

A STUDY OF FEMALE COACHING QUALIFICATIONS
IN THE STATE OF KANSAS
FOR CLASSES 1A, 2A AND 3A HIGH SCHOOLS

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CHAPTER 1

INTRODUCTION

Many administrators, educators and female athletes are questioning the ability of women to serve as coaches. A recent survey by the Kansas High School Activities Association revealed that 399 high schools totaling 40,865 female students have interscholastic athletics available to them. There are a growing number of sports offered to females which have stimulated student interest and participation. But increased student participation has not always been reinforced with the addition of more qualified coaches and it is this situation that poses a significant problem. Not only is it difficult to obtain the numbers of coaches needed, but more importantly an adequate number of qualified coaches.

With the large numbers of females participating in sports it would seem essential for well-qualified individuals to serve as coaches. Those coaching at the high school level are responsible for the safety, health and welfare of their students, yet many coaches lack the professional preparation and certification standards for their coaching assignments (4).

According to Arthur A. Esslinger (4), the major problem confronting intrascholastic athletics in this country today is that approximately one-fourth of all head coaches of secondary school teams have had no preparation for such responsibility (4:27). The only qualification for many present coaches has been past experience on a university team. Participation and practical experience are important,

but a coach should have professional preparation. In the past the physical education teacher has been responsible for the coaching tasks, but with seven to ten sports now being offered in most secondary schools it is impossible for one or two physical education teachers to handle the coaching assignments. One obvious solution to the problem would seem to be additional coaches from other academic areas. These individuals may want a teaching career and also want to coach, but do not want to major in or teach in the area of physical education. However, these "teacher-coaches" should be required to meet minimum qualifications for coaching. At the present time the only requirement for coaches in the state of Kansas is that they be certified as a teacher by the Kansas State Board of Education (13).

The AAHPER Division of Men's Athletics has long been aware that many coaches are not adequately prepared for coaching assignments (4:28). To attack this problem, a Task Force on Certification of High School Coaches was appointed. This Task Force concluded that the best way to "liquidate" unqualified coaches is for each state to establish certification standards for all coaches (4:28). The Task Force suggested the following program that includes minimum essentials which every secondary school coach should have. The suggested areas of study include the following:

Medical Aspects of Coaching	3
Principles and Problems of Coaching	3
Theory and Techniques of Coaching	6
Kinesiological Foundations to Coaching	2
Physiological Foundations to Coaching	2
	<u>16</u>

It is time for physical educators, athletic directors, school administrators and legislators within the state of Kansas to work together to solve the problem of having unqualified coaches performing the coaching assignments.

Purpose

The purpose of this study was to determine if female head coaches in the state of Kansas for class 1A, 2A and 3A high schools met the AAHPER Task Force suggested minimum course requirements.

Limitations

This study was limited to female coaches in the state of Kansas for classes 1A, 2A and 3A high schools. The data were obtained for 167 of the 190 female coaches within these three classifications.

Definition of Terms

1A, 2A, and 3A high schools -- Classifications of Kansas high schools based on the student enrollment for grades ten through twelve for each classification. These classifications are designed to match teams of similar competitive levels.

Medical Aspects of Coaching -- The knowledge of safety and medical aspects of athletics for the health and well-being of each individual. Also the knowledge of injury prevention, procedures when injury occurs and post injury care.

Principles and Problems of Coaching -- Knowledge of organization and management of athletics in addition to coaching ethics and maintenance of desirable behavior in athletics.

Theory and Techniques of Coaching -- Knowledge of detailed fundamentals and educational implications of sport. Stressing rules and regulations and game and practice preparation.

Kinesiological Foundations of Coaching -- Knowledge of human anatomy and of the mechanics in movement.

Physiological Foundations of Coaching -- Knowledge of humans' systems and their functions and how they are affected by activity and competition.

Teacher-Coaches -- Teachers from other academic areas other than physical education who want to coach but do not want to major in or teach physical education.

CHAPTER 2

REVIEW OF LITERATURE

The professional preparation of interscholastic athletic coaches has developed very slowly during the past fifty years. Today's coaches have evolved from the volunteer coaches of the early 1900's to the part-time non-faculty coaches of the early 1920's. As physical education became accepted into high school curriculums, teachers in the area were forced to meet certification requirements. One might have expected that the certification of coaches would also emerge. However, coaching certification requirements in many states have not been established.

In secondary schools at the present time the physical education teachers are usually responsible for the coaching of interscholastic sports. However with an increased number of sports and participants, one or two physical educators can no longer perform the coaching duties. School administrators have expressed their concern for the high school principals and the problem they have in obtaining enough teachers for the coaching assignments. Therefore, classroom teachers in academic areas other than physical education are being called upon to assist with coaching assignments.

In large high schools the head coach of major sports is often a former college athlete who earned a professional degree in physical education. Dudley DeGrott (3) emphasized the fact that coaches who also have the responsibility for teaching physical education do a poor

job in this area. However, in smaller high schools, instruction is provided by well meaning classroom teachers who may or may not have had professional preparation in the sport. These "teacher-coaches" should be required to meet coaching certification requirements.

Several states have or are considering the certification of athletic coaches. At the present time all fifty states require that coaches be certified for teaching (7:14). However, forty-one states have no specific certification requirements for coaching. Several of these forty-one states do, however, stress that the coach have professional preparation in physical education. Minnesota has the strongest requirements of the eight states requiring some sort of coaching certification. Minnesota requires not less than nine quarter hours in courses of which Principles of Physical Education is required, and the remaining courses are selected from at least two of the following: (1) administration of athletics, (2) first aid and prevention and care of athletic injuries, (3) human science and (4) coaching and athletic techniques. The other states also having similar certification course requirements include: (1) Iowa, (2) Nebraska, (3) South Dakota, (4) Oklahoma and (5) Indiana.

Professional preparation conferences are attempting to affect certification requirements in several states. The Jackson's Mill Conference and Washington Conference in 1962 attempted to influence coaching certification. Such conferences tend to solidify thinking and to standardize practices. During the past three years two meetings were held to discuss coaching certification standards in Missouri. The problem of having unqualified individuals handling interscholastic athletic teams was defined, and there was general agreement that

professional acceptable coaching certification standards were needed in Missouri. The outcome of the meetings was: (1) a solution regarding coaching certification in Missouri, (2) minimum standards for coaching certification were set, (3) a rationale for each course included in the minimum standards list was developed and (4) a plan for implementing coaching certification in Missouri was established (9:50).

Some state certification agencies suggest a minimum of fifteen hours and others suggest that a competency be established by teacher training institutes. Therefore, many colleges and universities have or are in the process of developing coaching curriculums. Kansas State University has established a curriculum for coaching majors. A minimum of seventeen hours are required and are based on the AAHPER Task Force suggested minimum course requirements (see Table 1).

Few studies have been conducted dealing with the problem of coaching certification. The majority of the available literature relating to the problem was published in the early 1970's.

A study (11) in Maryland was conducted to determine the qualifications of secondary school coaches. A questionnaire was sent to the superintendent of schools for each county and the city of Baltimore. The questionnaires indicated the highest degree and area of certification for head coaches, assistant coaches and junior varsity coaches. A reply of 83% was obtained. The study revealed that six of thirteen sports had 50% or more of the coaches certified in physical education. Thirty-eight percent of the assistant coaches and 39.9% of junior varsity coaches listed physical education as their area of certification. Sixty-three percent hold the bachelor's degree and 37% of the coaches in Maryland had an earned master's degree or above (11:11).

TABLE 1

GUIDELINES FOR COACHING CERTIFICATION

AAHPER Task Force Guidelines		Kansas State University Program	
Medical Aspects of Coaching	3	Treatment of Athletic Injuries	3
Principles of Coaching	3	Organization and Administration of Athletics	3
Kinesiological Foundations	2	Exercise Science	3
Physiological Foundations	2	Techniques of Training and Conditioning	4
Techniques of Coaching	6	Techniques Courses (select two)	2
		Techniques of Basketball	
		Techniques of Football	
		Techniques of Gymnastics	
		Techniques of Wrestling	
		Techniques of Swimming	
		Techniques of Tennis and Golf	
		Techniques of Baseball	
		Techniques of Track and Field	
		Techniques of Volleyball	
		First Aid	2
Total	16	Total	17

In New York state there is an increasing concern for professional preparation for coaches. A study of this matter was conducted by the Bureau of Physical Education and Recreation in the state. Although no formal research was done, consensus of all persons involved was that coaches need specialized instruction. A proposed program was presented to approve non-physical education certified teachers to coach interscholastic athletic teams for secondary schools. The proposed program consisted of the following: (1) Principles of Athletics, (2) Health Science and (3) Techniques of Coaching (8).

The Department of Physical Education of the University of North Carolina conducted a study regarding the relationship between injuries to high school boys participating in football and the teaching, coaching and playing experience of their coaches. Forty-three head coaches were interviewed concerning their training and background and this information was then related to the injury rate of the players under their supervision. This North Carolina study found that coaches with the least amount of coaching experience (1 to 4 years) were associated with teams of higher injury rates than those teams with coaches who had more experience (10). An indication was made that courses in exercise physiology, kinesiology and sports medicine should be included in the curriculum of football coaches (10).

The majority of studies in this area, indicated that the best preparation for athletic coaches was a physical education major and practical experience on a university team. However, with most schools facing financial difficulties, enough physical education teachers cannot be obtained to fill coaching assignments. Classroom teachers in

other academic areas are being called upon for assistance. Most authorities in the field believe that these "academic teachers" should be required to meet some degree of coaching certification standards.

As long as interscholastic athletic competition is accepted as one of our educational classrooms, students should not be exposed to practice until the coach has gained professional preparation.

CHAPTER 3

PROCEDURES

All data for this study was obtained from the Teacher Certification Division, Kansas State Board of Education in Topeka, Kansas. A list of female coaches was obtained from the Kansas High School Activities Association Membership Handbook. This investigator then checked the college transcripts of each coach to determine if these individuals had taken courses in the subject areas recommended by the AANPER (Table 1).

The certification records of coaches for this study were those of 167 females in class 1A, 2A and 3A high schools in the state of Kansas. Transcripts were not available on all the subjects; therefore, data was collected on 167 coaches out of approximately 190 listed for 1A, 2A and 3A high schools.

The courses that were considered acceptable for this study are outlined below. The major headings are AANPER Task Force guidelines with the specific courses being sub-headings.

I. Medical Aspects

- A. Treatment of Athletic Injuries
- B. First Aid

II. Principles of Coaching

- A. Principles of Coaching
- B. Psychology of Coaching
- C. Theory of Coaching

III. Kinesiological Foundations

- A. Kinesiology
- B. Bio-mechanics

IV. Physiological Foundations

- A. Physiology
- B. Exercise Physiology
- C. Exercise Science
- D. Scientific Principles of Coaching
- E. Techniques of Training

V. Techniques of Coaching

- A. Techniques course for any one sport

VI. Prerequisites

- A. First Aid
- B. Anatomy
- C. Physiology

It is this writer's opinion that several courses included in the subject areas recommended by the AANPER should be preceeded by foundation courses. Individuals must first have a knowledge of the human anatomy, particularly the bone structure and muscle groups, prior to taking a course in Kinesiology. Such courses as Exercise Physiology, Treatment of Athletic Injuries and Kinesiology should be preceeded by Physiology, First Aid and Anatomy, respectively. Therefore this investigator checked the subjects' transcripts to determine if these prerequisite courses had been taken.

A transcription was made of the state records and analyzed by categorizing coaches by school classification and by the sport that each coached. A tally system was used to determine the number of coaches who had taken courses in the AANPER recommended subject areas. The number of coaches who had taken these courses was divided by the total number of coaches, thus revealing a percentage. Example: There were twelve basketball coaches in class 1A that had taken courses in the Medical Aspects area, and there was a total of 36 1A basketball coaches.

The percent of 1A basketball coaches having had courses involving Medical Aspects was 33%.

Tally System

Classification	1A	2A	3A
Medical Aspects	ZZ ZZ " "		
Total Number of Coaches	ZZ ZZ ZZ ZZ ZZ ZZ ZZ - ZZ		

Figuring %

$$\frac{12 \text{ number of coaches having had courses in this area}}{36 \text{ total number of coaches}} = 33\% \text{ percentage of coaches having had Medical Aspects}$$

CHAPTER 4

RESULTS AND DISCUSSION

Results

The results based on the data collected on the 167 female coaches for 1A, 2A and 3A Kansas High Schools are presented in Tables 2-10.

Discussion

The AAHPER Task Force guidelines and the present coaching curriculum at Kansas State University are presented in Table 1. The curriculum at Kansas State University was based on the five areas of study suggested by the AAHPER Task Force and was established by the faculty members of the Physical Education Department. Several other universities have or are in the process of developing professional preparation curriculums for coaches. It is this author's opinion that the responsibility of turning out qualified coaches rests in the hands of training institutions.

Table 2 reveals that only four of the 167 female coaches, which amounted to 2.4%, had completed courses in all five areas suggested by the AAHPER Task Force. Data clearly indicated that female coaches in

TABLE 2
NUMBER AND % OF ALL COACHES FOR 1A, 2A AND 3A HIGH SCHOOLS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	1A		2A		3A		Total	
	No.	%	No.	%	No.	%	No.	%
Medical Aspects	5	10.6	9	11.8	5	11.3	19	11.3
Principles of Coaching	5	10.6	9	11.8	10	22.7	24	14.3
Kinesiological Foundations	26	55.3	60	78.9	40	90.9	126	75.4
Physiological Foundations	10	21.2	23	30.2	16	36.3	49	29.3
Techniques of Coaching	25	53.1	51	67.1	33	75.0	109	65.2
First Aid (PR)	28	59.5	66	86.8	39	88.6	133	79.6
Anatomy	25	53.1	55	72.3	37	84.0	117	70.0
Physiology	29	61.7	55	72.3	34	77.2	118	70.6
Completed All Courses					4		4	2.4
Completed No Courses					19		19	11.3

(PR) = prerequisites

TABLE 3

NUMBER AND % OF BASKETBALL COACHES FOR 1A, 2A AND 3A HIGH SCHOOLS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	1A		2A		3A		Total	
	No.	%	No.	%	No.	%	No.	%
Medical Aspects	2	8.0	8	18.1	2	13.3	12	14.2
Principles of Coaching	2	8.0	5	11.3	5	33.3	12	14.2
Kinesiological Foundations	9	36.0	39	88.6	15	100.0	64	76.1
Physiological Foundations	7	28.0	15	34.0	3	20.0	25	29.7
First Aid (PR)	14	56.0	39	88.6	15	100.0	68	80.9
Anatomy (PR)	13	52.0	35	79.5	14	93.3	63	75.0
Physiology (PR)	14	56.0	34	77.2	15	100.0	63	75.0

(PR) = prerequisites

TABLE 4

NUMBER AND % OF TRACK COACHES FOR 1A, 2A AND 3A HIGH SCHOOLS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	1A		2A		3A		Total	
	No.	%	No.	%	No.	%	No.	%
Medical Aspects	3	11.5	6	10.9	3	11.5	12	11.2
Principles of Coaching	2	7.6	6	10.9	7	26.9	15	14.0
Kinesiological Foundations	16	61.5	48	87.2	23	88.4	87	81.3
Physiological Foundations	6	23.0	19	34.5	5	19.2	30	28.0
First Aid (PR)	18	69.2	50	90.9	23	88.4	91	85.0
Anatomy (PR)	18	69.2	45	81.8	22	84.6	85	79.4
Physiology (PR)	18	69.2	43	78.1	20	76.9	81	75.7

(PR) = prerequisites

TABLE 5

NUMBER AND % OF VOLLEYBALL COACHES FOR 1A, 2A AND 3A HIGH SCHOOLS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	1A		2A		3A		Total	
	No.	%	No.	%	No.	%	No.	%
Medical Aspects	2	9.0	3	7.8	2	10.0	7	8.7
Principles of Coaching	3	13.6	2	5.2	4	20.0	9	11.2
Kinesiological Foundations	11	50.0	34	89.4	19	95.0	64	80.0
Physiological Foundations	6	27.2	13	34.2	8	40.0	27	33.7
First Aid (PR)	15	68.1	33	86.8	20	100.0	68	85.0
Anatomy (PR)	14	63.6	31	81.5	17	85.0	62	77.5
Physiology (PR)	15	68.1	30	78.9	17	85.0	62	77.5

(PR) = prerequisites

TABLE 6

NUMBER AND % OF TENNIS COACHES FOR 1A, 2A AND 3A HIGH SCHOOLS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	1A		2A		3A		Total	
	No.	%	No.	%	No.	%	No.	%
Medical Aspects	2	26.5	1	11.1	1	7.1	4	13.3
Principles of Coaching	2	28.5	3	33.3	3	21.4	8	26.6
Kinesiological Foundations	7	100.0	7	77.7	12	85.7	26	86.6
Physiological Foundations	2	28.5	2	22.2	6	42.8	10	33.3
First Aid (PR)	7	100.0	8	88.8	11	78.5	26	85.6
Anatomy (PR)	5	71.4	6	66.6	12	85.7	23	76.6
Physiology (PR)	5	71.4	6	66.6	11	78.5	22	73.3

(PR) = prerequisites

TABLE 7

NUMBER AND % OF GYMNASTIC COACHES FOR 1A, 2A AND 3A HIGH SCHOOLS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	1A		2A		3A		Total	
	No.	%	No.	%	No.	%	No.	%
Medical Aspects	1	25.0	1	11.1	2	20.0	4	17.3
Principles of Coaching	1	25.0	3	33.3	3	30.0	7	30.4
Kinesiological Foundations	4	100.0	9	100.0	10	100.0	23	100.0
Physiological Foundations	1	25.0	3	33.3	6	60.0	10	43.4
First Aid (PR)	3	75.0	9	100.0	9	90.0	21	91.3
Anatomy (PR)	3	75.0	7	77.7	9	90.0	19	82.6
Physiology (PR)	4	100.0	7	77.7	9	90.0	20	86.9

(PR) = prerequisites

TABLE 8

NUMBER AND % OF 1A COACHES FOR BASKETBALL, TRACK, VOLLEYBALL, TENNIS AND GYMNASTICS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	Basketball		Track		Volleyball		Tennis		Gymnastics	
	No.	%	No.	%	No.	%	No.	%	No.	%
Medical Aspects	2	8.0	3	11.5	2	9.0	2	28.5	1	25.0
Principles of Coaching	2	8.0	2	7.6	3	13.6	2	28.5	1	25.0
Kinesiological Foundations	9	36.0	16	61.5	11	50.0	7	100.0	4	100.0
Physiological Foundations	7	28.0	6	23.0	6	27.2	2	28.5	1	25.0
First Aid (PR)	14	56.0	18	69.2	15	68.1	7	100.0	3	75.0
Anatomy (PR)	13	52.0	18	69.2	14	63.6	5	71.4	3	75.0
Physiology (PR)	14	56.0	18	69.2	15	68.1	5	71.4	4	100.0

(PR) = prerequisites

TABLE 9

NUMBER AND % OF 2A COACHES FOR BASKETBALL, TRACK, VOLLEYBALL, TENNIS AND GYMNASTICS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	Basketball		Track		Volleyball		Tennis		Gymnastics	
	No.	%	No.	%	No.	%	No.	%	No.	%
Medical Aspects	8	18.1	6	10.9	3	7.8	1	11.1	1	11.1
Principles of Coaching	5	11.3	6	10.9	2	5.2	3	33.3	3	33.3
Kinesiological Foundations	39	88.6	48	87.2	34	89.4	7	77.7	9	100.0
Physiological Foundations	15	34.0	19	34.5	13	34.2	2	22.2	3	33.3
First Aid (PR)	39	88.6	50	90.9	33	86.8	8	88.8	9	100.0
Anatomy (PR)	35	79.5	45	81.8	31	81.5	6	66.6	7	77.7
Physiology (PR)	34	77.2	43	78.1	30	78.9	6	66.6	7	77.7

(PR) = prerequisites

TABLE 10

NUMBER AND % OF 3A COACHES FOR BASKETBALL, TRACK, VOLLEYBALL, TENNIS AND GYMNASTICS
THAT HAVE TAKEN COURSES IN THE AAHPER RECOMMENDED AREAS

	Basketball		Track		Volleyball		Tennis		Gymnastics	
	No.	%	No.	%	No.	%	No.	%	No.	%
Medical Aspects	2	13.3	3	11.5	2	10.0	1	7.1	2	20.0
Principles of Coaching	5	33.3	7	26.9	4	20.0	3	21.4	3	30.0
Kinesiological Foundations	15	100.0	23	88.4	19	95.0	12	85.7	10	100.0
Physiological Foundations	3	20.0	5	19.2	8	40.0	6	42.8	6	60.0
First Aid (PR)	15	100.0	23	88.4	20	100.0	11	78.5	9	90.0
Anatomy (PR)	14	93.3	22	84.6	17	85.0	12	85.7	9	90.0
Physiology (PR)	15	100.0	20	76.9	17	85.0	11	78.5	9	90.0

(PR) = prerequisites

Kansas for 1A, 2A and 3A high schools need additional professional preparation. If the state of Kansas were to establish coaching certification requirements based on the AAHPER recommendations, only four of the 167 female coaches for 1A, 2A and 3A high schools would meet certification standards. This would be an impossible situation in that there would be almost no available certified coaches to perform the coaching assignments.

Table 2 also indicates that nineteen of the 167 female coaches had not taken any courses relating to any of the five subject areas suggested by the AAHPER. It is frightening to think that the safety and health of thousands of students depends upon these untrained coaches. Parents and administrators should not take the risk of having students participate under anything but expert supervision.

The data collected on the 167 female coaches revealed that 50% or more of these coaches had taken courses in First Aid, Anatomy and Physiology. There was a slightly higher percentage of coaches in 3A high schools that had taken courses in these areas than coaches in 2A high schools. These prerequisites courses are foundations that all coaches should have.

There was an indication that 90.9% of all 3A coaches, 78.9% of 2A coaches, and 55.3% of 1A coaches had background knowledge in kinesiology. Kinesiological knowledge is a working tool of the coaching profession and provides the coach with an understanding of human motion and the ability to analyze individual athletic performance. It is impossible for a coach to help a student reach maximal potential unless he is fully competent in the field of kinesiology.

The medical aspects area suggested by the AAHPER, which includes treatment of athletic injuries, is extremely important to coaches. And yet only 11.3% of the 167 female coaches had taken courses in this area. It is essential that anyone concerned with the coaching of athletic teams complete a course that deals with the prevention and care of athletic injuries. It is an often occurrence for the athletic coach to be the only adult present during a practice session in which an athlete is injured. The coach must have knowledge regarding the nature and severity of the injury, treatment of the injury and a plan for a complete recovery. The female coaches in the state of Kansas as indicated by this study were definitely lacking in this area.

Principles and theory of coaching is another area in which coaches should be competent. Courses in this area emphasize organizational techniques, conditioning techniques, planning and drill progressions and many other factors relating to the development of a team. These courses would be of value to any coach and yet this study indicated that only 14.3% of the 167 female coaches had taken courses in this area. The female coaches in this study definitely need additional professional preparation in the area of coaching principles.

It is essential that coaches have a basic understanding of human physiology and how it is affected by exercise. The coach must know how to protect the health of his participants as well as helping them to achieve maximal potential. Table 2 indicates that 29.3% of the coaches had taken courses in the physiological area, specifically exercise physiology. It is difficult for coaches to effectively condition athletes without having a knowledge of the physiological changes that result from training and the best way to achieve desired changes.

This study indicates the need for better trained coaches in class 1A, 2A and 3A high schools in the state of Kansas. This writer believes that Kansas should adopt some form of requirement for coaching certification. We must act now and improve the professional preparation of coaches within the state, before such legislation is passed. Most educators agree that some special form of coaching preparation is needed, but the problem is finding ways of implementing such programs.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results of this study the following conclusions were reached:

1. Only four of the 167 female coaches in class 1A, 2A and 3A Kansas high schools had met all of the AAHPER Task Force recommendations. Nineteen of these coaches had not taken any courses relating to any of the five subject areas recommended by the Task Force. This would indicate that additional professional preparation is needed in these subject areas.
2. Major deficiencies were found in the following areas: (1) Medical Aspects of Coaching and (2) Principles of Coaching.

Recommendations

Based on the results of this study the following recommendations relating to coaching certification are made:

1. That Kansas adopt certification requirements for all coaches of high school athletic teams.
2. That colleges and universities develop coaching curriculums to improve coaching standards within the state.
3. That school administrators hire only those individuals for coaching assignments that have completed professional preparation courses.

Recommendations for further study include:

1. That additional studies need to be conducted on male coaches who coach female high school athletic teams within the state of Kansas.
2. That additional studies be made regarding female coaches in all fifty states and for all high school classifications.

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APPENDIX

DATA SHEET

Medical Aspects of Coaching	Exercise Physiology	Techniques	First Aid	Anatomy	Physiology	Kinesiology	Sport	Class	Name

Prerequisites

A STUDY OF FEMALE COACHING QUALIFICATIONS
IN THE STATE OF KANSAS
FOR CLASSES 1A, 2A AND 3A HIGH SCHOOLS

by

LINDA S. BRANDENBURG

B. S., Kansas State University, 1970

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

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The purpose of this study was to determine if female coaches in Kansas for class 1A, 2A and 3A high schools met the AAHPER minimal recommendations for coaching certification. The American Association for Health, Physical Education and Recreation recommends that coaches have taken professional preparation courses that include: (1) Medical Aspects of Coaching, (2) Principles of Coaching, (3) Kinesiological Foundations, (4) Physiological Foundations and (5) Techniques of Coaching. A list of 190 female coaches for class 1A, 2A and 3A high schools was obtained from the Kansas High School Activities Association Membership Handbook. A transcription was made of official state records located at the State Board of Education in Topeka, Kansas. Data was collected from the college transcripts of 167 of the 190 coaches and was used to determine if these coaches had taken the courses recommended by the AAHPER. The data indicated that only four of the 167 female coaches met all of the AAHPER recommendations while nineteen coaches did not have any courses relating to the recommended subject areas. The majority of the women currently coaching were far short of the minimum recommendations essential to protect the health and safety of their students. This study indicated the need for additional professional preparation of female coaches in Kansas for class 1A, 2A and 3A high schools and substantiates the need for the certification of all female coaches.