

ACADEMIC PREPARATION AND CHARACTERISTICS OF
TEACHERS OF GIRLS' PHYSICAL EDUCATION
IN KANSAS HIGH SCHOOLS 1966-67

568

A Thesis

Presented to
the Faculty of the Graduate Division
Kansas State Teachers College

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

by

Kay Good

May 1967

Janne C. Galley
Approved for the Major Department
Committee Chairman

Dorothy Martin
Committee Member

R. Shady
Committee Member

James L. Boyer
Approved for the Graduate Council

ACKNOWLEDGEMENT

I wish to express my appreciation to Jeanne C. Galley, my adviser, at whose suggestion and under whose supervision this study was made and to Dorothy Martin and Marvin Schadt who served as committee members.

I am grateful to my husband, Wally, for his encouragement and advice in the writing of this thesis.

A word of thanks is due to the officials and personnel of the State Department of Public Instruction, Topeka, Kansas, for the use of their resources in making this study possible.

TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
CHAPTER	
I. INTRODUCTION	1
Purpose of the Study	3
Limitations of the Study	4
Procedures of the Study	4
Definition of Terms	5
II. REVIEW OF THE LITERATURE	7
III. FINDINGS OF THE STUDY	12
Teachers of Girls' Physical Education	12
Academic Preparation of Women Physical Education Teachers	17
Ages of Women Physical Education Teachers	24
Teaching Experience of Women Physical Education Teachers	26
Teaching Assignments of Women Physical Education Teachers	28
Salaries of Women Physical Education Teachers	30
Relationship Between Salaries and Physical Education Hours	32

CHAPTER	PAGE
IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	34
BIBLIOGRAPHY	40

LIST OF TABLES

TABLE	PAGE
I. Girls' Physical Education Teachers in Relation to Size of Schools	13
II. Girls' Physical Education Teachers in Relation to Type of School Organization	15
III. Full-time and Part-time Women Teachers in Relation to Type of School Organization	16
IV. Kansas College and University Baccalaureate Degrees and Year of Graduation of Women Physical Education Teachers in Kansas	18
V. Number of Teachers from Out-of-State Colleges and Year of Degree	20
VI. Number of Teachers From All Colleges and Year of Degree	21
VII. Total College Semester Hours of Women Physical Education Teachers	23
VIII. Physical Education Credit Hours of Women Physical Education Teachers	25
IX. Age of Women Physical Education Teachers	26
X. Years of Teaching Experience	27
XI. Teaching Assignments of Women Physical Education Teachers According to System Type	29
XII. Salaries of Women Physical Education Teachers	31
XIII. Relationship Between Salaries and Physical Education Hours of Women Physical Education Teachers	33

CHAPTER I

INTRODUCTION

The importance of physical fitness has been the subject of widespread attention in the United States in recent years. Some of this attention has been due to the need for military preparedness, international athletic competition, and the assumption that physical health is basic to personal adjustment.

In addition to the fitness objectives of physical education, there has been growing recognition of the importance of the mental and social goals of physical education programs in the schools.¹ Public schools, especially, have accepted responsibility for physical education. In most states secondary school students are required to take courses in physical education.

The increased interest in physical education as a means of achieving desirable objectives has led to a concern about the qualifications of teachers of physical education. As stated by Rarick,

The profession has recognized that improved services to children rest largely upon the personal and professional qualities of the teachers trained in the professional programs.²

The relationship of teacher qualifications to achievement of physical education objectives is probably not clear, but it may be

¹G. Lawrence Rarick, "Physical Education," Encyclopedia of Educational Research, ed. Chester L. Harris (third edition: New York: Macmillan Company, 1960), p. 980.

²Ibid.

assumed that the better programs are developed by teachers who meet highest standards of qualification. The difficulty of evaluating a physical education program has been recognized.

Probably the best way to evaluate the physical education program in a school is to measure the progress pupils make under the influence of the program. To do this at present is extremely difficult because there is not an adequate supply of scientifically constructed achievement tests which might be used, and further, the hereditary and environmental conditions affecting pupils are so numerous and variable that one can never be certain as to how much of a pupil's progress in physical education is due to the school program and how much is due to outside factors.³

A possible way of evaluating a program would be to consider the qualifications of the teacher. One of the measures of teacher qualification frequently used is academic preparation. The earliest recognition in this country of the fact that physical education teachers needed special professional preparation was in 1861 in Boston when Dio Lewis, a physician, opened the first school in this country to prepare teachers of physical education.⁴ Today almost all four year accredited colleges and universities throughout the United States offer numerous and varied courses in physical education as part of teacher training programs. The assumption that there is a relationship between the amount and kind of academic

³N. P. Nielson and Glenn W. Arnett, A Score Card for Use in Evaluating Physical Education Programs in Elementary Schools (University of Utah Press, 1955), p. 2.

⁴Helen R. Haggerty, Certain Factors in the Professional Education of Women Teachers of Physical Education (New York: Columbia University, 1938), p. 1.

preparation of the teacher and the achievement of objectives of physical education may be questionable, but if this assumption can be made, an inquiry into the amount and kind of academic preparation of teachers of physical education should yield important information. Mohr indicates the need for more research in this area by pointing out that in a recent four year period only sixteen out of 450 different studies in physical education made by women were found in the area of teacher training.⁵

PURPOSE OF THE STUDY

The purpose of this study was to determine selected aspects of the amount and kind of academic preparation of teachers of girls' physical education in Kansas public secondary schools. A related purpose was to secure information about some of the characteristics of these teachers. Some of the questions to be answered were: What proportion of girls' physical education classes were taught by men in Kansas' secondary schools? Did the size of school or type of school organization have any relationship as to which sex taught girls' physical education in these schools? How many part-time women physical education teachers were there and in what type of school organization did they teach? How many Bachelor's and Master's degrees

⁵Dorothy R. Mohr, "Recent Research Pertaining to Physical Education and Sports by Women in the United States," Expanding Horizons in Physical Education, Report of the 4th International Congress on Physical Education and Sports for Girls and Women (Washington: International Association of Physical Education and Sports for Girls and Women, 1962), p. 163.

were there? From what colleges did women physical education teachers graduate and in what year? What was the amount of college preparation of women physical education teachers in regard to total semester hours of college credit and semester hours credit in physical education? What were the ages of women physical education teachers, and how many years had they taught? How mobile had this group of women teachers been? What were the other teaching fields of women physical education teachers? What were their salaries? Was there a relationship between the number of college physical education semester hours of women physical education teachers and the salaries they were paid?

LIMITATIONS OF THE STUDY

The portions of the study which dealt with academic preparation, age, teaching experience, teaching assignments, and salaries included only women teachers of girls' physical education in Kansas secondary schools. No attempt was made to analyze academic preparation except in terms of degree institutions, degrees earned, dates of graduation, total semester hours and semester hours of credit in physical education of women physical education teachers.

PROCEDURES OF THE STUDY

Data for the study was taken from the High School Principals' Organization Reports and college transcripts on file in the Kansas State Department of Public Instruction. Reports for the 1966-67 school year were examined, and the data was transferred to tally

sheets. Tables were constructed to assist in the analysis of the data, and a description of the data was written.

The design of the present study follows the general pattern used by Baker and Brooks,⁶ Sare,⁷ and Burger,⁸ who studied academic preparation of teachers of science, social science, and mathematics, respectively.

DEFINITION OF TERMS

Academic Preparation

The term "academic preparation" refers to college or university education of the teachers in the study. The various institutions, degrees earned, dates of graduation, total semester hours and semester hours of credit in physical education were analyzed in this study. The term "hour" refers to semester credit hour.

Part-time Teachers

Part-time teachers were those who taught less than full-time in Kansas Senior high schools according to the High School Principals' Organization Reports.

⁶Weldon N. Baker and Merle E. Brooks, "Background and Academic Preparation of the Teachers of Science in the High Schools of Kansas 1955-56," The Emporia State Research Studies, Vol. 6, No. 2, December, 1957.

⁷Harold V. Sare, "Background and Academic Preparation of the Social Science Teachers in the High Schools of Kansas 1956-57," The Emporia State Research Studies, Vol. 7, No. 2, December, 1958.

⁸John M. Burger, "Background and Academic Preparation of the Mathematics Teachers in the Public High Schools of Kansas 1957-58," The Emporia State Research Studies, Vol. 7, No. 3, March, 1959.

Type of School Organization

There were three main types of school organizations identified in the High School Principals' Organization Reports. Those designated as 8-4 systems in this study include grades nine through twelve in a secondary or senior high school. In those referred to as 6-3-3 systems, the secondary school unit for the purposes of this study included grades ten through twelve. Where grades seven and eight were included in the reports, the system was designated as a 6-6 organization.

CHAPTER II

REVIEW OF THE LITERATURE

The academic preparation of teachers of girls' physical education has been studied both as a part of general studies on teacher preparation and as specific research in the area of physical education. Some research deals with the nation-wide status of physical education teachers and other studies relate only to Kansas.

A recent publication of the American Association of Health, Physical Education and Recreation offers suggestions for improvement of professional preparation of teachers of physical education in the United States. Recommendations are as follows:

1. that teachers of secondary physical education should be required to complete five years of preparation beyond high school;
2. that the profession should determine the nature of professional preparation and;
3. that state certification requirements should not be regarded as the optimum standards for a professional program.¹

The importance of well-planned and accredited programs of professional preparation for teachers of physical education has

¹American Association of Health, Physical Education, and Recreation, Profession Preparation. (Washington: AAHPER, 1962), p. 5.

been recognized.² The American Association of Health, Physical Education and Recreation has recommended that programs for educating teachers of physical education be accredited by the National Council for Accreditation of Teacher Education as a means of insuring that acceptable standards of quality are sought.³

Dexter and Morehouse compared the minimum certification requirements for physical education teachers in the fifty states for the years 1953 and 1959. Professional education requirements increased from an average of 16.14 semester hours per state in 1953 to 17.66 semester hours in 1959. The general trend has been to increase the requirements for certification of physical education teachers. Dexter and Morehouse concluded the process is slow with not much uniformity in procedure partly because certification requirements vary from state to state and it would be difficult to arrange curriculum so that a teacher-training institution could prepare its physical education graduates for certification in all fifty states.⁴

Griffitts studied the preparation of physical education teachers in Kansas high schools and concluded teachers in small schools were most inadequately prepared. Griffitts did not distinguish between teachers of girls' and boys' classes. He further

²Ibid., p. 113.

³Ibid., p. 112.

⁴James Dexter and Laurence E. Morehouse, "Certification Requirements of Physical Education Teachers between 1953 and 1959," Research Quarterly, 32:20-25, March, 1961.

concluded the problem of inadequate preparation could be improved by elimination of the smaller schools through reorganization and consolidation of school districts.⁵

Studies of the college preparation, teaching combinations and salaries of all Kansas high school teachers were made by Ridgway, Irwin and Lockard. The data for these studies were taken from the high school principals' organization reports which are on file in the office of the State Superintendent of Public Instruction, Topeka, Kansas.

Ridgway's study thirty-five years ago revealed 22 per cent of the physical education teachers in Kansas taught only physical education. Other subjects included with the teaching of physical education in the order of their frequency were industrial arts, social studies, science, and mathematics.⁶

Irwin reported in 1938 that 67 per cent of the physical education teachers taught only one subject. Teaching combinations in order of frequency were: science, social studies, and industrial arts. The percentage and kind of college degrees held by 135 physical education teachers were Bachelor of Arts, 18 per cent; Bachelor

⁵Frank E. Griffitts, "A Comparative Study of the Status of Physical Education Teachers in the High Schools of Kansas" (unpublished Master's thesis, Kansas State Teachers College, Emporia, 1955), pp. 28, 29.

⁶C. W. Ridgway, "A Comparative Study of the Training and Teaching Combinations of Kansas High School Teachers" (unpublished Master's thesis, Kansas State Teachers College, 1931), pp. 22, 35.

of Science, 72 per cent; Master of Arts, 7 per cent; Master of Science, 1 per cent; and no degree, 2 per cent.⁷

Lockard replicated the work of Ridgway and Irwin and made some comparisons with their studies. Lockard's study revealed 62 per cent of the physical education teachers in Kansas taught only physical education classes. Twenty-two per cent of the physical education teachers taught one other subject and 9 per cent taught three subjects. Fields other than physical education in which these teachers taught were, in order of frequency, science, social studies, and English. Eighty-five per cent of the physical education teachers had a major or minor in their teaching field. Physical education classes were taught by 343 teachers whose major field was not physical education. Of this number 18 per cent had fifteen hours or more of physical education preparation, and 82 per cent of these teachers had less than fifteen hours in physical education. The percentage and kind of college degrees held by 135 physical education teachers were Bachelor of Arts, 21 per cent; Bachelor of Science, 53 per cent; Master of Arts, 15 per cent; Master of Science, 5 per cent; and no degree, 6 per cent.⁸

⁷Frank L. Irwin, "A Comparative Study of the College Preparation, Teaching Combinations, and Salaries Paid to the High School Teachers of Kansas" (unpublished Master's thesis, Kansas State Teachers College, Emporia, 1938), p. 26.

⁸Gene K. Lockard, "A Comparative Study of the College Preparation, Teaching Combinations, and Salaries of Kansas High School Administrators and Teachers," Kansas State Teachers College Bulletin of Information, Vol. 26, No. 11, November, 1946, pp. 26-27.

A recent study of physical education teachers in Kansas was made in 1964 by Schmidt who dealt with preparation, tenure, teaching duties, coaching duties, and salaries of all physical education teachers employed in Kansas high schools during the 1962-63 school year. Some of his findings were that 718 males and 262 females taught physical education in Kansas high schools, that about three-fourths of Kansas physical education teachers received undergraduate degrees from Kansas colleges and universities, that women physical education teachers had an average of a little over seven years of teaching experience, and that the annual salaries of full-time women physical education teachers ranged from \$3600 to \$7700.⁹

A study on the academic preparation of teachers in school systems with over 50,000 pupils in comparison to the total group of teachers in public schools in America provided information about ages, degrees, and experience for comparison with women physical education teachers in Kansas.¹⁰

To the author's knowledge there has been no study which has been concentrated on women physical education teachers in Kansas.

Eldon P. Schmidt, "A Study of Some Factors in the Status of High School Physical Education Teachers in Kansas, 1962-1963," (unpublished Master's thesis, University of Kansas, Lawrence, 1964), pp. 36-39.

"Teachers in Large School Systems, 1966." NEA Research Bulletin, 45:2, May, 1967, pp. 57-59.

CHAPTER III

FINDINGS OF THE STUDY

TEACHERS OF GIRLS' PHYSICAL EDUCATION

During the 1966-67 school year there were 496 teachers of girls' physical education in Kansas. Of this number, 275 (55.4 per cent) were women and 221 (44.6 per cent) were men. Although this study dealt only with women teachers of girls' physical education it may be of interest to note in what size of schools and in what types of school organization men and women teachers of girls' physical education were employed.

Table I, page 13, shows that in 8-4 school systems, girls' physical education was taught by 199 men (40.1 per cent of all teachers of girls' physical education) and 163 women (32.9 per cent). In the 6-3-3, 6-6 schools only twenty-two men (4.4 per cent) and 112 women (22.6 per cent) taught girls' physical education. The 8-4 schools employed 362 (73 per cent) of the teachers of girls' physical education out of a total of 496, and the 6-3-3, 6-6 schools employed 135 teachers (27 per cent) out of the same total.

Following are a few details in regard to the size of schools where men taught girls' physical education. In the 8-4 school systems, 125 (62.8 per cent) out of a total of 199 men taught girls' physical education in schools with enrollments under 100. Sixty-one men (30.7 per cent) taught in schools of 100-200 pupils. One hundred eighty-six (93.5 per cent) of all male teachers of

TABLE I
 GIRLS' PHYSICAL EDUCATION TEACHERS IN
 RELATION TO SIZE OF SCHOOLS

Enrollment	8-4 Teachers			6-3-3 and 6-6 Teachers			Total
	M	F	Total	M	F	Total	
2700-2800					6	6	6
2600-2700					0	0	0
2500-2600					0	0	0
2400-2500					8	8	8
2300-2400					3	3	3
2200-2300					15	15	15
2100-2200					0	0	0
2000-2100					5	5	5
1900-2000					4	4	4
1800-1900					3	3	3
1700-1800					3	3	3
1600-1700					2	2	2
1500-1600					1	1	1
1400-1500					0	0	0
1300-1400					0	0	0
1200-1300					6	6	6
1100-1200		1	1		4	4	5
1000-1100					6	6	6
900-1000		4	4		5	5	9
800- 900		1	1		6	6	7
700-800		1	1	1	2	3	4
600-700		1	1		4	4	5
500-600		6	6		8	8	14
400-500		13	13	1	4	5	18
300-400	1	13	14	0	4	4	18
200-300	12	48	60	2	6	8	69
100-200	61	43	104	9	7	16	120
Under 100	125	32	156	9		9	165
Totals	199 (40.1%)	163 (32.9%)	362 (73%)	22 (4.4%)	112 (22.6%)	134 (27%)	496

girls' physical education in 8-4 schools were employed in the smaller high schools of the state with enrollments of less than 200 pupils. Table I shows that no male teacher of girls' physical education taught in an 8-4 school system with an enrollment larger than 400 and only two men taught in 6-3-3 and 6-6 systems with over 400 in the high school. In 6-3-3 and 6-6 school systems all but four of the male teachers taught in schools with less than 200 pupils.

As Table I indicates, the largest high school where women physical education teachers taught was in the 2700-2800 pupil range which was a 6-3-3 school. No women physical education teachers taught in a 6-3-3 or 6-6 school system with an enrollment of less than 110 high school pupils. One hundred and twenty-three of 275 women teachers (44.7 per cent) taught in 8-4 high schools with less than 300 students. One-third of all teachers of girls' physical education, 165 out of 496, taught in schools with enrollments of less than 100 students, and three-fourths, 125 out of 165, of this group were male teachers in 8-4 systems.

Table II, page 15, shows the number and percentages of male and female teachers in relation to the type of school organization in which they taught. One hundred sixty-three (59.3 per cent) out of a total of 275 women physical education teachers taught in 8-4 school systems. In 6-3-3 systems, nine out of ten teachers of girls' physical education were women. Women who taught in 6-3-3 systems accounted for 30 per cent of the total number of girls' physical education teachers and 36 per cent of the women teachers.

There were thirteen (2.6 per cent) women teachers of physical education in 6-6 school systems in Kansas.

TABLE II
GIRLS' PHYSICAL EDUCATION TEACHERS IN RELATION TO
TYPE OF SCHOOL ORGANIZATION

Type of School Organization	No.	Female Teachers		Male Teachers			Total	% of Total
		% of Women	% of Total	No.	% of Men	% of Total		
8-4	163	59.3%	32.8%	199	90.0%	40.1%	362	73.0%
6-3-3	99	36.0	20.0	9	4.1	1.8	108	21.8
6-6	13	4.7	2.6	13	5.9	2.6	26	5.2
Total	275	100.0%	55.4%	221	100.0%	44.6%	496	100.0%

The largest group of male physical education teachers, 199 (90 per cent) out of a total of 221 men, was located in 8-4 school systems. Nine men taught in 6-3-3 schools (4.1 per cent of the men, 1.8 per cent of the total) and thirteen (5.9 per cent of the men, 2.6 per cent of the total) taught in 6-6 schools.

Although there were only fifty-four fewer men than women teaching girls' physical education in Kansas in the school year 1966-67, the proportion of men teaching girls' physical education had decreased considerably since a study by Schmidt four years earlier.¹¹ According to Schmidt's study 371 men, or 150 more than in 1966-67, were teaching girls' physical education during the school year 1962-63.

¹¹Schmidt, op. cit., p. 25.

Full-time and Part-time Physical Education Teaching by Women

Table III shows the number of full-time and part-time women teachers in relation to type of school organization. Part-time teachers in this study were those who taught less than full-time in the senior high schools as indicated on the High School Principal's Organization Report.

TABLE III

FULL-TIME AND PART-TIME WOMEN TEACHERS IN RELATION
TO TYPE OF SCHOOL ORGANIZATION

Time Status of Teachers	No. of Teachers in 8-4 Systems	No. of Teachers in 6-3-3, 6-6 Systems	Total
Full-time	77 (28.0%)	96 (34.9%)	173 (62.9%)
Part-time	86 (31.3%)	16 (5.8%)	102 (37.1%)
Total	163 (59.3%)	112 (40.7%)	275 (100.0%)

As Table III indicates, 173 (62.9 per cent) of the women who taught physical education were full-time teachers and 102 (37.1 per cent) were part time teachers.

A majority of the women teachers of girls' physical education, 163 out of a total of 275 (59.3 per cent) were employed in school systems organized on the 8-4 plan. Eighty-six of the 102 part-time women physical education teachers (84.3 per cent) were employed in 8-4 systems. The larger schools, which used the 6-3-3 plan, employed a small percentage of part-time teachers (16 or 5.8 per cent of all the women), while

ninety-six (34.9 per cent) were full-time women teachers of girls physical education.

ACADEMIC PREPARATION OF WOMEN PHYSICAL
EDUCATION TEACHERS

College Degrees

In 1966-67 every woman physical education teacher in Kansas held a baccalaureate degree, and thirty-six (13.1 per cent) of the women teachers had master's degrees. Table IV shows where women physical education teachers received their baccalaureate degrees and the year of graduation from Kansas colleges. The chart shows the number of graduates teaching physical education yearly from 1960 to the present, and before 1960 the groupings are made by decades.

Of the 275 women physical education teachers, 205 (74.5 per cent) received their undergraduate degrees from Kansas colleges and universities, and seventy (25.5 per cent) received baccalaureate degrees from out-of-state schools.

The six state colleges and universities graduated 150 (73.2 per cent) of the 205 women physical education teachers who received baccalaureate degrees in Kansas. The independent colleges graduated forty-eight (23.5 per cent) and the only municipal university, Washburn, produced seven graduates (3.4 per cent).

As indicated by Table IV, the largest number (fifty-five, or 26.8 per cent) of women physical education teachers who received

TABLE IV

KANSAS COLLEGE AND UNIVERSITY BACCALAUREATE
DEGREES AND YEAR OF GRADUATION OF
WOMEN PHYSICAL EDUCATION
TEACHERS IN KANSAS

College or University	Year of Graduation												Total	Per Cent
	1966	1965	1964	1963	1962	1961	1960	Total 1960's	1950's	1940's	1930's	1920's		
Kansas State Colleges & Universities	25	24	17	11	8	5	5	95	27	17	9	2	150	73.2
KSTC, Emporia	11	10	11	3	4	3	2	44	4	6	1	0	55	26.8
KSC, Pittsburg	5	1	3	6	2	1	1	19	6	5	1	0	31	15.1
Ft. Hays State	4	8	2	0	0	0	2	16	5	1	3	0	25	12.2
Ks. State Univ.	5	3	0	2	0	1	0	11	4	2	2	0	19	9.3
Univ. of Kans.	0	1	1	0	1	0	0	3	5	2	1	1	12	5.9
Wichita St. Univ.	0	1	0	0	1	0	0	2	3	1	1	1	8	3.9
Kans. Independent Colleges & Universities	7	11	6	2	2	3	2	33	7	5	2	1	48	23.5
Southwestern	3	3	0	0	0	1	1	8	2	0	0	0	10	4.9
Ottawa Univ.	2	4	0	0	0	0	0	6	0	2	1	0	9	4.4
Baker Univ.	0	0	2	0	0	0	0	2	0	2	0	1	5	2.4
Friends Univ.	0	1	3	0	1	0	0	5	0	0	0	0	5	2.4
McPherson Col.	0	1	0	0	1	0	0	2	2	1	0	0	5	2.4
Bethel College	1	0	0	0	0	1	0	2	2	0	0	0	4	2.0
Sterling Col.	0	0	1	1	0	0	1	3	1	0	0	0	4	2.0
Kans. Wesleyan	0	0	0	0	0	1	0	1	0	0	1	0	2	1.0
Bethany Col	0	0	0	1	0	0	0	1	0	0	0	0	1	.5
C. of E.	0	1	0	0	0	0	0	1	0	0	0	0	1	.5
Marymount Col.	0	1	0	0	0	0	0	1	0	0	0	0	1	.5
St. Mary(Xavier)	1	0	0	0	0	0	0	1	0	0	0	0	1	.5
Kans. Municipal University														
Washburn Univ.	0	2	1	2	0	1	1	7	0	0	0	0	7	3.4
Total Kansas Colleges & Universities	32	37	24	15	10	9	8	135	34	22	11	3	205	100.0%

baccalaureate degrees from Kansas institutions were graduates of Kansas State Teachers College, Emporia. Kansas State College of Pittsburg and Fort Hays Kansas State College ranked second and third with thirty-one (15.1 per cent) and twenty-five (12.2 per cent) respectively.

In 1966-67 there were only three women physical education teachers in Kansas high schools who had received baccalauerate degrees since 1960 from the University of Kansas, the state's largest university.

The independent college that graduated the most women physical education teachers was Southwestern College with ten women (4.9 per cent) and the second ranked independent college was Ottawa University with nine (4.4 per cent) graduates.

Thirty-six out of seventy (51.4 per cent) out-of-state women graduates teaching girls' physical education in Kansas received baccalaureate degrees at Oklahoma colleges or universities, as indicated in Table V.

Forty-nine (17.8 per cent) of the total number of women physical education teachers received their degrees in 1965, according to Table VI. Graduates of 1966 ranked second in number, thirty-eight (13.8 per cent). One hundred seventy-two (62.5 per cent of the 275 teachers) received their degrees in the 1960's which indicates that three-fifths of the teachers are fairly recent college graduates.

TABLE V
 NUMBER OF TEACHERS FROM OUT-OF-STATE
 COLLEGES AND YEAR OF DEGREE

State	Year of Graduation												Total	Per Cent
	1966	1965	1964	1963	1962	1961	1960	Total 1960's	1950's	1940's	1930's	1920's		
Oklahoma	4	5	3	2	2	3	2	21	13	1	1	0	36	51.4
Missouri	0	2	0	1	0	0	0	3	5	2	0	0	10	14.3
Nebraska	1	1	0	0	0	0	1	3	1	1	0	1	6	8.6
Iowa	0	0	0	1	0	0	0	1	0	0	1	1	3	4.3
Colorado	1	1	0	0	0	0	0	2	0	0	0	0	2	2.9
Texas	0	0	0	0	0	0	0	0	2	0	0	0	2	2.9
Indiana	0	0	0	0	0	0	1	1	1	0	0	0	2	2.9
Illinois	0	0	1	0	0	0	0	1	0	1	0	0	2	2.9
Arkansas	0	0	0	0	1	0	0	1	1	0	0	0	2	2.9
Others	0	2	1	0	0	1	0	4	0	1	0	0	5	7.1
Total Out-of-State	6	12	4	4	3	4	4	37	23	6	2	2	70	100.0

TABLE VI
 NUMBER OF TEACHERS FROM ALL COLLEGES
 AND YEAR OF DEGREE

	Year of Degree												
	1966	1965	1964	1963	1962	1961	1960	Total 1960's	1950's	1940's	1930's	1920's	
Kansas Schools	32	37	24	15	10	9	8	135	34	22	11	3	205
Out-of-State Schools	6	12	4	4	3	4	4	37	23	6	2	2	70
Totals	38	49	28	19	13	13	12	172	57	28	13	5	275
Per cent of Women Teachers	13.8	17.8	10.2	6.9	4.7	4.7	4.4	62.5	20.7	10.2	4.7	1.8	100%

Thirty-six (13.1 per cent) of the women physical education teachers in Kansas held master's degrees.¹² Nineteen (52.8 per cent) were granted by Kansas institutions and seventeen (47.2 per cent) by out-of-state institutions. Ten of the seventeen out-of-state master's graduates received their degrees in the 1960's, four in the 1950's, two in the 1940's, and one in the 1930's. Nine of the nineteen (47.4 per cent) teachers who received master's degrees from Kansas institutions, received them at Kansas State Teachers College of Emporia, four at Kansas State College, Pittsburg, and three each at Wichita State University and the University of Kansas. Fourteen of these teachers received their degrees in the 1960's, four in the 1950's and one in the 1940's.

The facts that seventeen teachers out of the thirty-six (47.2 per cent) received master's degrees from out-of-state institutions and seventy out of 275 (25.5 per cent) teachers received undergraduate degrees from out-of-state institutions indicate that over one-fourth of the women physical education teachers received part or all of their training out-of-state.

The greatest number of women physical education teachers with master's degrees taught in the larger school systems of the state. Wichita had the most master degree teachers with eleven (30.6 per cent); Shawnee Mission had three (8.3 per cent); Kansas City had two (5.6 per

¹²In the 1965-66 school year, 21.9 per cent of all public school teachers had master's degrees. NEA Research Bulletin, op. cit., p. 57.

cent). Twenty-three (63.9 per cent) teachers with master's degrees taught in 6-3-3 school systems, twelve (33.3 per cent) taught in 8-4 systems and one (2.8 per cent) in a 6-6 system.

Total College Credit Hours

An attempt was made to find out how well prepared the women physical education teachers were in regard to the total semester hours of college credit and total semester hours credit in the teaching field of physical education. Only 240 of the 275 teachers were included in this portion of the study due to the incomplete reports in which the total semester hours or teaching field hours were omitted, or because the data showed inconsistencies.

Table VII indicates the total number of college hours in groups of twenty hours and the number of teachers in each group. The teacher with the most recorded hours had 217 semester hours credit. In Table VII, the first range of 120-139 semester hours included over half of the teachers, 129 (53.7 per cent),

TABLE VII
TOTAL COLLEGE SEMESTER HOURS OF WOMEN
PHYSICAL EDUCATION TEACHERS

Total Semester Hours	Number of Teachers	Per cent of Teachers
120-139	129	53.7%
140-159	60	25.0%
160-179	39	16.3%
180-199	9	3.7%
200-219	3	1.3%
Total	240	100.0%

Physical Education Credit Hours

Table VIII shows the number of physical education hours recorded on the High School Principal's Organization Reports for women physical education teachers. The most semester hours in the field of physical education held by women physical education teachers was 107. Three teachers were reported to have earned less than eight hours of credit in physical education.

One hundred and thirty four teachers (55.8 per cent) of the 240 teachers had earned forty or more semester hours in physical education. Twenty-one teachers (8.7 per cent) had earned less than the twenty-four semester hours state minimum requirement.¹³

AGES OF WOMEN PHYSICAL EDUCATION TEACHERS

Of the 275 women physical education teachers in Kansas, 166 (60 per cent) were less than thirty years of age. According to the National Education Association's statistics for 1965-66, 33.9 per cent of all public school teachers were below thirty years of age.¹⁴

The youngest woman physical education teacher in Kansas was twenty-two years old and the oldest was sixty-nine. Slightly over twenty per cent of the women were in their thirties, 12.4 per cent

¹³Certification Handbook, State of Kansas, January 1, 1967. Issued by W. C. Kampschroeder, State Superintendent of Public Instruction and the State Board of Education, Topeka, Kansas, p. 55.

¹⁴NEA Research Bulletin, op. cit., p. 57.

TABLE VIII
 PHYSICAL EDUCATION CREDIT HOURS OF WOMEN
 PHYSICAL EDUCATION TEACHERS

Credit Hours Physical Education	Number of Teachers	Per Cent of Teachers
Less than 8	3	1.2
8-15	8	3.3
16-23	10	4.2
24-31	36	15.0
32-39	49	20.4
40-47	54	22.5
48-55	36	15.0
56-63	15	6.2
64-71	11	4.6
72-79	9	3.8
80 and over	9	3.8
Total	240	100.0%

were in their forties, 4.4 per cent in their fifties, and 2.2 per cent in their sixties, as shown in Table IX.

TABLE IX
AGE OF WOMEN PHYSICAL EDUCATION TEACHERS

Years of Age	No.	8-4 Systems		6-3-3 and 6-6 Systems			Total	Per Cent
		Per Cent	% of Total	No.	Per Cent	% of Total		
20-29	108	66.3	39.3	58	51.8	21.1	166	60.4
30-39	26	16.0	9.4	31	27.7	11.3	57	20.7
40-49	17	10.4	6.2	17	15.2	6.2	34	12.4
50-59	11	6.7	4.0	1	.9	.4	12	4.4
60-69	1	.6	.4	5	4.4	1.8	6	2.2
Totals	163	100.0%	59.3%	112	100.0%	40.7%	275	100.0%

More teachers were twenty-four years of age than any other age with fifty teachers (18.2 per cent) in this group. The next most frequent age was twenty-five with twenty-six (9.6 per cent) of the total. The average age of the woman physical education teacher was thirty-one years and seven months. The average age of all public school teachers in 1965-66 was thirty-eight and seven-tenths years.¹⁵

TEACHING EXPERIENCE OF WOMEN PHYSICAL EDUCATION TEACHERS

Since women physical education teachers in Kansas were found to be a young group, the amount of teaching experience could be

¹⁵Ibid.

expected to be low. The number of years of teaching experience varied from no previous experience to forty-four years experience.

Thirty-nine (14.2 per cent) were beginning teachers. Forty-eight (17.4 per cent) had taught only one year. One hundred thirty-eight (50.2 per cent) had less than five years teaching experience. Two hundred ten (76.4 per cent) had less than ten years experience, as indicated in Table X. The 275 teachers had taught a total of 1935 years, or an average of seven years per teacher. This figure is comparable to the average female teacher's experience of 7.16 years reported in Schmidt's 1962-63 study.¹⁶

TABLE X
YEARS OF TEACHING EXPERIENCE

Years of Experience	Number of Teachers	Per Cent of Total
0-9	210	76.4%
10-19	43	15.6%
20-29	15	5.5%
30-39	5	1.8%
Over 40	2	0.7%
Total	275	100.0%

¹⁶Schmidt, op. cit., p. 37

One hundred twelve (40.7 per cent) of the teachers had taught in their present school system, with no experience in any other school.¹⁷ One teacher had taught forty-four years in the same system. One hundred sixty-three teachers (59.3 per cent) of all of the women physical education teachers had taught in more than one school. Fifty-three teachers (19.3 per cent) changed jobs last year.

TEACHING ASSIGNMENTS OF WOMEN PHYSICAL EDUCATION TEACHERS

Almost half of the women physical education teachers in Kansas taught only physical education courses. Table XI indicates that 136 (49.5 per cent) out of a total of 275 women physical education teachers were in this group. A greater percentage of teachers in 6-3-3 and 6-6 systems, eighty-six (76.8 per cent) taught only physical education than did the 8-4 teachers (fifty or 32.2 per cent).

Ninety-four (34.2 per cent) of all the women physical education teachers taught one subject other than physical education. A little over three-fourths of these ninety-four teachers were in 8-4 schools.

¹⁷The NEA reports that 45.1 per cent of teachers in the United States have taught in only one school. NEA Research Bulletin, op. cit., p. 57.

TABLE XI
 TEACHING ASSIGNMENTS OF WOMEN
 PHYSICAL EDUCATION TEACHERS
 ACCORDING TO SYSTEM TYPE

Subjects	Number of Teachers		Total
	8-4	6-3-3, 6-6	
Only Physical Education	<u>50</u> (30.2%)	<u>86</u> (76.8%)	136 (49.5%)
One other subject	72	22	94 (34.2%)
Two other subjects	25	3	28
Three other subjects	9		9
Four other subjects	5	1	6
Five other subjects	<u>2</u>	<u> </u>	<u>2</u>
Total other subjects	113 (69.8%)	26 (23.2%)	139 (50.5%)
Totals	163	112	275

According to Table XI, 113 (69.8 per cent) of the teachers in 8-4 school systems taught subjects other than physical education, and twenty-six (23.2 per cent) of the 6-3-3 and 6-6 teachers taught other subjects.

The subject most frequently taught other than physical education by women physical education teachers was health. Home economics ranked second among the more commonly taught courses. Three other popular teaching areas taught along with physical education were the sciences, social studies, and business.

SALARIES OF WOMEN PHYSICAL EDUCATION TEACHERS

The average salary for all full-time women physical education teachers in Kansas for the school year 1966-67 was \$5800. The average female physical education salary in Schmidt's study¹⁸ in 1962-63 was \$5030, indicating that average salaries have increased \$770 in four years.

The estimated average teacher's salary for all Kansas high school teachers for the year 1966-67 was \$6275, according to a report by the National Education Association.¹⁹ The average women's physical education teacher's salary for the 1966-67 school year was \$475 below the estimated average of all teachers.

¹⁸Schmidt, op. cit., p. 31.

¹⁹Rankings of States, 1967, Research Report 1967-R1 (Washington: National Education Association, 1967), p. 26.

The salaries of women physical education teachers in this study ranged from \$4800 to \$8600. The range of salaries of women physical education teachers in Schmidt's study was from \$3600 to \$7700.²⁰ The mode of the 236 full-time teachers' salaries reported was in the \$5000-5499 range, which was 40.7 per cent of the total, as indicated in Table XII. The average salary of teachers with only a baccalaureate degree was \$5576.

TABLE XII
SALARIES OF WOMEN PHYSICAL EDUCATION TEACHERS

Salary	Number of Teachers	Per cent of Total
4500-4999	17	7.2
5000-5499	97	41.1
5500-5999	49	21.1
6000-6499	32	13.5
6500-6999	14	5.9
7000-7499	5	2.1
7500-7999	8	3.3
8000-8499	12	5.0
8500-8999	2	0.8
Total	236	100.0

Nineteen of the twenty-two teachers who earned \$7500 or more held master's degrees. Three teachers with master's degrees were paid less than \$6000. The average salary of the full-time master degree teachers was \$7076.

²⁰Schmidt, op. cit., p. 39.

RELATIONSHIP BETWEEN SALARY AND
PHYSICAL EDUCATION HOURS

The relationship between the number of physical education college credit hours and salaries of women physical education teachers is recorded in Table XIII. The number of teachers used in this comparison was 220 because the remainder of the teachers were either part-time teachers or the number of professional hours was not recorded on the High School Principal's Organization Report.

Two teachers who had over 100 physical education hours and master's degrees received salaries over \$8000. The largest number of teachers, twenty-seven (12.3 per cent), fell into the 40-49 hour bracket with a salary of \$5000-5499. The next largest group had 30-39 hours and salaries in the same \$5000-5499 range. There does not appear to be much relationship between the number of physical education college credit hours and salary.

TABLE XIII

RELATIONSHIP BETWEEN SALARIES AND PHYSICAL EDUCATION
HOURS OF WOMEN PHYSICAL EDUCATION TEACHERS

Salaries (in Dollars)	Semester Hours											Total	
	Under 10	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	Over 100		
4500-4999			1	2	6	2	2					13	5.9%
5000-5499	4	5	9	25	27	16	2	2				90	40.9%
5500-5999	0	3	9	15	10	4	4	1	1			47	21.4%
6000-6499	0	1	3	9	7	7	0	3				30	13.6%
6500-6999	0	0	2	2	2	3	1	1	1		1	13	5.9%
7000-7499	0	0	1	0	2	0	0	2				5	2.3%
7500-7999	0	0	1	0	2	1	1	1	0	1		8	3.6%
8000-8499	0	0	0	1	2	0	3	2	1	1	2	12	5.5%
8500-8999	0	0	0	1	0	0	1					2	.9%
Total	4	10	26	55	58	33	14	12	3	2	3	220	100.0%
Per cent of Total	1.8	4.5	11.8	25	26.4	15	6.4	5.4	1.4	.9	1.4	100%	

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was an attempt to find out who taught girls' physical education in the senior high schools in Kansas in 1966-67 and what were some characteristics and academic backgrounds of the group of women physical education teachers. Information used in this study was taken from the High School Principals' Organization Report and the certification files, both of which are in the Kansas State Department of Public Instruction, Topeka.

It was discovered that slightly over half of the teachers of girls' physical education were women. Smaller school systems organized on an 8-4 basis were more likely to use men to teach girls' physical education than to use women. Over one-third of the women who taught girls' physical education had part time assignments.

Every woman physical education teacher held a baccalaureate degree, and one out of eight had master's degrees. Almost three-fourths received their undergraduate degrees from Kansas colleges. Of the Kansas institutions, the Kansas State Teachers College of Emporia had graduated the largest number of the women physical education teachers in Kansas. Seventy teachers received baccalaureate degrees from out-of-state institutions, and about half of those who held master's degrees received them from colleges or universities in other states. A majority of the degrees were granted in the 1960's.

Over half of the teachers had earned between 120 and 140 hours of credit. The teacher with the most semester hours recorded had earned 217 hours. The teacher with the most semester hours in the field of physical education had 107 hours. Twenty-one (8.7 per cent) teachers had less than twenty-four semester hours credit in physical education. Over half (55.8 per cent) of the teachers had forty semester hours or more college credits in physical education.

Women physical education teachers are a young group. Six out of ten were less than thirty years old. The youngest teacher was twenty-two years old and the oldest was sixty-nine. Teaching experience was generally not long, either, as might be expected. Over half of the women teachers had less than five years experience. There were thirty-nine (14.2 per cent) beginning teachers. The teacher with the most years of experience had taught forty-four years.

Women teachers of girls' physical education change teaching positions frequently, according to the findings of this study. Six out of ten have taught in more than one school. About one-fifth of the group changed jobs between 1965-66 and 1966-67.

Almost half of the women physical education teachers taught only physical education. Those who taught other subjects were assigned from one to five courses other than physical education to teach. About one third taught in one field other than physical education. Almost three-fourths of the teachers in 6-3-3- systems taught only physical education, but in 8-4 systems less than one-third

of the teachers taught only physical education. Health was the course most frequently taught along with physical education. The next most frequent combination with physical education was home economics.

The average salary of the full-time women physical education teachers for 1966-67 was \$5800. The average salary of teachers with baccalaureate degrees only was \$5576. Master degree women had a \$7076 average. The salaries ranged from \$4800 to \$8600. Nineteen of the twenty-two teachers who made over \$7500 had master's degrees. Three teachers with master's degrees received less than \$6000. The mode was in the \$5000-\$5499 range.

Conclusions

Men teachers of girls' physical education are more likely to be found in smaller schools. This is probably due to the fact that a smaller school has fewer teachers and combination assignments are more common. Perhaps a lack of qualified girls' physical education instructors who are willing to teach two or more other subjects is another reason for the few women physical education teachers in the smaller schools. Other factors such as salary and location of the school could affect the situation.

More full-time women physical education teachers are appointed in the larger school systems of the 6-3-3 type. If school unification results in larger systems organized on the 6-3-3 plan, it may be

expected to bring about an increase in the percentage of full-time women physical education teachers in Kansas.

A relatively small percentage of all women physical education teachers have master's degrees. About the same percentage of the teachers had received degrees from Kansas colleges and universities as was found in a study made four years earlier.

From the finding that about half of the teachers had earned over 140 semester hours of college credit, it may be concluded that many women physical education teachers continue their education after graduation.

Even though women physical educators are a young group there are about one-fifth who continue teaching the subject after forty years of age. One fifth of the teachers changed jobs last year, which may indicate considerable mobility.

Teachers in large school systems organized according to the 6-3-3 plan are more likely to be assigned to teach only physical education. Teachers in smaller 8-4 school systems commonly teach other subjects in addition to physical education.

Average master degree teachers' salaries are \$1500 more than average salaries of baccalaureate degree teachers. Physical education hours evidently are not the basis for a teacher's salary.

Recommendations

Many smaller schools in Kansas assign men to teach girls' physical education, but in the larger systems there seems to be a

preference for employing women to teach these classes. Further study of the relationship of the sex of the instructor and the effectiveness of the instruction would seem to be important, especially for programs in smaller schools.

This study did not attempt to determine if a relationship existed between academic preparation and teaching effectiveness. The findings of the study show that the proportion of women physical education teachers who have earned master's degrees is probably below the proportion in other fields, and that salaries are not related to the amount of credit earned in physical education. Further study would be required as a basis for recommending an increase in the level of preparation in the field.

The supply of and demand for women teachers of physical education was not investigated in the present study. The study showed a large percentage of men teaching girls' physical education, a small number of women graduates from many colleges and universities, and probably a short career span of women physical education teachers. These findings lead to the recommendation that the causes for these conditions and problems of supply and demand be investigated more thoroughly. Follow-up studies by institutions of their graduates would be helpful.

The study revealed a number of women physical education teachers without the minimum number of hours in the field to meet certification requirements. Further efforts toward correction of this condition should be studied by the colleges

and universities, school administrators and the State Department of Public Instruction.

Since over half of the women physical education teachers are appointed to teach other subjects, students in preparation to teach in Kansas should be encouraged to qualify for certification in more than one area. Many women students whose primary field of interest is in another area could possibly be encouraged to qualify to teach physical education also.

BIBLIOGRAPHY

SELECTED BIBLIOGRAPHY

- American Association for Health, Physical Education, and Recreation. Professional Preparation. Washington: American Association for Health, Physical Education, and Recreation, 1962.
- Baker, Weldon N. and Merle E. Brooks. "Background and Academic Preparation of the Teachers of Science in the High Schools of Kansas, 1956-1957." The Emporia State Research Studies, Vol. 6, No. 2, December, 1957.
- Burger, John M. "Background and Academic Preparation of the Mathematics Teachers in the Public High Schools of Kansas, 1957-1958." The Emporia State Research Studies, Vol. 7, No. 3, March, 1959.
- Certificate Handbook--State of Kansas, January 1, 1967. Issued by W. C. Kampschroeder, State Superintendent of Public Instruction, and the State Board of Education, Topeka, Kansas.
- Dexter, James and Laurence E. Morehouse. "Certification Requirements of Physical Education Teachers between 1953 and 1959," Research Quarterly, 32:20-25, March, 1961.
- Griffitts, Frank E. "A Comparative Study of the Status of Physical Education Teachers in the High Schools of Kansas." Unpublished Master's thesis, Kansas State Teachers College, Emporia, 1955.
- Haggerty, Helen R. Certain Factors in the Professional Education of Women Teachers of Physical Education. New York: Columbia University, 1938.
- International Association of Physical Education and Sports for Girls and Women. Fourth International Congress on Physical Education and Sports for Girls and Women. Washington: N.E.A., 1962.
- Irwin, Frank L. "A Comparative Study of the College Preparation, Teaching Combinations, and Salaries Paid to the High School Teachers of Kansas." Unpublished Master's thesis, Kansas State Teachers College, Emporia, 1938.
- Kansas Educational Directory, 1966-1967. Issued by W. C. Kampschroeder, State Superintendent of Public Instruction and the State Department of Public Instruction, Topeka. Bulletin 340.

- Lockard, Gene K. "A Comparative Study of the College Preparation, Teaching Combinations and Salaries of Kansas High School Administrators and Teachers (1946)." Kansas State Teachers College of Emporia Bulletin of Information, Vol. 26, No. 11, November, 1946.
- Nielson, N. P. and Glenn W. Arnett. A Score Card for Use in Evaluating Physical Education Programs in Elementary Schools. University of Utah Press, 1955.
- Rankings of the States, 1967. Research Report, 1967--R 1. Washington: National Education Association, 1967.
- Rarick, G. Lawrence. "Physical Education," Encyclopedia of Educational Research, Ed. Chester L. Harris. (third ed.) New York: The Macmillan Company, 1960.
- Ridgway, C. W. "A Comparative Study of Training and Teaching Combinations of Kansas High School Teachers." Unpublished Master's thesis, Kansas State Teachers College, Emporia, 1931.
- Sare, Harold V. "Background and Academic Preparation of the Social Science Teachers in the High Schools of Kansas, 1956-1957." The Emporia State Research Studies, Vol. 7, No. 2, December, 1958.
- Schmidt, Eldon P. "A study of some factors in the Status of High School Physical Education Teachers in Kansas, 1962-63." Unpublished Master's thesis, University of Kansas, Lawrence, 1964.
- "Teachers in Large School Systems, 1966." NEA Research Bulletin, Vol. 45 No. 2. Washington: National Education Association, May, 1967.
- Williams, Jesse F., Clifford L. Brownell, and Elmon Vernier. The Administration of Health Education and Physical Education. Philadelphia and London: W. B. Saunders Company, 1958.