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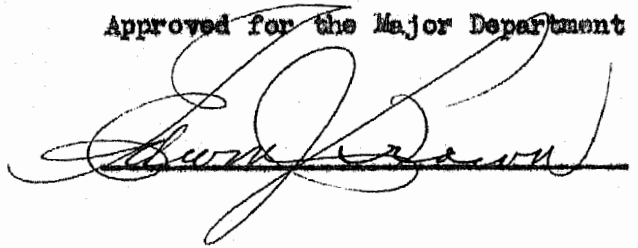
A COMPARATIVE STUDY OF THE COLLEGE PREPARATION,
TEACHING COMBINATIONS, AND SALARIES PAID TO THE HIGH SCHOOL
TEACHERS OF KANSAS

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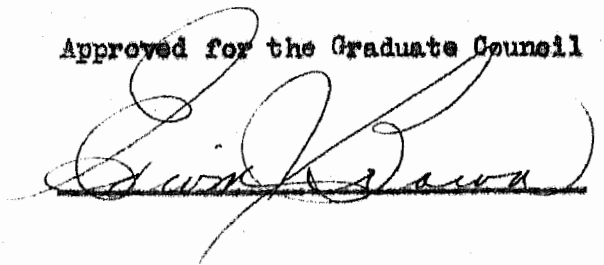
A THESIS
SUBMITTED TO THE DEPARTMENT OF
EDUCATION AND THE GRADUATE COUNCIL OF THE KANSAS STATE
TEACHERS COLLEGE OF EMPORIA IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE

By
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Approved for the Major Department



Approved for the Graduate Council



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Frank L. Irwin

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CHAPTER I

INTRODUCTION

THE NATURE OF THE STUDY

Not infrequently during the enrollment session in a Teachers College do we hear the students debating over the question of what to take. The spread of their college course is of great concern to them. They say in substance, to the advisor, should I study widely in one field and make somewhat of a specialist of myself, or should I take a moderate amount of work in several fields. If all the high schools could so arrange the teaching programs so each teacher could teach in a single field, the students would unquestionably be assured of a more thorough type of instruction. On the other hand, if this condition existed, teachers would all be inclined to become specialists and educators are not quite sure that this would be the correct situation.

In examining the high school teaching programs on a state wide basis, it is found that more than fifty percent of the teachers work in two or more fields of instruction. The question so far as the Teachers College student is concerned, reduces itself to the practical basis of job-hunting. He must say, "If I prepare myself in only one field, will my chances in getting a job be as good, or should I prepare myself in several fields?". In case the teaching candidate decides to study in several fields, another important question arises. Does it make any difference in just which field one prepares? Are there any set patterns existing to govern one in this respect? This study

attempts to serve the student in helping to answer these puzzling questions. An attempt has been made to discover just what combination of subjects is called for in practice. The daily teaching programs of every high school teacher in Kansas, for the school year 1937-38, were examined and analyzed. Prompted by the thought of aiding school officials charged with the responsibility of student counseling and teacher placement, and superintendents in programming teachers and in making schedules, the research on the succeeding pages has been made.

All school people are aware that teaching standards have been steadily advancing through the years. The Kansas State Board of Education has been raising standards as rapidly as it feels justified, in view of the low salary levels for teachers, who in the end have to make the economic sacrifice to meet the higher standard. It is one thing for such a board to make a rule affecting teacher preparation, and quite another thing to see that the rule is put into effect throughout the state.

In 1916, the so-called bachelors' degree rule was made, affecting with certain limitations, all high school teachers in Kansas. In 1933, the State Board announced a masters' degree ruling affecting all who administer class "A" or class "B" schools or systems in which such schools exist. The rule, however, was not retroactive and the administrators holding positions in such schools at the time the rule was made could continue, without jeopardizing the standing of the school or its administrator. An attempt was made to find out to what extent the above regulations have become effective in the secondary schools of Kansas.

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

Salaries in all types of public schools were greatly reduced in 1930 and the years immediately following. It is generally believed that the 1930 salary level has to a large extent been restored. A check was made of the salary of every high school teacher in Kansas and each was classified as to subjects taught. The table on salaries shows to what extent salaries have been restored to the 1930 level.

In 1930 and subsequent years the majority of the high schools in Kansas were forced to reduce the number on the instructional staff. In some instances the reduction was as high as twenty-five percent. It averaged in excess of ten percent all over the State. It was the usual custom for the faculty, after being reduced, to carry on quite the same curriculum and course of study as before. This meant that teachers were asked to teach more subjects and perhaps in more fields of instruction than previously. The study hopes to throw light on what took place in making these adjustments.

The principal problems with which the study is attempting to deal 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 all the subjects assigned to them?
- 3. What percent of the teachers' work is in each of the several fields of instruction?
- 4. How do the salaries of 1938 compare with the salaries of 1930 in the several fields of instruction?
- 5. What percent of the high school teachers have received the bachelor's degree from institutions of higher learning in Kansas?
- 6. How rapidly have the administrators of our secondary schools responded to the call for more advanced degrees?
- 7. How rapidly have the teachers in the same schools responded to the same call?

PREVIOUS STUDIES MADE

C. W. Ridgway¹ made an exhaustive study of this subject in 1930. His study consisted of examining the teaching programs of all the high school teachers of Kansas as reported by the high school principals to the state superintendent of public instruction in Topeka. Some of Mr. Ridgway's findings are used by way of comparison in this research. His study was made before the economic depression. At this time it seems desirable to make somewhat of a follow-up study and note such changes as have taken place. Mr. Ridgway used a little different

¹ C. W. Ridgway, A Comparative Study of the Training and Teaching Combinations of Kansas High School Teachers, Bulletin of the Graduate Division of the Kansas State Teachers College, Emporia. No. 5, 1931.

method of classifying teachers in the subject matter fields and for that reason the data presented are not always strictly comparable.

Earl W. Anderson² made a study entitled Graduates and the Positions They Fill. In this study information was collected concerning the history of graduates of teacher-training courses from Ohio State University during the year 1928-29. In one of his tables he determines the percentage of teacher training graduates who taught any classes in their major subject.

Aaron J. Regier³ made an extensive study in 1933. The title of his study was A Study of the Functioning of the Teacher Certification Laws in Kansas. The writer makes use of Mr. Regier's findings on teacher combinations.

Myra E. Scott⁴ in 1936 studied and reported on 144 picked schools in nineteen counties in north central Kansas. The purpose of her study was to see how well the English teachers in the counties studied were prepared in their specialized fields. Her study also covered the salaries of the English teachers. Miss Scott, however, used different standards of classifying English teachers than have been used by either Mr. Ridgway or the present writer. A summary of Miss Scott's work may

² Earl W. Anderson, Graduates and the Positions They Fill. Educational Research Bulletin, Vol. 10, No. 4; Ohio State University; 87 pp.

³ Aaron J. Regier, A Study of the Functioning of the Teacher Certification Laws and Regulations in Kansas for 1933-1934. Bulletin of Education, University of Kansas, Published by School of Education. Lawrence, Kansas. 1936. pp. 4-18.

⁴ Myra E. Scott, "Better Training and Pay for Kansas Kansas Teacher", February, 1938, Topeka, Kansas.

be found in the February issue of the Kansas Teacher for 1938.

THE SCOPE OF THE STUDY

The study undertakes the analysis of the daily teaching programs of approximately fifty-two hundred high school teachers in Kansas. This figure represents about 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 that it would be best to omit them from the salary study.

METHOD OF PROCEDURE

The method of procedure followed in this study has been that of taking the data from the official reports made by high school principals to the office of the state superintendent. These reports are on file in the office of W. T. Markham, state superintendent of public instruction in Topeka, Kansas. The reports for the school year 1937-38 were all examined and the data were read and transferred to mimeographed tally sheets which had been prepared for the purpose. All computation was done by machine where possible.

SOURCES OF DATA

The source of data was the high school principals' reports for the school year 1937-38 on file in the office of the state superintendent of public instruction in Topeka, Kansas.

TYPES OF DATA COLLECTED

The following types of data were collected from the 5211 teaching programs examined:

1. Teachers were classified as to sex.
2. Teachers were classified as to subjects taught.
3. Hours of college preparation after each subject taught were counted and averaged.
4. The kind of degree held by each teacher and the school conferring same was noted and tabulated.
5. The salary paid each teacher was recorded according to the subjects taught.
6. The number of fields in which each teacher worked were all counted.
7. The subjects taught in combination were all counted and classified.
8. 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 SET UP

An arbitrary standard for classifying teachers was set up. To

be classed as a mathematics teacher, for example, one would have to be teaching two or more classes in mathematics, with college preparation equal to or better than that indicated in any other subject. If a teaching program showed, for instance, a teacher teaching two classes in mathematics with thirty hours preparation, two classes in science with twenty hours preparation, and one class in English with thirty-five hours preparation, such individual would be classed as a mathematics teacher. In all instances 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 taken from the state reports and to classify and arrange these data in tabular form. An analysis accompanies each table. Conclusions have been drawn from the study and comparisons have been made in the tables.

CHAPTER II

THE COMMON TEACHING COMBINATIONS

As was suggested in the introduction it is of importance to teachers, administrators, and teacher placement officers to know the common teaching combinations. Is music more frequently taught with English than with mathematics? Are physical education teachers more often asked to teach classes in industrial arts or home economics than they are to teach science with physical education? Such questions as these are deserving of answers based upon scientific investigation.

Mr. Ridgway found in 1930 that approximately 43 percent of the high school teachers of the state were teaching in only one field. This study shows about 48 percent of teachers instructing in only one field. 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 1930. Table I shows a comparison of the percentage of teachers working in one field in 1938 with corresponding percents in 1930. The reader will note that, in every field but music, 1938 finds a much greater percent of the teachers working in one field.

There is some evidence to support the conclusion that many of our class "C" high schools have introduced music, perhaps in connection with the band movement, since 1930, and because the school was small, the teacher was assigned other classes with the music taught. This condition would tend to keep the percentage of "one-field" music teachers down as the percentage doubtless has tended to increase in the large and middle sized schools.

TABLE I

1930 ONE SUBJECT FIELD HIGH SCHOOL TEACHERS COMPARED WITH 1938

1 Subject Matter Field	2 Ridgway found in 1930	3 Irwin found in 1938
English	29%	43%
Mathematics	20%	47%
Social Studies	25%	43%
Science	15%	34%
Latin	8%	20%
Modern Language	16%	25%
Industrial Arts	26%	44%
Home Economics	32%	43%
Commerce	58%	66%
Agriculture	27%	58%
Music	61%	60%
Physical Education	22%	67%
Average	43%	48%

Read Table thus: The columns are numbered and named. Mr. Ridgway found 29 percent of the English teachers in 1930 working in only one field. Mr. Irwin found 43 percent of the English teachers working in one field in 1938. The percents are to the nearest whole number.

Table I (page 10) shows that there has been a marked advancement in the number of teachers who work only in one subject matter field during the past eight years. Even in the small high schools there are several teachers working in one field.

Table II is a detailed study of all the subject fields and how they 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. To illustrate: after the English teachers were classified, then all subjects other than English were counted, which were taught by the English teachers. Of these other subjects it was found that 22 percent were commerce, etc.

Table III (page 13) consists of a three way comparison of the first, second, and third most frequent combinations taught with the major subject, as found by Ridgway in 1930, Regier in 1934, and Irwin in 1938. It will be noted that very little change has taken place in the matter of the most frequent combinations. Occasionally, the first frequency in 1930 has shifted to second place in 1934 or perhaps to third place in 1938, but consistently the same subjects seem to prevail in the first three frequencies. Inasmuch as so few teachers work in more than three fields, the frequencies beyond the first three were considered of little importance. It is significant to note that the combinations taught with Latin were exactly the same in all three studies. This was also true in the field of music with the first two frequencies being English and social studies in each of the three years studied.

TABLE II

TEACHING COMBINATIONS AS THEY RANK

	A	1	2	3	4	5
English	43%	Social Sc.-22%	Latin-18%	Commerce-12%	Journalism-11%	Music-8%
Social Studies	43%	Science-19%	English-16%	Mathematics-15%	Commerce-16%	Ind.Arts-7%
Mathematics	47%	Science-31%	Commerce-18%	Social Sc.-14%	Ind.Arts-9%	English-8%
Science	34%	Math.-34%	Social Sc.-18%	Ind.Arts-13%	English-11%	Latin-9%
Physical Education	67%	Science-34%	Social Sc.-21%	Ind.Arts-17%	English-10%	Math.-6%
Agriculture	58%	Science-32%	Ind.Arts-19%	Social Sc.-17%	Math.-14%	Commerce-8%
Latin	20%	English-45%	Social Sc.-16%	Mod.Lang.-12%	Math.-8%	Science-7%
Home Economics	43%	Science-27%	Social Sc.-23%	English-18%	Commerce-13%	Music-5%
Music	60%	English-50%	Social Sc.-16%	Commerce-11%	Math.-6%	Latin-4%
Industrial Arts	44%	Social Sc.-23%	Science-23%	Agric.-20%	Math.-17%	Commerce-9%
Modern Language	25%	English-25%	Social Sc.-21%	Latin-19%	Math.-9%	Science-7%
Journalism	53%	English-39%	Social Sc.-25%	Latin-12%	Home Ec.-12%	Commerce-12%
Commerce	66%	Math.-24%	Social Sc.-22%	English-14%	Science-13%	Home Ec.-6%

Read Table thus: Column "A" indicates the percent of teachers who are teaching in only one field, e.g., 43% of all English teachers teach nothing but English. Of all subjects taught with English, Social Science was found first in frequency and was found 22% of the times in combination with English. Latin was found 18% of the times and Commerce, 12%. Read other subjects likewise. All percents are to the nearest round number.

TABLE III

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

	1	2	3	4
Major Subject Field	Ridgway 1930	Regier 1934	Irwin 1938	
English	1 Social Studies 2 Latin 3 Home Economics	1 Social Studies 2 Latin 3 Music	1 Social Studies 2 Latin 3 Commerce	
Social Studies	1 English 2 Science 3 Mathematics	1 English 2 Mathematics 3 Commerce	1 Science 2 English 3 Mathematics	
Mathematics	1 Science 2 Social Studies 3 English	1 Science 2 Social Studies 3 Commerce	1 Science 2 Commerce 3 Social Studies	
Science	1 Mathematics 2 Social Studies 3 Home Economics	1 Mathematics 2 Social Studies 3 Home Economics	1 Mathematics 2 Social Studies 3 Industrial Arts	
Physical Education	1 Industrial Arts 2 Social Studies 3 Science	1 Social Studies 2 Commerce 3 English	1 Science 2 Social Studies 3 Industrial Arts	
Agriculture	1 Science 2 Industrial Arts 3 Social Studies	1 Science 2 Social Studies 3 Industrial Arts	1 Science 2 Industrial Arts 3 Social Studies	
Latin	1 English 2 Social Studies 3 Modern Language	1 English 2 Social Studies 3 Modern Language	1 English 2 Social Studies 3 Modern Language	
Home Economics	1 English 2 Social Studies 3 Science	1 English 2 Science 3 Social Studies	1 Science 2 Social Studies 3 English	
Music	1 English 2 Social Studies 3 Mathematics	1 English 2 Social Studies 3 Mathematics	1 English 2 Social Studies 3 Commerce	
Industrial Arts	1 Science 2 Physical Educa. 3 Mathematics	1 Science 2 Agriculture 3 Mathematics	1 Science 2 Social Studies 3 Agriculture	
Modern Language	1 English 2 Latin 3 Social Studies	1 English 2 Latin 3 Not Reported	1 English 2 Social Studies 3 Latin	
Commerce	1 Social Studies 2 Mathematics 3 English	1 Social Studies 2 English 3 Mathematics	1 Mathematics 2 Social Studies 3 English	

Read Table thus; In 1930, Ridgway found Social Studies ranked first in frequency with English; Latin, second; Home Economics, third. Read in like manner for Regier in 1934 and Irwin in 1938.

CHAPTER III

HIGH SCHOOL TEACHING AND COLLEGE PREPARATION

High school courses of study are ever expanding. New subjects or at least subjects with new names are being added each year. The urge for admitting these new classes may come from one of several sources. A new teacher just fresh from college comes out with a new idea. He tells his principal about some course he has had in college, or perhaps has heard some visiting professor from a distant state tell of, and thinks it would be fine to teach it. The major text book publishing companies seem to be on a competitive spree, as it were, in publishing new books with the announcement that such and such a book meets a new felt need, in the ever changing social order. Frequently a business or professional man approaches the local high school principal, and suggests that there should be a new course taught to meet his particular fancy. The principal may weaken under the sales talk and try to make way for such a class the next semester. And so the story goes, one by one the new classes have made their appearance. It is perhaps safe to say that the small high school, of ten or a dozen teachers, is offering classes in twice as many fields of instruction as did the same high school prior to the World War.

All this makes one wonder if the teachers are receiving college preparation to handle adequately the new classes as they gradually become a part of the course of study. When the principal examines the subject matter covered in some of the new subjects, he is at a loss to know just where to classify it. For example, the subject called

"Business of Life," recently added to the course of study in many of the Kansas high schools, presents this problem. The chapters on understanding ourselves and others, personality and character training, thrift and waste, are in some respects psychological and could well be taught by the psychology teacher. In other respects they are social, and could be taught by the history and government teacher. Farther along in the course it is noticed that such chapters as money and banking services, communication services, shipping services, etc., appear. These headings would lead one to believe the class should be taught by either the economics teacher or perhaps by the commercial teacher. Some of the chapters throw in a smattering of home relations and present purely domestic problems. Perhaps the home economics teacher then should teach the class. Too often it is found that such classes are carelessly assigned to any teacher who happens to have an open class period for the particular semester this class is to be taught.

This study has tried to give special attention to the matter of college preparation, for all the specific subjects taught by the 5211 Kansas teachers included. After the teachers were all classified as to subjects taught, there appeared two main objectives. First, there was the matter of finding out just how well prepared are the English, the social studies, the mathematics teachers, to teach these specific subjects. Second, the study attempted to show how well prepared the teachers are to teach the subjects found on the schedule outside the major field. Tables IV, V, and VI (pages 17, 18, 19, respectively) deal with the first of these two objectives, and Table VII (page 20), with

the second objective. In Table IV, 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 noticed that in all fields the teachers rated well up toward one hundred percent on this basis. However, one would naturally expect a teacher to be reasonably well prepared to teach classes in the major field of instruction. When Table VII is examined, the condition is found to be much different and not so commendable. This table reveals the fact that, of all the subjects taught by teachers outside their fields, fifty percent of such subjects are taught with inadequate college preparation. It is interesting to note in Tables V and VI that the women teachers seem to be a bit better prepared to teach in their respective fields than are the men teachers. Thirty-five percent of the women teach with fifty or more semester hours of preparation. Only thirty-one percent of the men are this well prepared. The agriculture and music teachers seem to be prepared with more college hours 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 towards specialization in the field is required.

The high school report blanks 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 was in most instances a larger figure. In making this study, the figure which represented training in the field was used.

TABLE IV

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-----	867	97%	43%
Mathematics-----	427	91	47
Social Studies-----	809	97	43
Science-----	616	96	34
Latin-----	122	95	20
Modern Language-----	103	96	25
Industrial Arts-----	306	96	41
Home Economics-----	530	98	43
Commerce-----	526	92	66
Agriculture-----	195	99	58
Music-----	549	98	60
Physical Education-----	135	97	67
Journalism-----	15	100	53
Printing-----	12	83	100
Total-----	5211		

Read Table thus: Column 1 represents the number of teachers in the several fields. Column 2 gives the percent of the teachers who have fifteen or more semester hours of college training in the several fields. Column 3 lists the percent of the teachers teaching in one field. To illustrate, of the 867 English teachers 97% of them have fifteen or more hours college preparation in English and 43% of them teach nothing but English. Percents are to the nearest whole number.

TABLE V

COLLEGE HOUR PREPARATION OF THE MEN TEACHERS IN THE SEVERAL FIELDS

Subject Fields	1 Number 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-----	108	4	8	18	30	13	35
Mathematics-----	239	12	51	70	62	22	22
Social Studies-----	547	7	40	110	160	120	110
Science-----	471	4	18	73	107	90	179
Latin-----	23	1	2	7	7	3	3
Modern Language-----	18		2	2	3	5	6
Industrial Arts-----	305	7	16	39	105	63	75
Home Economics-----	0						
Commerce-----	228	9	11	32	56	60	60
Agriculture-----	193	5	9	13	19	23	124
Music-----	204			8	11	28	157
Physical Education-----	71		4	11	14	21	21
Journalism-----	6			1	1	2	2
Printing-----	11		1	1	1	3	5
Totals-----	2424	49	162	385	576	453	799
Percents-----		2	8	17	24	19	31

Read Table thus: Column 1 represents the number of teachers. The six remaining columns represent the number of teachers with college semester hours in training, within the limits designated at the head of the columns. For instance, of the 108 English teachers 4 had training ranging from 0-9 hours, 8 from 10-19 hours, 18 from 20-29 hours, etc. The percents are to the nearest whole number.

TABLE VI

COLLEGE HOUR PREPARATION OF THE WOMEN TEACHERS IN THE SEVERAL FIELDS

Subject Fields	1 Number 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-----	759	6	45	113	245	166	185
Mathematics-----	188	3	18	53	58	22	28
Social Studies-----	262	1	19	52	78	48	51
Science-----	145		12	22	44	23	34
Latin-----	99		2	16	29	19	33
Modern Language-----	85	4	6	6	9	13	47
Industrial Arts-----	0						
Home Economics-----	530	5	11	46	121	126	221
Commerce-----	298	17	33	40	58	55	95
Agriculture-----	3				1	1	1
Music-----	345	4	6	6	24	48	257
Physical Education-----	64		4	7	21	17	15
Journalism-----	9			1	2	3	3
Printing-----	1						1
Totals-----	2738	40	156	362	689	341	970
Percents-----		2	7	13	25	19	35

Read Table thus: Column 1 represents the number of teachers. The six remaining columns represent the number of teachers with college semester hours in training, within the limits designated at the head of the columns. For example, 759 English teachers were counted, of whom 6 had training ranging from 0-9 hours, 45 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 VII

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 prep- aration in college	3 Number and percent teaching with less than 15 college hours preparation
520 other than English-----	378 or 73% -----	142 or 27%
621 " " Social Studies-----	365 or 59% -----	256 or 41%
518 " " Mathematics-----	218 or 42% -----	300 or 58%
548 " " Science-----	320 or 58% -----	228 or 42%
115 " " Physical Education--	46 or 40% -----	69 or 60%
185 " " Agriculture--	68 or 37% -----	117 or 63%
242 " " Latin-----	145 or 60% -----	97 or 40%
121 " " Home Econ- omics-----	60 or 50% -----	61 or 50%
100 " " Music-----	40 or 40% -----	60 or 60%
201 " " Industrial Arts-----	76 or 38% -----	125 or 62%
92 " " Modern Lang- uage-----	58 or 63% -----	34 or 37%
61 " " Journalism--	39 or 48% -----	42 or 52%
447 " " Commerce-----	78 or 20% -----	369 or 80%
Totals: 3794 Teachers taught classes out of their respective fields	1893 or 50% -----	1901 or 50%

Read Table thus: The 520 teachers in Column 1 were not English teachers but taught one or more classes in English. Of the 520, 378 or 73% taught these English classes with more than 15 hours of college preparation in English, and 142 or 27% 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.

On checking the men and women teachers separately, on a basis of less than twenty semester hours of training, it is discovered that the larger percent of the mathematics and commerce teachers fall in this class. About seventeen percent of the women commerce teachers have less than twenty hours training, and about nine percent of the men commerce teachers fall in this class. When the mathematics teachers are examined on this basis of training, almost the exact opposite is observed. Twenty-seven percent of the men mathematics teachers have less than twenty hours of training and eleven percent of the women mathematics teachers are so classed. Combining the men and women teachers and considering all subjects, about eight percent of all have training of less than twenty hours. In summarizing Table V (page 18), the music teachers are found to have the most training and the mathematics teachers the least.

Tables V and VI (pages 18 and 19) must not be confused with Table VII (page 20). In Tables V and VI the teachers are classified as to their major fields. Table VII is a study of the teachers who teach one or more classes out of their major field. The training in college hours in Table VII was checked on the basis of the college minor or fifteen semester hours. The number, 5794, found as the total number of teachers in Table VII, means that it is the total number of cases in which teachers were found to be teaching one or more classes out of the major field. It is in this phase of high school teaching that one finds a large portion of the inadequately prepared teachers.

Of the teachers who teach commercial subjects out of the major field, Table VII reveals that 369 or eighty percent teach with less than a college minor. Teachers teaching agriculture classes rank second with sixty-three percent, and those teaching classes in industrial arts, third with sixty-two percent. The English classes taught by teachers other than English teachers, are taught with much better preparation. Seventy-three percent of the teachers other than English teachers teach with what might be considered adequate preparation.

The next twelve tables, VIII to XIX inclusive (pages 23 to 34 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 taught in combination with the main subject field were counted and the percent was figured for each teacher who had college preparation, in excess of fifteen semester hours, to teach the subjects. It is significant to note that when teachers, other than mathematics teachers, are asked to teach classes in mathematics, they are quite unprepared for the task. This condition seems to be true to a greater extent with mathematics classes than it is with other classes. For example, there are forty-one of the industrial arts teachers called upon to teach mathematics and only thirty percent of them had anything resembling adequate training. Similarly, of the thirty-seven English teachers who taught classes in mathematics, twenty-four percent had adequate training in mathematics. The 105 social studies teachers who taught mathematics fared a bit better in mathematics preparation, but at that had only forty-one percent prepared for the job.

TABLE VIII

COMMERCE TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
346	66% taught Commerce only	93% had training in Commerce
27	5% taught Commerce and English	85% had training in English
42	8% taught Commerce and Social Science	71% had training in Social Science
43	8% taught Commerce and Mathematics	49% had training in Mathematics
24	5% taught Commerce and Science	58% had training in Science
9	2% taught Commerce and Physical Education	33% had training in Physical Education
5	1% taught Commerce and Latin	80% had training in Latin
11	3% taught Commerce and Home Economics	36% had training in Home Economics
4	1% taught Commerce and Music	50% had training in Music
2	taught Commerce and Industrial Arts	
6	1% taught Commerce and Modern Language	33% had training in Modern Language
3	$\frac{1}{3}$ % taught Commerce and Journalism	0% had training in Journalism

Read Table thus; 346 or 66% of all the commerce teachers teach nothing but commerce. Of this number 93% had training in commerce equal to a minor or better; 27 or 5% of all the commerce teachers teach commerce and English, of which 85% had training in English equal to a minor or better; 42 or 8% of all the commerce teachers teach commerce and Social Science, of which 71% had training in Social Science equal to a minor or better, etc. Percents are to the nearest whole number.

TABLE IX

AGRICULTURE TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
113	58% taught Agriculture only	100% had training in Agriculture
4	2% taught Agric. and English	50% had training in English
21	10% taught Agric. and Social Studies	62% had training in Social Studies
17	8% taught Agric. and Mathe- matics	47% had training in Mathe- matics
37	19% taught Agric. and Science	78% had training in Science
3	1% taught Agric. and Physical Education	
1	1% taught Agric. and Latin	100% had training in Latin
	No Agriculture teachers taught Home Economics	
2	1% taught Agric. and Music	50% had training in Music
22	11% taught Agric. and Indus- trial Arts	63% had training in Industrial Arts
	No Agriculture teachers taught Modern Language	
	No Agriculture teachers taught Journalism	
	No Agriculture teachers taught Printing	
9	4% taught Agric. and Commerce	

Read Table thus: Of all the Agriculture teachers, 113 taught nothing but Agriculture. This represented 58% of the Agriculture teachers. All of the 58% had a college major or minor in the subject. 4 or 2% of all the Agriculture teachers taught Agriculture and English, of whom 50% had training in English. Read in like manner for each combination. Percents are to the nearest whole number.

TABLE X

MODERN LANGUAGE TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
26	25% taught Modern Language only	92% had training in Modern Language
28	26% taught Modern Language and English	78% had training in English
24	23% taught Modern Language and Social Studies	58% had training in Social Studies
10	10% taught Modern Language and Mathematics	20% had training in Mathematics
8	8% taught Modern Language and Science	62% had training in Science
1	1% taught Modern Language and Physical Education	
2	2% taught Modern Language and Agriculture	50% had training in Agriculture
22	21% taught Modern Language and Latin	72% had training in Latin
3	3% taught Modern Language and Home Economics	67% had training in Home Economics
2	2% taught Modern Language and Music	100% had training in Music
4	4% taught Modern Language and Industrial Arts	100% had training in Industrial Arts
	No Modern Language teachers taught Journalism	
	No Modern Language teachers taught Printing	
6	6% taught Modern Language and Commerce	25% had training in Commerce

Read Table thus; 26 or 25% of all Modern Language teachers taught nothing but Modern Language, of which 92% had at least a minor in Modern Language. 28 or 26% of the Modern Language teachers also taught English, of which 78% had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XI

PHYSICAL EDUCATION TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
135	67% taught Physical Education only	94% had training in Physical Education
7	5% taught Physical Education and English	57% had training in English
15	11% taught Physical Education and Social Studies	66% had training in Social Studies
4	3% taught Physical Education and Mathematics	25% had training in Mathematics
24	18% taught Physical Education and Science	79% had training in Science
2	$\frac{1}{3}$ % taught Physical Education and Agriculture	100% had training in Agriculture
	No Physical Education teachers taught Latin	
2	$\frac{1}{2}$ % taught Physical Education and Home Economics	100% had training in Home Economics
	No Physical Education teachers taught Music	
12	8% taught Physical Education and Industrial Arts	58% had training in Industrial Arts
1	taught Physical Education and Modern Language	
	No Physical Education teachers taught Journalism	
	No Physical Education teachers taught Printing	
3	taught Physical Education and Commerce	

Read Table thus: 135 or 67% of all Physical Education teachers taught nothing but Physical Education, of which 94% had at least a minor in Physical Education; 7 or 5% of all Physical Education teachers taught Physical Education and English, of which 57% had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XII
MUSIC TEACHERS' COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
325	60% taught Music only	97% had training in Music
167	30% taught Music and English	81% had training in English
55	10% taught Music and Social Studies	51% had training in Social Studies
15	8 $\frac{1}{2}$ % taught Music and Mathematics	20% had training in Mathematics
20	3 $\frac{1}{2}$ % taught Music and Science	55% had training in Science
2	0% taught Music and Physical Education	50% had training in Physical Education
3	3% taught Music and Agriculture	67% had training in Agriculture
13	2 $\frac{1}{2}$ % taught Music and Latin	58% had training in Latin
11	2% taught Music and Home Economics	36% had training in Home Economics
2	0% taught Music and Industrial Arts	50% had training in Industrial Arts
8	1 $\frac{1}{2}$ % taught Music and Modern Language	62% had training in Modern Language
2	0% taught Music and Journalism	100% had training in Journalism
37	7% taught Music and Commerce	27% had training in Commerce

Read Table thus: 325 or 60% of all Music teachers taught Music only, of whom 97% had at least a minor in Music; 167 or 30% of all Music teachers taught Music and English, of whom 81% had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XIII

LATIN TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
25	20% taught Latin only	96% had training in Latin
54	44% taught Latin and English	81% had training in English
19	15% taught Latin and Social Studies	57% had training in Social Studies
10	8% taught Latin and Mathematics	40% had training in Mathematics
8	6% taught Latin and Science	12% had training in Science
1	$\frac{1}{3}$ % taught Latin and Physical Education	100% had training in Physical Education
	No Latin teachers taught Agriculture	
1	$\frac{1}{3}$ % taught Latin and Home Economics	100% had training in Home Economics
7	5% taught Latin and Music	28% had training in Music
	No Latin teachers taught Industrial Arts	
15	12% taught Latin and Modern Language	80% had training in Modern Language
	No Latin teachers taught Journalism	
	No Latin teachers taught Printing	
5	4% taught Latin and Commerce	80% had training in Commerce

Read Table thus: 25 or 20% of all the Latin teachers taught Latin only, of whom 96% had training of at least a minor in Latin; 54 or 44% taught Latin and English, of whom 81% had at least a minor in English. Read in like manner for other combinations. Percents are to the nearest whole number.

TABLE XIV

HOME ECONOMICS TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
240	45% taught Home Economics only	87% had training in Home Economics
72	14% taught Home Economics and English	61% had training in English
90	17% taught Home Economics and Social Studies	55% had training in Social Studies
20	3 $\frac{1}{2}$ % taught Home Economics and Mathematics	15% had training in Mathematics
104	19% taught Home Economics and Science	67% had training in Science
10	2% taught Home Economics and Physical Education	
3	$\frac{1}{3}$ % taught Home Economics and Agriculture	
16	3% taught Home Economics and Latin	43% had training in Latin
	No Home Economics teachers taught Industrial Arts	
4	1% taught Home Economics and Modern Language	50% had training in Modern Language
1	taught Home Economics and Journalism	100% had training in Journalism
	No Home Economics teachers taught Printing	
50	9% taught Home Economics and Commerce	12% had training in Commerce

Read table thus: 240 or 45% of all Home Economics teachers taught Home Economics alone, of whom 87% had training of at least a minor in Home Economics; 72 or 14% of all Home Economics teachers taught Home Economics and English, of whom 61% had at least a minor in English. Read in like manner for other combinations. Percents to nearest whole number.

TABLE XV

SCIENCE TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
209	34% taught Science only	99% had training in Science
30	5% taught Science and English	50% had training in English
115	18% taught Science and Social Studies	52% had training in Social Studies
218	35% taught Science and Mathematics	50% had training in Mathematics
19	3% taught Science and Physical Education	37% had training in Physical Education
58	9% taught Science and Agriculture	36% had training in Agriculture
13	2% taught Science and Latin	61% had training in Latin
16	2% taught Science and Home Economics	56% had training in Home Economics
10	1½% taught Science and Music	10% had training in Music
63	13% taught Science and Industrial Arts	36% had training in Industrial Arts
3	½% taught Science and Modern Language	
3	½% taught Science and Journalism	67% had training in Journalism
	No Science teachers taught Printing	
74	12% taught Science and Commerce	13% had training in Commerce

Read Table thus: 209 or 34% of all the Science teachers taught Science only, of whom 99% had at least a minor in Science; 30 or 5% of the Science teachers taught Science and English, of whom 50% had at least a minor in English. Read in like manner for other combinations. Percents to nearest whole number.

TABLE XVI

MATHEMATICS TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
201	47% taught Mathematics only	93% had training in Mathematics
24	5% taught Mathematics and English	70% had training in English
44	10% taught Mathematics and Social Studies	54% had training in Social Studies
99	23% taught Mathematics and Science	51% had training in Science
9	2% taught Mathematics and Physical Education	33% had training in Physical Education
16	3% taught Mathematics and Agriculture	18% had training in Agriculture
18	4% taught Mathematics and Latin	55% had training in Latin
6	1% taught Mathematics and Home Economics	16% had training in Home Economics
8	2% taught Mathematics and Music	12% had training in Music
29	7% taught Mathematics and Industrial Arts	27% had training in Industrial Arts
3	1% taught Mathematics and Modern Language	100% had training in Modern Language
1	taught Mathematics and Journalism	
1	taught Mathematics and Printing	
57	13% taught Mathematics and Commerce	28% had training in Commerce

Read Table thus: 201 or 47% of the Mathematics teachers taught nothing but Mathematics, of whom 93% had training in mathematics; 24 or 5% of the Mathematics teachers taught Mathematics and English, of whom 70% had training in English. Read in like manner for other combinations. Percents are to nearest whole number.

TABLE XVII

INDUSTRIAL ARTS TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
127	44% taught Industrial Arts only	98% had training in Industrial Arts
4	1% taught Industrial Arts and English	75% had training in English
53	17% taught Industrial Arts and Social Studies	51% had training in Social Studies
41	13% taught Industrial Arts and Mathematics	30% had training in Mathematics
54	17% taught Industrial Arts and Science	70% had training in Science
14	4½% taught Industrial Arts and Physical Education	79% had training in Physical Education
45	16% taught Industrial Arts and Agriculture	50% had training in Agriculture
	No Industrial Arts teachers taught Latin	
	No Industrial Arts teachers taught Home Economics	
	No Industrial Arts teachers taught Music	
	No Industrial Arts teachers taught Modern Language	
	No Industrial Arts teachers taught Journalism	
1	taught Industrial Arts and Printing	
21	7% taught Industrial Arts and Commerce	89% had training in Commerce

Read Table thus: 127 or 44% of all Industrial Arts teachers taught nothing but Industrial Arts, of whom 98% had at least a minor in Industrial Arts; 4 or 1% of all Industrial Arts teachers taught Industrial Arts and English, of whom 75% had training in English. Read in like manner for other combinations. Percents to nearest whole number.

TABLE XVIII

ENGLISH TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
374	43% taught English only	98% had training* in English
141	16% taught English and Social Studies	69% had training in Social Studies
37	4% taught English and Mathematics	24% had training in Mathematics
46	5% taught English and Science	41% had training in Science
13	1½% taught English and Physical Education	38% had training in Physical Education
4	½% taught English and Agriculture	50% had training in Agriculture
116	13% taught English and Latin	61% had training in Latin
51	6% taught English and Home Economics	50% had training in Home Economics
45	5% taught English and Music	40% had training in Music
1	taught English and Industrial Arts	
38	4½% taught English and Modern Language	73% had training in Modern Language
68	8% taught English and Journalism	44% had training in Journalism
1	taught English and Printing	
73	8% taught English and Commerce	15% had training in Commerce

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

Read Table thus: 374 or 43% of all English teachers taught English only, of whom 98% had training in English; 141 or 16% of all English teachers taught English and Social Studies, of whom 69% had training in Social Studies. Read in like manner for other combinations. Percents to nearest whole number.

TABLE XIX

SOCIAL STUDIES TEACHERS COMBINATIONS AND TRAINING

No.	% teaching in other fields	% with training in other fields
350	43% taught Social Studies only	98% had training* in Social Studies
101	13% taught Social Studies and English	68% had training in English
103	13% taught Social Studies and Mathematics	41% had training in Mathematics
124	15% taught Social Studies and Science	51% had training in Science
34	4% taught Social Studies and Physical Education	44% had training in Physical Education
40	5% taught Social Studies and Agriculture	25% had training in Agriculture
37	5% taught Social Studies and Latin	54% had training in Latin
19	2% taught Social Studies and Home Economics	63% had training in Home Economics
16	2% taught Social Studies and Music	62% had training in Music
51	6% taught Social Studies and Industrial Arts	23% had training in Industrial Arts
24	3% taught Social Studies and Modern Language	67% had training in Modern Language
3	taught Social Studies and Journalism	100% had training in Journalism
100	12% taught Social Studies and Commerce	16% had training in Commerce

*"Training" signifies 15 or more semester hours of college credit.

Read Table thus: 350 or 43% of all Social Studies teachers taught nothing but Social Studies, of whom 98% had training equal to at least a college minor of fifteen hours in Social Studies. Read in like manner for other combinations. Percents to nearest whole number.

These tables reveal clearly that the high school principals should be more cautious in assigning the subjects to be taught in combination. About 175 of the high schools of the state are members of the North Central Association, whose standards do not permit teachers to teach with less than fifteen hours of college preparation. When one considers this fact, it makes the percentages in Table VII (page 20) even more significant.

SUPPLY OF TEACHERS FOUND IN THE DIFFERENT ACADEMIC FIELDS

A different standard was used in compiling the data for Tables XX and XXI (pages 36 and 37 respectively). The reader will note that the number of teachers totals 6925 in Table XX (page 36). This fact may seem strange, when 5211 teachers were reported to be used in the entire study. In sorting the teachers for Table XX (page 36), all teachers were counted in any subject where the record showed the teacher to have fifteen or more hours of college preparation. For example, 1225 English teachers were listed. This number represents all the teachers of all subjects who teach classes in English with the fifteen or more hours preparation. There are some, of course, who teach classes in English with less than that amount of preparation. Column 2 of Table (page 36) shows the percent of teachers, teaching with the above mentioned preparation.

Table XXI (page 37) shows the distribution of all classes taught in the state by all teachers.

TABLE XX

TEACHERS WITH TRAINING IN THE DIFFERENT FIELDS

1 Subject Fields	2 Number of Teachers	3 Percent of Teachers
English-----	1223	16%
Social Studies-----	1153	17
Mathematics-----	609	10
Science-----	919	14
Latin-----	262	3
Modern Language-----	157	2
Industrial Arts-----	370	5
Home Economics-----	584	8
Commerces-----	563	8
Agriculture-----	262	4
Journalism-----	54	1
Music-----	579	8
Physical Education-----	177	2
Printing-----	<u>13</u>	<u> </u>
Total-----	6925	100

Read Table thus: Of all the high school teachers, there were 1223 teaching classes in English with fifteen or more semester hours of college preparation in English. This represented 16% of all teaching, of all subjects, in all classes, done with fifteen semester hours or more of college preparation.

TABLE XXI

PERCENT OF CLASSES FOUND IN THE DIFFERENT FIELDS

1	2
Subject Field	Percent
English-----	19%
Social Studies-----	16
Mathematics-----	10
Science-----	12
Latin-----	4
Modern Language-----	2
Industrial Arts-----	5
Home Economics-----	5
Commerce-----	12
Agriculture-----	4
Journalism-----	1
Music-----	7
Physical Education-----	3
Printing-----	6
Total-----	100

Read Table thus: Of all the individual classes taught by all the high school teachers of the state, 19% of them are English classes. Percents are to the nearest whole number.

In making up Table XX (page 36), it should be explained that it was possible for one teacher to be counted more than once. For example, if a teacher taught science with fifteen or more hours of preparation, music with that amount, and say a class in algebra with the same amount, then this teacher would be counted three times. The Table shows the number of times that teachers in the individual fields were found to be teaching classes with a college minor or better. As was suggested, Table XXI (page 37) has nothing to do with teachers. It is a study of the distribution of all the classes taught. About nineteen percent of the classes taught are found to be English classes, seventeen percent social studies classes, etc. In checking and comparing the two tables the percents run very close. This is a check of the supply of adequately prepared teachers in the several fields, against the number of classes taught. The point of greatest discrepancy is found in the commerce field. Commerce classes represent twelve percent of all classes taught and only eight percent of these classes are taught by teachers with adequate preparation. In the case of home economics the reverse is found. Of all the classes taught in high school, five percent of them are home economics classes. When these classes are placed on a basis of being taught by teachers with adequate preparation, the relative percentage is raised to eight percent. This seems to show that the supply of adequately prepared home economics teachers from a relative point of view is much greater.

CHAPTER IV

SALARIES PAID TEACHERS IN THE DIFFERENT ACADEMIC FIELDS

Are high school teachers in Kansas adequately paid? Has there been a satisfactory recovery from the drastic salary reductions made during the early nineteen thirties? If there has been satisfactory recovery made, is it general to all classes of teaching, or is it limited to certain classes? These questions are specifically answered in Table XXII in this chapter (page 41). In compiling the data for this study, the salaries paid to all the high school teachers of Kansas were used, except those in the teacher training and parochial high schools. There were a few instances where the salary was omitted on the principal's report to the state superintendent. These omissions represented about five percent of the total number. As the table indicates, the salaries were recorded by classes according to the several classes of teachers. For example, to be classed as a home economics teacher, a teacher was required to be teaching at least two classes in home economics with training equal to or greater than that found in any other two subjects taught in the same field. About ninety percent of the teachers were readily classified according to this plan. The college record of the teacher was frequently consulted in classifying many of the more difficult ones.

Each spring about March 1, many superintendents in Kansas have a questionnaire to answer on the salary question. About that time of year when boards of education are ready to consider the question of

salaries to be paid for the ensuing year, they seem to be very curious to know what other schools are paying or expect to pay. Often superintendents and boards of education are puzzled over the question of whether to pay one teacher more than another, and if so, how much, and on what basis can such a difference be justified. This study will be of some value in answering very definitely what salaries are paid in general, and to what classes of teachers in particular. The table shows the 1938 average to be seventy-six percent of the 1930 average. Myra E. Scott¹ found in her study of English teachers in the north central counties, an average salary of \$988.71 as compared with the state's average for English teachers, of \$1209.00.

It is interesting to compute the salary restoration in terms of percent. There seems to be no consistency in what restoration has been made by the several classes of teachers. The agriculture teachers are within twenty-one percent of the 1930 level; the home economics teachers are paid within twenty-six percent of that level; the English teachers are within seventeen percent of that level; the industrial arts and science teachers lag to twenty-nine percent and thirty-one percent, respectively, of the 1930 level. This condition throws the rankings off considerably in the two periods under consideration. It will be noticed that agriculture teachers are still the best paid group. Industrial arts teachers have slipped from second to third place and

¹ Myra E. Scott, "Better Training and Pay for Kansas Teachers." Kansas Teacher, February, 1938, Topeka, Kansas.

TABLE XXII

A 1930 AND 1938 COMPARISON OF SALARIES IN THE DIFFERENT FIELDS

1	2	3	4	5	6	7
Subject Field	Ridgway found 1930 Mean	Rank 1930	Irwin found 1938 Mean	Rank 1938	Amount of reduction	Percent of reduction
Vocational Agri- culture	\$2246	1	\$1765	1	\$481	21%
Industrial Arts	1876	2	1325	3	551	29
Physical Educa- tion	1855	3	1426	2	429	23
Science	1821	4	1259	7	562	30
Mathematics	1696	5	1273	5	423	25
Social Studies	1641	6	1261	6	380	23
Commerce	1556	7	1207	10	349	22
Modern Language	1555	8	1252	8	303	19
Latin	1526	9	1303	4	223	14
Music	1512	10	1160	11	352	23
English	1463	11	1209	9	254	17
Home Economics	1431	12	1068	12	363	26
Agriculture (Not Vocational)			1358			
Average of the Several Classes	1682		1282			

Read Table thus: In 1930 Ridgway found the mean salary paid the vocational agriculture teachers to be \$2246 with first rank among the fields. Irwin found the same class of teachers receiving as a mean salary in 1938, \$1765, with first rank. Column 6 shows the amount of reduction between the two years under comparison. Column 7 gives the percent of reduction to the nearest whole number.

physical education has jumped from third to second place among all the teachers. Home economics was the lowest paid group in 1930, but that place is now given to the music teachers. The music teachers' salaries, however, are probably the least reliable of any, since a large number of them work for both the school district and the municipality, and in many cases draw two salaries, one of which may not be reported to the State Superintendent of Public Instruction. The Latin teachers are found to have made a greater jump, relatively speaking, than any other class of teacher. It is thought that this is due to the very large percent of the Latin teachers, so classed, teaching in the first and second class cities where salary reductions were not made on so large a scale as was practiced in the smaller communities. This class of teacher is paid now within about fourteen percent of the 1930 level. On the whole, there is evidence that salaries have not made the recovery that is generally believed they have made.

CHAPTER V

WHERE KANSAS HIGH SCHOOL TEACHERS RECEIVE THEIR TRAINING

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 many teachers. In addition to the state colleges, there are fifteen private or parochial colleges and one municipal university, all training teachers for the public schools of Kansas. The two teachers colleges enroll annually, for the regular nine months term, about twenty-eight hundred students. All the state colleges combined enroll annually about twelve thousand students. The municipal university enrolls about thirteen hundred and the fifteen private colleges enroll around five thousand students. Table XXIIIb shows three teachers colleges. This was true until a recent enactment of the legislature. Since Fort Hays was for so long strictly a teachers college, it is only fair to count its graduates in with the graduates of the other two teachers colleges. When this is done, the total enrollment in the teachers colleges becomes about thirty-six hundred students.

This study was made purely on a basis of the bachelor's degree. No graduate work was taken into consideration. It was found that of all the teachers now teaching in Kansas, 4213 or seventy-six percent received the bachelor's degree from some institution in Kansas. This number represented 2059 men and 2154 women. Nine hundred ninety-nine or twenty-four percent were graduated from some college outside the

TABLE XXIIIa

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

1	2	3	4	5
Item	Men	Women	Total	Percent
Number of High School Teachers Trained in Kansas	2059	2154	4213	76
Number of High School Teachers Trained Outside the Borders of Kansas	365	634	999	24 <i>100%</i>

Read Table thus: There were 2059 men, 2154 women, or a total of 4213 of the high school teachers who received their training based on the bachelor's degree, 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	2	3
Item	Ridgway found in 1930	Irwin found in 1938
Percent of Teachers Trained in the State's Five Colleges	60%	63%
Percent of Teachers Trained in the State's Three Teachers Colleges	34%	38% <i>100%</i>

Read Table thus: Of all the high school teachers teaching in Kansas, Ridgway found in 1930, 60% of them were trained in the State's five colleges. Irwin in 1938 found 63%.

borders of Kansas. This number represented 365 men and 634 women.

Of the 4213 receiving their degrees from institutions in Kansas, 1606 or thirty-eight percent received their degrees from the two teachers colleges referred to above, and the Fort Hays State College, which was until recently specifically named a teachers college. Of the 4213 teachers, 2556 received their degrees from one of the five state colleges. This number represents sixty-three percent of the teachers trained in the state.

According to Table XXIIIb (page 44), three percent more of the teachers were trained in state institutions than was true in 1930. Four percent more of them are now trained in teachers colleges than was true in that year.

It is significant to check the percent of teachers trained against the enrollments of the schools. On doing this it is found that sixty-five percent of the enrollments are found in state colleges. These same colleges train sixty-three percent of the teachers. The three teachers colleges, including Fort Hays, enroll only nineteen percent of the students, but train thirty-eight percent of the teachers. It must be remembered that all these numbers and percents refer strictly to high school teachers. By deductions then, thirty-seven percent of the high school teachers of Kansas are trained in the private and parochial colleges of Kansas. The reader may draw his own conclusions as to how well the teachers colleges are fulfilling their mission in training teachers for the public high schools of Kansas.

CHAPTER VI

NUMBER OF FIELDS IN WHICH TEACHERS WORK

Some questions are raised and suggestions made in Chapter I, as to the number of fields in which teachers work, and the general trend of the spread of the college course. When the student in a teacher-training institution is in his senior year, he begins to wonder quite seriously if he has prepared himself in a sufficient number of fields to satisfy the demand being made for getting a job in a small Kansas high school. It is found that a large percent of the "one-field" teachers are working in the first and second class cities of the state. As a general rule, these schools all require experience of candidates considered for teaching in them. This means that a large portion of the younger candidates just finishing college will find positions in the third-class city high schools. In the third-class city high schools a very large portion of the teachers work in several fields of instruction.

Such interesting and important questions as these present themselves to the teacher-training institution: 1. Should the institution stress training specialists, and if so, in what fields should they require the greater specialization? 2. In just how many fields should the institution ask that the student take work? 3. How many hours should constitute a major or a minor, and should this number be the same in all departments? Is it not probable that different semester-hour requirements should be made for different fields? In examining the standard set up by the North Central Association, it is found that

there is considerable deviation in the several fields. Fifteen semester hours in the general field of English seems to be considered sufficient preparation, for the high school English teacher, to teach any branch of English. The standard for foreign language is different. The teacher in this field must have the fifteen semester hours in the specific language taught. The standard for science is different from that of either English or foreign language. The science teacher must have fifteen semester hours in the general field of science, of which five hours must be in the specific science taught. The preparation of the mathematics teacher is precisely the same as that of the English teacher. The standard for the teachers of social studies is a bit elastic. The standard says that the teacher must have fifteen hours in the general field and some specific preparation in each subject taught.

These standards made by the governing board of the North Central Association would seem to say that a teacher-training institution could not make a blanket requirement for teaching in all departments. Doubtless there is disagreement by department specialists, as to minimum requirements for teachers to teach in the several departments. Some compromise, then, would have to be made before standards could be set up.

With the integration movement making headway, as it seems to be, the teacher who prepares himself in several fields would be far better prepared to fit into this idea of instruction. The so-called "progressive" educators say that every teacher should be an English teacher, every teacher should be a mathematics teacher, etc. This

study does not attempt to prove the correctness of this stand. All it has tried to do is to make a careful check to find out just how many fields in which the Kansas high school teachers are working.

Table XXIV 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 field by subjects.

It is interesting to examine the table by subjects. There were so few printing teachers classed as such, that little attention is needed here. The commerce teachers, however, are teaching largely in one field, as are the teachers of physical education. Only thirty-four percent of the science teachers are working in one field. The records show that in the third-class city high schools, there are not sufficient classes in science to warrant the teacher of that subject working in only the one field. The same thing, of course, is true of the Latin and modern language teachers, and to some extent of the home economics teachers.

It should be noted that the sixty-six percent of the commerce teachers and the sixty-seven percent of the physical education teachers working in one field are not comparable. The reason is that there are 526 commerce teachers and only 135 physical education teachers so classified. About one hundred of the physical education teachers are found in the first and second class cities where there are sufficient classes found to warrant the "one-field" teacher in the subject. This is far from the case with the commerce teachers. There are about four

TABLE XXIV

NUMBER AND PERCENTS OF TEACHERS TEACHING IN SEVERAL FIELDS

Subject Field	Number	Number in Each Field					Percent in Each Field				
		1	2	3	4	5	1	2	3	4	5
English	867	374	360	116	14	3	43%	41%	13%	2%	$\frac{1}{2}\%$
Social Studies	809	404	271	113	20	1	49	33	14	2 $\frac{1}{2}$	
Mathematics	427	202	145	71	8	1	47	34	17	2	
Science	618	209	239	138	29	1	34	39	22	4	
Physical Education	138	91	32	8	4	0	67	23	6	3	
Agriculture	195	113	39	36	7		58	20	19	3	
Latin	122	25	66	29	2	0	20	54	22	2	
Home Economics	530	230	198	89	11	2	43	37	17	2	
Music	549	325	173	48	2	1	59	31	8	$\frac{1}{2}$	
Industrial Arts	305	133	109	55	8	0	43	36	18	2	
Modern Language	103	26	47	23	6	1	25	45	22	6	1
Journalism	15	3	5	2	0	0	53	33	13	0	
Printing	12	12	0	0	0	0	100	0	0	0	
Commerce	523	346	119	44	16	1	66	23	8	3	
Totals	5211	2498	1603	772	127	11	48	34	15	3	

Read Table thus: Of the 867 English teachers 374 were teaching in only one field, 360 in two fields, etc. Of this total number of English teachers, 43% were working in only one field, 41% in two fields, etc.

hundred of these teachers found in the third-class city high schools where one would expect to find the subject taught to a greater extent in combination with other subjects. The popularity of the commercial branches doubtless is responsible for the high percentage of "one-field" teachers for this subject even in the third class cities.

The most significant thing about the study is found in making the comparison with the Ridgway study which was made in 1930. The schools are definitely tending toward the one-subject field of instruction. Of all the teachers in 1938, forty-eight percent work in a single field as compared with forty-three percent in 1930.¹

¹ Ridgway, op. cit.

CHAPTER VII

KINDS OF 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. When rules are made affecting college preparation for teachers, they are seldom made retroactive. This makes the process of staffing the schools with a particular type of degree a gradual one. 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. In round numbers about fifty-six percent of all who administer high schools in Kansas hold the master's degree or something better. About nineteen percent of the classroom teachers are this well prepared. Of the advanced degrees held by administrators, a majority are found to be Masters of Science. There are one hundred ninety holders of the Masters of Arts and 199 holders of the Masters of Science. This division is not true for the high school teachers. Four hundred ten of them are found to be holding the advanced degree in science, and 595 are holders of the arts 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

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	No. of Admin.	No. and type of degree held						No degree
		A.M.	M.S.	A.B.	B.S.	Ph.D.	M.E.	
Class "A" Schools	341	122	117	33	43	4	13	12
Percent of All Degrees		36%	34%	9%	12%	1%	4%	4%
Class "B" Schools	227	59	62	42	66	0	7	4
Percent of All Degrees		22%	27%	19%	29%	0	3%	2%
Class "C" Schools	149	18	20	46	70	0	0	4
Percent of All Degrees		11%	15%	29%	44%	0	0	3%
Total and Summary	727	190	199	121	179	4	20	20
Percents		26%	26%	17%	24%	1/2%	3%	3%

Read Table thus: There are 341 administrators in class "A" schools of which 122 hold the A.M. degree; 117 the M.E. degree; etc. There are 227 administrators in the class "B" schools of which 59 hold the A.M. degree; 62 the M.S. degree; etc. Percents are to the nearest whole number.

Master of Arts degree rather than the Master of Science. Of the English teachers alone, 133 hold the arts degree and only forty-four, the science degree.

It is rather striking to find a larger number and percent of the administrators in class "A" schools with "no degree" than is found in the class "B" schools. It is likewise striking to find twenty-one percent of the class "A" schools administered by men and women with nothing higher than a bachelor's degree. Seventy-six of the 341 men and women administrators of class "A" schools are not yet holders of the master's degree. It is significant to notice the change in percents of those holding the master's degree from the class "A" down through the class "B" to the class "C" schools respectively. They run as follows: seventy percent in the class "A", forty-nine percent in the class "B" and twenty-four percent in the class "C" with an average of fifty-two percent in all three classes. There are twenty, or three percent of all the administrators in Kansas with no degree at all. School systems in the first and second class cities were counted as having two administrators. The superintendent of the city system and the high school principal were both counted in making up the table.

Of the academic teachers, the mathematics teachers are found to have a larger percent with the master's degree. Thirty-two percent of all the mathematics teachers hold the advanced degree. The modern language teachers follow closely with thirty-one percent and the social studies teachers with twenty-nine percent. It is surprising to find

TABLE XXVI

KIND OF DEGREE HELD BY THE TEACHERS IN THE SECONDARY SCHOOLS

Subject Field	No. of Teachers	Number Holding Kinds of Degrees					Percents Holding Kinds of Degrees				
		A.B.	B.S.	A.M.	M.S.	None	A.B.	B.S.	A.M.	M.S.	None
English	867	430	241	133	44	18	49%	28%	15%	5%	2%
Social Studies	809	322	247	152	82	2	39	30	19	10	0
Mathematics	427	136	163	66	68	13	30	37	16	16	3
Science	616	160	236	70	91	10	26	38	11	15	2
Physical Education	135	25	98	9	2	3	18	72	7	1	2
Agriculture	195	10	148	11	25	1	5	76	5	13	0
Latin	122	75	18	20	9	1	69	14	16	7	1
Home Economics	530	162	305	27	22	14	30	57	5	4	3
Music	549	180	283	22	17	47	33	51	4	3	9
Industrial Arts	305	32	226	14	28	6	10	74	5	9	2
Modern Language	103	49	16	31	1	0	47	15	30	1	0
Journalism	15	4	5	4	1	1	27	33	27	7	7
Printing	12	4	6	1	1	0	33	50	8	8	0
Commerce	526	138	318	35	19	13	26	60	7	4	3
Totals	5211	1725	2310	595	410	129	33	44	11	8	3

Read Table thus: Of the 867 English teachers, 430 held the A.B. degree, 241 the B.S., etc. There are 49% with A.B. degrees and 28% with B.S. degrees, etc.

that the English teachers are academically not nearly so well trained. Only twenty percent of the English teachers hold the master's degree. It is somewhat striking to find thirty percent of the home economics teachers holding the bachelor of arts degree rather than the science degree. Only ten percent of the industrial arts teachers hold the arts degree. This may mean that, relatively, a larger percent of the home economics teachers are trained in the private and parochial schools than are the industrial arts teachers.