

A STUDY OF THE ACTIVITIES TAUGHT BY BOYS' PHYSICAL EDUCATION TEACHERS IN
THE HIGH SCHOOLS OF KANSAS

by

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INTRODUCTION AND REVIEW OF LITERATURE

Physical education as one part of education aims to develop and educate the individual through the medium of wholesome and interesting physical activities, so that he will realize his maximum capacities, both physically and mentally, and will learn to use his powers intelligently and cooperatively as a good citizen.

It is the purpose of this thesis to present a picture of the existing situation with respect to the physical education activities engaged in by the teachers of boys' physical education in the high schools of the State of Kansas.

To present a thorough study of this phase of physical education the following related information was also secured which has direct relationship to the main title of the thesis: organization, school facilities, gymnasium facilities, and personal data of physical education teachers.

As education has become guidance, physical education as mass production has been superseded by guidance of the individual pupil in a program which is adapted to his needs. These programs range all the way from complete rest to participation in the full program of physical activities.

Activities should be selected in physical education in relation to the student's experience, interests, drives, needs, and capacities. Over a period of time, there has been evidence which shows or suggests that running, jumping, throwing, climbing and hanging formed the basic patterns of motor movements throughout the life of man. The highly organized motor activities of today can be organized under these patterns. Baseball is running and throwing; football is running, throwing, jumping, lifting, and carrying; and basketball is running and throwing. Some activities involve specific

technique, but depend for their attractiveness upon the basic relationship of these patterns.

Irwin (1944) recommended the following physical education activities for use at the secondary school level. Secondary school sports should include: baseball, basketball, boxing, field ball, field hockey, soccer, speedball, softball, tennis, touch football, track and field, wrestling. The elective program should include: apparatus, aquatics, and games and relays. The recreational sports program with its carry-over value should include the following: archery, badminton, bowling, deck tennis, fencing, golf, table tennis, tumbling, handball, horseshoes, paddle tennis, shuffleboard, squash, social games, rhythms and dancing, and winter sports.¹

Through the medium of the activities program of physical education, varied experiences should be developed. Kozman, Cassidy and Jackson (1948) stated the following experiences should be developed: to perfect recreational and social skills, to follow special interests and develop special abilities, to enlarge information and understandings of healthy living, to improve health status, to play with others of their own level of skill, to increase their ability to get along with and work with others, to increase their powers of self-direction and leadership, to enjoy physical activity as a medium for self-expression, to develop appreciations of the performances of others, and to relate and apply learnings in physical education to school, home and community living.²

1. L. W. Irwin, *The Curriculum in Physical Education*, p. 169.

2. Kozman, Cassidy, and Jackson, *Methods in Physical Education*, p. 482.

Through the influence of participation in physical education activities the possibilities of meeting the four objectives of the Educational Policies Commission of the National Education Association should be enriched. These objectives are self-realization, human relationships, economic efficiency, and civic responsibility.¹

1. Educational Policies Commission: The Purposes of Education in a Democracy.

MATERIALS AND METHODS

During the school year 1949-1950, an inquiry blank was sent to each of the 647 high schools of the State of Kansas, as listed in the Kansas High Schools Activities Association handbook of 1949, published by the Board of Control of Topeka, Kansas, with Mr. E. A. Thomas, Commissioner.¹

A total of 422 schools returned the blanks; 25 class AA (enrollment that exceeds 475 pupils in the upper four grades in high school), 61 class A schools (enrollment of more than 150 and not exceeding 475), and 336 class B schools (enrollment not exceeding 150).

The following percentages were attained in the return: 25 of the 37 class AA schools or 68 per cent, 61 of the 87 class A schools or 70 per cent, and 336 of the 523 class B schools or 64 per cent, giving an overall percentage return of 65 per cent.

The questionnaire blank contained five sheets, with the material printed on by the ditto process. Each inquiry blank was sent in a stamped envelope with a stamped return envelope enclosed.

In the Appendix of this thesis is shown the inquiry blank and a map of the State of Kansas, showing the location by counties of the different high schools over the state from which the inquiry blanks were received.

1. E. A. Thomas, Kansas State High School Activities Association, p. 3.

PRESENTATION AND DISCUSSION OF FINDINGS

Organization

Total Schools Represented. Twenty-five class AA schools, 61 class A schools, and 336 class B schools are represented in this study. According to the Kansas State High School Activities handbook there are 37 class AA schools, 87 class A schools, and 525 class B schools, giving a percentage return from the class AA schools of 68 per cent, class A schools 70 per cent, and class B schools 64 per cent. The overall percentage of return is 65 per cent.¹

This study involves the enrollment of 27,691 boys in the 422 high schools, and a total enrollment of 56,264 students.

The type of school most common to this study was the 4-year high school. In the class B schools, 100 per cent were 4-year schools; in the class A schools, 93 per cent were 4-year, with 5 schools under the 3-year plan. Sixty-four per cent of the class AA schools were reported as 3-year high schools, while 32 per cent were reported as 4-year high schools. One class AA school reported as a 2-year high school.

Number of Boys' Physical Education Teachers. The number of boys' physical education teachers varied with the size of school involved. In the class AA schools, 24 schools listed 60 teachers with a range from 1 to 11. In the class A schools, 61 schools reported 67 teachers with a range from 1 to 8. Class B schools reported 320 teachers.

1. E. A. Thomas, Kansas State High School Activities Association, p. 3.

Semesters of Physical Education Required. Twenty-five class AA schools reported the following: 1 school required physical education for 8 semesters, 7 schools required physical education for 6 semesters, 8 schools required physical education for 4 semesters, and 9 schools required physical education for 2 semesters. In the class A schools, of the 60 reporting, 37 required physical education for 2 semesters, 18 reported physical education for 4 semesters, 1 reported physical education for 6 semesters, and 4 schools required physical education for 8 semesters. In the class B schools, with 332 reporting, 152 stated they required physical education for 2 semesters, 106 required physical education for 4 semesters, 5 schools required physical education for 6 semesters, and 71 schools required physical education for 8 semesters. One class B school offered physical education in alternate years and 4 schools stated that they required no physical education.

Class Meetings Per Week. A majority of the schools reporting devoted 5 periods a week to physical education. In class AA, 13 of the 25 schools reported daily class meetings, while 8 schools reported meetings 3 times a week, and 1 school reported meetings 2 periods a week. In class A, 36 schools indicated daily meetings of their physical education classes, while 20 schools reported meeting 3 times a week, and 3 schools reported meetings twice during the week. In the class B schools, 209 reported that their physical education classes met daily, 86 class B schools reported 3 class meetings each week, 31 schools reported 2 class meetings each week, 3 schools reported 1 class meeting a week, and 2 schools reported 4 class meetings each week.

Length of Class Period. The length of class periods ranged from 30 minutes to 65 minutes, the time being partially dependent on the length of class periods set for academic classes. In class AA schools, 15 schools reported 60-minute periods, 6 reported 55-minute periods, and 4 reported 50-minute periods. In class A schools, 29 reported 60-minute periods, 20 reported 55-minute periods, 7 reported 50-minute periods, 2 reported 45-minute periods, and 3 reported 40-minute periods. In the class B schools, with 331 replies, more variations were reported. One school reported a 65-minute period, 199 reported a 60-minute period, 35 schools had a 50-minute period, 27 had a 45-minute period, 30 schools had a 40-minute period, 36 schools had a 35-minute period, 1 school had a 30-minute period, and 2 schools had a 25-minute period.

Table 1. Organization of Boys' Physical Education Program

Classification of schools and physical education procedure.	Class of Schools		
	AA	A	B
Total Schools Represented	25	61	336
Percentage Returned	68	70	64
Enrollment			
Boys	9,673	7,671	10,347
Total	21,266	14,761	20,218
Type of School			
Senior high 2-year	1		
Senior high 3-year	16	5	
Senior high 4-year	8	56	336
Number of Physical Education Teachers			
Number of Schools Reporting	24	61	336
Total Teachers	60	67	320
Range	1-11	1-5	
Semesters of Physical Education Required			
Eight	1	4	71
Six	7	1	3
Four	8	18	106
Two	9	37	152
Alternate Years			1
None			4
Class Meetings Per Week			
Daily	13	36	209
Four			2
Three	8	20	86
Three-two combination		2	
Two	1	3	31
One			3
Length of Class Period			
Sixty-five minutes			1
Sixty minutes	15	29	199
Fifty-five minutes	6	20	35
Fifty minutes	4	7	27
Forty-five minutes		2	30
Forty minutes		3	36
Thirty-five minutes			1
Thirty minutes			2

Physical Education Activities

A study of Table 2 shows that basketball is the favorite team sport of the physical education teachers. Class AA schools reported 100 per cent participation, the class A schools reported 97 per cent, and the class B schools reported 99 per cent. Volleyball and softball were also rated high by the physical education teachers, with touch football, baseball, and soccer, in that order, showing the most prominence on the physical education program. Other team sports mentioned, but in a very small degree, were field hockey and speedball.

In the individual athletic activities of the physical education program, track and field led the list in all three classes of schools. Eighty-eight per cent of the class AA schools reported track and field, 85 per cent of the class A schools, and 69 per cent of the class B schools. In the class AA schools, the other high ranking activities were tennis, table tennis, badminton, shuffleboard, and golf, in that order. In the class A schools, the most frequently mentioned activities were tennis, table tennis, horseshoes, badminton, and shuffleboard, in that order. In the class B schools, table tennis, horseshoes, tennis, and badminton were most frequently mentioned.

The combative contests of the activities program showed average participation from the class AA and class A schools. Wrestling in the class AA high schools and class A high schools received the most ratings with 64 per cent of the class AA schools reporting, and 65 per cent of the class A schools reporting. In the class B schools, boxing was reported most frequently, however only 20 per cent reported. Boxing in the class A schools and individual challenges in the class AA schools rated above 50 per cent participation, while in the class B schools, wrestling and individual challenges both fell below 20 per cent participation.

In the rhythms section of Table 2, calisthenics received the most ratings from each class of schools, with the class AA schools reporting 88 per cent participation, class A schools reported 77 per cent, and class B schools reported 51 per cent. In the class AA schools, social dancing ranked next in order with folk dancing and marching following. In the class A schools, marching ranked second, followed by social dancing and folk dancing. Other rhythm activities mentioned less frequently were tap and clog dancing and square dancing.

Tumbling ranked the highest in the stunts and tumbling activities. Both class AA schools and class A schools reported high participation with the class AA schools reporting 100 per cent participation and the class A schools reporting 79 per cent. In the class B schools, tumbling also received the most emphasis, but only 27 per cent reported the activity on the program. Class AA schools also reported high participation in apparatus and stunts, while in the class A schools, stunts were reported by 52 per cent of the schools and apparatus by 32 per cent. In the class B schools, only 7 schools out of the 336 reported having apparatus, while 51 reported using stunts in their program.

In the relays and group games section of Table 2, both class AA and class A schools showed high percentages of participation. In the class AA schools, 84 per cent used relay games in their program, and 80 per cent used group games. In the class A schools, 80 per cent used relay games and 64 per cent used group games. In the class B schools, 40 per cent used relay races, and 26 per cent used group games.

Ice skating was the only activity of the winter sports program checked by the three classes of schools. Three class AA schools checked the activity, 2 class A schools, and 16 class B schools checked it.

Number of Activities

The number of activities the schools participated in is shown in Table 3. Forty-two activities were listed in Table 2. Each school indicated in the questionnaire which activities they participated in and the results are shown in Table 3. The class AA schools activities ranged from 11 to 30 activities. Class A schools ranged from 6 activities to 24, and the class B schools ranged from 2 to 25 activities.

Table 2. Activities included in Physical Education Programs

Forty-two activities most common in physical education programs	Class of Schools		
	AA	A	B
Team Games			
Basketball	25	59	334
Softball	23	60	264
Volleyball	25	59	275
Baseball	12	24	204
Touch Football	24	57	190
Soccer	17	33	55
Field Hockey		3	3
Speedball		1	
Individual Athletics			
Tennis	18	33	84
Table Tennis	18	26	199
Deck Tennis	3	7	19
Badminton	14	21	69
Paddle Tennis	7	10	21
Shuffleboard	13	14	55
Handball	4	11	9
Golf	12	13	12
Miniature Golf	2		
Swimming	4	3	8
Roller Skating		2	17
Bowling	3		
Quoits	1	5	14
Track and Field	22	54	231
Life Saving	6	5	9
Horseshoes	7	25	86
Archery	5	10	13
Darts	2	8	20
Croquet	2	3	7
Trampoline			1
Combative Contests			
Boxing	12	32	80
Wrestling	16	36	71
Individual Challenges	13	28	70
Rhythms			
Social Dancing	15	10	56
Folk Dancing	12	10	53
Marching	12	29	164
Calisthenics	22	47	183
Tap or Clog Dancing	2	3	9
Square Dancing	1	2	
Stunts and Tumbling			
Apparatus	21	20	7

Table 2. (concl.).

Forty-two activities most common in physical education programs	Class of Schools		
	AA	A	B
Tumbling	25	48	92
Stunts	19	32	51
Relays and Group Games			
Relay Races	22	49	134
Dodgeball, etc.	20	39	88
Winter Sports			
Skiing			
Ice Skating	3	2	16
Ice Hockey			

Table 3. Number of Activities in Class A, AA, and B Schools in Kansas

No. of activities	Class of Schools		
	AA	A	B
30	1		
29			
28	1		
27			
26			
25	1		2
24		1	
23	2	1	
22	4	2	
21	2	2	2
20	5	3	1
19		6	6
18	1	1	6
17	1	11	15
16	1	5	10
15	3	2	7
14		5	10
13	1	8	19
12		4	15
11	2	4	24
10		1	35
9		2	25
8		1	38
7		1	28
6		1	26
5			35
4			21
3			7
2			4

Facilities

Gymnasium. All schools except 2 reported that they had gymnasiums in their school buildings, varying from a large gymnasium, 60' x 80', to a small gymnasium which was less than 40' x 60'. In class AA schools, 19 reported that they had a large gymnasium, while 5 reported medium gymnasiums, and 1 reported a small gymnasium. In the class A schools, 29 reported large gymnasiums, 23 reported medium gymnasiums, 8 reported small gymnasiums, and 1 reported no gymnasium. In the class B schools, 59 reported large gymnasiums, 208 reported medium gymnasiums, 68 reported small gymnasiums, and 1 reported no available gym.

Play Room. Play rooms were reported below a minimum in all classes of schools. Thirteen class AA schools reported having play rooms available, 7 reported large play rooms, 40' x 60'; 4 reported medium play rooms, 20' x 30'; and 2 reported small play rooms, less than 20' x 30'. In the class A schools, 9 reported having play rooms, 3 were listed as large, 5 were listed as medium, and 1 was listed as small. Nineteen class B schools reported play rooms, 8 were listed as large, 3 as medium, and 8 as small.

Athletic Field. The athletic fields were determined on the following basis: large fields, 10 acres or more; medium fields, 6 to 9 acres; and small fields, less than 6 acres. Class A schools reported 15 large fields, 21 medium, and 25 small fields. Reports from the class B schools showed 42 large, 133 medium, and 157 small fields.

Baseball, football, track, and softball were the sports most frequently played on the athletic field of all the classes of schools, however in the class A schools, soccer was often mentioned as being played on the athletic field. Other sports reported to be played on athletic fields were hockey, speedball, kickball, touch football, golf, volleyball, relays, and horseshoes.

Playground. Playgrounds were determined on the following basis: large playgrounds, 7 acres or more; medium playgrounds, 3 to 6 acres; and small playgrounds, less than 3 acres. Eighteen of the 26 class AA schools reported having playgrounds, 6 of which were large, 3 medium, and 9 small. In class A, 48 schools reported. Five indicated large playgrounds, 11 medium, and 32 small. In class B, 290 schools reported. Sixteen had large playgrounds, 115 had medium playgrounds, and 169 had small playgrounds.

A large majority of the schools had a sod-surfaced playground. Other surfaces less frequently mentioned were clay, gravel, asphalt, a combination of sod and clay, and a combination of clay and gravel.

Tennis Courts. In class AA, 15 schools reported having available 70 courts. Thirty-four class A schools had 81 courts. One hundred and ten class B schools had available 177 courts.

Clay was the most frequently reported surface used on the tennis courts. Concrete surfacing rated second, and asphalt, sod, and sand were less frequently used. Ninety-one courts had clay surface, 46 courts were concrete, and 23 courts were asphalt.

Swimming Pool. Only 5 schools had a swimming pool in their school building, 4 in class AA schools, and 1 in class B schools. Seven other schools had access to the Y.M.C.A. swimming pools in their locality, and 3 indicated use of near-by lakes and rivers.

Table 4. Facilities Used for Boys' Physical Education Program

Description and use of facilities	Class of Schools		
	AA	A	B
Gymnasium			
Large (80' x 90')	19	29	59
Medium (40' x 80')	5	23	208
Small (less)	1	8	68
No Gymnasium		1	1
Play Room			
Large (40' x 60')	7	3	8
Medium (20' x 30')	4	5	3
Small (less)	2	1	8
Athletic Field			
Large (10 acres or more)	15	15	42
Medium (6 to 9 acres)	3	21	133
Small (less than 6 acres)	7	25	157
Athletic Field Used For:			
Baseball	14	29	244
Football	23	59	221
Track	19	51	236
Hockey	3	1	4
Soccer	9	22	50
Softball	18	43	259
Speedball	1	2	
Kickball		1	
Touch Football		1	7
Golf		2	1
Volleyball		1	2
Relays		1	
Horseshoes			3
Playground			
Large (7 acres or more)	6	5	16
Medium (3 to 6 acres)	3	11	115
Small (less than 3 acres)	9	32	159
<u>Surfacing of Playground</u>			
Sod	11	34	242
Clay	3	3	18
Gravel	3	5	8
Asphalt	1	2	1
Concrete			
Combination of sod and clay		2	9
Combination of clay and gravel		2	
Combination of sod and concrete			1
Combination of sod and gravel			9
Tennis Courts			
Number of schools having courts	15	34	110
Total number of courts	70	81	177
Range of Courts	1-10	1-6	1-3
<u>Surfacing of Tennis Courts</u>			
Clay	4	13	74
Asphalt	6	10	7

Table 4. (concl.).

Description and use of facilities	Class of Schools		
	AA	A	B
Concrete	5	11	30
Sod			1
Sand			2
Swimming Pool			
Large (30' x 75')			
Medium (20' x 60')	4		
Small (less)			1
Y.M.C.A.	3	2	

Gymnasium Facilities

The physical education activities program depends to a large extent on the amount of equipment available to produce an adequate and well-balanced program. The following apparatus equipment was reported in use in the high schools included in this survey:

Parallel Bars. In class AA, 19 schools reported 58 parallel bars with a range from 1 to 6. In class A schools, 18 reported 20 parallel bars with a range from 1 to 2. In class B schools, 7 schools reported 7 parallel bars.

Horizontal Bars. Eighteen class AA schools reported 37 horizontal bars with a range from 1 to 6. Sixteen class A schools reported 19 horizontal bars with a range from 1 to 2. Five class B schools had 5 horizontal bars.

Stall Bars. Nine class AA schools had 16 stall bars with a range from 1 to 4. One class A school had 1 stall bar, and 1 class B school had 1 stall bar.

Suspended Parallel Bar. One school in each class reported 1 parallel bar each.

Low Parallel Bar. Six AA schools had 10 low parallel bars available with a range from 1 to 3. One class A school had 1 bar. No class B schools reported this equipment.

Rings. Six class AA schools had 26 traveling rings, with a range from 1 to 6. No class A schools had this equipment. Two class B schools had 8 rings with a range from 2 to 6.

Six class AA schools had 16 sets of rings available with a range from 1 to 3. Six class A schools had 7 sets of rings with a range from 1 to 2. Two class B schools had 2 sets of rings.

Horse, Vaulting. In 19 class AA schools, 39 vaulting horses were reported with a range from 1 to 2. Fourteen class A schools reported 14 vaulting horses. Six class B schools reported 6 vaulting horses.

Gym Scooters. One school in class A reported the use of gym scooters in their physical education program. They had 12 scooters available.

Climbing Ropes. Fifty climbing ropes were available in 19 class AA schools with a range from 1 to 10. Twenty-seven ropes were available in 24 class A schools with a range from 1 to 4. Eighteen ropes were available in 16 class B schools with a range from 1 to 2.

Climbing Poles. Four class AA schools had 4 climbing poles. One class A school had 1 pole, and 2 class B schools reported 2 poles.

Vaulting Buck. Twenty-seven vaulting bucks were reported by 15 class AA schools with a range from 1 to 8. Thirteen vaulting bucks were available in 12 class A schools with a range from 1 to 2. Ten vaulting bucks were reported in 10 class B schools.

Springboard. Nineteen class AA schools had 50 springboards with a range from 1 to 6. Twenty class A schools had 23 springboards with a range from 1 to 2. Nine class B schools reported 9 springboards.

Horizontal Ladder. Thirteen ladders were reported by 10 class AA schools with a range from 1 to 4. Ten class A schools reported 10 ladders available, and 6 class B schools reported 6 ladders available.

Rowing Machine. A total of 6 rowing machines was reported--4 of which were in class AA schools, and 2 of which were in class A schools.

Chest Pulley Weights. Five class AA schools had 13 pulley weights with a range from 1 to 8. Two class A schools had 2 pulley weights, and 7 class B schools had 7 pulley weights.

Striking Bag Drum. Ten striking bag drums were reported in 9 class AA schools. Eight class A schools had 8 bag drums, and 17 class B schools had 17 bag drums.

Boxing Ring. Twenty-nine boxing rings were available in the high schools, with 3 in class AA, 10 in class A, and 16 in class B schools.

Wrestling Mats. Seventeen class AA schools reported 22 wrestling mats with a range from 1 to 4. Twenty-seven class A schools had 27 wrestling mats, and 98 class B schools had 98 wrestling mats.

Basketball Goals. Twenty-five class AA schools reported 130 basketball goals, with 15 schools reporting 4 goals, 5 schools reporting 6 goals, and 5 schools reporting 8 goals. In class A, 60 schools reported 250 basketball goals, with 10 reporting 2 goals, 40 reporting 4 goals, 5 reporting 6 goals, and 5 reporting 8 goals. In class B, 335 schools reported 1,270 basketball goals. Forty-eight schools had 2 goals each, 191 schools had 4 goals each, 74 schools had 6 goals each, and 22 schools had 8 goals each.

Gym Mats. Twenty-four class AA schools reported 411 mats, with a range from 6 to 36. In class A schools, 57 reported 317 mats with a range from 2 to 16. In class B schools, 210 schools reported 631 mats with a range from 1 to 10. The most common-sized mats purchased by the schools were 5' x 10' and 3' x 5'.

Trampoline. One class B school reported a trampoline.

Volleyball Standards. In class AA schools, 20 reported having volleyball standards. In class A schools, 50 reported volleyball standards available. In class B schools, 263 schools indicated volleyball standards.

Table 5. Gymnasium Facilities Available in Class A, AA, and B Schools in Kansas

Apparatus available for use in the physical education program	Class of Schools		
	AA	A	B
Parallel Bars			
Number of Schools Reporting	19	18	7
Total Number of Bars	38	20	7
Range	1-6	1-2	
Horizontal Bars			
Number of Schools Reporting	18	16	5
Total Number of Bars	37	19	5
Range	1-6	1-2	
Stall Bars			
Number of Schools Reporting	9	1	1
Total Number of Bars	16	1	1
Range	1-4		
Suspended Parallel Bar			
Number of Schools Reporting	1	1	1
Total Number of Bars	1	1	1
Low Parallel Bar			
Number of Schools Reporting	6	1	
Total Number of Bars	10	1	
Range	1-3		
Rings			
Traveling			
Number of Schools Reporting	6		2
Total Number of Rings	26		8
Range	1-6		2-6
Flying			
Number of Schools Reporting	6	6	2
Total Sets of Rings	16	7	2
Range	1-8	1-2	
Horse, Vaulting			
Number of Schools Reporting	19	14	6
Total Number of Horses	39	14	6
Range	1-8		
Gym Scooters			
Number of Schools Reporting		1	
Total Number of Scooters		12	
Climbing Ropes			
Number of Schools Reporting	19	24	16
Total Number of Ropes	50	27	18
Range	1-16	1-4	1-2
Climbing Poles			
Number of Schools Reporting	4	1	2
Total Number of Poles	4	1	2
Vaulting Buck			
Number of Schools Reporting	15	12	10
Total Number of Bucks	27	13	10
Range	1-8	1-2	
Springboard			
Number of Schools Reporting	19	20	9

Table 5. (concl.).

Apparatus available for use in the physical education program	Class of Schools		
	AA	A	B
Total Number of Boards	50	25	9
Range	1-6	1-2	
Horizontal Ladder			
Number of Schools Reporting	10	10	6
Total Number of Ladders	13	10	6
Range	1-4		
Rowing Machine			
Number of Schools Reporting	4	2	
Total Number of Machines	4	2	
Chest Pulley Weights			
Number of Schools Reporting	5	2	7
Total Number of Weights	13	2	7
Range	1-8		
Striking Bag Drum			
Number of Schools Reporting	9	8	17
Total Number of Drums	10	8	17
Range	1-2		
Boxing Ring			
Number of Schools Reporting	3	10	16
Total Number of Rings	3	10	16
Wrestling Mat			
Number of Schools Reporting	17	27	98
Total Number of Mats	22	27	98
Range	1-4		
Basketball Goals			
Number of Schools Reporting	25	57	355
Total Number of Goals	150	250	1,270
Range	4-8	2-8	2-8
Gymnasium Mats			
Number of Schools Reporting	24	57	210
Total Number of Mats	411	317	631
Range	6-36	2-16	1-10
Sizes of Mats			
3x5	12	12	24
3x8	5	6	37
5x10	16	35	155
5x10	1	10	18
4x8	4	3	6
4x6	4	3	6
Trampoline			
Number of Schools Reporting			1
Total Number of Trampolines			1
Volleyball Standards			
Number of Schools Reporting	20	50	263

Personal Data of Boys' Physical Education Teachers

Salary. In class AA the salaries ranged from \$2,800 to \$4,200 per annum. The mode salary was \$3,600, the median salary was \$3,537.50, and the mean salary was \$3,561.54. In class A schools the salaries ranged from \$2,400 to \$4,200, with the mode salary being \$3,150, the median salary being \$3,320, and the mean salary being \$3,330.45. In the class B schools the salary range was from \$900 to \$4,000, the mode salary being \$3,000, the median salary being \$3,103, and the mean salary being \$3,075.32. The majority of boys' physical education teachers were hired on either a 9-month or a 12-month basis, leaving a small number who were hired on a 10-month basis.

Degrees. Two hundred and twenty-one physical education teachers indicated they had their B. S. degree, with no advanced work. Of this group, 9 were from class AA schools, 35 were from class A schools, and 179 were from class B schools. One hundred and fourteen teachers indicated they had worked beyond their bachelor of science degree, with 5 reporting from class AA schools, 18 from class A schools, and 91 from class B schools.

Fifty-eight teachers indicated they had their M. S. degree, 9 of whom had worked beyond this degree.

Undergraduate Majors in College. Physical education, social science, education, history, and industrial arts were the most frequent major fields in undergraduate study. Two hundred and five teachers indicated major work in physical education, 125 indicated major work in social science, 85 majored in education, 82 majored in history, and 76 majored in industrial arts. Other major fields mentioned most frequently were coaching, biology, science, and business administration.

Undergraduate Minors in College. Physical education, education, social science, biology, science, and history were the most frequent minor fields in undergraduate study. One hundred and eighteen teachers indicated minor work in physical education, 99 teachers indicated minor work in education, 97 teachers indicated work in social science, 85 had minors in science, 85 had minors in biology, and 82 had minors in history. Other minor fields mentioned most frequently were mathematics, English, industrial arts, coaching and psychology.

Table 6. Personal Data of Boys' Physical Education Teachers in Class A, AA, and B Schools of Kansas

Salary, basis of contract, degrees, and undergraduate majors and minors	Class of Schools		
	AA	A	B
Salary			
Range	\$2,600-4,200	\$2,400-4,200	\$900-4,000
Mode	\$5,600	\$3,150	\$3,000
Median	\$5,537.50	\$3,320	\$3,103
Mean	\$3,561.54	\$3,330.45	\$3,073.32
Basis of Contract			
9 months	3	15	167
10 months	1	5	37
11 months		2	
12 months	17	35	94
Degrees			
B. S. Degree	9	35	179
Beyond	5	18	91
M. S. Degree	9	4	36
Beyond	2	4	3
Undergraduate majors in college			
Physical Education	22	42	141
History	5	8	69
Social Science	5	14	106
Mathematics	1	5	43
Education	6	8	71
Biology	3	8	47
Industrial Arts	3	7	66
Science	1		28
Chemistry			6
Commercial	1	1	19
Economics		3	14
Physics			12
Agriculture		2	9
Political Science		2	5
English	1	1	16
Business Administration	2	2	23
Geography			3
Zoology	2	1	3
Coaching	7	12	46
Psychology	2	3	10
Speech			4
Art			1
French			
Geology		1	3
Spanish			1
Music			1
Philosophy			1
Hygiene			1
Health		1	
Botany			1

Table 6. (concl.).

Salary, basis of contract, degrees, and undergraduate majors and minors	Class of Schools		
	AA	A	B
Undergraduate minors in college			
Physical Education	3	14	110
Mathematics	4	8	58
English	3	6	46
Science	2	13	70
History	5	10	67
Social Science	6	19	72
Biology	6	14	65
Education	8	21	70
Industrial Arts	2	6	43
Physics	1	2	14
General Science		5	
Chemistry	1	2	15
Physiology	3	5	18
Sociology	2	2	13
Physical Science		2	11
Economics	1	2	12
Geography		1	6
German			4
Botany	1	1	5
Latin			3
Psychology	2	5	22
Commercial			15
Agriculture			6
Spanish			1
Speech		1	3
Hygiene	3	4	13
Language	1		3
Health	1	6	20
French			2
Coaching	3	9	32
Music		1	2
Finance		1	1
Administration	1		10
Geology			1
Pre-medical	1		4
Journalism	1	2	4
Swimming	1	4	2
Fencing	1		
Zoology	1	3	10
Meteorology	1		
Bible and Religion			1
Astronomy			1
Philosophy			1

SUMMARY AND RESULTS

A majority of the high schools required from 2 to 4 semesters of physical education for credit. Jack (1946) found that 22 per cent of the Minnesota schools required physical education beyond the 10th grade, while this study shows that 54 per cent required physical education beyond the 10th grade.¹

Class meetings were held each week by 61 per cent of the schools. Jack (1946) found in his study that only 9 per cent of the schools required physical education more than an average of 2 periods per week.² Jackson (1945) in his study of Illinois schools stated that 2 periods a week were devoted to physical education in a majority of schools.³

Fifty-four per cent of the schools reporting assigned 60 minutes to physical education classes. Jack (1946) in his study stated that 76 per cent of the schools assigned 60 minutes to physical education classes, and as sizes of school enrollment increased the percentage of schools assigning 60 minutes to physical education class periods increased, which was also found to be true in this study.⁴

The following team games were found to be most popular among the physical education teachers and ranked in this order; basketball, volleyball, softball, touch football, and baseball. Koss, Reavis, Hughes, and Hutson (1940) stated that of all the activities offered team sports ranked the highest,

1. Harold K. Jack, *An Analysis of the Physical Education Programs of the Minnesota Secondary Schools*, p. 27.

2. *Ibid.* p. 27.

3. E. O. Jackson, *Activities Engaged in by Teachers of Physical Education in the High Schools of Illinois*, p. 65.

4. Jack, *op. cit.* p. 27.

with the following 10 ranking highest: basketball, softball, volleyball, tumbling, calisthenics, track and field, relay games, group games, touch football, and marching.¹ This study compares favorably with the exception of the higher ranking of track and field and the inclusion of table tennis which ranked 7th in this study. Tumbling which was ranked 4th in the other study ranked very low in this study.

LaPorte (1938) found from his 9 years of research in physical education that using the following criteria: physical and organic growth, social traits, psychological development, safety skills, and recreational skills, the following activities contributed more to senior high boys: swimming and diving, football, soccer, basketball, playground ball, life saving, tennis, baseball, speedball, and volleyball.²

From the activities reported in this study, the aquatic program is lacking in the largest degree, however it is believed that the summer recreational program may take up this portion of activities.

Forty-two different activities were listed in the questionnaire. In the class AA schools, the range was from 11 activities to 30 activities with the mode being 20 activities, the mean number of activities was 19.6, and the median number, 19.6. In the class A schools the range was from 6 activities to 24 activities, with the mode number of activities being 17, the mean being 15.3, and the median being 15.1. In the class B schools, the range was from 2 activities to 25 activities. The mode number of activities was 8, the mean was 9.45, and the median was 8.36 activities (Table 5).

1. L. V. Koss, W. C. Reavis, J. M. Hughes, P. W. Hutson, *Administering the Secondary School*, p. 496-497.

2. William R. LaPorte, *The Physical Education Curriculum*, p. 8.

Jack (1946) found the mean number of activities in the physical education program was 16.83 activities.¹ As size of school enrollment increased the mean and median number of activities increased, which was also found to be true in this study.

Ninety-nine per cent of the schools reported they had gymnasiums available in their buildings. This compares very favorably with Larson (1933) who stated that 201 of the 204 high schools in Minnesota (84 per cent) had 1 or more gymnasiums.² Jack (1946) reported that 72 per cent of the schools in Minnesota had 1 gymnasium in school buildings, and 18 per cent had 2 or more.³

Two hundred and twenty-nine schools, or 54 per cent, reported athletic fields of 6 acres or larger. Koes, Reavis, Hughes, and Hutson (1940) stated in their book that senior high school athletic fields averaged 6.4 acres.⁴

One hundred and fifty-six schools, or 43 per cent, reported playgrounds larger than 3 acres. Nordly (1939) in his study of Minnesota schools stated that 54 per cent of the schools have less than 2 acres of playground space, while 59 per cent have in excess of 5 acres.⁵ A majority of the playgrounds have a sod surface. LaPorte (1938) states that heavy turf makes the ideal surface for large areas.⁶

1. Jack, *op. cit.* p. 27.

2. L. A. Larson, *A Survey of Physical Education and Health Education in Public High Schools of Minnesota*, p. 110.

3. Jack, *op. cit.* p. 28.

4. Koes, Reavis, Hughes, and Hutson, *op. cit.* p. 496.

5. Carl L. Nordly, *University of Minnesota Study of Physical Education Facilities and Equipment of the Accredited Public Secondary Schools of Minnesota*, p. 127.

6. LaPorte, *op. cit.* p. 41.

Tennis courts were available in 159 schools with a range from 1 to 10 courts. Clay and concrete were the most popular surface for the courts. No available material was present for comparison, but it is felt that this part of the study ranked very favorably.

Five swimming pools were reported; 4 medium (20' x 60'), and 1 small (less than 20' x 60'). Seven schools indicated the use of Y.M.C.A. pools in the near vicinity.

No available information was found in which to compare the various pieces of equipment in the gymnasiums, however activities on the different pieces of apparatus are an important phase of the physical education program, and should not be neglected.

According to this report the 10 high-ranking pieces of gymnasium equipment are as follows: basketball goals, gymnasium mats, volleyball standards, wrestling mats, climbing ropes, parallel bars, horizontal bars, springboards, vaulting horses, and vaulting bucks.

The salaries of the physical education teachers increased progressively with pupil enrollment, which was also noted in Jackson's (1943) study in Illinois.¹ Most physical education teachers are paid on a 9-month basis, although there is a strong tendency toward the 12-month basis.

Three hundred and ninety-three men indicated they had received their bachelor of science degree, and 53 indicated a master's degree, with 9 men doing work beyond their master's degree. This indicates interest in professional growth and probably can be attributed to some degree to the veteran's educational program since the war. Jackson (1943) stated in his study that 155 men in Illinois had received their master's and 36 men were doing work beyond.²

1. Jackson, *op. cit.*, p. 62.

2. *Ibid.*, p. 62.

Forty-nine per cent of the men reporting indicated physical education as their field of major specialization. Thirty per cent stated that physical education was one of their minors. Jackson (1945) in the study of Illinois stated that 34 per cent of the men teachers majored in physical education.¹ Sixty-nine teachers in class B schools reported they had neither a major nor a minor in physical education, while 5 teachers in class A indicated as such. Sixteen teachers failed to answer. Other major fields most frequently mentioned were social science, education, history, industrial arts, and mathematics. The most frequently mentioned minors other than physical education were education, social science, science, history, biology, and mathematics. Jackson (1945) stated that education was the most frequently mentioned in the undergraduate minor field.²

1. Jackson, op. cit., p. 63.

2. Ibid., p. 63.

CONCLUSIONS

There is a strong tendency to increase the number of required semesters of physical education in the individual schools from the state requirement, which states that credit may be earned by a daily period of at least 60 minutes for a full year or a like period every other day for 2 full years. Sixty-five class B high schools were not meeting these standards.

A great variety of activities is included in the curriculum, but a few of the so-called varsity sports appear to predominate and, in many instances, probably constitute the program. Team games receive the greatest emphasis from the physical education teacher, probably because the initial cost of equipment is less than the cost of apparatus equipment, etc.

The individual athletics programs, which include some of the best activities for carry-over into later life, are not receiving the emphasis they should. Some of this lack of emphasis can be contributed to the college curriculum, because they are not in the program of activities taught.

There also seems to be neglect on the rhythm activities, especially social dancing, folk dancing, and square dancing. This socialization aspect of physical education should be stressed more in the training program of the physical education teachers.

It is very notable that all except 2 of the schools reporting had gymnasiums. The people, boards of education, and administrators have in the past 30 years come to recognize the value of good gymnasium facilities, both from the school's standpoint and also from the standpoint of community welfare.

Due largely to the cost, swimming pools are at a minimum in Kansas. The public, school boards, and administrators should recognize the values

gained from swimming and life saving and do their utmost to include it in their activities program.

Gymnasium facilities were noticeably weak in the smaller schools, however it was noted that apparatus which serves a greater number of boys at one time was more prevalent, which is a good point.

Professional growth increases with the size of schools. It was noted that 30 per cent of the teachers who reported were working toward advanced degrees, which is advantageous to the teacher as well as the physical education program.

Due to the improved standards of the State Department of Education, physical education teachers have accordingly had to increase their hours to meet these requirements, which has been an advantage to the student, the teacher, and the program.¹

Teacher training institutions should increase the emphasis placed on group games, recreational activities for carry-over into later life, and rhythms. This training should be very practical and fundamental.

With the emphasis that has been placed on physical education in the State of Kansas, and which will be increased in the future, it would seem advisable that the State of Kansas should have a state supervisor to help maintain the standards set forth in the physical education manual, and to integrate the program of physical education with education as a whole, keeping in mind always that the major function of education is to train the individual for more effective and happy living in socialized situations where getting along with people is more important and more difficult than expressing highly technical skills.²

1. State of Kansas, Department of Education, Certificate Handbook, p. 24.
2. State of Kansas, Department of Education, Physical Education Manual.

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APPENDIX

Questionnaire

Map of Kansas

Boys' Physical Education Teachers of Kansas

Dear Sir:

The following pages enclose a check list to determine the existing situation in regard to certain phases of the physical education program as offered in the six hundred and forty-seven high schools of the State of Kansas.

The material gathered will be used for a Master's Thesis in Physical Education at Kansas State College.

Organization

K.S.H.S.A.A. Classification (AA-A-B) _____

Enrollment _____

Boys _____

Total enrollment of school _____

Type of School _____

Senior high 2-year _____

Senior high 3-year _____

Senior high 4-year _____

Number of Boys' Physical Education _____

Teachers _____

Semesters of Physical Education _____

required (check one)

8 _____

6 _____

4 _____

2 _____

Class meetings per week (check one)

Daily _____

Four _____

Three _____

Two _____

One _____

Length of class period (check one)

60 min. _____

55 min. _____

50 min. _____

45 min. _____

40 min. _____

35 min. _____

30 min. _____

25 min. _____

20 min. _____

Facilities

Gymnasium

Large	(80' x 90')	_____
Medium	(40' x 60')	_____
Small	(less)	_____

Play Room

Large	(40' x 60')	_____
Medium	(20' x 30')	_____
Small	(less)	_____

Athletic Field

Large	(10 acres or more)	_____
Medium	(6 to 9 acres)	_____
Small	(less)	_____

This field used for:

Baseball	_____
Football	_____
Track	_____
Hockey	_____
Soccer	_____
Softball	_____
Others (name)	_____

Playground

Large	(7 acres or more)	_____
Medium	(3 to 6 acres)	_____
Small	(less)	_____

Surfacing

Sod	_____
Clay	_____
Gravel	_____
Asphalt	_____
Concrete	_____

Tennis Courts

Rubber	_____
Surfacing	_____
Clay	_____
Asphalt	_____
Concrete	_____

Swimming Pool

Large	(30' x 75')	_____
Medium	(20' x 60')	_____
Small	(less)	_____

Additional Facilities

Gymnasium (if more than one piece
of the same kind of apparatus,
please indicate)

Parallel bars	_____
Horizontal bars	_____

Additional Facilities (cont.)

Low parallel bar	-----
Rings	-----
Traveling	-----
Flying	-----
Horse, vaulting	-----
Climbing ropes	-----
Climbing poles	-----
Vaulting buck	-----
Springboard	-----
Horizontal ladder	-----
Rowing machine	-----
Chest pulley weight	-----
Striking bag drum	-----
Boxing ring	-----
Wrestling mat	-----
Basketball goals	-----
Mats (number)	-----
3x5	-----
3x8	-----
5x10	-----
3x10	-----
Others	-----
Volley ball standards	-----

Activities included in the curriculum

for boys:	
Team Games	
Basketball	-----
Softball	-----
Volleyball	-----
Baseball	-----
Touch football	-----
Soccer	-----
Field hockey	-----
Individual Athletics	
Tennis	-----
Table tennis	-----
Deck tennis	-----
Badminton	-----
Paddle tennis	-----
Shuffleboard	-----
Handball	-----
Golf	-----
Miniature golf	-----
Swimming	-----
Roller skating	-----
Bowling	-----
Quoits	-----
Track & field	-----
Life saving	-----
Horseshoes	-----

Archery	_____
Darts	_____
Croquet	_____
Combative contests	
Boxing	_____
Wrestling	_____
Individual challenges	_____
Indian wrestle, etc.	_____
Rhythms	
Social dancing	_____
Folk dancing	_____
Marching	_____
Calisthenics	_____
Tap or Clog dancing	_____
Stunts and Tumbling	
Apparatus	_____
Tumbling	_____
Stunts	_____
Relays and Group Games	
Relay races	_____
Dodgeball, etc.	_____
Winter Sports	
Skiing	_____
Ice skating	_____
Ice hockey	_____
Personal Data of the Boys' Physical Education Teachers	
Salary (average)	
9-months	_____
10-months	_____
12-months	_____
B. S. Degree	
Beyond	_____
M. S. Degree	
Beyond	_____
Undergraduate Majors in College	
Physical Education	_____
History	_____
Social Science	_____
Mathematics	_____
Education	_____
Biology	_____
Industrial Arts	_____
Science	_____
Chemistry	_____
Commercial	_____

Undergraduate Majors in College (cont.)

Economics	_____
Physics	_____
Agriculture	_____
Political Science	_____
English	_____
Business Administration	_____
Geography	_____
Zoology	_____
Coaching	_____
Psychology	_____
Speech	_____
Art	_____
French	_____
Geology	_____
Spanish	_____
Language	_____
Others (list)	_____

Undergraduate Minors in College

Physical Education	_____
Mathematics	_____
English	_____
Science	_____
History	_____
Social Science	_____
Biology	_____
Education	_____
Industrial Arts	_____
Physics	_____
General Science	_____
Chemistry	_____
Physiology	_____
Sociology	_____
Physical Science	_____
Economics	_____
Geography	_____
German	_____
Botany	_____
Latin	_____
Psychology	_____
Commercial	_____
Agriculture	_____
Spanish	_____
Speech	_____
Hygiene	_____
Language	_____
Health	_____
French	_____
Coaching	_____
Music	_____
Finance	_____
Administration	_____
Geology	_____
Pre-medical	_____
Journalism	_____

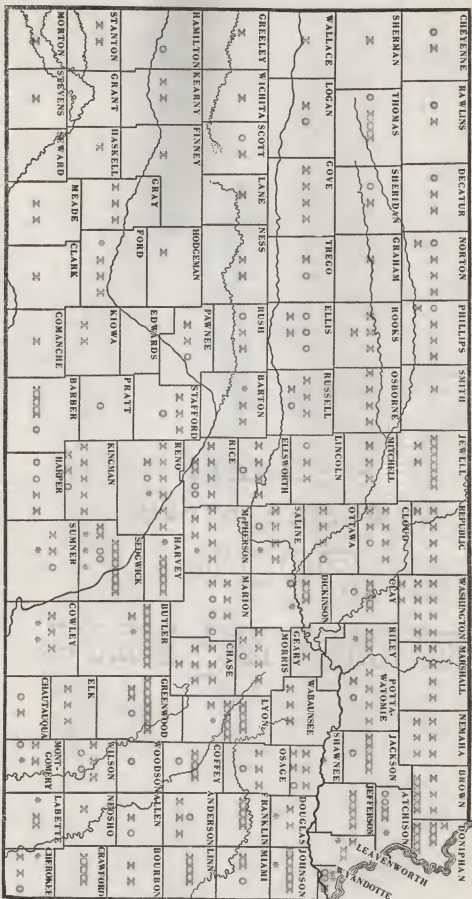
Undergraduate Minors in College (cont.)

Swimming	=====
Fencing	=====
Zoology	=====
Others (list)	=====

Thank you for your kind cooperation. With the help of the other six hundred and forty-six boys' physical education directors we may get a good picture of what is being done in physical education in the State of Kansas.

Sincerely,

Barney Hays



Distribution of high schools by counties
(Those who returned questionnaires)

● Class AA high schools
○ Class A high schools
X Class B high schools