

NP. 23.1

WELLS LIBRARY
KANSAS STATE TEACHERS COLLEGE
EMPORIA, KANSAS

**KANSAS STATE TEACHERS
COLLEGE of EMPORIA
BULLETIN of INFORMATION**

Normaliana

**A Comparative Study of the College
Preparation, Teaching Combinations,
and Salaries of Kansas High School
Administrators and Teachers (1946)**

by

GENE K. LOCKARD

WILLIAM ALLEN WHITE LIBRARY
KANSAS STATE TEACHERS COLLEGE
EMPORIA, KANSAS

Studies in Education Number

(Thirty-first of the Series)

Volume 26, No. 11

November, 1946

NP. 23.1
1946

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	7
II. THE COMMON TEACHING COMBINATIONS.....	10
Number of Fields in Which Teachers Work.....	11
III. HIGH-SCHOOL TEACHING AND COLLEGE PREPARATION.....	15
IV. SALARIES PAID IN THE ACADEMIC AND ADMINISTRATIVE FIELDS.....	26
V. COLLEGE TRAINING OF HIGH SCHOOL TEACHERS.....	28
VI. THE HIGH SCHOOL ADMINISTRATOR AS A TEACHER.....	29
VII. DEGREES HELD BY THE HIGH SCHOOL TEACHERS AND THE ADMINISTRATORS	31
VIII. SUMMARY	35
LITERATURE CITED	36
LIST OF STUDIES IN EDUCATION.....	37

LIST OF TABLES

TABLE	PAGE
I. A Percentage Comparison for 1931, 1938, and 1946 of Teachers Working in One Field Only.....	11
II. Teaching Combinations as They Rank.....	12
III. A Three-way Comparison of the Subjects Most Frequently Taught in Combination	13
IV. Number and Percents of Teachers Teaching in Several Fields..	14
V. Teachers with a Major or Minor in Their Teaching Fields.....	16
VI. College Hour Preparation of the <i>Men</i> Teachers in the Several Fields	17
VII. College Hour Preparation of the <i>Women</i> Teachers in the Several Fields	18
VIII. Subjects Taught by Teachers Out of Their Respective Teaching Fields	19
IX. <i>English Teachers</i> Combinations and Training.....	20
X. <i>Social Studies Teachers</i> Combinations and Training.....	20
XI. <i>Mathematics Teachers</i> Combinations and Training.....	21
XII. <i>Science Teachers</i> Combinations and Training.....	21
XIII. <i>Physical Education Teachers</i> Combinations and Training.....	22
XIV. <i>Agriculture Teachers</i> Combinations and Training.....	22
XV. <i>Latin Teachers</i> Combinations and Training.....	23
XVI. <i>Home Economics Teachers</i> Combinations and Training.....	23
XVII. <i>Music-Teachers</i> Combinations and Training.....	24
XVIII. <i>Industrial Arts Teachers</i> Combinations and Training.....	24
XIX. <i>Modern Language Teachers</i> Combinations and Training.....	25
XX. <i>Commerce Teachers</i> Combinations and Training.....	25
XXI. A 1931, 1938, and 1946 Comparison of Salaries in the Different Academic Fields	27
XXII. Salary Study of the Kansas High-school Administrators.....	27
XXIIIa. Number and Percent of Kansas High School Teachers Trained in Colleges Within the Borders of the State.....	28
XXIIIb. Percent of Teachers Trained in Kansas Who Received Their Training in the Five State Colleges and the Three Teachers Colleges Respectively	28
XXIV. Subjects Most Frequently Taught by Kansas High School Administrators	30
XXV. Kinds of Degrees Held by the <i>Administrators</i> in the Secondary Schools in Classes Defined by the State Board of Education..	32
XXVI. Kinds of Degrees Held by the <i>Teachers</i> in the Secondary Schools,	32
XXVII. A Two-way Degree Comparison of Secondary School Teachers..	34

EDITOR'S INTRODUCTION

It is well known that the beginning teacher in high school usually teaches several different subjects. The older teacher, who has become established in the larger schools, teaches in a single field or even a single subject. These facts have important implications. The prospective teacher should select his course so as to minimize the difficulties associated with the giving instruction in fields in which he has little or no college preparation. The teacher training institution should give the student the benefit of its best knowledge of actual and probable future teaching combinations. The superintendent and the principal should do their best to avoid difficult and highly unusual teaching combinations.

This is the third time that *Studies in Education* has presented the picture of the college training and teaching combinations of Kansas high school teachers, the previous studies being those of C. W. Ridgway (1931) and Frank L. Irwin (1938). Mr. Ridgway's study made no attempt to determine the trends as it was the first of its kind in this state. Mr. Irwin devoted much of his effort to discussing changes which had taken place. Mr. Lockard has placed many of his findings in the form of three-way comparisons which enable the readers to determine in some detail the differences as well as the similarities in the present picture as compared to the previous ones.

Because such a large percentage of the administrators of Kansas schools begin their careers as classroom teachers and continue to teach one, two or more classes while serving as administrators, the present study has considered this group separately. In all other respects it has followed essentially the plan of the two previous studies so that comparisons may be as easy as possible.

Studies in Education wishes to acknowledge its appreciation to Superintendent L. W. Brooks, Mr. Floyd F. Herr and other officials in the office of the Superintendent of Public Instruction, Topeka, Kansas, for their coöperation and assistance in making this study possible.

A complete list of *Studies in Education* appears on page 37. It will be noted that several of these are now out of print; those still available may be obtained from the Dean of the Graduate School, Kansas State Teachers College, Emporia, Kansas.

JOHN BREUCKELMAN, *Editor*.

CHAPTER I

INTRODUCTION

THE NATURE OF THE STUDY

In examining the high-school instructional programs on a state-wide basis, it is found that approximately fifty percent of the Kansas teachers work in two or more fields of instruction. An attempt has been made in this study to discover just what combinations of subjects are called for in practice. The daily teaching programs of almost all the high school teachers in Kansas, for the school year 1945-1946, have been examined and analyzed.

The research on the succeeding pages has been made to aid the school officials charged with the responsibility of student counseling and teacher placement, and superintendents in outlining their teaching schedules.

This study also attempts to reveal the degree of preparedness, in terms of college semester hours, of the high school teachers of the state. It shows the amount of college preparation for each individual subject taught by the teacher. It is also concerned with the matter of subjects taught outside the teacher's field of adequate preparation.

The principal problems with which the study deals may be summarized as follows:

1. What subjects are most commonly taught in combination?
2. How well prepared in terms of college hours are the teachers to teach the subjects assigned to them?
3. What percent of the teacher's work is in each of the several fields of instruction?
4. How do the salaries of 1931 and 1938 compare with those of 1946?
5. What percent of the high school teachers have received their training in Kansas?
6. What percent of the superintendents and principals are qualified administrators?

PREVIOUS STUDIES MADE

C. W. Ridgway made an exhaustive study of this subject in 1931.¹ His study consisted of examining the teaching programs of the high school teachers of Kansas as reported by the high school principals to the State Superintendent of Public Instruction in Topeka. Although Ridgway's findings form a basis for this research, he used a slightly different method of classifying teachers in the subject matter fields and for that reason the data presented are not always strictly comparable.

Earl W. Anderson made a study entitled *Graduates and the Positions They Fill*.² In this study information was collected concerning the history of gradu-

1. C. W. Ridgway, "A Comparative Study of the Training and Teaching Combinations of Kansas High School Teachers," *Studies in Education*, Kansas State Teachers College of Emporia, No. 5, 1931.

2. Earl W. Anderson, "Graduates and the Positions They Fill," *Educational Research Bulletin*, Vol. 10, No. 4, Feb. 18, 1931, Ohio State University, pp. 87-94.

ates of teacher-training courses from Ohio State University during the year 1928-1929.

Aaron J. Regier made an extensive study in 1933.³ The title of his study was *A Study of the Functioning of the Teacher Certification Laws in Kansas in 1933-1934*.

Myra E. Scott in 1938 studied and reported on 144 picked schools in nineteen counties in north central Kansas.⁴ The purpose of her study was to see how well the English teachers in the counties studied were prepared in their specialized fields. A summary of Miss Scott's work may be found in the February issue of the *Kansas Teacher* for 1939.

Frank L. Irwin made a thorough study of the teaching combinations as they were reported in 1938.⁵ Since this study was made prior to World War II, it seems desirable to make a follow-up study to note such changes as have occurred during the war years. The present study parallels Irwin's as closely as possible so that definite comparisons can be made.

THE SCOPE OF THE STUDY

The study undertakes the analysis of the daily teaching programs of 4,262 high-school teachers in Kansas. The figure represents approximately the total number teaching in the state. Junior high-school teachers, where they could be identified, were not counted; neither were the teachers in the several training schools operated by the state colleges counted. Teachers in the secondary parochial schools were counted and figured in all tables except the table on salaries. A large number of the salaries in the parochial schools were omitted from the reports, and for this reason it was thought best to omit them from the salary study.

METHOD OF PROCEDURE

The method of procedure in this study has been that of taking the data from the *High-school Principal's Organization Report* which are on file in the office of L. W. Brooks, State Superintendent of Public Instruction, Topeka, Kansas. The reports for the school year 1945-1946 were all examined and the data transferred to mimeographed sheets prepared for the purpose.

TYPES OF DATA COLLECTED

The following types of data were collected from the teaching programs examined:

1. Teachers were classified as to sex.
2. Teachers were classified as to subjects taught.
3. Hours of college preparation for each subject taught were counted and averaged.
4. The kind of degree held by each teacher and the school conferring this degree were noted.

3. Aaron J. Regier, "A Study of the Functioning of the Teacher Certification Laws and Regulations in Kansas in 1933-1934," *Bulletin of Education*, University of Kansas, Lawrence, Kan., Vol. 4, No. 1, March, 1938, pp. 4-18.

4. Myra E. Scott, "Better Training and Pay for Kansas Teachers," *Kansas Teacher*, Vol. 46, No. 4, February, 1938, Topeka, Kan., p. 6.

5. Frank L. Irwin, "A Comparative Study of the College Preparation, Teaching Combinations, and Salaries of Kansas High School Teachers," *Bulletin of Information*, Kansas State Teachers College, Emporia, Vol. 18, No. 9, September, 1938.

5. The salary paid each teacher was recorded according to the subjects taught.
6. The field in which each teacher worked were all counted.
7. The subjects taught in combination were all counted and classified.
8. Subjects taught by the administrators were tabulated.
9. The type of degree held by the administrator was noted and recorded according to the class of school in which he worked.

DEFINITION OF STANDARDS

An arbitrary standard for classifying teachers was set up. To be classed as an *English teacher*, for example, one would have to be *teaching two or more classes in English, with college preparation equal to or better than that indicated in any other subjects*. If a teaching program showed, for instance, a teacher teaching two classes in English with thirty hours preparation, two classes in science with twenty hours preparation, and one class in mathematics with forty hours preparation, such an individual would be classed as an English teacher. In all instances, except administrators who were counted when teaching only one class in a specific subject, a teacher was required to be teaching two or more classes in the same field to be classed as a teacher in that field.

PRESENTATION OF DATA

The plan of study has been to present the original data as taken from the state reports. These data have been classified and arranged in tabular form. Conclusions have been drawn from the study and comparisons have been made in the tables.

CHAPTER II

THE COMMON TEACHING COMBINATIONS

In 1931, approximately forty-three percent of the high-school teachers of the state were teaching in only one field. In 1938, the percentage of one-field teachers had increased to forty-eight and the present study for the school year 1945-1946 shows that the steady increase has continued with the present percentage standing at fifty-two. If it is better for the student to have the teacher in but one field, then there has been considerable improvement made in this respect since 1931.

Table I shows a comparison of the percentage of teachers working in one field for the years of 1931, 1938, and 1946. In comparing these percentages for 1931 and 1938 the reader will note an increase in every field except music. This is not the case in 1946, for of the twelve fields cited, five of these show a definite decrease; however, in the remaining seven fields a substantial increase is shown. The best illustration of this is the percentage comparison in the field of agriculture. In 1931, twenty-seven percent of the agriculture teachers taught agriculture only; in 1938 the percentage had increased to fifty-eight; and the present study shows that ninety-one percent of all these teachers teach that one subject only. This change is due in a large part to the increased emphasis placed on vocational agriculture, which, under existing Smith-Hughes legislation, requires a trained specialist as an instructor.

Table II is a detailed study of all the subject fields and their rank in frequency with every other field. This table was made up as follows: After sorting all the major fields and determining all the classes of teachers, the number of times that other subjects appeared on the teaching program was counted. For instance, after the English teachers were classified, all subjects other than English taught by the English teachers were counted. Of these other subjects it was found that thirty-four percent were social studies, etc.

It will be noted in Table III (page 13) that very little change has taken place in the most frequent combinations. Inasmuch as so few teachers work in more than three fields, the frequencies beyond the first three were considered of little importance and thus were not considered in the table. Occasionally, the first frequency in 1931 has shifted to second place in 1938 or perhaps to third place in 1946; but consistently the same subjects seem to prevail in the first three frequencies.

TABLE I
A PERCENTAGE COMPARISON FOR 1931, 1938, AND 1946 OF TEACHERS
WORKING IN ONE FIELD ONLY

1 SUBJECT MATTER FIELD.	2 Ridgway found in 1931.	3 Irwin found in 1938.	4 Lockard found in 1946.
English.....	29%	43%	38%
Mathematics.....	20%	47%	42%
Social Studies.....	25%	43%	49%
Science.....	15%	34%	48%
Latin.....	8%	20%	16%
Modern Language.....	16%	25%	37%
Industrial Arts.....	26%	44%	58%
Home Economics.....	32%	43%	52%
Commerce.....	58%	66%	62%
Agriculture.....	27%	58%	91%
Music.....	61%	60%	69%
Physical Education.....	22%	67%	62%
Average.....	43%	48%	52%

Read table thus: Ridgway found 29 percent of the English teachers in 1931 working in only one field. In 1938, Irwin found 43 percent of the English teachers teaching in one field. Lockard found 38 percent of the English teachers working in one field in 1946. The percents are to the nearest whole number.

NUMBER OF FIELDS IN WHICH TEACHERS WORK

Table IV (page 14) shows the number of fields in which teachers work, by classes of teachers as to subject matter taught. The table also shows the percent of teachers working in the several subject matter fields.

The music teachers, however, represent a special case. The figures do not present the entire picture because many music teachers spend approximately half their time instructing in the elementary schools. These teachers, therefore, are involved in more teaching areas than this study indicates.

TABLE II
TEACHING COMBINATIONS AS THEY RANK

	A	1	2	3	4	5
English.....	38%	Social St., 34%.....	Music, 14%.....	Latin, 13%.....	Journalism, 11%.....	Mod. Language, 10%
Social Studies.....	49%	English, 28%.....	Phys. Ed., 22%.....	Science, 19%.....	Mathematics, 18%.....	Commerce, 7%
Mathematics.....	42%	Science, 44%.....	Social St., 21%.....	Phys. Ed., 19%.....	English, 13%.....	Latin, 9%
Science.....	48%	Mathematics, 36%.....	Phys. Ed., 23%.....	Social St., 19%.....	Home Ec., 14%.....	English, 9%
Physical Education.....	62%	Science, 35%.....	Social St., 28%.....	English, 14%.....	Commerce, 12%.....	Industrial Arts, 10%
Agriculture.....	91%	Science, 50%.....	Social St., 32%.....	Industrial Arts, 25%.....	Phys. Ed., 17%.....	English, 9%
Latin.....	16%	English, 60%.....	Mod. Language, 21%.....	Social St., 19%.....	Mathematics, 19%.....	Science, 8%
Home Economics.....	52%	Science, 60%.....	Social St., 20%.....	English, 19%.....	Phys. Ed., 18%.....	Mathematics, 8%
Music.....	69%	English, 65%.....	Social St., 18%.....	Commerce, 12%.....	Science, 9%.....	Latin, 6%
Industrial Arts.....	58%	Phys. Ed., 50%.....	Science, 38%.....	Mathematics, 16%.....	Social St., 15%.....	Agric., 10%
Modern Language.....	37%	English, 55%.....	Latin, 29%.....	Social St., 14%.....	Science, 8%.....	Music, 5%
Journalism.....	17%	English, 66%.....	Social St., 20%.....	Latin, 20%.....	Mod. Language, 20%.....	—
Commerce.....	62%	Social St., 31%.....	English, 22%.....	Mathematics, 20%.....	Phys. Ed., 16%.....	Science, 13%

Read table thus: Column "A" indicates the percent of teachers who are teaching in only one field, *e. g.*, 38 percent of all English teachers teach nothing but English. Of all subjects taught with English, Social Studies was found first in frequency and was found 34 percent of the times in combination with English. Music was found 14 percent of the times and Latin, 13 percent. Read other subjects likewise. All percents are to the nearest whole number.

TABLE III

A THREE-WAY COMPARISON OF THE SUBJECTS MOST FREQUENTLY TAUGHT IN COMBINATION

1 MAJOR SUBJECT FIELD.	2 Ridgway, 1931.	3 Irwin, 1938.	4 Lockard, 1946.
English.....	1 Social Studies..... 2 Latin..... 3 Home Economics..	1 Social Studies..... 2 Latin..... 3 Commerce.....	1 Social Studies 2 Music 3 Latin
Social Studies.....	1 English..... 2 Science..... 3 Mathematics.....	1 Science..... 2 English..... 3 Mathematics.....	1 English 2 Physical Education 3 Science
Mathematics.....	1 Science..... 2 Social Studies..... 3 English.....	1 Science..... 2 Commerce..... 3 Social Studies.....	1 Science 2 Social Studies 3 Physical Education
Science.....	1 Mathematics..... 2 Social Studies..... 3 Home Economics..	1 Mathematics..... 2 Social Studies..... 3 Industrial Arts....	1 Mathematics 2 Physical Education 3 Social Studies
Physical Education.....	1 Industrial Arts.... 2 Social Studies..... 3 Science.....	1 Science..... 2 Social Studies..... 3 Industrial Arts....	1 Science 2 Social Studies 3 English
Agriculture.....	1 Science..... 2 Industrial Arts.... 3 Social Studies.....	1 Science..... 2 Industrial Arts.... 3 Social Studies.....	1 Science 2 Social Studies 3 Industrial Arts
Latin.....	1 English..... 2 Social Studies..... 3 Modern Language	1 English..... 2 Social Studies..... 3 Modern Language	1 English 2 Modern Language 3 Social Studies
Home Economics.....	1 English..... 2 Social Studies..... 3 Science.....	1 Science..... 2 Social Studies..... 3 English.....	1 Science 2 Social Studies 3 English
Music.....	1 English..... 2 Social Studies..... 3 Mathematics.....	1 English..... 2 Social Studies..... 3 Commerce.....	1 English 2 Social Studies 3 Commerce
Industrial Arts.....	1 Science..... 2 Physical Ed..... 3 Mathematics.....	1 Science..... 2 Social Studies..... 3 Agriculture.....	1 Physical Education 2 Science 3 Mathematics
Modern Language.....	1 English..... 2 Latin..... 3 Social Studies.....	1 English..... 2 Social Studies..... 3 Latin.....	1 English 2 Latin 3 Social Studies
Commerce.....	1 Social Studies..... 2 Mathematics..... 3 English.....	1 Mathematics..... 2 Social Studies..... 3 English.....	1 Social Studies 2 English 3 Mathematics

Read table thus: In 1931, Ridgway found Social Studies ranked first in frequency with English; Latin, second; Home Economics, third. Read in like manner for Irwin in 1938 and Lockard in 1946.

TABLE IV
NUMBER AND PER CENTS OF TEACHERS TEACHING IN SEVERAL FIELDS

SUBJECT FIELDS.	Total No. of teachers.	Breakdown according to number of fields taught.									
		One field.		Two fields.		Three fields.		Four fields.		Five fields.	
		No.	%	No.	%	No.	%	No.	%	No.	%
English.....	842	318	38	388	46	128	15	7	1	1	0
Social Studies.....	484	236	49	184	38	55	11	9	2	0	0
Mathematics.....	402	167	42	151	38	76	19	8	1	0	0
Science.....	350	169	48	123	36	50	14	8	2	0	0
Physical Education.....	160	100	62	47	29	13	9	0	0	0	0
Agriculture.....	117	106	91	7	6	3	3	1	0	0	0
Latin.....	64	11	16	35	55	15	24	3	5	0	0
Home Economics.....	461	240	52	144	31	64	14	12	3	1	0
Music.....	416	288	69	100	24	22	6	6	1	0	0
Industrial Arts.....	259	148	58	68	26	36	14	7	2	0	0
Modern Language.....	60	22	37	27	45	11	18	0	0	0	0
Journalism.....	6	1	20	4	60	1	20	0	0	0	0
Printing.....	15	10	67	5	33	0	0	0	0	0	0
Commerce.....	626	333	62	169	26	62	10	11	2	1	0
Totals.....	4,262	2,199	50	1,452	34	536	14	72	2	3	0

Read table thus: Of the 842 English teachers, 318 or 38 percent were teaching in only one field, 388 or 46 percent in two fields, etc. Percents are to the nearest whole number.

CHAPTER III

HIGH-SCHOOL TEACHING AND COLLEGE PREPARATION

This study has attempted to give special attention to the matter of college preparation for all the specific subjects taught by the 4,262 Kansas teachers included. After the teachers were all classified as to subjects taught, two main objectives appeared for consideration. First, an attempt was made to find out just how well prepared the English, the social studies, and the mathematics teachers were to teach these specific subjects. Second, an attempt was made to show how well prepared the teachers were to teach the subjects found on the schedule outside the major field. Tables V, VI, and VII (pages 16, 17, 18, respectively) deal with the first objective, and Table VIII (page 19), with the second objective. In Table V, column 2, a "college minor" was interpreted as including fifteen or more hours of college work in the specific field under discussion. It will be noted that in all fields the teachers rated well up toward one hundred percent on this basis.

Tables VI and VII reveal that the men teachers seem to be somewhat better prepared to teach in their respective fields than are the women teachers. Thirty-nine percent of the men teach with fifty or more semester hours of preparation. Only thirty percent of the women are this well prepared. The agriculture and music teachers seem to be prepared with more college hours in their respective fields than do the teachers in the other fields. This is probably due to the fact that a somewhat greater percent of these teachers teach in a single field; therefore, a greater tendency exists towards specialization in the field.

TABLE V
TEACHERS WITH A MAJOR OR MINOR IN THEIR TEACHING FIELDS

SUBJECT FIELDS.	1 Number of teachers.	2 Percent who have major or minor in field.	3 Percent who teach in this field alone.
English.....	842	98%	38%
Mathematics.....	402	86%	42%
Social Studies.....	484	95%	49%
Science.....	350	98%	48%
Latin.....	64	97%	16%
Modern Language.....	60	97%	37%
Industrial Arts.....	259	83%	58%
Home Economics.....	461	98%	52%
Commerce.....	626	87%	62%
Agriculture.....	117	100%	91%
Music.....	416	99%	69%
Physical Education.....	160	85%	62%
Journalism.....	6	84%	20%
Printing.....	15	100%	67%
Total.....	4,262		

Read table thus: Of the 842 English teachers, 98 percent have fifteen or more hours college preparation in English and 38 percent teach nothing but English. Percents are to the nearest whole number.

Tables VI and VII (pages 17 and 18) should not be confused with Table VIII (page 19). In tables VI and VII, the teachers are classified as to their major fields. Table VIII is a study of the teachers who teach one or more classes out of their major field. The total, 2,728, is the total number of cases in which teachers were found to be teaching one or more classes out of the major field; therefore, this number includes many duplications. It is in this phase of high-school teaching that inadequately prepared teachers appear. For example, Table VIII reveals that 279 or eighty-two percent of such physical education teachers teach with less than a college minor. In the principals' reports, however, the entries dealing with the college preparation of physical education teachers were incomplete more often than for the other subjects. As a result the percentage figures for physical education teachers are perhaps less accurate.

TABLE VI
COLLEGE HOUR PREPARATION OF THE MEN TEACHERS IN THE SEVERAL
FIELDS

SUBJECT FIELDS.	1 No. of teachers.	2 0-9 hrs.	3 10-19 hrs.	4 20-29 hrs.	5 30-39 hrs.	6 40-49 hrs.	7 Over 50 hrs.
English	36	1	6	7	7	6	9
Mathematics	138	8	43	44	26	7	10
Social Studies	148		11	28	35	25	49
Science	208	2	14	28	32	38	94
Latin	3			1	1		1
Modern Language	9		4			1	4
Industrial Arts	257	18	33	43	64	31	68
Home Economics	0						
Commerce	94	8	11	15	15	13	32
Agriculture	116		1	4	5	7	99
Music	125	1	4	3	10	18	89
Physical Education	91	13	18	14	14	14	18
Journalism	2			1		1	
Printing	15		5	3	2	1	4
Totals	1,242	51	150	191	211	162	477
Percents		4	12	15	17	13	39

Read table thus: Of the 36 English teachers, 1 had training ranging from 0-9 hours, 6 from 10-19 hours, 7 from 20-29 hours, etc. The percents are to the nearest whole number.

TABLE VII
COLLEGE HOUR PREPARATION OF THE WOMEN TEACHERS IN THE SEVERAL
FIELDS

SUBJECT FIELDS.	1 No. of teachers.	2 0-9 hrs.	3 10-19 hrs.	4 20-29 hrs.	5 30-39 hrs.	6 40-49 hrs.	7 Over 50 hrs.
English.....	806	3	112	172	194	132	193
Mathematics.....	264	15	72	68	65	14	30
Social Studies.....	336	7	56	60	71	54	88
Science.....	142	1	18	32	36	16	39
Latin.....	61	1	13	14	10	6	17
Modern Language.....	51		6	13	1	6	25
Industrial Arts.....	2		1				1
Home Economics.....	461	3	24	39	104	92	199
Commerce.....	532	44	112	102	84	77	113
Agriculture.....	1						1
Music.....	291		14	16	18	27	216
Physical Education.....	69	7	7	10	16	10	19
Journalism.....	4		1		1		2
Printing.....	0						
Totals.....	3,020	81	436	526	600	434	943
Percents.....		3	15	17	20	15	30

Read table thus: 806 English teachers were counted, of whom 3 had training ranging from 0-9 hours, 112 had training in the range of 10-19 hours, etc. Read in like manner for other fields. The percents are to the nearest whole number.

TABLE VIII
SUBJECTS TAUGHT BY TEACHERS OUT OF THEIR RESPECTIVE TEACHING
FIELDS

1 TEACHERS TAUGHT CLASSES IN THIS SUBJECT.	2 Number and percent teaching with excess of 15 hours of preparation in college.	3 Number and percent teaching with less than 15 college hours preparation.
367 other than English.....	327 or 89%	40 or 11%
474 other than Social Studies.....	385 or 82%	39 or 18%
273 other than Mathematics.....	160 or 58%	113 or 42%
442 other than Science.....	362 or 82%	80 or 18%
343 other than Physical Education.....	64 or 18%	279 or 82%
49 other than Agriculture.....	40 or 82%	9 or 18%
139 other than Latin.....	107 or 77%	32 or 23%
141 other than Home Economics.....	115 or 82%	26 or 18%
136 other than Music.....	86 or 63%	50 or 37%
55 other than Industrial Arts.....	34 or 62%	21 or 38%
101 other than Modern Language.....	88 or 87%	13 or 13%
83 other than Journalism.....	63 or 76%	20 or 24%
125 other than Commerce.....	49 or 39%	76 or 61%
Totals: 2,728 teachers taught classes out of their respective fields.....	1,880 or 69%	848 or 31%

Read table thus: The 367 teachers in Column I were not English teachers but taught one or more classes in English. Of the 367, 327 or 89 percent taught these English classes with more than 15 hours of college preparation in English, and 40 or 11 percent taught these English classes with less than 15 hours college preparation in English. Read in like manner for other subjects. Percents are to the nearest whole number.

The next twelve tables, IX to XX, inclusive (pages 20 to 25 respectively), deal with twelve different subject fields. Each table shows the subjects taught in combination with the subjects in the main field. All the subjects, except journalism, taught in combination with the main subject fields were counted, and the percent was figured for each teacher who had college preparation of fifteen or more semester hours to teach the subjects. Journalism as a combination subject was omitted from these tables because in most cases the principals' reports either omitted the specific training in this subject, or listed the same number of college hours as that given for English. Thus it was impossible to determine just how many hours the journalism teachers had in their specific subject.

The *High School Principal's Organization Report* from which the data were taken called for "specific training in college hours in the subject taught," and, also, "training in college hours in the field of instruction." The latter in most instances was a larger figure. In making this study, the figure which represented training in the field was used.

TABLE IX
ENGLISH TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
318	38% taught English only.	100% had training* in English.
177	21% taught English and Social Studies.	85% had training in Social Studies.
43	5% taught English and Mathematics.	21% had training in Mathematics.
43	5% taught English and Science.	77% had training in Science.
33	4% taught English and Physical Education.	19% had training in Phys. Education
3	1% taught English and Agriculture.	67% had training in Agriculture.
74	9% taught English and Latin.	86% had training in Latin.
52	6% taught English and Home Economics.	84% had training in Home Economics.
78	9% taught English and Music.	62% had training in Music.
1	Taught English and Industrial Arts.	
50	6% taught English and Modern Language. No English teachers taught Printing.	92% had training in Mod. Language.
40	5% taught English and Commerce.	30% had training in Commerce.

Read table thus: 318 or 38 percent of all English teachers taught English only, of whom 100 percent had training in English; 177 or 21 percent of all English teachers taught English and Social Studies, of whom 85 percent had training in Social Studies. Read in like manner for other combinations. Percents to nearest whole number.

* "Training" signifies the North Central Association requirement of 15 hours or more.

TABLE X
SOCIAL STUDIES TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
236	49% taught Social Studies only.	99% had training in Social Studies.
75	14% taught Social Studies and English.	89% had training in English.
50	10% taught Social Studies and Mathematics.	64% had training in Mathematics.
53	11% taught Social Studies and Science.	77% had training in Science.
59	12% taught Social Studies and Phys. Education.	25% had training in Phys. Education.
8	1% taught Social Studies and Agriculture.	88% had training in Agriculture.
10	2% taught Social Studies and Latin.	70% had training in Latin.
16	3% taught Social Studies and Home Economics.	75% had training in Home Economics.
11	2% taught Social Studies and Music.	82% had training in Music.
9	2% taught Social Studies and Industrial Arts.	78% had training in Industrial Arts.
8	1% taught Social Studies and Mod. Language.	63% had training in Mod. Language.
17	4% taught Social Studies and Commerce.	30% had training in Commerce.

Read table thus: 236 or 49 percent of all Social Studies teachers taught nothing but Social Studies, of whom 99 percent had training equal to at least a college minor of fifteen hours in Social Studies. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XI
MATHEMATICS TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
167	42% taught Mathematics only.	91% had training in Mathematics.
34	9% taught Mathematics and English.	94% had training in English.
54	12% taught Mathematics and Social Studies.	89% had training in Social Studies.
103	26% taught Mathematics and Science.	78% had training in Science.
48	11% taught Mathematics and Phys. Education.	11% had training in Phys. Education.
4	1% taught Mathematics and Agriculture.	100% had training in Agriculture.
20	5% taught Mathematics and Latin.	87% had training in Latin.
9	2% taught Mathematics and Home Economics.	78% had training in Home Economics.
9	2% taught Mathematics and Music.	33% had training in Music.
13	3% taught Mathematics and Industrial Arts.	35% had training in Industrial Arts.
9	2% taught Mathematics and Mod. Language.	78% had training in Mod. Language.
	No Mathematics teachers taught Printing.	
19	5% taught Mathematics and Commerce.	24% had training in Commerce.

Read table thus: 167 or 42 percent of the Mathematics teachers taught nothing but Mathematics, of whom 91 percent had training in Mathematics; 34 or 9 percent of the Mathematics teachers taught Mathematics and English, of whom 94 percent had training in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XII
SCIENCE TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
169	48% taught Science only.	99% had training in Science.
17	5% taught Science and English.	94% had training in English.
38	11% taught Science and Social Studies.	79% had training in Social Studies.
71	21% taught Science and Mathematics.	69% had training in Mathematics.
45	12% taught Science and Physical Education.	16% had training in Phys. Education.
14	4% taught Science and Agriculture.	86% had training in Agriculture.
5	1% taught Science and Latin.	40% had training in Latin.
27	8% taught Science and Home Economics.	93% had training in Home Economics.
4	1% taught Science and Music.	
14	4% taught Science and Industrial Arts.	59% had training in Industrial Arts.
2	Taught Science and Modern Language.	100% had training in Mod. Language.
	No Science teachers taught Printing.	
9	2% taught Science and Commerce.	89% had training in Commerce.

Read table thus: 169 or 48 percent of all the Science teachers taught Science only, of whom 99 percent had at least a minor in Science; 17 or 5 percent of the Science teachers taught Science and English, of whom 94 percent had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XIII
PHYSICAL EDUCATION TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
100	62% taught Physical Education only.	94% had training in Phys. Education.
9	6% taught Phys. Education and English.	100% had training in English.
17	11% taught Phys. Education and Social Studies.	89% had training in Social Studies.
7	4% taught Phys. Education and Mathematics.	57% had training in Mathematics.
21	13% taught Phys. Education and Science.	95% had training in Science.
	No Phys. Education teachers taught Agric.	
2	1% taught Phys. Education and Latin.	100% had training in Latin.
1	1% taught Phys. Ed. and Home Economics.	100% had training in Home Economics.
	No Phys. Education teachers taught Music.	
7	4% taught Phys. Education and Ind. Arts.	78% had training in Industrial Arts.
	No Phys. Education teachers taught Mod. Lang.	
	No Phys. Education teachers taught Printing.	
8	5% taught Phys. Education and Commerce.	88% had training in Commerce.

Read table thus: 100 or 62 percent of all Physical Education teachers taught nothing but Physical Education, of which 94 percent had at least a minor in Physical Education; 9 or 6 percent of all Physical Education teachers taught Physical Education and English, of which 100 percent had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XIV
AGRICULTURE TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
106	91% taught Agriculture only.	100% had training in Agriculture.
1	1% taught Agriculture and English.	100% had training in English.
4	4% taught Agriculture and Social Studies.	100% had training in Social Studies.
	No Agriculture teachers taught Mathematics.	
6	5% taught Agriculture and Science.	100% had training in Science.
2	2% taught Agriculture and Phys. Education.	
	No Agriculture teachers taught Latin.	
	No Agriculture teachers taught Home Econ.	
	No Agriculture teachers taught Music.	
3	3% taught Agriculture and Industrial Arts.	67% had training in Industrial Arts.
	No Agriculture teachers taught Mod. Language.	
	No Agriculture teachers taught Printing.	
	No Agriculture teachers taught Commerce.	

Read table thus: Of all the Agriculture teachers, 106 taught nothing but Agriculture. This represents 91 percent of the Agriculture teachers. All of the 91 percent had a college major or minor in the subject. 1 or 1 percent of all the Agriculture teachers taught Agriculture and English and was trained in English. Read in like manner for each combination. Percents are to the nearest whole number.

TABLE XV
LATIN TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
11	16% taught Latin only.	100% had training in Latin.
29	45% taught Latin and English.	92% had training in English.
10	16% taught Latin and Social Studies.	60% had training in Social Studies.
10	16% taught Latin and Mathematics.	50% had training in Mathematics.
4	6% taught Latin and Science.	100% had training in Science.
2	3% taught Latin and Physical Education.	
1	1% taught Latin and Agriculture.	
2	3% taught Latin and Home Economics.	100% had training in Home Economics.
2	3% taught Latin and Music.	100% had training in Music.
	No Latin teachers taught Industrial Arts.	
11	17% taught Latin and Modern Language.	100% had training in Mod. Language.
	No Latin teachers taught Printing.	
2	3% taught Latin and Commerce.	

Read table thus: 11 or 16 percent of all the Latin teachers taught Latin only, of whom 100 percent had training of at least a minor in Latin; 29 or 45 percent taught Latin and English, of whom 92 percent had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XVI
HOME ECONOMICS TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
240	52% taught Home Economics only.	99% had training in Home Economics.
48	10% taught Home Economics and English.	79% had training in English.
50	11% taught Home Economics and Social Studies.	68% had training in Social Studies.
17	4% taught Home Economics and Mathematics.	27% had training in Mathematics.
121	26% taught Home Economics and Science.	89% had training in Science.
44	9% taught Home Economics and Phys. Ed.	17% had training in Phys. Education.
4	1% taught Home Economics and Agriculture.	50% had training in Agriculture.
2	Taught Home Economics and Latin.	50% had training in Latin.
10	2% taught Home Economics and Music.	50% had training in Music.
6	1% taught Home Economics and Mod. Lang.	50% had training in Mod. Language.
	No Home Economics teachers taught Printing.	
10	2% taught Home Economics and Commerce.	30% had training in Commerce.

Read table thus: 240 or 52 percent of all Home Economics teachers taught Home Economics alone, of whom 99 percent had training of at least a minor in Home Economics; 48 or 10 percent of all Home Economics teachers taught Home Economics and English, of whom 79 percent had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XVII
MUSIC TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
288	69% taught Music only.	99% had training in Music.
77	19% taught Music and English.	91% had training in English.
23	6% taught Music and Social Studies.	95% had training in Social Science.
6	1% taught Music and Mathematics.	50% had training in Mathematics.
10	3% taught Music and Science.	80% had training in Science.
7	2% taught Music and Physical Education. No Music teachers taught Agriculture.	
8	2% taught Music and Latin.	37% had training in Latin.
6	1% taught Music and Home Economics.	50% had training in Home Economics.
2	Taught Music and Industrial Arts.	50% had training in Industrial Arts.
5	1% taught Music and Modern Language. No Music teachers taught Printing.	100% had training in Mod. Language.
16	4% taught Music and Commerce.	34% had training in Commerce.

Read table thus: 288 or 69 percent of all Music teachers taught Music only, of whom 99 percent had at least a minor in Music; 77 or 19 percent of all Music teachers taught Music and English, of whom 91 percent had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XVIII
INDUSTRIAL ARTS TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
148	58% taught Industrial Arts only. No Industrial Arts teachers taught English.	92% had training in Industrial Arts.
19	7% taught Industrial Arts and Social Studies.	84% had training in Social Studies.
20	8% taught Ind. Arts and Mathematics.	50% had training in Mathematics.
46	16% taught Industrial Arts and Science.	80% had training in Science.
61	22% taught Ind. Arts and Physical Education.	28% had training in Phys. Education.
11	4% taught Industrial Arts and Agriculture. No Industrial Arts teachers taught Latin.	91% had training in Agriculture.
1	Taught Industrial Arts and Home Economics.	100% had training in Home Economics.
1	Taught Industrial Arts and Music. No Ind. Arts teachers taught Mod. Language.	
1	Taught Industrial Arts and Printing.	100% had training in Printing.
2	1% taught Industrial Arts and Commerce.	50% had training in Commerce.

Read table thus: 148 or 58 percent of all the Industrial Arts teachers taught nothing but Industrial Arts, of whom 92 percent had at least a minor in Industrial Arts; 19 or 7 percent of all Industrial Arts teachers taught Industrial Arts and Social Studies, of whom 84 percent had training in Social Studies. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XIX
MODERN LANGUAGE TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
22	37% taught Modern Language only.	100% had training in Mod. Language.
21	35% taught Modern Language and English.	100% had training in English.
6	10% taught Mod. Language and Social Studies. No Mod. Lang. teachers taught Mathematics.	100% had training in Social Studies.
3	5% taught Mod. Language and Science.	100% had training in Science.
2	3% taught Mod. Lang. and Phys. Education. No Modern Lang. teachers taught Agriculture.	
11	18% taught Modern Language and Latin. No Mod. Lang. teachers taught Home Econom.	72% had training in Latin.
2	3% taught Mod. Language and Music. No Mod. Lang. teachers taught Ind. Arts. No Modern Lang. teachers taught Printing.	100% had training in Music.
1	1% taught Mod. Language and Commerce.	100% had training in Commerce.

Read table thus: 22 or 37 percent of all Modern Language teachers taught nothing but Modern Language, of which 100 percent had at least a minor in Modern Language; 21 or 35 percent of the Modern Language teachers also taught English, of which 100 percent had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XX
COMMERCE TEACHERS COMBINATIONS AND TRAINING

No.	Percent teaching in other fields.	Percent with training in other fields.
333	62% taught Commerce only.	97% had training in Commerce.
53	8% taught Commerce and English.	83% had training in English.
75	12% taught Commerce and Social Studies.	84% had training in Social Studies.
49	8% taught Commerce and Mathematics.	69% had training in Mathematics.
32	5% taught Commerce and Science.	50% had training in Science.
40	6% taught Commerce and Phys. Education.	7% had training in Phys. Education.
6	1% taught Commerce and Latin.	67% had training in Latin.
27	4% taught Commerce and Home Economics.	71% had training in Home Economics.
19	3% taught Commerce and Music.	90% had training in Music.
3	Taught Commerce and Industrial Arts.	67% had training in Industrial Arts.
9	1% taught Commerce and Mod. Language.	89% had training in Mod. Language.

Read table thus: 333 or 62 percent of all the Commerce teachers teach nothing but Commerce. Of this number 97 percent had training in Commerce equal to a minor or better; 53 or 8 percent of all the Commerce teachers teach Commerce and English, of which 83 percent had training in English equal to a minor or better. Read in like manner for other combinations. Percents are to the nearest whole number.

CHAPTER IV

SALARIES PAID IN THE ACADEMIC AND ADMINISTRATIVE FIELDS

In compiling the data for Table XXI, the salaries paid to all the high-school teachers of Kansas were used, except those in the parochial and teacher-training high schools. The salaries were listed according to the teachers' respective teaching fields. For example, to be classed as an English teacher, a teacher was required to be teaching at least two classes in English, with training equal to or greater than that found in any other two subjects taught. In a few instances, less than one percent, salaries were omitted on the principal's report to the state superintendent.

The salaries of the high school administrators are shown in Table XXII (page 27). The salary for the highest and lowest paid administrator in the different classes of high schools was in almost every instance a single administrator's salary; however, in computing the mean for the different classes of high schools the salaries paid to all the administrators in their respective classes were averaged.

It would be well to note at this time that the classification of Kansas high schools is not based on the school enrollment but on standards established by the State Board of Education. This means that in some instances very small high schools may be in the class "A" division. This fact may help to explain why the lowest salary of \$1,700 paid to a class "A" high-school administrator is less than that received by the lowest paid class "B" administrator who receives an annual salary of \$1,800.

TABLE XXI

A 1931, 1938, AND 1946 COMPARISON OF SALARIES IN THE DIFFERENT ACADEMIC FIELDS

1 SUBJECT FIELD.	2 Ridgway found 1931 mean.	3 Rank 1931.	4 Irwin found 1938 mean.	5 Rank 1938.	6 Lockard found 1946 mean.	7 Rank 1946.
Vocational Agriculture.....	\$2,246	1	\$1,765	1	\$2,870	1
Industrial Arts.....	1,876	2	1,325	3	2,426	2
Physical Education.....	1,855	3	1,426	2	2,315	3
Science.....	1,821	4	1,259	7	2,192	4
Mathematics.....	1,696	5	1,273	5	2,079	6
Social Studies.....	1,641	6	1,261	6	2,049	7
Commerce.....	1,556	7	1,207	10	1,961	10
Modern Language.....	1,555	8	1,252	8	2,047	8
Latin.....	1,526	9	1,303	4	1,966	9
Music.....	1,512	10	1,160	11	2,121	5
English.....	1,463	11	1,209	9	1,900	12
Home Economics.....	1,431	12	1,068	12	1,918	11
Agriculture (not vocational).....			1,358		2,568	
Avg. of the several classes.....	\$1,682		\$1,282		\$2,186	

Read table thus: In 1931, Ridgway found the mean salary paid the vocational agriculture teachers to be \$2,246 with first rank among the fields. Irwin found the same class of teachers receiving as a mean salary in 1938, \$1,765, the first rank. Lockard, in 1946, also found vocational agriculture to rank first in the salary scale with a mean salary of \$2,870.

TABLE XXII

SALARY STUDY OF THE KANSAS HIGH-SCHOOL ADMINISTRATORS

1 CLASS OF SCHOOL.	2 Highest salary.	3 Lowest salary.	4 Mean salary.
Class "A".....	\$9,009	\$1,700	\$3,822
Class "B".....	4,000	1,800	2,886
Class "C".....	3,600	1,485	2,527

Read table thus: The highest paid administrator in all the Class "A" high schools of Kansas was one who received \$9,009 annual salary. The lowest paid administrator in the state's Class "A" schools received \$1,700 per year. The mean salary of all the Class "A" high-school administrators was \$3,822. Read in like manner for the other classes of high schools. Salaries computed to the nearest whole number.

CHAPTER V

COLLEGE TRAINING OF HIGH-SCHOOL TEACHERS

Kansas has five state colleges, two of which are charged with the specific responsibility of training teachers for her public schools. The other three have departments of education which annually graduate potential teachers. In addition to the state colleges, there are fourteen private or denominational colleges and two municipal universities, all training teachers for the public schools of Kansas. Since Fort Hays Kansas State College was for so long strictly a teachers' college, it seems only fair to include its graduates with the graduates of the other two teachers colleges in computing the data for Table XXIIIb.

The highest degree held by each individual teacher formed the basis for this study. It was found (Table XXIIIa) that of all the teachers now teaching in Kansas, 3,154, or seventy-four percent, received their college training from some institution in Kansas. This number represented 908 men and 2,246 women. Of the 1,108 teachers, or twenty-six percent, trained outside the borders of Kansas 337 were men and 771 were women.

Of the 3,154 teachers receiving their training from institutions in Kansas, 1,178 or thirty-seven percent, were from the two teachers colleges and Fort Hays Kansas State College. Of the 3,154 teachers, 2,097 received their advanced training from one of the five state colleges. This number represents sixty-seven percent of the teachers trained in the state.

TABLE XXIIIa
NUMBER AND PERCENT OF KANSAS HIGH-SCHOOL TEACHERS TRAINED IN COLLEGES WITHIN THE BORDERS OF THE STATE

1 ITEM.	2 Men.	3 Women.	4 Total.	5 Percent.
Number of high-school teachers trained in Kansas	908	2,246	3,154	74%
Number of high school teachers trained outside the borders of Kansas.....	337	771	1,108	26%

Read table thus: There were 908 men, 2,246 women, or a total of 3,154 of the high-school teachers who received their training in colleges within the borders of the state.

TABLE XXIIIb
PERCENT OF TEACHERS TRAINED IN KANSAS WHO RECEIVED THEIR TRAINING IN THE FIVE STATE COLLEGES AND THE THREE TEACHERS COLLEGES RESPECTIVELY

1 ITEM.	2 Ridgway found in 1931.	3 Irwin found in 1938.	4 Lockard found in 1946.
Percent of teachers trained in the state's five colleges..	60%	63%	67%
Percent of teachers trained in the state's three teachers colleges.....	34%	38%	37%

Read table thus: Of all the high-school teachers trained in Kansas, Ridgway found in 1931, 60 percent of them were trained in the state's five colleges. Irwin, in 1938, found 63 percent, and Lockard, in 1946, found 67 percent.

CHAPTER VI

THE HIGH-SCHOOL ADMINISTRATOR AS A TEACHER

Ridgway included the administrators as teachers if they taught two or more classes in any one subject.¹ Irwin made no specific mention of administrators as teachers, but he listed a total of 5,211 teachers as compared with Ridgway's 4,421.² From this larger number it may be presumed that Irwin used the same criteria as Ridgway, thus including most of the administrators as classroom teachers. This study presents data dealing with the administrator as an instructor in addition to his administrative duties and responsibilities.

In compiling the data for Table XXIV all superintendents, principals, and assistant principals of the Kansas high schools were considered. In this study any administrator who taught any number of classes in one or more of the subject fields was considered a teacher. For example, if a class "A" high-school administrator taught one class in English, one in mathematics, and two in science, he was counted once for each of these three subjects.

Of the 617 high-school administrators who taught, it was found that the largest percent taught one or more classes in either social studies, science, mathematics, physical education, or industrial arts; however, some of the administrators were found to be teaching classes in one or more of the other nine subject fields.

One of the most significant conclusions to be drawn from this study is the fact that approximately 100 percent of the administrators for the class "B" and "C" high schools and 70 percent of the administrators for the class "A" high schools teach one or more classes.

1. C. W. Ridgway, "A Comparative Study of the Training and Teaching Combinations of Kansas High School Teachers," *Studies in Education*, Kansas State Teachers College, Emporia, No. 5, 1931, pp. 7-8.

2. Frank L. Irwin, "A Comparative Study of the College Preparation, Teaching Combinations, and Salaries of Kansas High School Teachers," *Bulletin of Information*, Kansas State Teachers College, Emporia, Vol. 18, No. 9, Sept., 1933.

TABLE XXIV
SUBJECTS MOST FREQUENTLY TAUGHT BY KANSAS HIGH-SCHOOL ADMINISTRATORS

CLASS OF HIGH SCHOOL.	Number of administrators.	Administrators who teach.	Social Studies.		Scienc.		Mathematics.		Physical Education.		Industrial Arts.	
			Number.	Percent.	Number.	Percent.	Number.	Percent.	Number.	Percent.	Number.	Percent.
Class "A".....	433	298	117	39	119	40	79	27	70	24	40	13
Class "B".....	162	160	78	49	79	50	72	45	74	46	45	28
Class "C".....	160	159	77	48	68	43	73	46	71	45	42	27

Read table thus: Of the 433 administrators in the Class "A" high schools of Kansas, 298 teach one or more classes. Of these 298, 117 or 39 percent teach Social Studies, 119 or 40 percent teach Science, etc. Since many administrators teach in two or more fields, the total number will be larger than 298 and the total percent more than one hundred.

CHAPTER VII

DEGREES HELD BY THE HIGH-SCHOOL TEACHERS AND THE ADMINISTRATORS

This study has attempted to determine the rapidity with which high-school teachers and administrators of the state are responding to the call for advanced degrees. There were a few degrees listed on the principals' reports not commonly conferred in recent years, such as bachelor of philosophy, bachelor of literature, and master of philosophy. These were not considered. The bachelor of music degree was counted, but was included with the bachelor of science, as it is a comparable degree. The master of education degree was considered separately in making up the table for administrators but those teachers holding this degree were added to those with the master of science degree.

TABLE XXV

KINDS OF DEGREES HELD BY THE ADMINISTRATORS IN THE SECONDARY SCHOOLS IN CLASSES DEFINED BY THE STATE BOARD OF EDUCATION

Class of school and percent of degrees held.	Number of Admin.	Number and type of degree held.						No degree.
		Ph. D.	M. E.	M. A.	M. S.	A. B.	B. S.	
Class "A" schools . . .	433	5	27	182	165	25	29	0
Percent of all degrees		2%	6%	42%	38%	6%	7%	0
Class "B" schools . . .	162	1	14	34	55	24	34	0
Percent of all degrees		1%	9%	21%	32%	16%	21%	0
Class "C" schools . . .	160	0	2	23	17	54	60	4
Percent of all degrees		0	1%	14%	11%	34%	38%	2%
Total and summary . . .	755	6	43	239	237	103	123	4
Percents		1%	6%	32%	31%	14%	15%	1%

Read table thus: There are 433 administrators in Class "A" schools of which 5 hold the Ph. D. degree; 27 the M. E. degree; etc. Read in like manner for remainder of table. Percents are to the nearest whole number.

TABLE XXVI

KIND OF DEGREE HELD BY THE TEACHERS IN THE SECONDARY SCHOOLS

SUBJECT FIELD.	Number of teachers.	Number and percents holding kinds of degrees.									
		M. A.		M. S.		A. B.		B. S.		None.	
English	842	131	15%	56	7%	339	40%	272	33%	44	5%
Social Studies	484	99	19%	52	11%	157	33%	146	31%	30	6%
Mathematics	402	52	13%	40	10%	156	34%	131	33%	23	5%
Science	350	49	14%	60	17%	83	24%	140	40%	18	5%
Physical Education	160	24	15%	8	5%	34	21%	84	53%	10	6%
Agriculture	117	3	3%	21	18%	5	4%	88	75%	0	0
Latin	64	14	23%	5	8%	34	53%	9	14%	2	2%
Home Economics	461	19	4%	22	5%	98	21%	298	65%	24	5%
Music	416	34	9%	11	2%	91	22%	244	59%	33	8%
Industrial Arts	259	21	8%	43	17%	30	12%	136	52%	29	11%
Modern Language	60	26	44%	2	3%	23	39%	8	13%	1	1%
Journalism	6	4	66%	1	17%	0	0	1	17%	0	0
Printing	15	2	13%	2	13%	1	7%	9	60%	1	7%
Commerce	626	45	7%	48	8%	171	27%	305	49%	57	9%
Totals	4,262	526	12%	371	9%	1,222	29%	1,871	44%	272	6%

Read table thus: Of the 842 English teachers, 131 or 15 percent hold the M. A. degree, 56 or 7 percent the M. S., etc. Read in like manner for remainder of table.

Approximately sixty percent of all who administer high schools (Table XXV) in Kansas hold the master's degree or higher. About twenty-one percent of the classroom teachers (Table XXVI, page 32) are equally well prepared. Of the advanced degrees held by the administrators, the master of arts is slightly in the majority. There are 239 holding this degree, as compared to 237 with the master of science. This same preference for the master of arts degree over the master of science degree holds true for the high-school teachers. Five hundred and twenty-six are found to be holding the advanced degree in the arts, and 371 are holders of the science degree. Preference for the arts degree among the teachers is influenced by the fact that a very large percent of the social studies, modern languages, Latin, and English teachers hold the master of arts degree rather than the master of science degree. Of the English teachers alone, 131 hold the arts degree and only 56 the science degree. These ratios are affected somewhat by the existing regulations of some of the institutions granting advanced degrees. The Kansas State Teachers College of Emporia, for example, grants only one advanced degree, the master of science.

It is significant to note the change in percents for administrators holding the master's degree, who are now located in class "A," class "B," and class "C" high schools respectively. They run as follows: Eighty-six percent in the class "A," sixty-two percent in the class "B," and twenty-six percent in the class "C," with an average of fifty-eight percent in all three classes. The superintendents of the city systems and the high-school principals were both counted in making up the table.

Of the academic teachers, the journalism teachers are found to have the largest percent with the master's degree. There are, however, only six of these teachers in the state; thus for comparison among the different fields these will not be considered. Of the remaining teachers the Latin and science instructors seem to be the best prepared in regard to the advanced degrees held, for thirty-one percent in both these fields hold either the master of science or master of arts degree. The social studies teachers follow closely with thirty percent. It is surprising to find that the home economics teachers are academically not nearly so well trained. Only nine percent of the home economics teachers hold the master's degree. This may be due in part to the rather precise curriculum for qualification under Smith-Hughes requirements.

In making degree comparisons of the high-school teachers of 1938 and 1946 it will be noted, according to Table XXVII (page 34), that relatively little change has taken place.

The relative number of teachers holding the master's degree has shown a slight increase, as compared with a decrease in those holding the bachelor's degree. This fact would perhaps be interpreted as a significant improvement through these years until one inspects the remainder of the table and finds that the number of teachers with no degree has increased.

TABLE XXVII

A TWO-WAY DEGREE COMPARISON OF SECONDARY SCHOOL TEACHERS

SOURCE.	Total number of teachers.	Master degrees.		Bachelor degrees.		No degrees.	
		No.	%	No.	%	No.	%
Irwin (1938).....	5,211	1,005	19	4,035	77	129	2
Lockard (1946).....	4,262	897	21	3,093	73	272	6

Read table thus: Of the 5,211 high school teachers in the state in 1938, 1,005 or 19 percent held master's degrees, 4,035 or 77 percent bachelor's degrees, etc. Percents are to the nearest whole number.

CHAPTER VIII

SUMMARY

This investigation has sought by means of numerous comparisons to bring the material of the similar studies of 1931 and 1938 up to date. The former studies were made prior to World War II, which was a period of financial depression and economic unrest. This study covers the school year 1945-1946 which was the last year of actual hostilities.

What has been the effect of the war on education? This study cannot accurately answer this question for the ramifications of such a situation are tremendous, but it does accurately describe some of the almost stereotyped situations, associated with the educational field, and how they have changed. The war took many individuals from the teaching profession to serve in the armed forces. The unprecedented increase in wartime industry, which offered larger salaries than a teacher would normally receive, took many others. These and many other pertinent factors have caused a marked teacher shortage.

Another pronounced effect of the war on education is the higher salaries paid to the administrators and teachers in the secondary schools. This increase of salaries has come about through the dwindling supply of qualified teachers and through the increase in the cost of living. Dealing with average salaries only, the high school teacher's salary has increased approximately 40 percent over that paid in 1938 and 23 percent over that paid in 1931.

A few other pertinent facts relative to the educational situation since 1931 in the high schools of Kansas are worthy of mention. The teaching combinations have remained relatively stable throughout the sixteen-year period represented by the three studies. About half of all the Kansas high-school teachers teach classes in two or more different fields. In terms of college hour preparation, the present study shows a slight decrease in preparation in the fields taught; however, a somewhat higher percentage of high-school teachers hold master's degrees than was true in 1938.

LITERATURE CITED

- ANDERSON, EARL W., "Graduates and the Positions They Fill." *Educational Research Bulletin*, Ohio State University, Vol. 10, No. 4, Feb. 18, 1931. Columbus, Ohio: The Ohio State University, 1931. Pp. 87-94.
- IRWIN, FRANK L., "A Comparative Study of the College Preparation, Teaching Combinations, and Salaries of Kansas High School Teachers." Studies in Education Number, Fifteenth of the Series, *Bulletin of Information*, Kansas State Teachers College of Emporia, Vol. 18, No. 9, Sept., 1938. Topeka, Kansas: Kansas State Printing Plant, 1938. 38 pp.
- REGIER, AARON J., "A Study of the Functioning of the Teacher Certification Laws and Regulations in Kansas in 1933-1934." *Bulletin of Education*, University of Kansas, Vol. 4, No. 1, March, 1938. Lawrence, Kansas: School of Education, University of Kansas, 1938. Pp. 4-18.
- RIDGWAY, C. W., "A Comparative Study of the Training and Teaching Combinations of Kansas High School Teachers." Bulletin of the Graduate Division, *Studies in Education*, Kansas State Teachers College of Emporia, No. 5, Oct., 1931. Topeka, Kansas: Kansas State Printing Plant, 1931. 31 pp.
- SCOTT, MYRA E., "Better Training and Pay for Kansas Teachers." *Kansas Teacher*, Vol. 46, No. 4, February, 1938. Topeka, Kansas. P. 6.

LIST OF STUDIES IN EDUCATION

1. MAUL, RAY C. *A Study of Administrative Practices in Correspondence-Study Departments of Teachers Colleges and Normal Schools*. Vol. 1, No. 1, Jan., 1930. 71 pp. Limited supply.
2. SLOAN, HERBERT L. *A Study of the Status of Public School Administrators in Kansas*. Vol. 1, No. 2, June, 1930. 54 pp. Limited supply.
3. SCHRAMMEL, H. E., and WOOD, E. R. *Success and Failure of College Students (A Follow-up Study of the Freshmen Who Entered the Kansas State Teachers College of Emporia During the Years 1924 to 1929)*. No. 3, Jan., 1931. 103 pp. Supply exhausted.
4. BROWN, EDWIN J. *A Study of the Facts and Conditions Involved in the Problem of College Admissions*. No. 4, April, 1931. 56 pp. Supply exhausted.
5. RIDGWAY, C. W. *A Comparative Study of the Training and Teaching Combinations of Kansas High School Teachers*. No. 5, Oct., 1931. 31 pp. Supply exhausted.
6. LITTLE, J. KENNETH. *A Critical Study of Public School Costs in Kansas from 1898 to 1928*. No. 6, March, 1932. 58 pp. Limited supply.
7. ALTUS, WILLIAM D. *A Study of the Status of the County Superintendent in Kansas*. No. 7, June, 1933. 52 pp. Limited supply.
8. WILLIAMS, MARY RACHEL. *A Critical Study of the Individual Reports Made by Kansas Administrators to Parents*. Kansas State Teachers College Bulletin of Information,* Vol. 14, No. 6, June, 1934. 32 pp. Supply exhausted.
9. EWALD, HAROLD HUGO. *A Handbook of Facts Concerning Kansas Public Schools*. Vol. 14, No. 11, Nov., 1934. 48 pp. Limited supply.
10. GREEN, PAUL G. *An Annotated Bibliography of the History of Education in Kansas*. Vol. 15, No. 9, Sept., 1935. 33 pp. Limited supply.
11. PHARES, EARL E., and BROWN, EDWIN J. *A Self-Rating Scale for High School Principals*. Vol. 16, No. 6, June, 1936. 34 pp. Supply exhausted.
12. BROWN, EDWIN J., and BYALL, RUSSELL D. *A "Consumer's Research" in School Supplies*. Vol. 16, No. 9, Sept., 1936. 44 pp. Supply exhausted.
13. LITTLE, MARTIN EBERT. *A Study of the Eighth Grade Diploma Situation in Kansas*. Vol. 17, No. 6, June, 1937. 37 pp. Limited supply.
14. THIESSEN, N. J., *An Annotated Bibliography of American Historical Fiction*. Vol. 18, No. 5, May, 1938. 65 pp.
15. IRWIN, FRANK L. *A Comparative Study of the College Preparation, Teaching Combinations, and Salaries of Kansas High School Teachers (1938)*. Vol. 18, No. 9, Sept., 1938. 38 pp.
16. HILBERT, LYLE WARREN. *A Study of the Status of the Rural High School Principal in Kansas*. Vol. 18, No. 10, Oct., 1938. 27 pp.

* Beginning with number 8, Studies in Education have been published as numbers of the Kansas State Teachers College Bulletin of Information.

17. BROWN, E. J., SCHRAMMEL, H. E., and NILES, IRENE. *An Annotated Bibliography of Dissertations Accepted for the Master of Science Degree, Kansas State Teachers College of Emporia, (1929-1939)*. Vol. 19, No. 9, Sept., 1939. 61 pp.
18. MASE, WAYNE E. *A Self-Rating Scale for School Custodians*. Vol. 19, No. 10, Oct., 1939. 24 pp.
19. ALLEN, PAUL. *Kansas Mammals*. Vol. 20, No. 5, May, 1940. 62 pp. Supply exhausted.
20. EDWARDS, RALPH M. *The County Superintendent and Rural School Supervision*. Vol. 20, No. 7, July, 1940. 67 pp.
21. JOERG, ADRIENNE, and SHROYER, LANA A. *A Survey of the Certification, Preparation, Experience, Salary, and Employment Status of Elementary and High School Teachers in Kansas for the Year 1939-1940*. Vol. 20, No. 9, Sept., 1940. 50 pp.
22. MENTZER, LOREN W. *Wildlife Conservation (Information Concerning and Helps for Teaching)*. Vol. 21, No. 6, June, 1941. 63 pp.
23. O'BRYANT, CHARLES W. *A Comparative Study of the Status of Public School Administrators in Kansas*. Vol. 21, No. 7, July, 1941. 43 pp.
24. SMITH, LLOYD C. *A Historical Outline of the Territorial Common Schools in the State of Kansas*. Vol. 22, No. 2, Feb., 1942. 60 pp.
25. GEYER, DON F. *A Study of the Administrative and Supervisory Duties of the Teaching Principal in the Small Elementary School*. Vol. 22, No. 7, July, 1942. 39 pp. Supply exhausted.
26. YOUNG, IONA. *A Preliminary Survey of Interests and Preferences of Primary Children in Motion Pictures, Comic Strips, and Radio Programs as Related to Grade, Sex, and Intelligence Differences*. Vol. 22, No. 9, Sept. 1942. 40 pp. Supply exhausted.
27. DAVIS, DON E. *An Investigation of the Governmental Agencies of the State of Kansas*. Vol. 23, No. 11, Nov., 1943. 95 pp.
28. BROWN, EDWIN J., and O'REILLY, VIRGINIA M. *A Self-Rating Scale for the Elementary Teacher*. Vol. 24, No. 6, June, 1944. 36 pp.
29. BREUKELMAN, JOHN (Editor). *An Annotated Bibliography of Theses Accepted for the Master of Science Degree, Kansas State Teachers College of Emporia (1939-1944)*. Vol. 24, No. 11, Nov., 1944. 32 pp.
30. WOLFE, EUNICE. *A Handbook for the High School Teacher-Librarian*. Vol. 25, No. 8, August, 1945. 31 pp.