLE V (continued)

NUMBER AND PER CENT OF STUDENTS COMING FROM EACH COUNTY IN KANSAS--CLASS OF 1934 AND 1934

County	Freshmen of 1934		Freshmen of 1934	
	Number	Per Cent	Number	Per Cent
56. Greeley				
57. Greenwood	26	4.7	30	4.3
58. Hamilton				.1
59. Harper	13	2.4	9	1.3
60. Harvey	13	2.4	10	1.4
61. Haskell				
62. Hodgeman	1	.2		
63. Jackson	5	.9	4	.6
64. Jefferson	3	.4	18	2.5
65. Jewell	3	.6	5	.7
66. Johnson	4	.7	2	.3
67. Kearny	3	.6	4	.6
68. Kingman	3	.6	9	1.3
69. Kiowa	2	.4	3	.4
70. Labette			4	.6
71. Lane			6	.9
72. Leavenworth			4	.6
73. Lincoln			2	.3
74. Linn			3	.4
75. Logan				
76. Lyon	144	26.2	153	21.6
77. McPherson	2	.4	7	1.
78. Marion	15	2.7	18	2.6
79. Marshall	6	1.1	6	.9
80. Meade	2	.4	4	.6
81. Miami	2	1.1	1	.1
82. Mitchell	3	.6	6	.9
83. Montgomery	1	.2	7	1.
84. Morris	21	3.8	6	.9
85. Morton				
86. Nemaha	7	1.3	10	1.4
87. Neosho	3	.6	4	.6
88. Ness	3	.6	2	.3
89. Norton			1	.1
90. Osage	9	1.6	15	2.2

TABLE V (continued)

NUMBER AND PER CENT OF STUDENTS COMING FROM EACH COUNTY IN KANSAS--CLASS OF 1934 AND 1934

County	Freshmen of 1934		Freshmen of 1934	
	Number	Per Cent	Number	Per Cent
71. Osborne	1	.2	4	.6
72. Ottawa	4	.7	4	.6
73. Pawnee	3	.6	4	.6
74. Phillips	1	.2	1	.1
75. Pottawatomie	2	.4	3	.4
76. Pratt	7	1.3	12	1.7
77. Rawlins	2	.4		
78. Reno	7	1.3	20	2.9
79. Republic	5	.9	4	.6
80. Rice	5	.9	3	.4
81. Riley	4	.7	7	1.
82. Rooks	1	.2	1	.1
83. Rush			1	.1
84. Russell			2	.3
85. Saline	1	.2	4	.6
86. Scott	1	.2		
87. Sedgwick	8	1.5	12	1.7
88. Seward	2	.4	2	.3
89. Shawnee	5	.9	8	1.2
90. Sheridan				
91. Sherman	2	.4		
92. Smith			4	.6
93. Stafford	7	1.3	11	1.6
94. Stanton	4	.7		
95. Stevens				
96. Sumner	18	3.3	18	2.6
97. Thomas				
98. Trego			1	.1
99. Wabaunsee			10	1.4
100. Wallace				
101. Washington	1	.2	6	.9
102. Wichita				
103. Wilson	6	1.1	4	.6
104. Woodson	11	2.	5	.7
105. Wyandotte	2	.4	18	2.6
Out of State	10	1.9	21	3.
Total	550	100.1	696	99.9

1934. Six hundred ninety-six students listed home addresses in 1924, and 550 in 1934; hence comparison on the per cent basis is more accurate, although the actual number of students is significant.

The greatest number of students for both groups came from Lyon County; 152, or 21. per cent, of the total class of 1924 and 144, or 26.2 per cent, of the class of 1934. The 1934 class shows a gain of 4.4 per cent over the class of 1924 in freshmen enrolled from Lyon County.

Morris County shows a gain of nearly 3 per cent in students enrolled in 1934. Sumner County with 18 and Rooks with 1 show the same number enrolled in 1934 as ten years ago.

Wabaunsee, an adjoining county, presents an interesting fact in that there are no freshmen enrolled from there in the 1934 class, but in 1924 there were ten freshmen from this county. It is difficult to determine the cause for this extraordinary decrease; however the increased drawing power of Washburn College at Topeka may account, at least to some extent, for the loss in number from Kansas State Teachers College. There is always the possibility in every county, especially in counties of the western part of the state, that fewer freshmen students are enrolling because of serious financial conditions caused by the depression, drought, and other unfavorable circumstances.

Figures 1 and 2 are dot maps of Kansas showing graphically for the two groups the distribution of students enrolled at the Kansas State Teachers College of Emporia from the various counties. These figures show a trend in the drawing power of the college over a period of ten

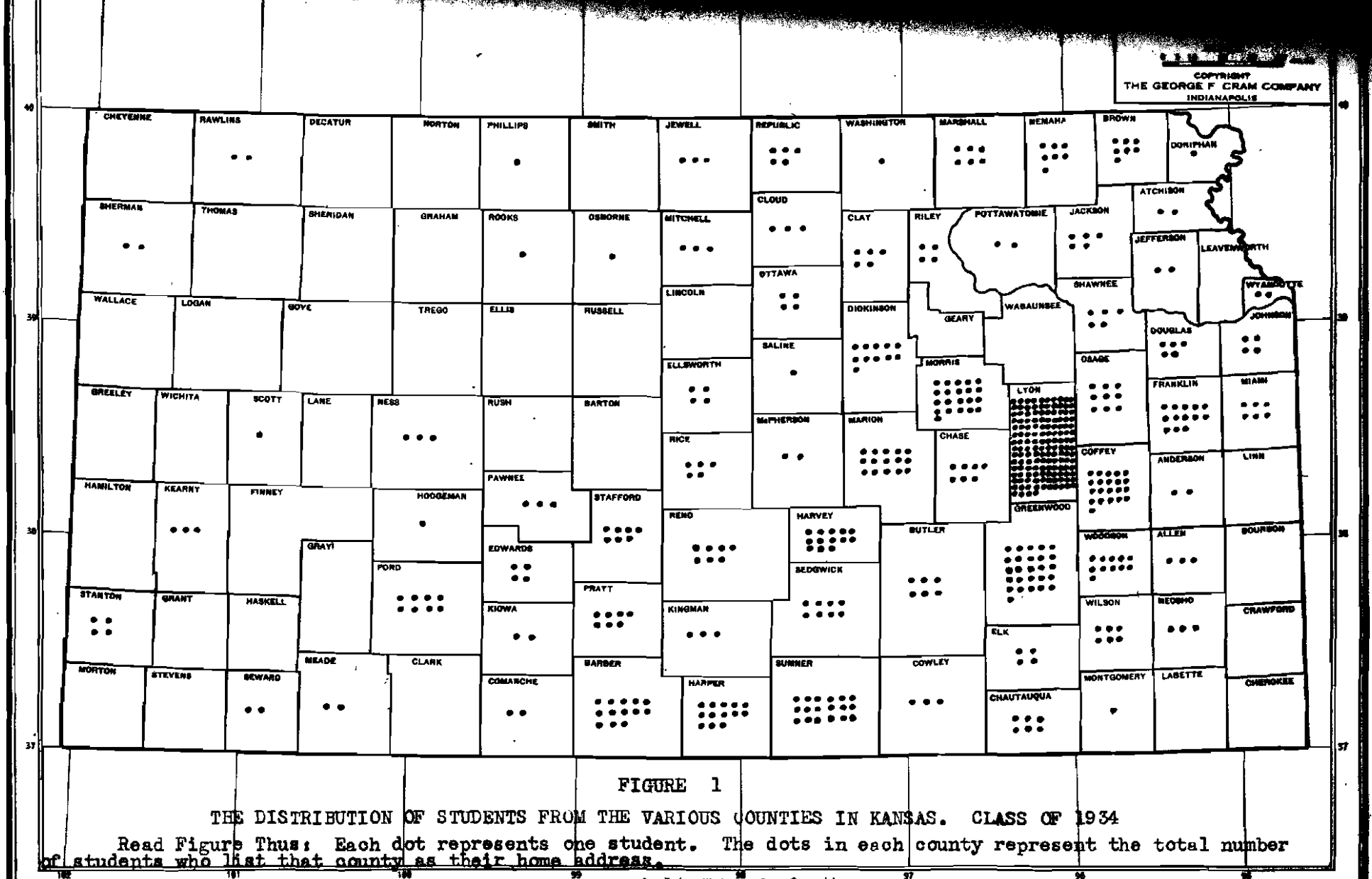

FIGURE 1

THE DISTRIBUTION OF STUDENTS FROM THE VARIOUS COUNTIES IN KANSAS. CLASS OF 1934

Read Figure Thus: Each dot represents one student. The dots in each county represent the total number of students who list that county as their home address.

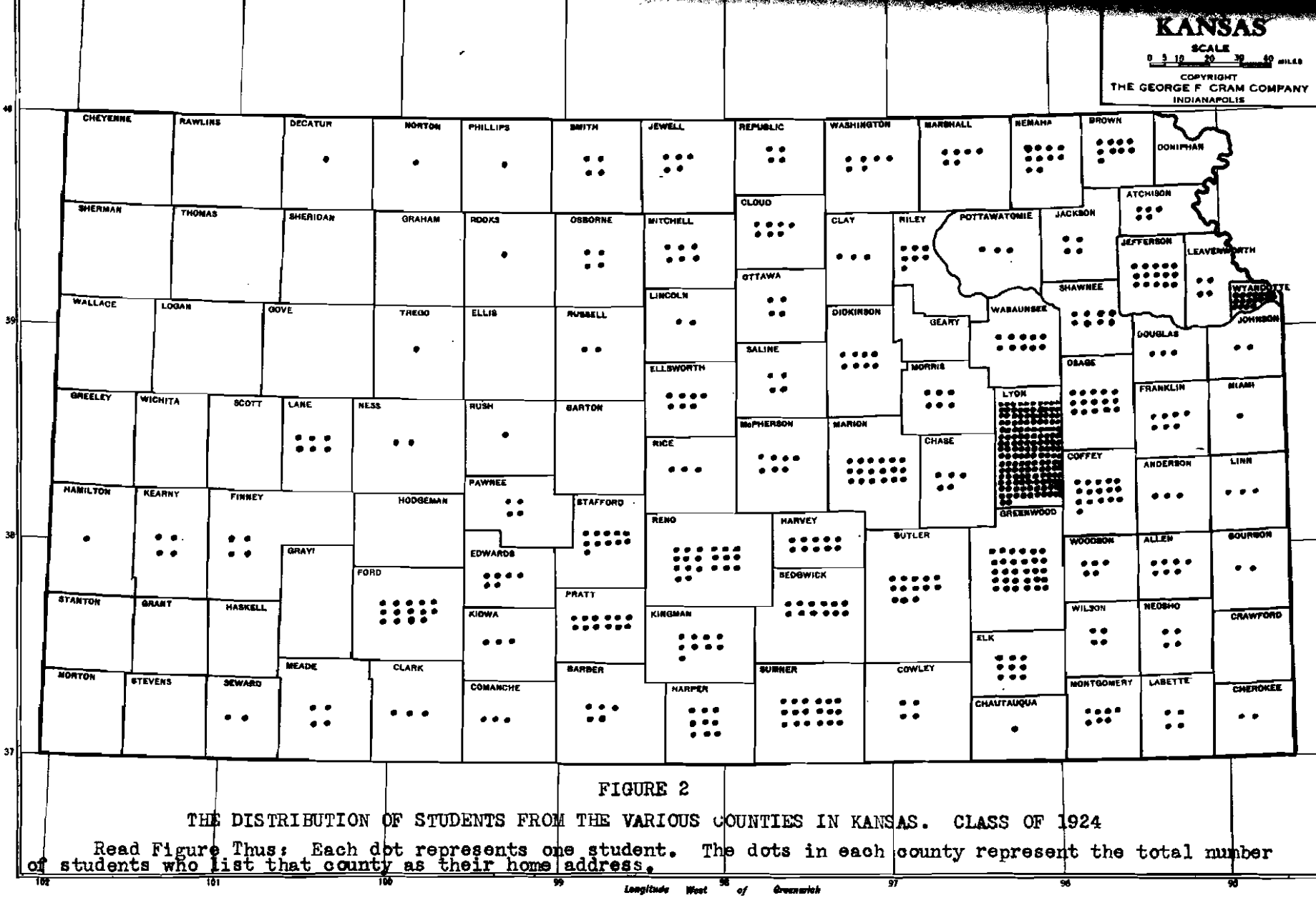

FIGURE 2

THE DISTRIBUTION OF STUDENTS FROM THE VARIOUS COUNTIES IN KANSAS. CLASS OF 1924

Read Figure Thus: Each dot represents one student. The dots in each county represent the total number of students who list that county as their home address.

years. Figure 1 shows that the students of the 1934 class tended to come from counties that lay within first or second zone distance from Emporia. Few students of the 1934 class came from the northwest section of the state. It should also be observed that the counties of Linn, Bourbon, Crawford, Cherokee, and Labette had no students enrolled in the 1934 class. However, the counties adjoining the Oklahoma line; namely, Chautauqua, Cowley, Sumner, Harper, Barber, and Comanche, have contributed a large proportion of students to the 1934 class.

Figure 2 shows the distribution of the students from the various counties in the period of 1924. The two figures indicate that there were more students in the 1924 class than in the 1934 class. The number of students in the 1924 class who came from each county was more evenly distributed over the various sections of the state.

It is of interest to compare the differences in number of students who came from the same county in the two periods. In 1924, Wabaunsee County had ten students enrolled at this college; in 1934, there were no students from this county. Eighteen students came from Wyandotte County in 1924, but in 1934 only 2 students came from this county.

The number of students who came from Morris County had more than tripled in the ten years. Chase County has an increase of 2 students enrolled at the Emporia Teachers College in 1934. No students enrolled in the 1934 freshmen class came from Linn, Bourbon, Crawford, or Cherokee County; however, in 1924, these counties, with the exception of Crawford, had from 2 to 3 students enrolled as freshmen.

The figures show that the students of the 1924 class came from more diversified sections of the state than did the students of the 1934 class.

Summary

1. The freshmen class of 1924, or 742 students, exceeded the number of freshmen in 1934, 552, by 190 entrants.

2. The Northwestern section of the state showed a marked decrease in number of students coming to Kansas State Teachers College of Emporia.

3. In 1924, there were 21 out of state students; in the 1934 class, there were only ten or a loss of 1.2 per cent.

4. Investigation revealed that the majority of students in the 1934 class came from Lyon and nearby counties rather than from diversified sections of the state.

CHAPTER IV

COMPARISON OF VARIOUS FAMILY AND HOME ENVIRONMENT DATA OF THE TWO GROUPS

The exponents of heredity and environment have long debated the question whether native endowment, environmental conditions, or a combination of both determined an individual's ultimate success. Objective data are given in this chapter which have a bearing on the problem.

Psychologists have made numerous investigations to determine the ages of parents whose children are more brilliant, and to determine the ages of parents whose children are duller than the average. In this connection, the average age of parents of the freshmen of 1934 was compared with the average of the parents of the 1924 freshmen. Table VI gives a comparison of the two classes as to average age of parents according to the decile ranking of the student.

It is interesting to note, that the average age for the mothers of the 1934 class, 46.6 years, was nearly a year greater than the average age, 45.8 years, for the mothers of the students of the 1924 class. Similarily, the average of the father's ages, 49.9 years, was nearly two years greater than the average age, 47.9 years, of the fathers of the 1924 class.

It will be observed that in the class of 1934, the average ages of the mothers of the students ranking in Deciles VIII, IX, and X were greater than were those of the students who ranked in the lower deciles

with the exception of Decile IV. The mothers of the students who ranked in Decile VIII had the highest average age, 46.2 years. The average age of the fathers, 49.9 years, was higher than the average of 46.4 years for the students' mothers.

TABLE VI

AVERAGE AGES OF PARENTS AS RELATED TO THE DECILE RANKING OF STUDENTS

	1934		1924	
Deciles	Mothers Years	Fathers Years	Mothers Years	Fathers Years
I	46.5	50.2	45.7	50.6
II	45.9	50.7	45.9	55.1
III	45.4	47.9	45.5	55.5
IV	48.	51.5	45.9	50.5
V	44.6	48.8	45.8	50.8
VI	45.9	48.8	45.8	50.6
VII	45.6	48.5	46.9	55.2
VIII	46.2	51.	45.9	50.2
IX	46.5	49.8	45.7	55.1
X	47.8	51.8	45.5	50.7
Average Age	46.4	49.9	45.8	47.9

Read Table Thus: The average age of mothers for Freshmen ranking in the first decile in 1934 was 46.5 years, for 1924, 45.7 years. Read the average age of each decile for father and mothers in the same manner.

The average ages of the fathers for the students who ranked in every decile except the third, exceeded the highest average age of the mothers which was 46.2 years. The average age for the mothers of the students who ranked in each of the ten deciles was 45 years plus a fraction varying from .5 to .9 of a year. The average ages of the

fathers exceed the averages of the mothers by nearly five years for the students who ranked in each decile with the exception of Deciles II, III, and VII; in these deciles, the average age of the fathers, 56.+ years, exceeds that of the mothers, 45.+ years, by nearly ten years.

In summary it may be stated that, on the average, the fathers and mothers of 1934 freshmen are older by approximately two years than were the parents of the freshmen of 1924. In this connection it should also be observed that in a later chapter data will be presented which show that 1934 freshmen are on the average, two years younger than were the 1924 freshmen. Hence the difference in age between parents and students is actually four years greater in 1934 than it was in 1924.

Amount of Schooling of Parents

The amount of schooling of the parents has been considered to have a direct effect upon the attainment of their children. Tables VII and VIII show the amount of schooling of the parents as related to the decile ranking of the students.

Table VII shows that of all the mothers listed for the class of 1934, only one had received a Master's degree; 10 had graduated from college, and 82 had attended college. Of the mothers who attended high school, 128 had graduated, and 23 had attended but did not graduate; 219 of the 463 mothers listed had only an elementary school education.

None of the mothers of the students ranking in the first four deciles had attended college. The mother of one student in the fifth decile was a college graduate. Only 3 of the mothers of students ranking

TABLE VII

THE AMOUNT OF SCHOOLING OF THE MOTHERS AND FATHERS OF THE CLASS OF 1934 AS RELATED TO THE DECILE RANKING OF THE STUDENTS

Schooling	Decile										
	I	II	III	IV	V	VI	VII	VIII	IX	X	Total
Mothers											
Ph. D.											
M. S.							1				1
B. S.					1		2		4	3	10
Attended College	5	6	11	8	7	4	9	11	9	12	82
High School	13	10	9	13	17	7	15	10	19	15	128
Attended High School			4	3	4	1	3	5		3	23
Grades	29	30	19	20	22	15	22	20	19	23	219
Median	Grades	Grades	At.H.S.	At.H.S.	At.H.S.	Grades	H.S.	At.H.S.	H.S.	H.S.	463
Fathers											
Ph. D.											
M. S.								3	2		5
B. S.		1		2	2		1	1	2	3	12
Attended College	5	7	7	7	11	1	8	10	11	12	79
High School	13	12	12	8	8	5	9	15	4	10	96
Attended High School			1	2	2		3	1	1	3	13
Grades	29	24	24	26	23	22	31	23	31	28	261
Median	Grades	Grades	Grades	Grades	Grades	Grades	Grades	H.S.	Grades	At.H.S.	466

Read Table Thus: Of the students ranking in Decile I, only 5 of their mothers attended college, 13 had graduated from high school and 29 had only a grade school education. Of those ranking in Decile II, 6 attended college, 10 graduated from high school and 30 had only grade school education. Read each decile in the same manner for both mothers and fathers.

in the tenth decile had graduated from college. The medians of school attainment for the mothers of students ranking in the different deciles were interesting. For the mothers of the students who ranked in Deciles I and II, the average amount of schooling was grade work; for the mothers of students in Deciles III, IV, and V the median amount of schooling was high school attendance. In Decile VI, the median school attendance of the mothers reverts to grade school education. However, in Deciles VII, II, and I the median school attendance of the mothers lay at high school graduation, although in Decile VIII, the median was high school attendance, but not graduation.

Of the fathers of the class of 1934, 5 had received master's degrees, but none had received Ph. D. degrees. Of the fathers who attended college, 19 received degrees, 79 attended, but were not graduated. Ninety-six fathers were high school graduates, and 13 attended high school. However, of the 466 fathers listed, 261 had only elementary school education.

Of the students ranking in Decile I, none of the fathers were college graduates and only 8 had attended college. Of the number of students ranking in each successive higher decile, there was a material increase in the number of fathers who had attended college, with the exception of Decile VI; and in this decile the number of fathers listed was smaller than in other deciles. Of the students who ranked in the eighth decile, 3 of the number listed had received master's degrees, whereas of those in the tenth decile, none of the fathers were listed with such degrees. It will be noted that the medians of school attendance

for the fathers lay in elementary school preparation with the exceptions of Deciles VIII and X, where the medians were high school graduation and high school attendance without graduation, respectively.

The lower medians of school attainment for the fathers than for the mothers may be accounted for by the fact that the fathers were probably forced to quit school in order to obtain gainful employment to support a family.

Table VIII presents similar data for the class of 1924. Of the mothers, none had obtained master's degrees, although 7 were college graduates. Seventy-two had attended college; 154 were high school graduates, 12 had attended but not graduated from high school, but 429 of the 675 listed had only elementary school education. The median age of the mothers for students ranking in Deciles I to X was elementary grade education. None of the mothers of the students ranking in the first decile had attended college; only 2 of the mothers of students ranking in Decile X were college graduates.

Of the fathers, the same number had master's degrees in 1924 as in 1934; similarly, 12 were college graduates as compared to the 12 college graduates of the class of 1934. However, there were 210 more fathers listed in 1924 than in 1934. The median school attainment of the fathers of the students in the class of 1934 was elementary school attendance.

In the comparison of the two classes, the fact merits notice that the medians of school attendance for both mothers and fathers of the

TABLE VIII

THE AMOUNT OF SCHOOLING OF THE MOTHERS AND FATHERS OF THE CLASS OF 1924 AS RELATED TO THE DECILE RANKING OF THE STUDENTS

Schooling	Decile										
	I	II	III	IV	V	VI	VII	VIII	IX	X	Total
Mothers											
Ph. D.											
M. S.											
B. S.					1	1	1		2	2	7
Attended College		6	8	7	5	15	6	9	5	11	72
High School	16	21	12	17	12	19	17	17	12	12	154
Attended High School	2		2	2	2		1		4		13
Grades	32	45	48	42	53	39	41	53	49	50	429
Median	Grades	Grades	Grades	Grades	Grades	Grades	Grades	Grades	Grades	Grades	676
Fathers											
Ph. D.											
M. S.							2	2		1	5
B. S.		1		3		5	1		2		12
Attended College	5	7	10	5	4	9	6	4	9	9	68
High School	6	11	11	11	10	8	8	9	9	10	93
Attended High School	4		1	1	1	1	2	1	3		14
Grades	35	53	45	48	58	51	47	63	49	35	484
Median	Grades	Grades	Grades	Grades	Grades	Grades	Grades	Grades	Grades	Grades	676

Read Table Thus: Of the students ranking in Decile I, none of their mothers attended college, 16 graduated from high school, 2 attended high school but did not graduate, 32 had only elementary school education. The average amount of schooling, of course, being grade school. Read each decile in the same manner for fathers and mothers.

1934 class exceeded the medians of the mothers and fathers of the class of 1924. However, it is surprising that there was not greater variation, because of the increased opportunity for education, and the increased universality of school attendance.

The Influence of Parental Occupation Upon Decile Ranking of Students

The results of numerous investigations show that there is a high correlation between occupational level of the parent and the intelligence of the offspring.

The 1107 students from the two classes 1934 and 1924 who indicated occupations for parents, listed such a wide diversification of occupations that it was necessary to use some method of classification and ranking. For this purpose, George S. Counts's list of forty-five occupations has been used.[7] This list is the average of the social status rankings given the forty-five occupations by 450 selected individuals. In order to classify the occupations still further, the list of forty-five was divided into five divisions. Division I contains the first nine of the occupations listed according to social status; Division II contains the second group of nine, and so on to Division V, which contains the nine rated lowest according to social status. These five divisions, each containing nine occupations, were made arbitrarily--simply for the sake of convenience in classification.

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[7] George S. Counts, "The social status of occupations; a problem in vocational guidance." School Review, XXXIII (January, 1925), pp. 16-28.

TABLE IX

FORTY-FIVE OCCUPATIONS RANKED ACCORDING TO SOCIAL STATUS BY 4BD PERSONS

Division I	Division II	Division III	Division IV	Division V
% Occupation	Occupation	Occupation	Occupation	Occupation
1. Banker	10. Teacher (H.S.)	19. Teacher (Rural)	28. Carpenter	37. Factory Operative
2. College Professor	11. Missionary	20. Grocer	29. Salesman	38. Blacksmith
3. Physician	12. Factory Manager	21. Bookkeeper	30. Soldier	39. Coal Miner
4. Clergyman	13. Teacher (Elem.)	22. Electrician	31. Typesetter	40. Janitor
5. Lawyer	14. Merchant	23. Engineer	32. Plumber	41. Waiter
6. Auto Manufacturer	15. Man of leisure	24. Insurance Agent	33. Tailor	42. Teamster
7. Supt. of Schools	16. Farmer	25. Policeman	34. Motorman	43. Rod Carrier
8. Civil Engineer	17. Machinist	26. Mail Carrier	35. Chauffeur	44. Street Cleaner
9. Army Captain	18. Salesman	27. Conductor	36. Barber	45. Ditch Digger

Read Table Thus: In Division I, the occupation of Banking was listed as ranking first in occupational status; a college professor was rated second, and a physician third, etc. A ditch digger was rated as the occupation ranking lowest in the social scale. Read the other items in the same manner.

Table X gives the occupational status of the parents in relation to the decile ranking of the students of the class of 1934.

TABLE X

OCCUPATIONAL STATUS OF PARENTS AS RELATED TO DECILE RANKING OF THE FRESHMEN OF 1934

	Ranking										
	I		II		III		IV		V		Total
Decile	No.	%	No.	%	No.	%	No.	%	No.	%	No.
I	2	12.5	40	12.7	6	7.7	5	8.9			53
II	1	6.3	36	11.2	8	8.4	4	7.	5	15.6	55
III			31	9.9	9	11.5	5	8.8	2	6.3	47
IV	1	6.3	24	7.6	9	11.5	13	22.9	3	9.4	50
V			33	10.5	7	9.	4	7.	6	18.8	50
VI	2	12.5	29	9.2	7	9.	4	7.	6	18.8	48
VII			31	9.9	9	11.5	7	12.5	3	9.4	50
VIII	4	25.	32	10.2	7	9.	5	8.8	3	9.4	51
IX	3	18.8	25	8.	14	18.	4	7.1	3	9.4	49
X	3	18.8	34	10.8	5	6.4	6	10.5	1	3.1	49
Total	16	100.	315	100.	78	100.	57	100.	32	100.	498

Read Table Thus: Of the 53 students in Decile I, the fathers of only 2 of them or 12.5 per cent had an occupational ranking of I; 40 or 12.7 per cent ranked status II, 6 were in status III, 5 in ranking IV, and none ranked in status V. Read each decile in the same manner.

Table X gives the occupational status of the parents of the students of the 1934 class in relation to the latter's decile ranking. It will be observed that a greater proportion of parents of students who ranked in the upper deciles; namely, VIII, IX and X, ranked occupationally in the more select divisions than did the parents of students with a lower decile status. The parents of 3 of the students who ranked in Deciles IX and X were classified in occupational Division I. The parents of 2 of the students who ranked in Deciles I and VI were in occupational Division I.

some of the parents of the students who ranked in Deciles III, V, and VI were classified in occupational Division I.

It should be observed that both Deciles V and VI have an equal number of students whose parents ranked in the lowest social status group; twice as many or more than twice as many as in any of the other deciles except Decile II. The parents of students who ranked in Decile I had the greatest number in occupational Division II with 40 parents listed as being of this occupational status. Only 24 of the parents of students who ranked in Decile IV were placed in occupational Division II.

It should be stated that the greater proportion of the parents ranked in occupational status II. In Count's list, the farmer is considered in Division II, hence, since the Kansas State Teachers College of Emporia is located in a farming area it would be expected that the parents of the largest number of students would be engaged in farming.

Table XI gives the occupational status of the parents in relation to the decile ranking of the students of the class of 1924.

It is apparent from this table that 23, or more than half, of the parents of the 41 students in the first decile ranked in occupational Division II. The parents of more than two thirds of the 60 students in Decile II were listed occupational level II. The parents of 2 of the students who ranked in Decile X were in Division I; the parents of 31 of these students had an occupational level of Division II. The parents of 11 of the students who ranked in Decile X were given an occupational ranking of Division II; the parents of 3 of the students from this group ranked in Division IV, but the parent of only 1 of these students ranked in occupational level V.

TABLE XI

OCCUPATIONAL STATUS OF PARENTS AS RELATED TO DECILE RANKING OF THE FRESHMEN OF 1924

	Ranking										
	I		II		III		IV		V		Total
Decile	No.	%	No.	%	No.	%	No.	%	No.	%	No.
I	3	10.	23	6.	6	10.5	1	1.2	6	15.8	41
II	3	10.	41	10.7	2	2.6	8	9.9	6	15.8	60
III	3	10.	47	12.2	5	6.6	9	11.1	5	13.2	69
IV	4	13.3	36	9.4	6	7.9	13	16.	3	5.3	61
V	1	3.3	52	13.5	7	9.2	12	14.8	4	10.5	76
VI	3	10.	38	9.9	5	6.6	9	11.1	4	10.5	59
VII	3	10	38	9.9	8	10.5	7	8.6	1	2.6	57
VIII	2	7.	43	11.2	13	17.1	8	9.9	4	10.5	70
IX	6	20.	35	9.1	11	14.5	11	13.6	3	13.6	68
X	2	7.	31	8.1	11	14.5	3	3.7	1	2.6	48
Total	30	100.	384	100.	76	100.	81	100.	38	100.	609

Read Table Thus: Of the 41 students in Decile I, the fathers of 3 of them or 10. per cent had an occupational ranking of Division I; 23 or 6. per cent ranked in Division II; 6 in Division III; 1 in Division IV; and 6 in status V. Read each Decile in the same manner.

The comparison of the two classes shows that there has been little change in the occupational status of the parents of the students of the class of 1934 from those of 1924. For the most part, the parents of freshmen students are engaged in farming.

The Relation of the Size of Family To Decile Ranking of Students

Census statisticians point to the fact that the size of the American family tends to be becoming smaller. In view of this condition, it is significant to notice the number of brothers and sisters the students of the 1934 class had in comparison with the number of brothers and sisters

of the students of 1924. This study has been carried out on the basis of decile rank. The problem was to determine whether the students coming from smaller families were more brilliant than those coming from larger families or whether those coming from larger families were the more brilliant. The data have been worked up with two questions in mind; the average size of family in regard to brothers and sisters now living, and the average size of family including brothers and sisters deceased.

Table XII presents the data for the classes of 1934 and 1924. Considering the average size of family including the brothers and sisters not living, the students ranking in Decile II come from the largest families. The students who were in Decile X come from the next largest size family, having an average of 4.4 brothers and sisters.

The average size of the family was materially increased when the number of brothers and sisters not living were included.

It is of interest to compare the average size of the family of the 1934 class with the average size family of the class of 1924. The average size of the family of the students of the 1924 class was larger than the average sized family of the freshmen of 1934. These students of the 1924 group who ranked in Deciles III and VIII came from homes where they had more than five brothers and sisters (including the number of brothers and sisters not living). However, of this class, the size of the family of the students ranking in Decile X was not larger than the family of the students who ranked in other deciles.

These data indicate that the average size of family, 3.6 brothers and sisters, of the students of the class of 1934 was materially smaller

TABLE XXI

THE AVERAGE NUMBER OF BROTHERS AND SISTERS PER FAMILY AS RELATED TO THE DECILE RANKING OF STUDENTS--CLASS OF 1934 AND 1924

	Class of 1934					Class of 1924				
		Living		Including Deceased			Living		Including Deceased	
Decile	Number Students Per Decile	Number Brothers Sisters	Av. No. Brothers Sisters	Number Brothers Sisters	Av. No. Brothers Sisters	Number Students Per Decile	Number Brothers Sisters	Av. No. Brothers Sisters	Number Brothers Sisters	Av. No. Brothers Sisters
I	55	207	3.8	222	4.	56	228	4.	258	4.6
II	53	207	3.9	241	4.6	79	343	4.3	391	5.
III	54	186	3.4	209	3.9	70	330	4.7	377	5.4
IV	54	194	3.6	219	4.1	73	274	3.8	308	4.2
V	57	150	2.6	168	3.	85	349	4.2	391	4.7
VI	57	215	3.8	238	4.2	83	315	3.8	346	4.5
VII	56	219	3.9	227	4.2	78	264	3.5	308	4.
VIII	55	208	3.7	225	4.	82	339	4.4	421	5.1
IX	53	153	2.9	173	3.3	79	305	3.9	355	4.5
X	58	238	4.1	254	4.4	61	253	4.2	288	4.7
Totals	552	1970	3.6	2184	4.	742	3048	4.1	3439	4.6

Read Table Thus: The average size family of the 55 students who ranked in the first decile was 3.8 brothers and sisters living; the average size family including brothers and sisters not living for the same group was 4. brothers and sisters. Read in the other items in the same way for both class of 1934 and class of 1924.

than the average size of the family, 4.1 brothers and sisters, of the students for the period of ten years previous.

Summary

1. The average age of the mothers of the class of 1934 was nearly a year greater than the average age of the mothers of the students of 1934. The average age of the fathers of the 1934 class exceeded by nearly two years the average age of the fathers of the class of 1924.

2. The average amount of schooling of the fathers and mothers of the class of 1934 exceeded the average amount of schooling of the parents of the 1924 class.

3. The data indicated that the occupational status of the parents of present day students had not altered materially from the status of the parents of ten years ago. The greater proportion of parents of the students in both classes came from Division II, which includes the occupation of farming.

4. The average size of the family of the 1934 class was smaller than the average sized family for ten years ago. By inference, it may be assumed that since the students of the 1934 class had a higher ranking on the entrance test, brighter children come from smaller families. However, before such statement may be accepted, the existence of better educational opportunities and advantages must be taken into consideration.

CHAPTER V

COMPARISON OF AGE AND OTHER PHYSICAL DATA OF THE TWO GROUPS

Thus far in this study no reference has been made to data pertaining to the individual students themselves. A careful study has been made of the ages of the students of 1934 and of those of 1924 to determine the relationship shown to decile ranking. In Table XIII, the age and the decile ranking of the students of the two classes are listed.

TABLE XIII

THE RELATION OF THE AVERAGE AGE OF STUDENTS TO THEIR RANKING ON THE ENTRANCE EXAMINATION

	Class of 1934						Class of 1924					
	Women			Men			Women			Men		
Decile	No. Per Decile	Range Ages	Av. Age	No. Per Decile	Range Ages	Av. Age	No. Per Decile	Range Ages	Av. Age	No. Per Decile	Range Ages	Av. Age
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
I	24	17-22	19.1	31	17-26	19.5	38	17-30	19.9	15	18-25	21.3
II	29	16-27	18.9	24	16-25	19.	46	17-29	20.	29	18-29	20.2
III	36	16-29	18.6	18	17-24	18.5	52	17-31	20.	22	17-23	21.
IV	32	15-31	18.6	22	16-21	18.3	53	16-40	19.7	17	16-25	21.4
V	39	16-25	18.5	18	16-20	18.8	48	16-40	20.	29	17-24	20.5
VI	35	16-40	18.5	22	17-22	18.6	53	17-32	20.3	24	17-25	19.6
VII	37	17-24	18.4	19	16-21	18.1	50	17-40	20.	19	17-32	19.3
VIII	37	16-25	18.6	18	17-20	18.4	56	17-30	20.4	13	17-21	18.9
IX	32	15-23	18.5	21	16-22	18.4	60	16-40	20.9	16	16-22	19.2
X	30	16-25	18.3	28	16-20	19.4	59	16-40	20.3	19	16-25	19.5
Av. of Total			18.6			18.9			20.1			20.2

Read Table Thus: The average age of the women ranking in Decile I of the class of 1934 was 19.1 years. The ages ranged from 17-22. Read the other items in the same manner.

Column (2) of Table XIII shows the ranges in the ages of the women according to decile rank. The greatest age range occurs among the women ranking in the sixth decile; the ages vary from 16 to 40 years. The smallest

range in age appears among the women ranking in Decile I; the age range was from 17 to 22 years. The average age of those ranking in the first decile, 19.1 years, exceeded the average age of the students in all other deciles by nearly one year. The lowest average age, 18.3 years, occurred among the women ranking in the tenth decile. The average for the whole group was 18.6 years. These data were in accordance with the known fact that less capable pupils in the grade and high school occasionally require a year longer to go through school; in contrast, superior pupils frequently finish school in less than normal time.

Column (5) presents the range of the men's ages; it is deserving of note that none of the boys listed were more than twenty-six years of age. The average age of the men ranking in Decile I, 19.8 years, exceeded the average age of the men ranking in Decile X, 19.4 years, by only one tenth of a year. The greatest age range was nine years occuring among the students ranking in Deciles I and II. Of the students grouped in Decile VIII, the age range was only 3 years; of the students of Decile X, the range was 4 years. The lowest average age, that of 18.3 years, occurred among the men ranking in the fourth decile. The greatest average age, that of 19.5 years, occurred among the men students ranking in Deciles I and III. The average age for the men in all the deciles was 18.9 years--only .3 greater than the average of 18.6 years for the women.

Column (8) refers to the range of the women's ages of the class of 1924. The age range was much greater in comparison than the age range of the women of the class of 1934. The greatest age range, 16 to 40 or 24 years, occurred among women ranking in four different deciles in the 1924

class, but among the students ranking in only one decile of the 1934 class. Also in the case of the average ages, the least average age of Group II, 19.7 years exceeded the greatest average of Group I which was 19.1 years. The average age for the students ranking in the different deciles of Group II exceeded the average age of the students of Group I by more than two years. The average age of the women of the 1934 class, 18.6 years, was nearly 2 years less than the average age, 20.1 for the freshmen women of 1924. Similarly the men's average age of the 1934 class, 18.9 years, was nearly two years less than the average of 20.2 years for the men of the 1924 group.

Column (11) referring to the men's ages reveals the fact that the age range in no instance was so great as that of the age range of the women of the same decile.

The average of the men's ages of the students in Group I, exceeded that of the women's ages by only .5 points; however, it exceeded the average age for the men of the class of 1934 by more than two years.

These data were intensely interesting in that they show that both the men and women freshmen students enrolled in the 1934 class were materially younger in age than those students enrolled ten years ago. Several factors probably contributed to the apparent youthfulness of the 1934 class. There is a greater tendency, at the present time, for students to enter college immediately after graduating from high school; also, more students enter school at a younger age, and are promoted more rapidly according to superior ability. The better educational opportunities make it possible for students to progress more quickly along prescribed academic routes.

The Comparison of the Physical Defects of the Two Groups

Physiological well-being is one of the fundamental factors contributing to ability to learn. Sight defects, hearing impairment, and other serious physical defects necessarily hinder educational progress. Table XIV shows the relation of physical defects to the decile ranking of students.

TABLE XIV

THE RELATION OF PHYSICAL DEFECTS TO DECILE RANKING OF FIFTEEN STUDENTS

	Class of 1938						Class of 1939					
Defects	Eye		Ear		Physical		Eye		Ear		Physical	
Decile	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
I	10	7.6	1	9.1	4	7.7	6	2.8	1	2.	3	7.3
II	9	6.8			8	15.4	26	11.6	6	12.	7	17.1
III	13	9.9	2	18.2	7	13.5	20	9.4	2	4.	3	7.3
IV	17	12.9			4	7.7	23	10.9	4	8.	1	2.4
V	7	5.3	1	9.1	4	7.7	23	10.9	14	28.	1	2.4
VI	20	15.2			4	7.7	18	8.5	5	10.	5	12.2
VII	17	12.9	2	18.2	8	15.4	20	9.9	2	4.	6	14.6
VIII	11	8.3	1	9.1	2	3.8	25	11.8	4	8.	6	14.6
IX	15	11.4	1	9.1	6	11.8	29	13.7	9	18.	2	4.9
X	13	9.9	3	27.3	5	9.6	22	10.4	3	6.	7	17.1
Total	132	100.	11	100.	52	98.9	212	100.	50	100.	41	100.
% of whole class		21.9		2.		9.4		38.6		6.7		8.5

Read Table Thus: Of the students in Decile I, 10 or 7.6 per cent have eye defects; 1 student or 9.1 per cent have hearing defects, and 4 students or 7.7 per cent have some other physical defect. Interpret the other items in the same manner.

Of the 132 students in Group I listing sight defects, 10 were in the first decile. The smallest number of students having eye defects, 7, were in Decile IV. Those students who had the greatest number of eye defects, 20, ranked in the sixth decile; 20.9 per cent of the whole class

listed some sight defect. In Group I, of the 212 students who listed sight defects, only 6 were in the first decile, whereas the greatest number, 29, were in the ninth decile. Twenty-eight and six tenths per cent of the students in the class listed sight defects. In comparison with Group I, there was nearly 5 per cent more sight impairment in the class of ten years ago than in the class of the 1934 period.

Of the 1934 freshmen, only 11 students, or only 2 per cent of the whole class, listed any hearing impairment. However, in 1924, 52 students, or 6.7 per cent of the whole class, listed hearing defects.

The comparison of the two classes in regard to actual physical defects shows a greater preponderance of physical impairment among the students of the 1934 class. Fifty-two students, or 9.4 per cent, of the whole class of Group I listed physical defects, whereas, only 41 students, or 5.5 per cent, of Group II listed any physical difficulties.

It is difficult to account for the variation in the degree of physical impairment, such as eye, ear, and other physical defects, of the two groups; perhaps the most plausible explanation lies in the difference in the students of the two groups.

Summary

1. The freshmen students of the 1924 class, with an average age of 20. years for both men and women, exceeded the average age of 18. years of the 1934 freshmen by nearly two years.

2. The per cent of students in the class of 1924 who listed eye defects exceeded the per cent of the students in the class of 1934 who listed such defects by 4.7 per cent.

3. Only 2 per cent of the students in the 1934 class listed hearing impairment, as compared with 6.7 per cent of the students of 1924.

4. Of the 1934 freshmen, 9.4 per cent listed physical defects, whereas, of the 1924 entrants only 5.3 per cent of the whole class listed such defects.

5. The variations in the number and per cent of these students who listed physical impairment in the two classes was probably due to differentiation in the personnel of the two groups.

CHAPTER VI

COMPARISON OF VARIOUS EDUCATIONAL DATA OF THE TWO GROUPS

Many educators are of the firm belief that a student's future success and attainment can be predicted on the basis of his past achievement. With this view in mind, a study was carried on for the purpose of determining what the freshman entrants of the two classes had previously accomplished.

The first part of the problem involved the study of how long the college entrants had been out of high school before entering college. Table XV shows the number and per cent of the students of both classes entering the first year after graduation; those entering the second year, and those who had been out of school for as long as five years. All who had been out of high school longer than five years were classified in the group of miscellaneous.

It will be observed from the table that of these students graduating in 1934, the length of time between graduation and college entrance had only slight influence upon their decile rank. In the 1934 class, 7.1 per cent of those ranking in the first decile and 7.9 per cent of those in the tenth decile graduated in 1934. The greatest number, or 15 per cent, of students entering college the same year of high school graduation ranked in the fourth decile. In the class of 1934, the only significant difference shown in decile ranking and year of graduation is in the group of those who

TABLE IV

THE RELATION OF THE NUMBER OF YEARS BETWEEN HIGH SCHOOL GRADUATION AND COLLEGE ENTRANCE TO THE DECILE RANKING OF THE STUDENT

Deciles	Class of 1934												Class of 1924											
	Years												Years											
	1934		1933		1932		1931		1930		Miss.		1934		1923		1922		1921		1920		Miss.	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
I	20	7.1	19	15.2	6	10.1	5	12.8			3	10.7	21	7.6	12	8.8	4	5.1	5	7.1	3	10.7	3	3.3
II	23	8.2	10	8.	13	22.	3	7.7	1	11.1	2	7.1	35	12.6	18	13.2	5	6.3	9	12.7	2	7.1	5	5.5
III	20	7.1	6	4.8	3	5.1	1	2.6	1	11.1	6	21.4	30	10.8	16	11.8	9	11.4	12	16.9	3	10.7	6	6.5
IV	42	15.	14	11.2	5	8.8	2	5.1	2	22.2	4	14.3	25	9.	15	11.	11	13.9	5	7.1	1	3.6	9	9.8
V	32	11.4	14	11.2	4	6.8	5	12.8			1	3.6	34	12.2	16	11.8	5	6.3	6	8.5	6	21.4	7	7.6
VI	30	10.7	11	8.6	5	8.5	5	12.8	1	11.2	4	14.3	33	11.9	12	8.8	8	10.1	10	14.1	3	10.7	7	7.6
VII	31	11.1	16	12.8	3	5.1	2	5.1	1	11.1	1	3.6	29	10.4	13	9.6	8	10.1	4	5.6	3	10.7	9	9.8
VIII	31	11.1	10	8.	8	13.5	2	5.1			3	10.7	29	10.4	11	8.1	15	19.	5	7.1	3	10.7	13	14.1
IX	29	10.4	13	10.4	5	8.5	2	5.1	2	22.2	2	7.1	22	7.9	18	11.8	6	7.6	9	12.7	2	7.1	20	21.7
X	22	7.9	12	9.6	7	11.8	12	30.7	1	11.1	2	7.1	20	7.2	7	5.1	8	10.1	6	8.5	2	7.1	15	16.3
Total No.	280		125		59		39		9		28	100.	268		136		79		71		28		92	100.
% of whole Class	51.8		23.1		10.9		7.2		1.7		5.2		34.5		18.3		10.6		9.6		3.8		12.4	100.

Read Table Thus: In the class of 1934, those in Decile I who graduated in 1934 comprised 7.1 per cent of the class who graduated that year; of those graduating in 1933, 15.2 per cent ranked in the first decile. Read the remaining items in the same manner.

finished high school more than five years previously; the greater proportion of these students tend to rank in the lower deciles. It is significant to note that of the 1934 class, 50 per cent of the freshmen entrants enrolled graduated in 1934; 23.1 per cent graduated in 1933; 10.9 per cent, in 1932; 7.2 per cent, in 1931; and 1.7 per cent, in 1930. Only 5.8 per cent of the 1934 freshmen had graduated more than five years ago.

In the class of 1924, much the same relationship is shown as in the class of 1934. However, the largest per cent of the 1924 class who graduated in 1924 ranked in the second decile as compared to the fourth decile ranking for the class of 1934. Similarly, of those who graduated in 1923, the largest per cent ranked in the second decile. Of those graduating in 1922, the greatest per cent, 19, ranked in Decile VIII; of those who graduated in 1921, the largest percentage ranked in Decile III. Of the 1920 graduating class, 21.4 per cent of the group ranked in Decile V. These students who graduated more than five years prior to 1924 present an interesting fact: by far the most of these students ranked in the three highest deciles; namely, 14 per cent in Decile VIII; 21.7 per cent in Decile IX; and 16.3 per cent in Decile X.

Considering the two classes, it is of interest to note that in 1924 only 34.6 per cent of the class entered college the same year they graduated from high school, as compared to 51.9 per cent of the class of 1934. The number of students who had been out of school as long as five years before entering college was twice as great in 1924 as in 1934.

It is apparent from these data that more students are continuing

to college directly from high school in 1934 than were doing so in the period ten years before. This difference may very probably be due to the fact that in recent years it has been less easy to obtain employment either as teacher or otherwise when students are graduated from high school. Moreover, it may be that parents and students realize to a fuller extent the importance of more education now rather than waiting one or more years while employed in some occupations which offer little or no opportunity for advancement without further training.

Previous Attendance in College as it is Related to the Decile Ranking of the Student

Many of the students who enter college as freshmen have had some previous attendance in an institution of higher learning. A number of these students have attended summer school, one, two, and sometimes even three or four summers. Some students have transferred from other institutions; others have failed in previous enrollment and hence are still classified as freshmen. There is also a group of students who have passed courses successfully, but because of outside work have been unable to carry a full schedule; these students after a year's attendance are still freshmen. There are those students who have failed, and even after one, two, and sometimes three years of attendance still do not have the requisite number of accepted hours to be classified other than as freshmen.

Table XVI shows the relation between previous attendance in college and the decile ranking of the student.

TABLE XVI

PREVIOUS ATTENDANCE IN COLLEGE AS RELATED TO THE DECILE RANKING OF THE STUDENT

No. of Years	Class of 1934						Class of 1924					
	1 Year		2 Years		3 Years		1 Year		2 Years		3 Years	
Deciles	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
I	3	6.					15	4.4	4	18.1		
II	2	4.					39	11.4	4	12.1		
III	5	10.					36	10.5	3	9.1		
IV	6	12.	1	25.			36	10.5	5	15.2		
V	5	10.					27	7.9	8	24.2	1	50.
VI	5	10.	2	50.			38	11.1	3	9.1		
VII	7	14.	1	25.			34	9.9	3	9.1		
VIII	8	16.					43	12.5	2	6.1		
IX	1	2.					45	13.1	1	3.	1	50.
X	8	16.			1	100.	31	9.				
Total	50	100.	4	100.	1	100.	344	100.	33	100.	2	100.
% of Class	9.1		.7		.2		46.4		4.5		.3	

Read Table Thus: Of those having attended college one year or part of year previous to enrollment as freshmen in 1934, 6 per cent ranked in the first decile, and 16 per cent in the tenth decile. Read the remaining items in the same manner.

From the data presented in Table XVI it was assumed that previous attendance in college, either part of a year or one year, did not bear relationship to the decile ranking of the student. The greater per cent of those who have attended previously ranked in Deciles VII, VIII and X. However, of the 1934 class, only 9.1 per cent of the students had attended college before; .7 of one per cent had attended 2 years, but only .2 of one per cent had attended as long as three years.

In the class of 1924, 344 of the 742 students had attended college previously as compared to the 50 students from the 1934 class. However, this fact must be taken into consideration: in 1924, no previous entrance

tests had been given; hence it was necessary for all who were classified as freshmen to take them. In the 1934 class, there may be an equal number of freshmen who have been in school before, but if they were enrolled in any semester during the regular school year, they were required to take the tests when they first entered college. Nearly half, 43.4 per cent of the students had had some work in college before enrolling as freshmen in the fall of 1924; 33, or 4.5 per cent of the group had attended as long as two years.

The greater percentage of previous attendance in college among the students of ten years ago is probably accounted for by enrollment in summer school. The data presented in Table XVI show that there was a longer lapse of time between high school graduation and college enrollment among the students of ten years ago than of the students of the 1934 class. This longer interval of years between graduation and college enrollment makes allowance for summer school or semester previous attendance in college. However, in previous years, high school graduates could obtain a 1 year state certificate upon attending college one summer term; this may have been a factor partially responsible for this spasmodic attendance. After attending one summer they taught one year; then they attended another summer and had their certificates renewed and were able to teach another year; this practice continued indefinitely. Again, the factor of being able to get jobs with such little education also is of significance here.

Failure in High School or Elementary Work as Related to the Decile Ranking of the Student

A study was made of the per cent of students in the two classes who had failed in either elementary or high school work. The underlying motive of this problem was to determine what relationship existed between previous failure in school work and the ranking of the student on the entrance tests.

Table XVII shows the number and per cent of students of both classes who failed in high school and elementary school work.

Of the freshmen of the 1926 class, the students who ranked in Decile I had by far the greatest per cent of failure in high school and elementary school work. The students who ranked in Decile IX had the smallest percentage of failures in previous school work. The comparison of the records of the students ranking in Deciles I and IX shows that the percentage of school failures among those ranking in Decile I is almost 14 times as great as the percentage of failures for the students of Decile IX. Twenty seven and six-tenths per cent of those students who failed in the elementary grades ranked in Decile I on the entrance tests. No student ranking in the tenth decile listed failure in grade school work. It is interesting to note that the students who ranked in the higher deciles listed fewer number of grade school failures.

In the class of 1924, the per cent of failures in high school work is more evenly distributed among the students ranking in the different deciles. However, the students having a greater percentage of failures rank in the lower deciles. The failures in grade school are more closely

TABLE XVII

THE RELATION OF FAILURE IN HIGH SCHOOL AND ELEMENTARY SCHOOL TO THE DECILE RANKING OF THE STUDENT

	Class of 1934				Class of 1924			
	High School		Grade School		High School		Grade School	
Decile	No.	%	No.	%	No.	%	No.	%
I	13	28.6	8	27.6	8	9.5	12	20.3
II	7	15.4	5	17.3	15	18.	6	10.1
III	3	6.6	3	10.4	6	7.1	8	13.5
IV	3	6.6	3	10.4	10	11.9	7	11.8
V	6	13.2	3	10.4	9	10.7	3	5.1
VI	5	11.	4	13.8	7	8.3	9	15.5
VII	2	4.4	1	3.5	7	8.3	3	5.1
VIII	3	6.6	1	3.5	7	8.3	4	6.8
IX	1	2.2	1	3.5	5	6.	4	6.8
X	2	4.4			9	10.7	4	6.8
Total	45	100.	29	100.	84	100.	59	100.
% of Class		5.2		3.3		11.3		8.

Read Table Thus: In the class of 1934, 13 or 28.6% of the students who failed in high school ranked in Decile I on the entrance tests. Of the students failing in grade school, 8 or 27.6% ranked in Decile I. Interpret the remaining items in the same manner.

related to the decile ranking of the student; three times as many of the students who ranked in Decile I failed in grade work as did those students who ranked in Decile X.

The comparison of the two classes reveals the fact that there was a greater percentage of failures among the students of the class of 1924 than among the students of the class of 1934. The percentage of high school failures of the class of 1924 exceeded by 5.2 per cent the average of the high school failures for the class of 1934. The average per cent of failures in the grade school work of the students of the 1924 class exceeded the average of the class of 1934 by 2.7 per cent.

It is also of interest to note some of the reasons listed by students for their failure. Illness was listed by 83 as the cause of failing in high school. Lack of study was given as the cause of failure by 18 students; 17 reported that the lessons were too difficult. Dislike for the subject was the reason given by ten students for their failure; outside work and too heavy a class schedule were also given as the causes of failure. All of these reasons except, perhaps, lack of study are justifiable; however, from the data shown in the Table XVII, it is apparent that the basic reason for failure in school work was lack of intellectual ability, indicated by the ranking of the students on the entrance tests.

Extracurricular Activities

Extracurricular activities have come to play an important part in the field of education. Educational leaders believe that the bright student should do more than merely make good grades: he should take part in other activities which will tend to give him a keener appreciation and better understanding of life situations. To determine to just what extent students did participate in other than academic fields, the following studies have been made.

Table XVIII presents the results of the extracurricular study of the students of the 1934 class.

Part I of Table XVIII refers to athletics. Of the 111 students taking part in football, it is of interest to observe that 20, or 18 per cent, ranked in Decile I; only 9, or less than half as many of the students

TABLE XVIII

THE RELATION OF EXTRA CURRICULAR PARTICIPATION TO THE STUDENT'S DECILE RANKING ON THE ENTRANCE TESTS--CLASS OF 1934

	I		II		III		IV		V		VI		VII		VIII		IX		X		Whole Class	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
PART I ATHLETICS																						
Football	20	18.	12	10.8	11	9.9	13	11.7	10	9.	11	9.9	7	6.3	8	7.2	9	8.1	10	9.	111	20.1
Basketball	24	10.3	23	9.9	22	9.5	21	9.1	25	10.8	33	14.2	16	6.9	27	11.6	21	9.1	20	8.6	232	40.2
Track	24	21.6	12	10.8	10	9.	9	8.1	12	10.8	6	5.4	10	9.	11	9.9	10	9.	6	5.4	110	19.9
Tennis	10	9.3	7	6.5	8	7.5	12	11.2	9	8.4	14	13.1	10	9.3	14	13.1	10	9.3	13	12.	107	19.4
Golf	4	23.6	1	5.9	3	17.7	3	17.7				5.9	1	5.9	1	17.7	3		1	5.9	17	3.1
Swimming	5	14.7	3	8.8	2	5.9	3	8.8	6	17.6	4	11.8	4	11.8			4		3	8.9	34	6.2
Baseball	9	9.4	10	10.4	8	8.3	13	13.5	13	13.5	13	13.5	10	10.4	6	6.2	6	6.2	8	8.3	96	17.4
Judging							1												1	1.	1	.2
PART II MUSIC																						
Glee Club	39	10.6	37	10.	28	7.6	35	9.5	40	10.8	42	11.4	37	10.	37	10.	34	9.2	40	10.8	369	66.8
Orchestra	17	9.2	16	8.7	16	8.7	20	10.9	16	8.7	17	9.2	18	9.8	18	9.8	20	10.9	26	14.1	184	33.3
Band	10	8.6	8	6.9	10	8.6	12	10.3	9	7.8	11	9.5	11	9.5	8	6.9	17	14.7	20	17.2	116	21.
Chorus	25	10.1	27	10.9	21	8.5	24	9.7	24	9.7	32	12.9	25	10.1	28	11.3	20	8.1	21	8.5	247	44.7
Music--Indiv.	13	15.9	11	13.4	11	13.4	6	7.3	4	4.9	7	8.5	8	9.8	9	11.	8	9.8	5	6.1	82	14.9
PART III MISCELLANEOUS																						
Debate	1	1.8					2	3.6	8	14.6	7	12.7	5	9.1	12	21.8	10	18.2	10	18.2	55	10.
Oratory	3	17.7	1	5.9					1	5.9	1	5.9	2	11.8	5	29.5	1	5.9	3	17.7	17	3.1
Declamatory	1	5.	1	5.					1	5.	3	15.	1	5.	7	35.	4	20.	2	10.	20	3.6
Dramatics	24	9.6	23	9.2	19	7.6	19	7.9	29	11.6	25	10.	27	10.8	26	10.4	28	11.2	30	12.	250	45.3
Art					1	16.6	2	33.2					1	16.6	2	33.					6	1.1
School Paper											1	11.1			1	11.1	4	44.4	3	33.3	9	1.6
Club			1	5.9	1	5.9			2	11.8	1	5.9	1	5.9	2	11.8	3	17.7	6	35.4	17	3.

Read Table Thus: In Part II, Musical Activities, 39 students or 10.6% of these participating in glee club work ranked in Decile I; 37 or 10.% of the students taking part ranked in Decile II. Read the remaining items in the same manner.

ranking in the tenth decile, took part in football. The percentage of students playing basketball is more nearly equal for the students of the different decile groups; however, the greatest per cent of the students who play basketball rank in the sixth decile. In track activities, the greatest per cent of students who took part ranked in Decile I. Of the students playing golf, the greatest per cent ranked in Decile I; no student who ranked in Decile II or IX took part in golf. In swimming, the greatest per cent of students who participated ranked in Decile VI. Of the ninety-six students who listed participation in baseball, 15 ranked in Deciles IV, V, and VI respectively. Only one student participated in agricultural judging.

It is apparent from these data that the greater proportion of the students who received athletic honors ranked in lower deciles.

Part II Music

Of the 588 students who sang in glee clubs, the greatest number; namely, 42, or 11.4 per cent of students participating, ranked in Decile VI. However, the percentage of students who took part was fairly evenly distributed among the students of the ten groups.

In orchestra, of the 184 students who played instruments, Deciles IV and X claim an equal number of twenty students each; but again the distribution was comparatively equal. In band, 14.7 per cent of these students playing ranked in the tenth decile. The distribution of the students singing in the chorus was relatively equal among the ten groups.

TABLE XIX

THE RELATION OF EXTRA CURRICULAR PARTICIPATION TO THE STUDENT'S DECILE RANKING ON THE ENTRANCE TESTS--CLASS OF 1924

	I		II		III		IV		V		VI		VII		VIII		IX		X		Whole Class	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
PART I ATHLETICS																						
Football	12	9.6	21	16.8	16	12.8	12	9.6	15	12.	16	12.8	10	8.	6	4.8	11	8.8	6	4.8	125	16.9
Basketball	26	8.3	40	12.7	35	11.1	36	11.4	39	12.4	31	9.9	26	8.3	31	9.9	31	9.9	19	6.	314	43.3
Track	19	9.3	21	19.4	15	13.9	8	7.4	13	12.	13	12.	8	7.4	7	6.5	5	4.6	8	7.4	108	14.6
Tennis	3	6.3	6	12.5	6	12.5	4	8.3	8	16.7	6	12.5	7	14.6	3	6.3	2	4.2	3	6.3	48	6.6
Golf	6	7.5	18	22.5	8	10.	4	5.	11	13.8	12	15.	6	7.5	4	5.	7	8.8	4	5.	80	10.8
Miscellaneous									1	100.											1	.1
PART II MUSIC																						
Glee Club	20	7.9	33	13.	25	9.8	29	11.4	25	9.8	29	11.4	32	12.6	25	9.8	20	7.9	16	6.3	254	34.2
Orchestra	5	4.8	9	14.3	9	14.3	4	6.4	8	12.7	6	9.5	4	6.4	5	7.9	9	14.3	6	9.5	63	8.5
Band	1	5.	2	10.	1	5.	2	10.	3	15.	1	5.	2	10.	1	5.	3	15.	4	20.	20	2.7
Chorus	7	4.	21	14.	10	6.6	11	7.3	17	11.2	23	15.2	18	11.9	16	10.6	14	9.3	14	9.3	151	20.4
Music--Indiv.	7	7.9	6	6.7	9	10.1	7	7.9	10	11.2	9	10.1	7	7.9	11	12.4	10	11.2	13	14.6	89	12.
PART III MISCELLANEOUS																						
Debate	3	4.1	7	9.5	4	5.4	6	8.1	9	12.2	9	12.2	9	12.2	13	17.6	7	9.5	7	9.5	74	10.
Oratory							1	4.5	1	4.5	4	18.2	2	9.1	3	13.6	3	13.6	8	36.3	22	3.
Declamatory							1	7.7	3	23.1	2	15.4	5	38.5	1	7.7	1	7.7			13	1.8
Dramatics	18	6.2	33	11.3	19	6.5	26	8.9	35	12.	36	12.3	30	10.3	41	14.	34	11.6	20	6.8	292	39.4
Art					1	33.					1	33.							1	33.	3	.4
School Paper			2	8.	1	4.	3	12.	3	12.	1	4.	6	24.			5	20.	4	16.	25	3.4
Club	2	4.5	3	6.8	5	11.4	4	9.1	3	6.8	3	6.8	5	11.4	8	18.2	5	11.4	6	13.6	44	5.9

Read Table Thus: In Part II, Musical Activities, 20 students or 7.9% of the 254 taking part in Glee Clubs ranked in Decile I; 33 students or 13.% ranked in Decile II. Read the remaining items in the same manner.

Individual music honors deserve notice in that, of the 82 students who won such distinction, 15 ranked in the first decile, whereas only 8 students from Decile X received musical honors.

Part III Miscellaneous

Of the students who debated, 21.8 per cent ranked in the 9th decile, and 18.2 per cent ranked in Decile X, as compared with 1.8 per cent of the students ranking in Decile I who took part in debate.

In oratory, again the greater per cent of the students participating fell in the higher deciles, 30 per cent ranking in Decile IX.

Nearly one half, 280, of the 552 freshmen students of the 1934 class took part in dramatics; of these students, the greatest per cent, 11.6, ranked in the fifth decile, although 11.2 per cent received tenth decile ranking.

The students who took part in such extracurricular activities as art work, school paper editorship, and departmental club work tended to rank in the upper deciles.

Freshman of 1934

The greatest per cent, 16.9, of those students who played football ranked in Decile XI; Deciles VIII and X contain the smallest per cent of students taking part, 4.8 per cent for each. Similarly in basketball, the largest per cent of students participating ranked in Decile XI. Of the other athletic activities, track, tennis, and baseball, the data show

that those ranking in the higher deciles tended to participate less than did those students ranking in the lower deciles.

Part II Musical Activities

With the exception of the students who sang in Glee Clubs, the greater percentage of those participating in musical activities ranked in the upper deciles.

Part III Miscellaneous

In miscellaneous extracurricular activities, such as debate, dramatics, school paper work, and departmental club work, the students ranking in the higher deciles participated most actively.

Table IX shows the per cent of students of each class who participated in extracurricular activities.

The comparison of the two classes in regard to extracurricular participation indicated trends that are taking place in educational and vocational fields.

The number of students playing football has increased nearly 4 per cent since 1924; however the fact must be considered that there was a greater preponderance of men in the 1934 class. There are fewer students in 1934 playing basketball, but in the number participating in track there was a gain of more than 5 per cent over the 1924 group. Nearly three times as many students out of the 1934 class played tennis as did students of 1924; 19.4 per cent as compared with 6.5 per cent of the 1924 class.

TABLE XI

COMPARISON OF EXTRACURRICULAR PARTICIPATION OF FRESHMEN OF 1934 WITH THE PARTICIPATION OF THE FRESHMEN OF 1924

Activity	Freshmen of 1934		Freshmen of 1924	
	Total No.	% of Class	Total No.	% of Class
Part I				
Football	111	20.1	125	16.9
Basketball	232	40.2	314	43.3
Track	110	19.9	108	14.6
Tennis	107	19.4	48	6.5
Golf	17	3.1		
Swimming	34	6.2		
Baseball	96	17.4	80	10.8
Miscellaneous	1	.2	1	.1
Part II				
Glee Club	369	66.8	254	34.2
Orchestra	184	33.3	63	8.5
Band	116	21.	20	2.7
Chorus	247	44.7	151	20.4
Individual Numbers	82	14.9	89	12.
Part III				
Debate	55	10.	74	10.
Oratory	17	3.1	22	5.
Declamatory	20	3.6	13	1.8
Dramatics	250	48.3	292	39.4
Art	6	1.1	3	.4
School Paper	9	1.6	25	3.4
Departmental Clubs	17	3.1	44	5.9
Total Students in Class	552		742	

Read Table Thus: Of the freshmen of 1934, 111 students played football, or 20.1% of the whole class. Of the 1924 freshmen, 125 students or 16.9 % of the whole class played football. Read the remaining items in the same manner.

The most interesting part of Table XX is Section II, dealing with music activities. The per cent of students singing in glee clubs has nearly doubled since 1924; 66.8 per cent of the 1934 class as compared with 34.2 per cent of the 1924 group. In orchestra, there is a gain of more than four times the per cent of students playing instruments in the 1934 class. The comparison of the band groups is the most striking: the per cent of students who played in the band in the 1934 class was nearly 8 times as great as the per cent of students participating in 1924, 21. per cent as compared to 2.7 per cent respectively. The increase in the number of students singing in the chorus has almost doubled; there is also a gain of 8.9 per cent of the students who received individual music honors.

The same per cent, 10 per cent, of the students in the class participated in debate in 1934 as in the class of 1924. In oratory, there is a decrease of 8 per cent in the number of students taking part; there is also a slight decrease in the number of students working on the school paper. However, of the freshmen entrants who had taken part in high school dramatics, the percentage is slightly higher for the 1934 class.

In every extracurricular activity except basketball, oratory, school paper, and departmental club work, the 1934 class shows an increase over the class of 1924 in per cent of students participating.

The data from Table XX indicate that more students are participating in extracurricular activities than did so ten years ago; furthermore, the number of extracurricular activities has increased.

The Relation of Honors Received to Decile Rank

The question of conferring honors has puzzled school administrators for years. The charge is often brought that students who are most popular, but least meriting receive honors undeservedly. A study has been made of the freshmen of the two classes to discover to what extent the honors that students receive in high school are related to decile ranking of the student on the entrance tests.

Table XXI shows the results of the research. Only data for the freshmen of 1934 class have been used, as the Freshmen Information Cards of 1924 contain no specific questions regarding honors the students had received.

It is worthy of notice that the data from Table XXI parallel closely the decile ranking of the students. Of the students who were valedictorians, none ranked in the first decile; two of the students who were valedictorians ranked in Decile II. However, 17 students or 42.5 per cent of those who received highest scholastic honors ranked in Decile X. Of the whole class, only 7.2 per cent of the students were valedictorians. Of these students who were salutatorians, 24.8 per cent ranked in Decile X. Of the fifty-eight students of the freshmen class who had been elected to membership in the National Honor Society, 20 students, or 34.4 per cent, ranked in the tenth decile--more than twice the number ranking in any other decile.

The students who won honors in athletics such as football, basketball, track and tennis; tended to rank in the lower deciles.

TABLE XXI

THE RELATION OF HIGH SCHOOL HONORS RECEIVED TO THE STUDENT'S DECILE RANKING ON THE ENTRANCE TESTS
CLASS OF 1934

Honors Activity	Deciles																				Whole Class	
	I		II		III		IV		V		VI		VII		VIII		IX		X			
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Valedictorian			2	5.			1	2.5	3	7.5	1	2.5	5	12.5	3	7.5	8	20.	17	42.5	40	7.2
Salutatorian			3	9.3	2	6.2	2	6.2	2	6.2	7	21.7	1	3.1	3	9.3	4	12.4	8	24.8	32	5.8
National Honor Society	1	1.7	1	1.7	5	8.6	3	5.2	2	3.4	6	10.3	5	8.6	7	12.	8	13.8	20	34.4	58	10.5
President of Class	3	8.6	2	5.7	1	2.9	2	5.8	6	17.2	2	5.7	5	14.3	8	22.9	4	11.4	2	5.8	35	6.3
Individual Music					1	9.1	2	18.2	1	9.1	2	18.2			3	27.3			2	18.2	11	2.
Group Music Honors			9	36.	1	4.	4	16.	2	8.	2	8.	1	4.	3	12.	1	4.	2	8.	25	4.5
Football	5	19.	5	19.	2	7.6	4	15.2	3	11.4	3	11.4	1	3.8	2	7.6			1	3.8	26	4.7
Basketball	3	4.2	9	12.6	10	14.	8	11.2	13	18.2	11	15.4	4	5.6	7	9.8	1	1.4	5	7.	71	12.9
Baseball	5	21.7	4	17.4	2	8.7	4	17.4	4	17.4	3	13.							1	4.3	23	4.2
Track	5	27.8			2	11.1	2	11.1	3	16.7	1	5.6	1	5.6	2	11.1			2	11.	18	3.3
Golf	2	100.																			2	.4
Tennis											1	33.			1	33.			1	33.	3	.5
Club President	4	8.4	4	8.4	6	12.6	6	12.6	7	16.9	3	6.3	5	10.5	5	10.5	4	8.4	2	4.2	48	8.7
Honor Student	1	3.1			2	6.2	2	6.2	3	9.4	4	13.5	7	21.8	2	6.2	9	24.7	2	6.2	32	5.8
Cheer Leader			1	100.																	1	.2
Dramatics			3	24.9	1	8.3	1	8.3			1	8.3	1	8.3	1	8.3	3	24.4	1	8.3	12	2.2
Student Council			1	20.					1	20.			1	20.	2	40.					5	.9
Class Officer			2	11.6	2	11.6	1	5.8	3	17.4	3	17.4	2	11.6	2	11.6	2	11.6			17	3.1
Judging Honors							1	100.													1	.2
School Paper					1	8.3	1	8.3	2	16.6					5	41.5	3	24.9			12	2.2
Scholarship Contest			1	4.8			1	4.8	2	9.5	4	19.	1	4.8	4	19.	5	23.2	3	14.3	21	3.8
Debate											1	11.1	2	22.3	5	55.5	1	11.1			9	1.6

Read Table Thus: One of the students ranking in the sixth decile was the valedictorian of his class in high school. Forty students or 7.2 per cent of the class of 552 freshmen were valedictorians. Read the remaining items in the same manner.

The honor of being the president of a departmental club, according to these data, bears no direct relation to the student's decile ranking. Of the freshmen who were honor students, by far the greater per cent ranked in the upper deciles. Of those students who participated in the scholarship contest, none ranked in Decile I, 5 students who took part ranked in Decile II, and 3 ranked in Decile X.

The data in Table XXX, Honors Received, should not be confused with these data referring to extracurricular activities in Tables XVIII and XIX. Although Table XXI contains some of the same items, this distinction should be made; these data refer not to those who merely took part in extracurricular activities, but to those students who received honorary recognition for outstanding work.

Summary

1. In 1934, only 34.2 per cent of the freshmen had graduated from high school that year. In 1934, 51.6 per cent of the students had graduated that year. These data tend to indicate that there is a greater tendency for students to continue directly to college after high school graduation at the present time than in previous years.

2. Those students who had been enrolled in college for a semester or summer term tended to rank higher on the entrance tests than did those students who were enrolling for the first time.

3. The students who had failed in high school or in elementary work tended to rank in lower deciles than did those who had not failed.

there were more failures among the students of 1924 than among the students of 1934.

4. The data from the tables of extracurricular activities show that of the students participating in athletics, the greater per cent, especially in football and track, ranked in the lower deciles.

5. The students who took part in musical activities, debate, oratory, and dramatics tended to rank in the upper deciles.

6. The students who were especially outstanding in honorary work ranked in the upper deciles.

7. The data from this chapter tend to show that the students who take most active part in extracurricular activities also tend to rank higher on the entrance examinations.

CHAPTER VII

DATA RELATED TO VOCATIONAL GUIDANCE

Previous Occupational Experience

In previous chapters, studies have been reported of the students' age, academic success, extracurricular participation, and other similar activities. In this chapter, data will be given which are more nearly personal in nature.

Table XXII shows the results of a study made on the kind and amount of occupational experience students have had. Besides teaching experience, such occupations and vocations as farming, printing, carpenter work, radio repairing, mechanic work, truck driving, and orchestra directing were listed.

From the data shown in Table XXII, it is evident that those students having had teaching or other occupational experience ranked higher on the entrance examinations than did those who had had no such experience. One student who ranked in Decile IV had taught one year. Of those who had taught two years, 3 ranked in Decile II, 1 each in Deciles V and VIII, and 3 in Decile X.

In experience other than teaching, 7 of the entrants who had worked for a year ranked in Decile I; 2 ranked in Decile II; 6, in Decile III; 7 each, in Deciles IV and V; 6, in Decile VI; and 1 in Decile X. The students who had had more than five years' experience ranked in the following deciles: II, III, VI, VII, and IX.

TABLE XXXI

THE RELATION OF OCCUPATIONAL EXPERIENCE TO DECILE RANKING OF THE FRESHMAN ENTRANTS OF THE CLASS OF 1934

	Teaching												Other Experience											
	1 Year		2 Years		3 Years		4 Years		5 Years		Miss.		1 Year		2 Years		3 Years		4 Years		5 Years		Miss.	
Decile	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
I													7	10.5	1	8.			1	20.	2	28.6		
II			3	36.									2	3.	3	23.1	1	11.					1	20.
III									1	25.			6	9.	2	15.4	2	22.	1	20.			1	20.
IV	1	20.									1	20.	7	10.5			1	11.						
V			1	12.	1	11.			1	25.			7	10.5	2	15.4					1	14.3		
VI					2	22.					1	20.	6	9.	2	15.4	2	22.	1	20.	1	14.3	1	20.
VII							1	50.					4	6.	1	7.7			1	20.			1	20.
VIII			1	12.	2	22.					2	40.	10	14.9										
IX	2	40.			1	11.			1	25.			10	14.9	1	7.7	1	11.			1	14.3	1	20.
X	2	40.	3	36.	3	33.	1	50.	1	25.	1	20.	8	11.9	1	7.7	2	22.	1	20.	2	28.6		
Total	5		8		9		2		4		5		67		13		9		5		7		5	
% of Class	.9		1.5		1.6		.4		.7		.9		12.1		2.4		1.6		.9		1.3		.9	

Read Table Thus: Of the students ranking in Decile I, none have had teaching experience; 7 have had experience in some other line of work for 1 year, one student has had 2 years experience; one student, four, and 2 have had five year's experience. Read the remaining items in the same manner. Miscellaneous refers to more than five year's experience in teaching or other fields.

Of the whole class, only 5, or .9 per cent of the freshmen had taught as long as one year; 8 students, or 1.5 per cent, had taught two years; 9, or 1.6 per cent, three years; 4 students had taught as long as five years; and 5 had taught more than five years.

The students who had taught or had worked in some other field for one, two, or three years ranked higher in the entrance tests than did those students who had come directly to college from high school. This fact seems to imply that maturity, and the ability to participate in outside activities or possibly experience gained while working tend to influence a student's ranking on entrance tests. Of the 552 freshmen entrants, 67 had worked at some other occupation for one year; 13 had spent two years working, and 5, or .9 per cent, of the whole class had worked for more than five years.

A Comparison of the Degree of Self-Maintainence of the Students of the Class of 1934 and Those of the Class of 1924

A study was made to discover what per cent of the students were maintained in school by parents or others; what per cent planned to earn their way through work, and what per cent intended to maintain themselves through savings. Table XXIII presents the data for the class of 1934. The fact should be taken into consideration that these data were furnished at the opening of the school year. In the majority of instances, a certain per cent of support was anticipated either from parents or work; there has been no attempt in this study to determine to what extent the amount anticipated has been realized.

TABLE XXXII

THE RELATION OF SELF MAINTAINENCE TO RANKING ON THE ENTRANCE EXAMINATIONS — FRESHMEN OF 1934

Deciles	I Parents or Others								II Savings								III Work							
	100		75		50		25		100		75		50		25		100		75		50		25	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
I	6	5.9	8	6.7	7	9.7	7	8.8	4	17.4			9	10.6	9	11.4	2	9.1	6	8.7	10	9.7	6	8.5
II	16	12.6	2	4.4	10	13.9	6	7.5	1	4.4	1	7.1	11	12.9	6	7.6	1	4.6	2	2.9	6	5.8	7	9.9
III	4	3.1	4	8.9	1	1.4	2	2.5					6	7.1	4	5.1	3	13.6	3	4.4	6	5.8	3	4.2
IV	23	17.9	6	13.3	12	16.7	7	8.8	5	21.7	3	21.4	11	12.9	7	8.9	4	18.2	3	4.4	13	12.6	5	7.
V	16	12.5	3	6.7	7	9.7	10	12.5	3	13.			8	9.4	8	10.1	3	13.6	9	13.	12	11.6	8	7.1
VI	10	7.8	8	17.8	11	15.3	8	10.	2	8.7	2	14.3	7	8.2	6	7.6	3	13.6	2	2.9	13	12.6	12	16.9
VII	18	14.1	5	11.1	8	11.1	11	13.8	1	4.4	1	7.1	12	14.1	6	7.6			5	7.3	13	12.6	7	9.9
VIII	14	10.8	6	13.3	6	8.3	9	11.3	2	8.7	3	21.4	2	2.4	8	10.1	1	4.6	11	15.9	8	8.8	11	15.5
IX	16	12.5	3	6.7	4	5.5	9	11.3	2	8.7	1	7.1	11	12.9	14	17.7	2	9.1	13	18.8	12	11.7	6	8.5
X	6	4.7	5	11.1	6	8.3	11	13.8	3	13.	3	21.4	8	9.4	11	13.9	3	13.6	15	21.7	12	11.7	9	12.7
Total	128		45		72		80		23		14		85		79		22		69		103		71	
% of Class	25.2		8.8		13.		14.5		4.2		2.5		15.4		14.3		4.		12.5		18.7		12.9	

Read Table Thus: Of the students who rank in Decile I, 6 were entirely supported by parents. Savings maintain 4 students, and 2 freshmen will make all their own way through work. Read the remaining items in the same manner.

Of the students who ranked in the first decile, 5 were supported entirely by their parents; 6, or 4.7 per cent, of those in the tenth decile were supported entirely by parents or others. Of the students in Decile IV, 23 were entirely supported by parents.

Of those maintained by savings, the greatest number, 5, ranked in Decile IV; 14 freshmen in Decile IX expected to pay 25 per cent of their expenses with savings.

Four students who ranked in Decile IV supported themselves entirely through work. Fifteen and five-tenths per cent of the freshmen who ranked in Decile IX listed that they would support themselves 25 per cent through work. Of the freshmen who ranked in Decile X, 21.7 per cent hoped to support themselves 75 per cent through work.

Considering the whole class, 128 of the 552 students, or 23.2 per cent of the whole class, were supported 100 per cent by their parents. Only 4 per cent supported themselves entirely by working, although 18.7 per cent made 50 per cent of their own way through work. Twenty-three students, or 4.2 per cent, supported themselves entirely through savings; and 15.4 per cent paid 50 per cent of their way by savings.

The data in Table XXIV show conclusively that a large per cent of the students in the 1924 class were supported 100 per cent by their parents. Thirty-six and one tenth per cent, more than one-third of the whole class, were maintained entirely by parents or others. Only 8.8 per cent were supported 75 per cent by parents; 2.7 per cent made their own way entirely by work; and 10.1 per cent made 50 per cent of their own way.

TABLE XXIV

THE RELATION OF SELF MAINTAINENCE TO RANKING ON THE ENTRANCE EXAMINATIONS — FRESHMEN OF 1924

Deciles	I Parents or Others								II Savings								III Work							
	100		75		50		25		100		75		50		25		100		75		50		25	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
I	23	8.6	3	4.6	3	4.9	7	8.9	5	4.2	3	10.	8	13.1	4	7.7			5	8.3	9	12.	8	7.3
II	30	11.2	11	16.9	3	4.9	12	15.2	8	6.7	5	16.7	6	9.8	3	5.8	4	20.	5	8.3	7	9.3	14	22.7
III	24	9.	9	13.8	7	11.5	6	7.6	11	9.3	5	16.7	6	9.8	5	9.6			5	8.3	7	9.3	12	10.9
IV	30	11.2	4	6.2	7	11.5	5	6.3	9	7.6	1	3.3	4	6.6	9	17.3	7	35.	6	10.	6	8.	7	6.4
V	28	10.5	8	12.3	7	11.5	9	11.4	16	13.5	4	13.3	5	8.2	7	13.5	2	10.	8	13.3	6	8.	12	10.9
VI	33	12.3	7	10.8	7	11.5	10	12.7	8	6.7	2	6.7	6	9.8	6	11.5	1	5.	11	18.3	7	9.3	12	10.9
VII	24	9.			9	14.8	12	15.2	15	12.7	2	6.7	10	16.4	3	5.8	1	5.	5	8.3	12	16.	2	1.8
VIII	28	10.8	10	15.4	9	14.8	6	7.6	13	11.	3	10.	9	14.8	3	5.8	5	15.	5	8.3	9	12.	17	15.5
IX	26	9.7	9	13.8	6	9.8	5	6.3	16	13.5	3	10.	4	6.6	9	17.3			8	13.3	5	6.7	17	15.5
X	21	7.8	4	6.2	3	4.9	7	8.9	18	15.2	2	6.7	3	4.9	3	5.8	2	10.	2	3.3	7	9.3	9	8.2
Total	268		65		61		79		119		30		61		52		20		60		75		110	
% of Class	36.1		8.8		8.2		10.7		16.		4.		8.2		7.		2.7		8.1		10.1		14.8	

Read Table Thus: In Decile I, 23 students were supported 100 per cent by parents; 3, 75 per cent; 3, 50 per cent, and 7, 25 per cent. None of the students ranking in Decile I supported themselves entirely through work. Read the remaining items in the same manner.

In comparing the two classes, it should be observed that the number of students who were entirely supported ten years ago was more than 10 per cent greater than the number of the 1934 class so supported. More than 18 per cent of the freshmen of 1934 group supported themselves half or more than half through work, as compared to 10.1 per cent of the class of 1924. In 1924, 18. per cent of the students maintained themselves entirely through savings, as compared to only 4.2 per cent of the 1924 class.

Table XXIII and Table XXIV show that the number of students who were working their way through school was greater for the 1934 group than for the 1924 class. These data show little relationship existing between self-maintainence and decile ranking on the entrance examinations.

A Comparison of the two Classes in Regard to the Length of Time Students Planned to Remain in College

In connection with this same problem, another study has been worked out determining how long students intended to remain in college.

Of the students who planned to remain four years, 13.3 per cent ranked in Decile VIII; 12. per cent ranked in Decile X. Only 8 students from the 562 freshmen planned to remain three years. Thirteen and two-tenths per cent of these who planned to get Life Certificates ranked in Decile X. Of the students who intended to remain only one year, the greatest number, 16.4 per cent, ranked in Decile V. Of the students who were undecided how long they would remain, only 2.7 per cent ranked in Decile X.

TABLE XXV

THE RELATION OF DECILE RANKING TO THE LENGTH OF TIME THE STUDENT PLANNED TO REMAIN IN COLLEGE

Deciles	Class of 1934										Class of 1924									
	Number of Years Students Plan to Remain										Number of Years Students Plan to Remain									
	4 Years		3 Years		2 Years		1 Year		Undecided		4 Years		3 Years		2 Years		1 Year		Undecided	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
I	23	9.6			8	9.2	9	9.8	6	8.	8	5.4	1	10.	22	9.	14	6.1	8	8.8
II	23	9.6	1	12.5	9	10.4	11	12.	5	6.7	16	10.8			28	11.5	18	7.9	11	19.3
III	21	8.7			11	12.7	5	5.5	12	16.	11	7.4	1	10.	20	8.2	22	9.6	12	21.1
IV	26	10.8	2	25.	4	4.6	10	10.9	7	9.3	13	8.8			26	10.7	22	9.6	5	8.8
V	17	7.1			8	9.2	15	16.4	12	16.	11	7.4	1	10.	35	14.4	23	10.	6	10.5
VI	25	10.4	2	25.	12	13.8	12	13.1	10	13.3	17	11.5	1	10.	20	8.2	31	13.5	6	10.5
VII	19	7.9	1	12.5	8	9.2	8	8.7	9	12.	19	12.8			26	10.7	20	8.7	6	10.5
VIII	32	13.3			7	8.1	9	9.8	4	5.3	19	12.8			23	9.5	29	12.6	6	10.5
IX	26	10.8	1	12.5	8	9.2	8	8.7	8	10.6	17	11.5	1	10.	21	8.6	37	16.1		
X	29	12.	1	12.5	12	13.8	5	5.5	2	2.7	18	12.2	5	50.	22	9.	13	5.7		
Total	241		8		87		92		75		148		10		243		239		57	
% of Class	43.7		1.5		15.8		16.7		13.6		26.		1.4		32.8		30.9		7.7	

Read Table Thus: In the Class of 1934, 23 students ranking in Decile I plan to remain in college 4 years, none plan to remain 3 years; 8 intend to stay 2 years, and 8 plan to remain just one year. Read the remaining items in the same manner.

In the class of 1924, 8 in Decile I, or 5.4 per cent, planned to remain four years, as compared with 18, or 12.2 per cent, of those who ranked in Decile I. Thirty-five of the 243 freshmen who planned to get Life Certificates ranked in Decile V. The greatest number of students, 37, or 16.1 per cent, of those who intended to stay only one year ranked in Decile II.

The comparison of the two classes reveals some interesting facts. More than 43 per cent of the 1934 class planned to remain four years, as compared to 20. per cent of the class of 1924. However, the per cent of students working for a Life Certificate was more than twice as great in the 1924 class as in the 1934 class. Sixteen and seven-tenths per cent of the 1934 class planned to remain only one year as compared to 30.9 per cent ten years ago. More than 13 per cent of the 1934 class were undecided as to how long they could remain in college, whereas only a little more than 7 per cent of the students in the class of 1924 were undecided.

The data from this table indicate that the greater number of the freshmen of 1934 planned to remain four years in college; whereas ten years ago the greater percentage planned to remain only two years.

A Study of Vocational Choice

As specialization has become increasingly more necessary, it has become essential that students begin work in their chosen field in college. A study was made of those in the freshmen class of 1934 to determine whether they had decided on their vocation, or whether they were yet uncertain.

TABLE XXVI

RELATION OF VOCATIONAL DECISION TO DECILE RANKING--CLASS OF 1934

Decile	Yes		No		Undecided	
	No.	%	No.	%	No.	%
I	19	7.5	20	9.2	7	17.7
II	16	6.3	22	10.1	11	26.8
III	27	10.7	18	8.3	6	14.6
IV	24	9.5	25	11.5	2	4.9
V	26	10.3	21	9.6	5	12.2
VI	35	13.	27	12.4	4	9.8
VII	25	9.9	19	8.7		
VIII	25	9.9	25	11.5	2	4.9
IX	28	11.1	20	9.2	3	7.3
X	30	11.9	21	9.6	1	2.4
Total	255		218		41	
% Class	45.5		38.5		7.4	

Read Table Thus: Nineteen students ranking in Decile I had made a decision about a vocation; 20 had not decided, and 7 were not sure or uncertain. Read the data for the remaining items in the same manner.

Only 19 students, or 7.5 per cent, of those who ranked in Decile I had definitely decided upon a vocation; whereas 30, or 11.9 per cent of those who ranked in Decile X had made a decision. Of the students who had not yet decided, the number was about equally distributed among the ten groups. Attention should be called to the fact that, of those who were as yet uncertain, only 2.4 per cent ranked in Decile X, as compared to 26.8 per cent in Decile II. A large per cent of those who were uncertain about a vocation ranked in the lower deciles.

Summary

1. The data indicate that those students who have had outside experience, either teaching or in some other vocation, for as long as one year, tend to rank higher on the entrance examinations than do those who have not had such experience.

2. The freshmen of the class of 1934 were more nearly self-supporting than were the students of ten years ago. Only a small per cent of the 1934 class was entirely supported by parents or others.

3. Research revealed that the majority of the freshmen of 1934 planned to remain in college until graduation, whereas ten years ago the greater percentage planned to remain only two years.

4. The students who were undecided about a vocation were found to rank in the lower deciles. More than 46 per cent of the 1934 class had made a decision concerning life work.

CHAPTER VIII

CONCLUSIONS

This study was carried on for the purpose of determining the degree of relationship existing between the two groups in relation to academic and personnel data. There has been no intention in this problem to evolve suggested remedies or to determine the cause of differences. The data presented are the results obtained through various research problems. This study has been worked out on the basis of the student's decile ranking; each group of data has been considered in its relation to the student's decile rank.

In conclusion, some of the broader implications of the findings of this investigation should be pointed out. The results of the study indicate certain significant differences in the two classes; these variations show trends in educational and social practice over a period of ten years.

Results of the Study

Personal Data

1. On the intelligence tests, the freshmen of 1934 were found to rank materially higher than the freshmen of 1924.
2. The freshmen entrants of 1934 were younger than the freshmen entrants of 1924. The average age difference of the two groups was nearly two years.
3. The parents of the freshmen students of the 1934 class were older than the parents of the freshmen students of ten years ago.

4. The average school attendance of parents of the 1934 freshmen was higher than for the parents of the 1924 group.
5. The average size of the family of the students of 1934 was smaller than the average size of the family of the students of 1924.
6. There was no clear-cut difference indicated in the social status of the occupations of the parents for the two groups.
7. The per cent of men in the 1934 class exceeded the per cent of men in the 1924 group by 9.6 per cent.

Educational Data

1. The majority of the students of the 1934 class enrolled in college the same year that they graduated from high school. On the other hand, a number of the freshmen of 1924 had graduated from one to five years previously.
2. The per cent of failures in both high school and grade school work was greater among the freshmen of 1924 than among the freshmen of 1934.
3. The students who took part in extracurricular activities tended to rank in the upper deciles. A greater proportion of the students of the 1934 class than of the 1924 group participated in extra-curricular activities.
4. The greater per cent of the freshmen of the 1934 class planned to remain in college for four years; whereas the majority of the students of 1924 intended to remain in school only two years.

Vocational Data

1. Freshmen of the 1934 class were more nearly self-supporting than were the freshmen of ten years ago.
2. Freshmen who had had previous occupational experience, in teaching, or in some other line of work tended to rank higher on the entrance tests.
3. A greater per cent of the students of the 1924 class than of the 1934 group had decided upon a vocation. Students who had made no decision about a vocation tended to rank in the lower deciles.

The difference in the performance on intelligence tests was the most significant dissimilarity of the two groups. These results indicated that students in the present educational system tend to have broader educational opportunities and experiences than did the students in previous years. The apparent difference of the students in intellectual ability may be due to the increase in the average amount of school attendance of the parents, to the increased reading facilities, or to differences in educational instruction.

The data shown in the study represent what actually exists; before definite suggestions may be made in regard to changes in educational practice further study must be made. The value of this problem lies in the objective material tabulated which may be utilized in further investigation.

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APPENDIX

Sample copies of the Freshmen Information Card referred to on

page 8 of Chapter I, Introduction.

Card I. Freshmen Information Card--1934

Card II. Freshmen Information Card--1924

K. S. T. C. STUDENT'S RECORD CARD Card I -- Class of 1934

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Decile

Date.....

Name..... Sex..... Age..... Married..... Race.....
(Last) (First) (Middle)

Home Address..... College Classification..... Date of Birth.....
(Month) (Day) (Year)

	Total Score	Entrance Test	English Composition	Vocabulary	Reading	Mathematics	Spelling	Literature						
Test Score.....														
Weighted Score...														
Decile X.....														
Decile IX.....														
Decile VIII.....														
Decile VII.....														
Decile VI.....														
Decile V.....														
Decile IV.....														
Decile III.....														
Decile II.....														
Decile I.....														

FAMILY DATA: Father living..... Age..... Amount of schooling..... Occupation..... Mother living..... Age..... Amount of schooling..... Number brothers living..... Number not living..... Give specific amount of schooling each has had to date:.....

..... Number sisters living..... Number not living..... Give specific amount of schooling each has had to date:.....

PHYSICAL: What sight defects..... Wear glasses..... What hearing defects.....

List other physical defects.....

SCHOLASTIC: Where did you last attend grade school..... When graduated..... Have you attended college elsewhere.....

Where..... When..... How long..... Name high school from which you graduated.....

When..... Have you failed in any (a) college subject..... Why..... (b) High school subject..... Why.....

..... (c) Grade work..... Why..... Underline honors you received in high school. Valedictorian, salutatorian, membership National Honor Society, team captain of (a) football, (b) basket ball, (c) baseball, (d) track. List others.....

..... Specify number of high school credits you have in each of the following subjects: Latin..... Modern Language.....

English..... History..... Civics..... Mathematics..... Science..... Music..... Commercial subjects..... Manual Training..... Home Economics.....

Others..... Total units.....

EXTRA CURRICULAR: Underline those you participated in in high school: (1) athletics: football, basket ball, baseball, track, tennis, golf, hockey, swimming. List others.....

..... (2) Music: glee club, orchestra, band, chorus. List others..... (3) Miscellaneous: Debate, oratory, declamatory, dramatics. List others.....

MISCELLANEOUS: Number years teaching experience..... Experience other than teaching: What..... When..... How long.....

Where..... To what extent (%) will your maintenance while in college be provided (1) by parents or others..... (2) by your own savings..... (3) through work..... What induced you to come to K. S. T. C.?..... For what position do you plan

SCHOLARSHIP RECORD

FRESHMAN YEAR..... SOPHOMORE YEAR.....

	SUBJECTS	A	B	C	D	F	Inc.	Wd.	Totals	Cat. No.	SUBJECTS	A	B	C	D	F	Inc.	Wd.	Totals
										Totals,									

JUNIOR YEAR..... SENIOR YEAR.....

	SUBJECTS	A	B	C	D	F	Inc.	Wd.	Totals	Cat. No.	SUBJECTS	A	B	C	D	F	Inc.	Wd.	Totals
										Totals,									

Name ....., ... Sex..... Married..... Age..... yr..... mo. Date of birth .....
Last 1st 2nd

Card II -- Class of 1924

Home address ..... Your experience teaching: years ..... where ..... When .....

Number of semester hours you are carrying at this time ..... Experience other than teaching: years .... where ..... when .....

STANDARD SCORES	Army Alpha	PSYCHOLOGICAL EXAMINATION									Reading Kansas Silent Reading	Reading Thorndike McCall	Vocabulary	English Literature	English Composition	American History	Civics	General Science	Geography	Spelling
		Completion	Arith. Reasoning	Artificial Language	Proverbs	Reading	Opposites	Grammar	Reasoning	Total										
Above																				
Freshman Col.	129											72	105							
Senior H. S.	120										30	68	87	65		63				
Junior H. S.	117										27	65	78	55		57			66	
Sophomore H.S.	111										26	64	63	45		52			60	
Freshman H. S.	97										23	62	45	35		46			54	
8th grade	88										19	61	30			41			48	
7th grade	70										16	58				27			44	
Below																				
1st score																				
Decile																				
2nd score																				

Name of father ....., ... Is he living ..... Age ..... Amount of schooling ..... Address ....., ... Occupation.....

Name of mother ....., ... Is she living .... Age .... Amount of schooling .....

Size of family: No boys living ..... No. boys dead ..... No girls living ..... No. girls dead .....

Physical record: Eyes ..... Ears ....

Diseases: Measles ...., Scarlet fever ....., ..., ..., ..., ..., ..., ...

Accidents: ....

Scholastic record of brothers and sisters:

1. Specific amount of schooling each brother has had to date: ....

2. Specific amount of schooling each sister has received to date: ....

Your scholastic record:

College work: where ..... when ..... High School: where ..... when ..... Grade: where ..... when .....

College work repeated ..... why ..... H. S. work repeated ..... why ..... Grade ..... why.....

Specify the number of High School credits you have in each of the following subpects: Latin....., Modern Language....., English....., History....., Civics.....

Mathematics....., Science....., Music....., Commercial subjects....., Manual Training....., Home Economics....., Others....., ..., ..., ...

Total Units .....

Specify the extra curricular activities you participated in during High School:

Athletics ....

Dramatics ....

Music ....

Debating ....

....

To what extent (%) were you supported by your parents or others while in High School? .....

To what extent (%) did you maintain yourself by your own savings while in High School? ..... } Total 100%

To what extent (%) did you maintain yourself through work while in High School? .....

To what extent (%) are you being supported by your parents or others while in college? .....

To what extent (%) are you maintaining yourself by your own savings while in college? ..... } Total 100%

To what extent (%) are you maintaining yourself through work while in college? .....

Why did you come to K. S. T. C.? .....

What are your plans? .....

How long do you intend to stay? .....

Other information .....

Name of mother ....., ... Is she living .... Age .... Amount of schooling .....

Size of family: No boys living ..... No. boys dead ..... No girls living ..... No. girls dead .....

Physical record: Eyes ..... Ears .....

Diseases: Measles ...., Scarlet fever ....., ..., ..., ..., ..., ..., ...

Accidents: ....

Scholastic record of brothers and sisters:

1. Specific amount of schooling each brother has had to date: ....

2. Specific amount of schooling each sister has received to date: ....

Your scholastic record:

College work: where ..... when ..... High School: where ..... when ..... Grade: where ..... when .....

College work repeated ..... why ..... H. S. work repeated ..... why ..... Grade ..... why.....

Specify the number of High School credits you have in each of the following subpects: Latin....., Modern Language....., English....., History....., Civics.....

Mathematics....., Science....., Music....., Commercial subjects....., Manual Training....., Home Economics....., Others....., ..., ..., ...

Total Units .....

Specify the extra curricular activities you participated in during High School:

Athletics ....

Dramatics ....

Music ....

Debating ....

....

To what extent (%) were you supported by your parents or others while in High School? .....
To what extent (%) did you maintain yourself by your own savings while in High School? ..... } Total 100%
To what extent (%) did you maintain yourself through work while in High School? .....

To what extent (%) are you being supported by your parents or others while in college? .....
To what extent (%) are you maintaining yourself by your own savings while in college? ..... } Total 100%
To what extent (%) are you maintaining yourself through work while in college? .....

Why did you come to K. S. T. C.? .....

What are your plans? .....

How long do you intend to stay? .....

Other information .....

Home address ..... Your experience teaching: years ..... where ..... When .....

Number of semester hours you are carrying at this time ..... Experience other than teaching: years .... where ..... when .....

STANDARD SCORES	Army Alpha	PSYCHOLOGICAL EXAMINATION									Reading Kansas Silent Reading	Reading Thorndike McCall	Vocabulary	English Literature	English Composition	American History	Civics	General Science	Geography	Spelling
		Completion	Arith. Reasoning	Artificial Language	Proverbs	Reading	Opposites	Grammar	Reasoning	Total										
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Senior H. S.	120										30	68	87	65		63				
Junior H. S.	117										27	65	78	55		57			66	
Sophomore H.S.	111										26	64	63	45		52			60	
Freshman H. S.	97										23	62	45	35		46			54	
8th grade	88										19	61	30			41			48	
7th grade	70										16	58				27			44	
Below																				
1st score																				
Decile																				
2nd score																				
Decile																				