

A STUDY OF THE GIRLS' PHYSICAL EDUCATION
PROGRAM IN THE CLASS AA HIGH SCHOOLS IN KANSAS

by |

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INTRODUCTION

A physical education program consists of the planned experiences available to participants through physical activities.¹ The first step in setting up a program is to determine the objectives, which are statements of the purposes or goals based on the needs of the students.

The objectives of physical education in the United States have been stated in professional literature by many leaders in this field. The objectives stated by Brownell and Hagman are based on their definition of physical education. They define physical education as the accumulation of wholesome experiences through participation in large-muscle activities that promote optimum growth and development. Based upon this definition, physical education concerns itself with four general objectives: (1) objectives related to the development of physical fitness, (2) objectives related to the development of social and motor skills, (3) objectives related to the development of knowledge and understandings, and (4) objectives related to the development of habits, attitudes, and appreciations.²

¹Clyde Knapp and E. Patricia Hagman, Teaching Methods for Physical Education (New York, Toronto, London: McGraw-Hill Book Company, Inc., 1953), p. 76.

²Clifford Lee Brownell and E. Patricia Hagman, Physical Education--Foundations and Principles (New York, Toronto, London: McGraw-Hill Book Company, Inc., 1951), p. 183.

Physical activities are the media through which physical education accomplishes its declared objectives. There is no set list of activities that must be included in every high school physical education program. Each school should choose the activities that will best meet the needs of the students.

There are several factors which cause the physical education activities to vary from school to school; these include: the needs of the students, facilities, equipment, climate, community recreation programs, the administration, the background of the physical education teacher, time allotted, size of classes and community attitudes.

The various types of activities that comprise the physical education program may be grouped according to the following classification: (1) fundamental skills, (2) games and sports, (3) rhythmic activities, (4) self testing activities, (5) corrective or adaptive activities, and (6) recreational activities.¹

As to the specific activities that could be included in the high school physical education program, Suohar suggests the following: basketball, formal activities, field hockey, advanced rhythms, volleyball, tumbling, track and field, touch football, swimming, softball, soccer, archery,

¹Brownell and Hagman, op. cit., p. 310.

badminton, bowling, tennis, dance, winter activities, handball, golf, camping, and corrective exercises.¹

High school physical education programs have often been criticized for offering only a few activities, usually consisting of volleyball, basketball, and softball. They are urged to offer a variety of activities with special emphasis on the individual activities with carry-over value that can be used for leisure time. Tennis, golf, and bowling are examples of activities with excellent carry-over value.

Purpose

The purpose of this study was (1) to determine the existing conditions in regard to program, facilities, and staffs of girls' physical education in the class AA high schools in Kansas during the school year of 1965-66 and (2) to compare the results with the recommendations of leading authorities in the field of physical education.

Review of Literature

Several studies have been made at Kansas State University concerning the boys' physical education programs in Kansas, but none has been made concerning the girls' programs.

¹Charles A. Bucher, Foundations of Physical Education (St. Louis: The C. V. Mosby Company, 1960), p. 73.

The following have made studies of boys' physical education programs in the various class high schools in Kansas: Richard E. Towers, Robert F. Sulsman, Barnabas A. Hays, and Frank G. Kavanaugh. John L. Wiedmer made a study of the boys' physical education programs in the junior high schools in Southeastern Kansas.

The results of this study were compared with recommendations of authorities as to the physical education program, facilities, and equipment. The two main sources of recommendations came from Bookwalter's Physical Education in Secondary Schools and LaPorte's The Physical Education Curriculum. The recommendations of these two authorities can be found under the section entitled Comparison of the Results with the Recommendations of Leading Authorities.

Method of Study

Using as a basis a questionnaire in a master's report by John L. Wiedmer and with helpful suggestions from Professor Raymond A. Wauthier and Professor T. M. Evans, a questionnaire was constructed for this study.

During the 1965-66 school year, this questionnaire was sent to the women's physical education instructors in 53 of the 56 class AA high schools of the State of Kansas, as listed in the 1965-66 Kansas High School Activities Association Handbook, published by the Board of Directors.

Class AA high schools have enrollments that exceed

639 pupils in the upper four grades in high school. The three class AA high schools that were not included in the survey were boys' schools.

The questionnaire was three pages in length and was divided into three sections. The first part contained questions concerning enrollment, class organization, activities included in the physical education program, and the intramural program.

The second section dealt with the facilities and equipment that were available and the last section had questions pertaining to the staff.

The questionnaires were mailed with a self-addressed, stamped envelope. After two weeks, 36 schools had returned the questionnaire. Seventeen follow-up letters were sent and as a result, ten more questionnaires were returned.

The answers to each question were tabulated and the data were used in writing this report.

Questionnaire Results:

Number mailed -----	53
Number returned -----	46
Per cent returned -----	87

RESULTS AND DISCUSSION

The body of this report contains the questions on the questionnaire followed by a table showing the results of the answers to the question. Following the table is an interpretation of the findings.

Enrollment of Class AA High Schools

The enrollment of the class AA high schools in Kansas ranged from 510 to 2,899. The enrollment of 36 of the schools was based on the tenth, eleventh, and twelfth grades, while eight of the schools included the enrollment of the ninth grade.

TABLE I
TOTAL SCHOOL ENROLLMENT

Groupings of schools by enrollment	Number of schools	Per cent	Total students enrolled
2,899 - 2,700	1	2	2,889
2,699 - 2,500	3	7	7,600
2,499 - 2,300	1	2	2,300
2,299 - 2,100	3	7	6,578*
2,099 - 1,900	2	4	4,088
1,899 - 1,700	1	2	1,850
1,699 - 1,500	3	7	4,710
1,499 - 1,300	1	2	1,358
1,299 - 1,100	2	4	2,400
1,099 - 900	11	24	11,103#
899 - 700	11	24	9,124#
699 - 500	7	15	4,188
Total	46	100	58,188

*Seven schools did not indicate the number of students enrolled. The 1965-66 Kansas High School Activities Association Handbook was used to find the enrollment in each of these schools.

#The enrollment figures of eight of the schools included the ninth grade.

Sixty-three per cent of the schools had an enrollment of less than 1,100. Thirty-seven per cent of the reporting schools had an enrollment of 1,100 or more. The total enrollment for all the reporting class AA high schools in Kansas was 58,188.

TABLE II
NUMBER OF BOYS AND GIRLS ENROLLED IN SCHOOL

Groupings according to size of schools	Total no. of girls enrolled in school	Total no. of boys enrolled in school
2,899 - 2,700	1,500	1,389
2,699 - 2,500	3,800*	3,800*
2,499 - 2,300	1,134	1,166
2,299 - 2,100	3,339	3,239*
2,099 - 1,900	2,047	2,041
1,899 - 1,700	950	900
1,699 - 1,500	2,345*	2,365*
1,499 - 1,300	647	711
1,299 - 1,100	1,200*	1,200*
1,099 - 900	5,504*	5,599*
899 - 700	4,466*	4,658*
699 - 500	<u>2,045</u>	<u>2,143</u>
Total	26,977	29,211

*Thirteen schools in the starred groups did not indicate the number of boys and girls enrolled.

A comparison between the number of boys and girls enrolled in the class AA high schools showed that there were 234 more boys than girls. The enrollment of the boys ranged from a high of 1,389 to a low of 255. The range for girls was from a high of 1,500 to a low of 255.

As shown in Table II, a total of 26,977 girls and 29,211 boys were enrolled in the schools reporting. A more accurate tabulation would have been possible if complete information had been recorded by all the schools concerning the enrollment.

Program

In the first section of the questionnaires, questions were asked which dealt with the areas of class organization, activities in the physical education program, adapted program, health examinations, and intramural sports. The answers to these questions are reported in this section.

Question 1. How many girls' physical education teachers are in your school?

TABLE III
NUMBER OF GIRLS' PHYSICAL EDUCATION TEACHERS

Number of instructors	Number of schools	Per cent
1	23	50
2	12	26
3	6	13
4	0	0
5	4	9
6	1	2

As shown in Table III, 23 schools or 50 per cent had one physical education teacher for girls. Twelve schools had two teachers, six had three teachers, four had five teachers, and one school had six teachers. The range of girls' physical education teachers was from one to six with a total of 91.

Question 2. How many semesters of physical education are required?

TABLE IV
SEMESTERS OF PHYSICAL EDUCATION REQUIRED

Semesters required	Number of schools	Per cent
6	1	2
4	19	41
3	3	7
2	23	50

One school required six semesters of physical education, 19 schools required four semesters, three required three semesters, and 23 schools, or 50 per cent required only two semesters of physical education.

Question 3. How often do physical education classes meet each week?

TABLE V
PERIODS PER WEEK PHYSICAL EDUCATION CLASSES MET

Periods per week	Number of schools	Per cent
5	31	67
4	1	2
3	4	9
Alternate (3 one week, 2 next)	9	20
No answer	1	2

Physical education classes met five times a week in 31, or 67 per cent of the schools. Classes met four times a week in one school, three times a week in four schools,

and on alternate days in nine schools. One school did not answer this question.

Of the 31 schools in which the physical education classes met daily, one of these schools also required three years of physical education, 11 schools required two years of physical education, three required a year and a half, and 16 required only one year.

Only one school had four physical education class meetings per week and this school required four semesters of physical education.

Four schools had physical education classes three days a week. Of these one school required four semesters of physical education and three schools required two semesters.

In nine schools the physical education classes met on alternate days of the week. One week the girls had three days of physical education and the following week they had two days of physical education. In five of these schools, four semesters of physical education were required and in four schools only two semesters of physical education were required.

Question 4. What is the length of the physical education class period in minutes?

TABLE VI
LENGTH OF PHYSICAL EDUCATION CLASS PERIOD

Length of period	Number of schools	Per cent
60	12	26
55	28	61
50	5	11
45	1	2

Twenty-six per cent of the schools reported having a physical education class period of 60 minutes. Twenty-eight schools, or 61 per cent, had a 55 minute class period, five schools had a 50 minute class period, and one school had a 45 minute class period.

Question 5. What team games are included in your physical education program?

TABLE VII
TEAM GAMES INCLUDED IN PHYSICAL EDUCATION PROGRAM

Team games included	Number of schools	Per cent
Basketball	45	98
Volleyball	45	98
Softball	43	94
Soccer	27	59
Field hockey	22	48
Speedball	22	48
*Speedaway	7	15
*Touch football	5	11

*These items were not on the list of activities to check and were written in.

Two team games, basketball and volleyball, were offered in 45 schools, or in 98 per cent of the schools. Forty-three schools offered softball, 27 offered soccer, 22 offered field hockey, 22 offered speedball, seven offered speedway, and five offered touch football.

Question 6. What individual activities are included in your physical education program?

TABLE VIII
INDIVIDUAL ACTIVITIES INCLUDED IN PROGRAM

Individual activities included	Number of schools	Per cent
Badminton	39	85
Track and field	36	78
Archery	34	74
Table tennis	34	74
Tennis	33	72
Shuffleboard	28	61
Bowling	27	59
Deck tennis	19	41
Swimming	15	32
Golf	12	26
Life saving	12	26
Fencing	11	24
Darts	9	20
Horsehoes	9	20
Quits	8	17
Croquet	7	15
Paddle tennis	6	13
Synchronized swimming	6	13
W S I	2	4
Riflery	1	2
Roller skating	0	0
Miniature golf	0	0

Eighty-five per cent of the schools offered badminton,

78 per cent offered track and field, 74 per cent offered archery, 74 per cent offered table tennis, 72 per cent offered tennis, 61 per cent offered shuffleboard, 59 per cent offered bowling. None of the schools offered roller skating or miniature golf.

Question 7. What types of rhythms are included in your physical education program?

TABLE IX
RHYTHMS INCLUDED IN PROGRAM

Rhythms included	Number of schools	Per cent
Calisthenics	41	89
Folk dancing	25	54
Modern dance	25	54
Body mechanics	21	46
Marching	18	39
Social dance	10	22
*Square dance	4	9
Tap or clog	0	0

*This item was not on the list of activities to check and was written in.

Forty-one of the schools included calisthenics in their program, 25 schools offered folk dance, 25 offered modern dance, 21 offered body mechanics, 18 offered marching, ten offered social dance, and four offered square dancing. None of the schools offered tap or clog dancing.

Question 8. What gymnastics are included in your physical education program?

TABLE X
GYMNASTICS INCLUDED IN PROGRAM

Gymnastics included	Number of schools	Per cent
Stunts and tumbling	40	90
Apparatus	36	78
Trampoline	28	61
Free exercise	25	54

Forty, or 90 per cent of the schools, offered stunts and tumbling, 36 schools offered apparatus, 28 offered trampoline, and 25 had free exercise.

Question 9. What relays and group games are included in your physical education program?

Twenty-eight schools included relay races in their program and 27 included dodgeball.

TABLE XI
TOTAL NUMBER OF PHYSICAL EDUCATION ACTIVITIES OFFERED

Total number of activities	Number of schools
33	1
32	1
31	1
30	0
29	2
28	1
27	0
26	2
25	1
24	3
23	1
22	0

TABLE XI (continued)

Total number of activities	Number of schools
21	5
20	4
19	3
18	3
17	4
16	2
15	2
14	1
13	0
12	3
11	4
10	1
9	0
8	1

There were 41 different activities listed in the questionnaire. Three activities, which were not included in the questionnaire, were added by schools that offered these in their program. The activities were touch football, speed-away, and square dancing. The greatest number of activities offered by any one school was 33. The least number of activities offered was eight.

Question 10. Does your school have an adapted physical education program?

Eleven schools had an adapted program for those not able to participate in the regular physical education class activities. Thirty-four schools offered no adapted program, and one did not answer the question.

Question 11. If your school has an adapted program,

are the students accommodated in the regular physical education class or in a special class?

Of the 11 schools that offered an adapted program, three of these schools handled the handicapped students in the regular physical education classes while eight schools provided separate classes.

Question 12. Are physical examinations required for students in physical education?

Eleven schools required the students in physical education classes to have a physical examination and 33 did not. Two schools did not answer the question.

Question 13. Do you have an intramural program for girls?

Thirty-two schools offered an intramural program for girls and 14 did not.

Question 14. If you do not have an intramural program at the present time, do you anticipate introducing one within the next five years?

Of the schools that did not have an intramural program, seven anticipated introducing one within the next five years and one did not. Six did not answer that part of the question.

Question 15. What activities are included in the intramural program?

TABLE XII
INTRAMURAL ACTIVITIES

Intramural activities	Number of schools	Per cent
Volleyball	30	94
Basketball	29	91
Softball	19	59
Badminton	16	50
Track and field	12	37
*Bowling	11	34
*Swimming	11	34
*Tennis	10	31
*Gymnastics	9	27
Field hockey	8	25
*Archery	5	16
*Table tennis	4	13
*Modern dance	3	9
*Golf	3	9
Soccer	2	6
*Fencing	2	6
*Team deck tennis	2	6
*Speedball	2	6
*Canoeing	1	3
*Folk dance	1	3
*Horseback riding	1	3
*Life saving	1	3
*Marching	1	3
*Speedaway	1	3
*Touch football	1	3
*Bicycling	1	3
*Hiking	1	3
*Skating	1	3
No answer	1	3

*These items were not on the list of activities to check and were written in.

The most popular intramural activity was volleyball, as 30 of the 32 schools that had an intramural program offered this sport. The next most popular sport was basketball, with 29 schools including this activity. The other

popular activities offered were softball, badminton, track and field, bowling, swimming, and tennis.

TABLE XIII
NUMBER OF INTRAMURAL ACTIVITIES OFFERED

Number of activities	Number of schools
1	1
2	4
3	4
4	5
5	1
6	3
7	3
8	2
9	2
10	5
19	1
No answer	1

The number of activities offered in the intramural programs ranged from one activity to 19 activities. Of the 32 schools that had an intramural program, 14 offered four activities or less.

Question 16. As intramural director, how much time do you spend on intramurals per week?

TABLE XIV
TIME SPENT ON INTRAMURALS PER WEEK

Hours per week	Number of teachers	Per cent
1 - 4	16	50
5 - 9	10	31
10 - 15	2	6
No answer	4	13

Sixteen teachers spent from one to four hours a week on intramurals, ten spent from five to nine hours and two spent from ten to 15 hours. Four did not answer this question.

Question 17. How much extra pay do you receive for intramurals?

TABLE XV
EXTRA PAY FOR INTRAMURALS

Extra pay	Number of teachers	Per cent
None	13	41
\$50 - \$99	2	6
\$100 - \$199	4	13
\$200 - \$299	10	31
\$300	1	3
By the hour	1	3
No answer	1	3

The range in pay for intramurals was from no pay to \$300. Thirteen teachers received no pay, two received \$50,

four received from \$100 to \$199, ten received from \$200 to \$299, one received \$300, one was paid by the hour and one did not answer the question.

Question 18. When are intramurals played?

TABLE XVI
WHEN INTRAMURALS ARE PLAYED

When played	Number of schools	Per cent
After school	27	85
Night	1	3
*Before school	1	3
Noon hour	0	0
After school and night	2	6
After school, night, noon hour and Saturday	1	3

*This item was not on the list to check and was written in.

Eighty-five per cent of the schools that had an intramural program played only after school. Two schools played both after school and at night and one school played after school, at night, on Saturday, and during the noon hour.

Question 19. Who serve as officials for your intramural games?

TABLE XVII
OFFICIALS FOR INTRAMURALS

Officials	Number of schools
Senior students	19
Faculty	13
*Students who know rules	5
*Junior students	2
*Student leaders	2
*Intramural committee	1
*G A A girls	1

*These items were not on the list to check and were written in.

**In some of the schools more than one of the above groups served as officials.

In 19 of the schools, the senior students served as officials for the intramural program. The next most common group were faculty members and 13 schools used them to officiate.

Question 20. Is there any type of award given to individuals in your intramural program?

Sixty-three per cent of the schools gave awards to individuals in the intramural program and 37 per cent did not.

Question 21. If individual awards are given, what are used?

TABLE XVIII
TYPE OF INDIVIDUAL AWARD

Type of individual award	Number of schools
Letters	7
Medals	6
Trophies	5
Plaques	3
Ribbons	3
Points toward GAA pins	3
Stripes	1
Pins	1

*Of the schools that gave individual awards, some schools gave more than one type of award.

The most common types of individual awards were letters, medals and trophies.

Question 22. Is there any type of award given to teams in the intramural program?

Thirty-one per cent of the schools that had an intramural program gave team awards and 69 per cent did not.

Question 23. If team awards are given, what are used?

TABLE XIX
TYPE OF TEAM AWARD

Type of team award	Number of schools
Ribbons	4
Trophies	3
Plaques	1

TABLE XIX (continued)

Type of team award	Number of schools
Medals	1
Points for letter	1
G A A points	1

*One school gave more than one type of award.

Few of the schools gave awards to teams in the intramural program. The two most common team awards were ribbons and trophies.

Facilities and Equipment

The second section of the questionnaire had questions concerning indoor and outdoor facilities and gymnasium equipment.

Question 1. What is the size of your gymnasium?

TABLE XX
SIZE OF GYMNASIUM

Size of gymnasium	Number of schools	Per cent
Large (60' x 90')	34	75
Medium (40' x 60')	6	13
Small (less)	1	2
Large, medium and small	1	2
Large and medium	2	4
Large and small	1	2
No answer	1	2

Thirty-four of the schools reported having large gymnasiums that were 60 feet by 90 feet or more in size. Six had medium sized gymnasiums that were 40 feet by 60 feet or more. One school had a small gymnasium that was less than 40 feet by 60 feet, one school had both a large and a small gymnasium, two had a large and a medium gymnasium and one had all three sizes. One school did not answer the question.

Question 2. What is the size of your play room?

TABLE XXI
SIZE OF PLAY ROOM

Size of play room	Number of schools	Per cent
Large (40' x 60')	7	15
Medium (20' x 30')	3	7
Small (less)	6	13
Two medium and one small	1	2
Medium and small	1	2
None	16	35
No answer	12	26

Sixteen per cent of the schools had no play room and 12 per cent failed to answer the question. Fifteen per cent had a large play room, seven per cent had a medium sized play room, 13 per cent had a small play room, two per cent, or one school had two medium and one small sized play rooms, and two per cent, or one school had one medium and one small play room.

Question 3. What is the size of your playground?

TABLE XXII
SIZE OF PLAYGROUND

Size of playground	Number of schools	Per cent
Large (7 acres or more)	14	30
Medium (3 to 6 acres)	9	20
Small (less)	9	20
None	2	4
No answer	12	26

Playgrounds were determined on the following basis: large playgrounds, seven acres or more; medium playgrounds, three to six acres; and small playgrounds, less than three acres. Thirteen of the schools had large playgrounds, nine had medium sized playgrounds, nine had small playgrounds, two had no playground, and 12 failed to answer the question.

Question 4. What is the size of your athletic field?

TABLE XXIII
SIZE OF ATHLETIC FIELD

Size of athletic field	Number of schools	Per cent
Large (10 acres or more)	14	30
Medium (6 to 9 acres)	18	40
Small (less)	8	17
None	2	4
No answer	4	9

Fourteen schools had athletic fields that were ten

acres or more in size. Eighteen of the schools, or 40 per cent, had fields approximately six to nine acres and eight schools had small athletic fields of less than six acres.

Question 5. How many tennis courts does your school have?

TABLE XXIV
NUMBER OF TENNIS COURTS

Number of tennis courts	Number of schools	Per cent
12	1	2
11	0	0
10	2	4
9	1	2
8	0	0
7	0	0
6	5	11
5	2	4
4	6	13
3	3	7
2	9	20
1	1	2
None	16	35

Thirty of the high schools had tennis courts ranging from one court to 12. The most frequent number of courts was two and nine schools had this number. There were a total of 133 tennis courts.

Question 6. What is the surfacing of the tennis courts?

Of the 133 tennis courts, 79 were concrete, 31 were asphalt, and 23 did not report the type of surfacing.

Question 7. What is the size of your swimming pool?

TABLE XXV
SIZE OF SWIMMING POOL

Size of pool	Number of schools	Per cent
Large (30' x 75')	6	13
Small (less than 20' x 60')	9	20
None	31	67

Sixty-seven per cent of the schools had no swimming pool, 13 per cent had a large pool that was 30 feet by 75 feet or more, and 20 per cent had a small pool that was less than 20 by 60 feet.

Question 8. How many showers are available for the girls' physical education classes?

TABLE XXVI
NUMBER OF SHOWERS AVAILABLE

Number of showers	Number of schools	Per cent
None	1	2
1 - 5	2	4
6 - 10	8	17
11 - 15	14	31
16 - 20	14	31
21 - 25	1	2
26 - 30	3	7
31 - 35	2	4
More than 35	1	2

The range of shower facilities in the different schools was from none to 60. The majority of the schools had from 11 to 20 showers. The total number of showers was 729. One school had no shower facilities.

Question 9. Do you require showers after physical education class?

Ninety-one per cent of the schools required the girls to shower after class and nine per cent did not.

Question 10. What gymnasium equipment do you have available?

TABLE XXVII
GYMNASIUM EQUIPMENT AVAILABLE

Gymnasium equipment	Number of schools	Per cent	Total number of items	Range
Basketball goals	46	100	257	2 - 12
Volleyball standards	46	100	181	2 - 10
Tumbling mats	41	89	600	6 - 50
Parallel bars	41	89	51	1 - 3
Climbing ropes	38	82	98	1 - 9
Horse, vaulting	37	80	52	1 - 3
Trampoline	26	61	34	1 - 2
Springboard	26	56	34	1 - 2
Horizontal bar (High bar)	21	46	27	1 - 3
Vaulting buck	19	41	27	1 - 3
Rings, flying	17	37	26	1 - 4
Low parallel bar	16	35	18	1 - 2
*Balance beam	11	24	13	1 - 3
Horizontal ladder	6	13	6	
*Reuter board	5	11	5	
*Stall bars	5	11	9	1 - 4
*Uneven parallel bar	5	11	5	
Rings, traveling	4	9	9	1 - 6
*Beat board	2	4	5	1 - 4

TABLE XXVII (continued)

Gymnasium equipment	Number of schools	Per cent	Total number of items	Range
*Rings, still	2	4	2	
*Vaulting box	2	4	2	
*Exercise bar	1	2	1	
*Suspended parallel bar	1	2	1	
*Table tennis table	1	2	2	
*Tether ball standards	1	2	6	

*These items were not on the list to check and were written in.

From Table XXVII, it can be seen that basketball goals, volleyball standards, tumbling mats, parallel bars, climbing ropes and the vaulting horse are the most common equipment available in the class AA high schools. At least 80 per cent of the schools had one or more of these pieces of equipment.

Personal Data

The personal data section of the questionnaire contained questions for the physical education instructor concerning her salary, teaching load, degrees, undergraduate major and minor fields, additional subjects taught, and extra-curricular duties.

In most cases, the schools that had more than one physical education teacher for girls included the personal data of only one of the teachers. However, in a few cases

the data of each of the teachers in the school was included. There were 53 teachers that answered this section.

Question 1. What is your teaching salary?

TABLE XXVIII
TEACHING SALARY

	Salary
Range	\$4,500 to \$8,500
Mode	\$4,700
Median	\$5,425
Mean	\$5,867

The range of the salaries of the girls' physical education teachers in the class AA high schools in Kansas was from \$4,500 to \$8,500. The mode was \$4,700, the median \$5,425, and the mean \$5,867.

Question 2. Do you have a Master's degree?

Of the 53 teachers who answered the personal data section, 20 had a Master's degree and 32 did not. One did not answer this question.

Question 3. What was your undergraduate major in college?

TABLE XXIX
UNDERGRADUATE MAJOR IN COLLEGE

Undergraduate major	Number of teachers	Per cent
Physical education	33	62
Biology	4	7
Psychology	4	7
History	2	4
Education	2	4
English	2	4
Business education	1	2
Guidance	1	2
Health	1	2
Science	1	2
Spanish	1	2
Sociology	1	2

Thirty-three of the teachers majored in physical education, four in biology, four in psychology, two in history, two in education, two in English and one majored in each of the following: business education, guidance, health, science, Spanish, and sociology.

Question 4. What was your undergraduate minor in college?

TABLE XXX
UNDERGRADUATE MINOR IN COLLEGE

Undergraduate minor	Number of teachers
Science	6
Social sciences	6
Biology	5
English	5

TABLE XXX (continued)

Undergraduate minor	Number of teachers
Psychology	5
Health	4
Home economics	2
Math	2
Business	1
Education	1
French	1
German	1
History	1
Library education	1
Literature	1
Recreation leadership	1
Safety education	1
Sociology	1
Spanish	1
Zoology	1
None	2
No answer	4

The most common minor fields were science, social science, biology, English, psychology, and health. None had a minor in physical education. Two had no minors and four did not answer the question.

Question 5. How many classes do you teach daily?

TABLE XXXI
NUMBER OF CLASSES TAUGHT DAILY

Classes taught	Number of teachers	Per cent
3	1	2
4	1	2
5	32	60

TABLE XXXI (continued)

Classes taught	Number of teachers	Per cent
6	10	19
10	4	8
No answer	5	9

The range in the teaching load was from three classes to ten. Sixty per cent of the teachers taught five classes a day and 19 per cent taught six classes.

Question 6. What is the average size of your classes?

TABLE XXXII
SIZE OF CLASSES

Class size	Number of schools	Per cent
15 - 19	2	4
20 - 24	2	4
25 - 29	4	8
30 - 34	13	24
35 - 39	10	18
40 - 44	8	15
45 - 49	3	6
50 - 54	3	6
55 or more	2	4
No answer	6	11

The classes ranged in size from 15 to 80 students. Most of the classes averaged from 30 to 40 students.

TABLE XXXIII
CLASS SIZE: MEAN, MEDIAN, MODE

Mean, median, mode	Class size
Mean	37
Median	35
Mode	36

The mean class size was 37, the median was 35 and the mode was 36.

Question 7. What subjects do you teach other than physical education?

TABLE XXXIV
SUBJECTS TAUGHT OTHER THAN PHYSICAL EDUCATION

Subjects taught other than physical education	Number of teachers	Per cent
None	25	47
Health	17	32
First aid	4	8
Biology	1	2
Science	1	2
No answer	5	9

Twenty-five teachers taught only physical education. Twenty-three teachers taught another subject in addition to physical education. Seventeen taught health, four first aid, one biology, one science, and five did not answer the question.

Question 6. Do you sponsor any outside activities in the school?

TABLE XXXV
SPONSOR OF OUTSIDE ACTIVITIES

Outside activities	Number of teachers
Pep Club	25
Cheerleaders	15
Class sponsor	11
G A A	9
Sports Club	9
Intramurals	9
Gymnastics coach	7
Swimming Club	6
Tennis coach	6
Dance Club	4
Drill team	4
Girls League	2
Homecoming	2
Home room counselor	2
Student Council	2
Volleyball coach	2
Fencing Club	1
Golf coach	1
Interschool sports	1
Pom pom girls	1
Y-Teens	1
No answer	4

The teachers sponsored 21 outside activities with a range of one to five activities sponsored by each. The two most common outside activities sponsored by physical education teachers were the Pep Club and the cheerleaders.

TABLE XXXVI
NUMBER OF ACTIVITIES SPONSORED

Number of activities sponsored	Number of teachers
1	11
2	21
3	9
4	6
5	2

Eleven teachers sponsored one outside activity, 21 teachers sponsored two activities, nine sponsored three activities, six sponsored four activities and two sponsored five.

Question 9. What was the basis of your contract?

TABLE XXXVII
BASIS OF CONTRACT

Basis of contract	Number of teachers
9 month	16
10 month	1
11 month	0
12 month	25
No answer	11

Most contracts were on a 12 month basis and the next most common was a nine month basis.

SUMMARY

There were 56 class AA high schools in the state of Kansas. A questionnaire was sent to 53 of the 56 schools. The three that were not included were boys' schools. The information compiled in this study was gathered from the 46 schools which returned the questionnaire.

Fifty per cent of the schools had only one physical education instructor. Twenty-six per cent had two instructors. There were a total of 91 instructors.

Fifty per cent of the schools required only two semesters of physical education and 41 per cent required four semesters.

In 67 per cent of the schools, the physical education classes met five times a week. Twenty per cent of the schools alternated the days, meeting three days one week and two days the next or three days one semester and two days the next.

Of the 31 schools in which the physical education classes met daily, one of these schools also required three years of physical education, 11 schools required two years of physical education, three required a year and a half, and 16 required only one year.

The amount of time most frequently allotted for physical education was 55 minutes and the next most frequent was 60 minutes. The range in time allotted was from 45 minutes

to 60 minutes.

The three most popular team games included in the physical education programs were basketball, volleyball, and softball. Forty-five schools offered basketball, 45 offered volleyball, and 43 offered softball.

The individual activities included most frequently in the programs were badminton, track and field, archery and table tennis. Thirty-nine schools offered badminton.

Forty-one schools included calisthenics in their classes. The most popular types of dance were folk and modern dance.

A high percentage of the schools offered gymnastics in their program. Ninety per cent of the schools offered stunts and tumbling, 78 per cent offered apparatus, 61 per cent offered trampoline and 54 per cent offered free exercise.

The total number of physical education activities offered in each of the schools' physical education programs ranged from eight to 33. The most frequent number of activities offered was 21 and five schools offered this number.

Eleven schools had an adapted program for those students that were not able to participate in the regular physical education class activities. Of these schools, eight accommodated for these students in a separate class and three handled them in the regular physical education class.

Only 11 schools required the students in the physical

education classes to have a physical examination.

Seventy per cent of the schools offered an intramural program for girls and 30 per cent did not. Of the schools that did not have a program, seven anticipated introducing one within the next five years.

The most popular intramural activities were volleyball, basketball, softball, and badminton. Thirty schools offered volleyball, 29 offered basketball, 19 offered softball, and 12 offered badminton. The range of activities offered was from one to 19.

The time that teachers spent on intramurals per week ranged from one to 15 hours. Fifty per cent of the teachers spent from one to four hours per week on intramurals.

The range in pay for intramurals was from no pay to \$300. Forty-one per cent of the teachers received no pay. Thirty-one per cent received between \$200-\$299.

Eighty-five per cent of the schools played their intramural games after school. In 19 schools the senior students served as officials and in 13 schools the faculty officiated.

Sixty-three per cent of the schools gave individual awards in their intramural program and only 31 per cent gave team awards.

Seventy-five per cent of the schools had a large gymnasium which was 60 feet by 90 feet. Fifteen per cent had a large play room which was 40 feet by 60 feet and 30 per

cent had a large playground of seven acres or more. Thirty per cent had a large athletic field of ten acres or more.

Thirty of the high schools had tennis courts ranging from one court to 12. The most frequent number of courts was two. There were a total of 133 tennis courts, and of these 79 were concrete and 31 were asphalt.

Sixty-seven per cent of the high schools had no swimming pool, 13 per cent had a large pool and 20 per cent had a small pool.

The range of shower facilities in the different schools was from none to 60. The majority of the schools had from 11 to 20 showers. The total number of showers was 729. Ninety-one per cent of the schools required the girls to shower after class.

There was a variety of gymnasium equipment available in the various schools. Every school had at least two basketball goals and two volleyball standards. Forty-one schools had tumbling mats and 41 had parallel bars.

The range of the salaries of the girls' physical education teachers was from \$4,500 to \$8,500. The mode was \$4,700, the median \$5,425, and the mean \$5,867.

Thirty-eight per cent of the 53 teachers answering the section on personal data had a Master's degree.

Thirty-three of the teachers majored in physical education and none of them minored in physical education. The most common undergraduate majors were biology and psychology.

The most common minors were science, social science, biology, English and psychology.

The range in the teaching load was from three to ten classes. Sixty per cent of the teachers taught five classes a day and 19 per cent taught six classes.

The classes ranged in size from 15 to 80. The mean class size was 37, the median 35 and the mode 36.

Twenty-five teachers taught only physical education. Twenty-three teachers taught another subject in addition to physical education. The most frequent additional subject taught was health and 17 taught this.

The teachers sponsored 21 outside activities with a range of one to five activities sponsored by each. The most frequent activities sponsored were the Pep Club and the cheerleaders.

COMPARISON OF RESULTS WITH RECOMMENDATIONS
OF LEADING AUTHORITIES

Program

Semesters required. In Kansas the state requires a minimum of one unit of physical education or one-half unit of physical education and one-half unit of health.

Ideally, students should take physical education each year in elementary and secondary schools. The literature in the field is practically unanimous in requesting that experiences in physical education be provided for each year of school.¹ In this study, only one school required physical education for all three years of high school and nineteen schools required two years.

Periods of physical education per week. According to LaPorte, physical education classes should meet daily if at all possible.²

Bookwalter said that if in order to maintain the recommended class size, a choice has to be made between reducing the number of years or the number of days of required physical education, the number of days should be reduced. The

¹Karl W. Bookwalter, Physical Education in the Secondary Schools (Washington D. C.: The Center for Applied Research in Education, Inc., 1964), p. 24.

²Wm. Ralph LaPorte, The Physical Education Curriculum (Los Angeles: University of Southern California Press, 1938), p. 45.

most economical arrangement, in terms of student-hour load for the gymnasium, is the two-three policy -- two days one semester and three days the next.¹

In 68 per cent of the schools, physical education classes met daily and in 17 per cent of the schools, the classes met on alternate days.

Of the 31 schools in which the physical education classes met daily, one of these schools also required three years of physical education, 11 schools required two years of physical education, three schools required a year and a half of physical education, and 16 schools required only one year.

Four of the schools that responded met the very minimum state requirement by offering physical education every other day for only one year.

Length of class period. There is a general agreement among leading educators that each pupil should have a one-hour class period of physical education during the course of the school day plus the opportunity to participate in after school recreation and an intramural program.²

Sixty minute periods are recommended by Bookwalter. Time must be given to dress before class and to dress and

¹Bookwalter, *op. cit.*, p. 25.

²L. W. Irwin, The Curriculum in Health and Physical Education (St. Louis: C. S. Mosby Company, 1944), p. 63.

shower after class. The recommended time to allow girls to dress for class is six minutes and 12 minutes after class for showers and dressing. This would leave about 40 minutes for active instruction.¹

Only 26 per cent of the schools answering the questionnaire allowed 60 minutes for physical education. The most common length of classes was 55 minutes.

Team sports. The team sports offer the opportunity to develop organic strength through participation in various activities that require agility, speed, strength, and endurance. They also offer the chance to enjoy relaxation. Team games can serve as one of the best opportunities for students to develop desirable social traits and characteristics.²

A majority of the class AA high schools responding to this survey offered the following team sports in their girls' physical education program: softball, basketball, volleyball, and soccer. Field hockey, speedball, speedaway and touch football were offered by some of the schools.

Individual activities. Individual activities include those activities which provide physical recreation for the individual or small groups.

¹Bookwalter, op. cit., p. 25.

²David K. Brace, Health and Physical Education for Junior and Senior High Schools (New York: A. S. Barnes and Company, Inc., 1935), p. 243.

Individual activities are, as a rule, the essential carry over activities. Because of this, about two-thirds of these activities are of the less vigorous type. Unfortunately, in spite of their great carry-over value, they are most frequently omitted from the poorer programs because of their lack of vigor, their facility requirements, and the lack of time for the total basic program. These omissions should be corrected.¹

Team sports and individual activities should be allotted 21-24 per cent of the time in the girls' physical education program in high school.²

The following individual activities were offered by a majority of the class AA high schools in this study: badminton, track and field, archery, table tennis, tennis, shuffleboard and bowling.

Gymnastics. Gymnastics provide students the opportunity to overcome awkwardness, to develop balance, strength, endurance, flexibility, agility and body control. It should also give students a chance to attain progressively higher levels of achievement.

According to Bookwalter, gymnastics require 21 per

¹Bookwalter, op. cit., p. 53.

²Ibid.

cent of the girls' time on the high school level.¹

A majority of the class AA high schools offered all of the gymnastic activities listed on the questionnaire. The gymnastics listed were stunts and tumbling, apparatus, trampoline and free exercise.

Rhythms. Rhythms has several functions in the physical education program. It should help the student develop poise and a sense of rhythm. It should give them an opportunity to develop creativity and it provides them with an activity to use in their leisure time.

The fundamentals of dance should have been developed in the elementary grades. The most suitable types of dance to include in the high school are social, square, and modern. Beginning with the ninth grade, it is desirable to include some co-educational dance instruction, when possible. The time allotment for rhythms for girls should be from 16-18 per cent.²

Over half of the class AA high schools that answered this survey offered the following rhythms in their program: calisthenics, folk dance, and modern dance.

A majority of the schools that answered the questionnaire offered the following activities in their program for

¹Ibid., p. 53.

²Ibid.

girls: basketball, volleyball, softball, soccer, badminton, track and field, archery, table tennis, tennis, shuffleboard, bowling, calisthenics, folk dancing, modern dance, stunts and tumbling, apparatus, trampoline, free exercise, relay races, and dodgeball.

Adapted program. Students who are restricted for medical reasons, either temporarily or permanently, from regular physical education classes, need some modified work and should be encouraged to participate in those activities that are in the range of their capacity as indicated by a doctor's diagnosis.¹

Some five to ten per cent of the high school population may be expected to have physical handicaps which should be cared for. Nationally, less than four per cent of the high schools have effective programs with respect to adaptive and remedial physical education.²

Twenty-four per cent of the class AA schools surveyed had an adapted program.

Physical examination. A medical examination should be provided and required of every student at least once in each school level: entrance to the primary, the elementary, the junior high, and the senior high. If at all possible,

¹Charles C. Cowell and Helen W. Hazelton, Curriculum Designs in Physical Education (New York: Prentice-Hall, Inc., 1955), p. 58.

²Bookwalter, op. cit., p. 45.

it should be given annually. No student should be permitted to participate in strenuous activities either in class or on athletic squads under the supervision of the school without such prior medical examination. Both the hazards to the child and the legal liability to the school justify such examination even though the cost may be high.¹

Only 24 per cent of the schools that answered the questionnaire required the girls in physical education to have a physical examination.

Intramural program. The aim of the intramural sports program is to provide as many students as possible with sports that will have a carry-over value after students leave school.²

The activities offered should be adaptable to the time that is available; either before school, after school, activity period, lunch period, at night, or on Saturday. The sports included should not require long practice periods to get into condition. They should require only a minimum degree of skill and should be simple to administer and supervise.

Intramural sports should not be confused with the required physical education program. Intramurals should be

¹LaPorte, op. cit., p. 45.

²Rosalind Cassidy, New Directions in Physical Education for Adolescent Girls (New York: A. S. Barnes and Company, Inc., 1935), p. 68.

on a voluntary basis and should offer an opportunity to play without instruction and without the individual being graded.

Thirty-two of the schools answering the questionnaire had an intramural program with a range from one to 19 activities offered. Fourteen of these schools offered from one to four activities. The most common activities offered were volleyball, basketball, softball and badminton. One school that had a program did not list the activities offered.

Awards for intramural program. According to Cassidy, the ideal set up is to have no awards except publicity in the school paper or on the bulletin board. A study revealed awards have become a financial problem to almost every school that uses elaborate awards. It is unsound to have to conduct a program solely on the basis of the students playing to receive a prize.¹

Sixty-three per cent of the schools that had an intramural program gave individual awards. The most common types of awards were letters, medals and trophies.

Facilities and Equipment

Gymnasium. The gymnasium should be a wing at one end of the school building -- not in the basement of the building. The best arrangement is to have the physical education

¹Cassidy, ibid., p. 71.

unit separate from the main building. To avoid interruptions it should not be combined with an auditorium.¹

The ceiling should be at least 18 feet high and preferable 20 to 24 feet. The floors should be of maple or other hard wood; walls smooth; radiators, drinking fountains or other such items recessed; interior painted a light neutral color; with careful planning of light, heat, and ventilation; and with acoustical treatment, if possible.²

The gymnasium space necessary depends on the class size and the types of activities that will be conducted in this facility. According to LaPorte, the minimum size for the floor area is 45 by 60 feet and the maximum size is 90 by 110 feet. A good size for the average school is 65 by 90 feet.³

Ninety-six per cent of the class AA high schools in Kansas had a gymnasium 40 by 60 feet or larger, which met LaPorte's minimum recommendation. Eighty-three per cent had a gymnasium 60 by 90 feet.

Play room. A play room could be used for adapted physical education classes, for apparatus or for rhythms.

¹L. W. Irwin and W. C. Reavis, "Practices Pertaining to Health and Physical Education in Secondary Schools," Research Quarterly, Oct. 1940, 93:95.

²LaPorte, op. cit., p. 41.

³Ibid.

It is usually a smaller area than the gymnasium. LaPorte says that an adequate size for a play room is 20 by 30 feet.¹

Fifteen per cent of the schools surveyed had a play room that was 40 by 60 feet and seven per cent had one that was 20 by 30 feet. Thirty-five per cent had no play room and 26 per cent did not answer the question.

Playground. In the words of Woods Hutchinson, "better a playground without a school than a school without a playground." The amount of play space a school needs depends upon the enrollment, the type of games the students play, or will play if space is provided; and the load the space must carry at any one period.²

A senior high should have ten acres of play space plus one acre for each 200 students in regular attendance. Fifteen acres has been found to be a good average for the better high schools.³

Thirty per cent of the class AA high schools had a playground of seven acres or more. Two schools had no playground and 12 did not answer this question.

Athletic field. According to Williams and Brownell, almost any large and level open space forms the basis for a

¹LaPorte, ibid., p. 43.

²Mabel Lee, The Conduct of Physical Education (New York: A. S. Barnes and Company, 1937), p. 151.

³Williams and Brownell, op. cit., p. 332.

suitable athletic field. Of primary importance are: surfacing, drainage, layout for various sports, seating facilities, and a strong wire fence surrounding the area.¹

Thirty per cent of the schools responding had an athletic field of ten acres or more and 40 per cent had a field of six to nine acres. Four per cent had no athletic field and nine per cent did not answer the question.

Tennis courts. Bookwalter says that the minimum provision for senior high schools is four doubles tennis courts which will accommodate 16 players at one time.² LaPorte recommends that for a class of 35 to 45 students, at least 8 to 10 tennis courts are necessary in order for satisfactory class instruction to be given.³

Thirty of the high schools surveyed had tennis courts ranging from one to 12 courts per school. There were a total of 133 tennis courts. It is interesting to note that although only 30 schools had tennis courts, 33 schools offered tennis in their required physical education program.

Swimming pool. The area or size of the pool should be determined by the following factors: (1) space requirements per individual for the various activities in the pool,

¹Williams and Brownell, ibid., p. 336.

²Bookwalter, op. cit., p. 93.

³LaPorte, op. cit., p. 39.

(2) approximate number of persons, maximum size of classes and activities to be accommodated in a given situation, (3) number of class or activity periods per day, (4) probable rate of learning for beginners, and (5) economy.¹

The swimming pool size should be designed to be in conformity with the requirements for intramural or interscholastic swimming meets and water games. Pools 60 feet in length are approved for interscholastic AAU records, however the trend and recommended length is 75 feet.²

Only 23 per cent of the schools had a swimming pool. Of these, 13 per cent were 30 feet by 70 feet.

Shower facilities. According to Lee, no school should attempt to carry on physical education for girls without at least four shower heads. There should be one shower head for each two-fifths of the peak load.³

Only one school answering the questionnaire had no shower facilities. The range of shower facilities was from none to 60. Sixty-two per cent of the schools had from 11 to 20 showers. Only three schools had five or less.

Ninety-one per cent of the schools required the girls to shower after class.

¹Frederick Luehring, Swimming Pool Standards (New York: A. S. Barnes and Company, 1939), p. 96.

²Ibid.

³Lee, op. cit., p. 145.

Gymnasium equipment. The amount and variety of supplies and equipment needed depends on the type of program offered and the number of students enrolled.

Gymnastic equipment should include about three mats to each piece of heavy apparatus equipment and at least one five by eight foot mat to each six or eight students in the largest tumbling class. Heavy apparatus should at least include climbing ropes, flying rings, high bars, parallel bars, side horses, and trampolines. If all these units were available, one unit each would accommodate one class of from 36 to 40 students.¹

Eighty-nine per cent of the schools responding had tumbling mats with a range of six to 50. Eighty-nine per cent had parallel bars, 82 per cent had climbing ropes, 30 per cent had vaulting horses, 61 per cent had a trampoline, 46 per cent had a high bar, and 37 per cent had flying rings.

Personal Data

Class size. It is widely recognized that physical education classes should not exceed 45 in enrollment and in no case should organized classes be permitted to go beyond 60 for one instructor. LaPorte recommended the maximum of

¹Bookwalter, op. cit., p. 97.

200 pupils per day.¹ Bookwalter recommended that the students-per-teacher maximums range from 190 to 250 pupils a week and up to 150 in any one day.²

From the survey of class AA high schools in Kansas, the average class size was 37 and the classes ranged in size from 15 to 80.

Class load. A recent unpublished study of the course assignments of selected physical education teachers revealed that the model number of courses taught is three. Daily class teaching hours should generally be kept at about five sections and should never exceed six. The total number of class hours a week, including other curricular or regular school functions, should generally be held to 30 and should never exceed 35 hours a week.³

Sixty per cent of the teachers answering the questionnaire had five classes per day and 19 per cent had six classes.

Subjects taught other than physical education. In a recent unpublished study by Bookwalter, it was revealed that the most frequent additional course taught by physical education teachers other than physical education was social

¹LaPorte, op. cit., p. 47.

²Bookwalter, op. cit., p. 20.

³Ibid., p. 19.

sciences and the next most common was health and safety.¹

In this survey, the most common subject taught other than physical education was health which was taught by 32 per cent. First aid was next and was taught by eight per cent. Forty-seven per cent of the teachers taught no additional subjects.

Undergraduate majors and minors in college. All teachers of physical education should be certified by the state since physical education is a very technical field and includes the handling of activities which are more or less inherently hazardous. It is important that they be under the leadership only of trained teachers, hence, the person responsible for them should have at least a minor and preferably a major in physical education in his college program.²

Of the 53 teachers answering this question, 33 had a major in physical education and none had a minor.

Salary. The national average teaching salary of secondary-school teachers in 1965-66 was estimated at \$6,768 in the NEA Research Bulletin.³

In comparison, the average salary for women physical education teachers in the class AA high schools in Kansas was \$5,867.

¹Bookwalter, *ibid.*, p. 19.

²*ibid.*, p. 48.

³NEA Research Bulletin, No. 2, May 1966, Research Division of the National Education Association, p. 36.

CONCLUSIONS

The majority of the girls' physical education programs in the class AA high schools in Kansas failed to meet the recommendations of authorities in the field of physical education in regard to the semesters of physical education that are required and the length of the class period. Also, a majority of the schools did not offer an adapted program or require physical examinations.

A majority of the schools did meet the recommendations as to the class size, the teaching load, and the number of physical education class meetings per week.

In regard to the facilities in the class AA schools in Kansas, a majority of the schools met the minimum recommendations for the size of the gymnasium and the number of showers. However, less than half of the schools met the recommendations for playground space, tennis courts, or swimming pool.

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A STUDY OF THE GIRLS' PHYSICAL EDUCATION
PROGRAM IN THE CLASS AA HIGH SCHOOLS IN KANSAS

by

PHYLLIS LEIGH WHEELER

B. S., Kansas State College of Pittsburg, 1963

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

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The purpose of this study was (1) to determine the existing conditions in regard to program, facilities, and staffs of girls' physical education in the class AA high schools in Kansas during the school year of 1965-66 and (2) to compare the results with the recommendations of leading authorities in the field of physical education.

During the 1965-66 school year, a questionnaire was sent to the women's physical education instructors in 53 of the 56 class AA high schools in Kansas. The three class AA high schools that were not included in the survey were boys' schools.

The questionnaire was divided into three sections; the first section contained questions about the physical education program, the second concerned the facilities and equipment and the last section had questions pertaining to the staff.

The total number of questionnaires returned was 46 of 53, or 87 per cent.

Fifty per cent of the schools reporting had only one physical education teacher. Twenty-six per cent had two teachers and there were a total of 91 physical education teachers.

In 50 per cent of the schools, only two semesters of physical education were required and four semesters were required in 41 per cent of the schools.

In 67 per cent of the schools, the physical education

classes met five times a week. Twenty per cent of the schools alternated the days, meeting three days one week and two days the next, or three days one semester and two days the next.

The amount of time most frequently allotted for physical education was 55 minutes and the next most frequent was 60 minutes. The range in time allotted was from 45 minutes to 60 minutes.

The three most popular team games included in the physical education programs were basketball, volleyball, and softball. The individual activities included most frequently in the programs were badminton, track and field, archery and table tennis.

Seventy per cent of the schools offered an intramural program for girls. Of the schools that did not have a program, seven anticipated introducing one within the next five years.

There was a variety of gymnasium equipment available in the various schools. Every school had at least two basketball goals and two volleyball standards. Forty-one schools had tumbling mats and 41 had parallel bars.

The range of the salaries of the girls' physical education teachers was from \$4,500 to \$8,500. The mode was \$4,700, the median \$5,425, and the mean \$5,867.

Thirty-eight per cent of the 53 teachers answering the section on personal data had a Master's degree.

Thirty-three of the teachers majored in physical education and none of them minored in physical education. The most common undergraduate majors were physical education, biology and psychology.

The range in the teaching load was from three to ten classes. Sixty per cent of the teachers taught five classes a day and 19 per cent taught six classes.

The classes ranged in size from 15 to 80. The mean class size was 37, the median 35, and the mode 36.

Twenty-five teachers taught only physical education. Twenty-three taught another subject in addition to physical education.

The majority of the girls' physical education programs in the class AA high schools failed to meet the recommendations of authorities in the field in regard to the semesters of physical education that are required and the length of the class period. Also, a majority of the schools did not offer an adapted program or require physical examinations.

A majority of the schools did meet the recommendations as to the class size, teaching load, and the number of physical education class meetings per week.

In regard to the facilities in the class AA schools, a majority of the schools met the minimum recommendations for the size of the gymnasium and the number of showers. However, less than half of the schools met the recommendations for playground space, tennis courts, or swimming pool.