

THE STATUS OF PHYSICAL EDUCATION FOR GIRLS
IN THE HIGH SCHOOLS OF ARIZONA

by

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INTRODUCTION

Physical education is a comparatively new subject in the curriculum. Within the last thirty years it has been almost universally introduced into the schools. Only in the last ten years, however, have educators come to recognize it as a contributing to the general objectives of all education, and physical educators to realize its values in the educational field. The change in attitude on the part of physical educators as well as of other educators is more markedly brought out by the fact that originally the subject was called "Physical Training" or "Physical Culture", the stress being always on the word "Physical". Recently the term has become "Physical Education" and since 1930 the emphasis has been placed on "education" and all that it implies.

In view of the growing interest in physical education throughout the country and the fact that it is being taught in the high schools of Arizona, it seemed desirable to make a survey of the status of physical education for girls in

the state in order to ascertain the major needs within the field. Until this time there has been no authoritative material relating to this subject within the state of Arizona. The results of such an investigation are of special interest to the Department of Physical Education of the University of Arizona which is training future teachers of Physical Education for positions primarily within the state. A knowledge of the problem which they must face and the requirements which they must meet will serve to provide for more complete preparation of Arizona's future teachers of physical education.

PURPOSE OF THE STUDY

The purpose of this thesis, therefore, is to make a survey of physical education for girls in the junior and senior high schools of the state of Arizona. The more important questions arising in connection with the study are:

1. What per cent of the girls enrolled in the junior and senior high schools of the state are taking physical education?
2. For what reasons are girls exempt from physical education?
3. What is needed to make the high-school program of physical education adequate?

The data used in this study were obtained by means of a questionnaire sent to the sixty-three principals of junior

and senior high schools in the state of Arizona.¹

The questionnaire was written after an analysis of the field had been made and its major problems determined. The questions were divided into two principal groups: (a) those dealing with physical education in its relation to general education, and having to do with teacher training, teacher qualifications, and the attitude of the educational administrator toward physical education; (b) those applying specifically to physical education and its problems of credit, exemptions, length and number of class periods, equipment and program. The nature of the questions is such that their answers should serve to present a composite picture of the needs of physical education for girls within the state.

The immediately following pages show the questionnaire and its accompanying letter together with a summary of the answers received. The nature of the answers reveals in many instances the point of view of the principal and of his physical education instructor (where she has helped in filling out the questionnaire). An attempt has been made to interpret the results and to point out noteworthy answers.

Of the sixty-three questionnaires sent out, thirty-nine were returned. Due to the fact that some of the principals failed to answer all of the questions, certain discrepancies in numbers will be noted.

1. See pages 4 ff.

Department of Physical Education
for Women
University of Arizona
Tucson

March 20, 1933

Dear Sir:

The Department of Physical Education for Women at the University of Arizona is conducting a survey of the status of Physical Education for girls in the junior and senior high schools of the state. Will you please fill out the enclosed questionnaire and return it in the stamped, addressed envelope, also enclosed. In the event that you yourself cannot give the necessary time to this matter, will you please have a qualified person give the information asked for, in order that your school may be included in the survey?

The data so secured will be entirely confidential. The aim of this survey is to get a composite picture of the needs of Physical Education within the state. Results will be used to prepare the major students in Physical Education at the University more completely for teaching positions in the schools of Arizona.

I shall appreciate a prompt reply.

Very truly yours,

(Signed) Genevieve R. Brown

Instructor in Physical Education

QUESTIONNAIRE

The Status of Physical Education for Girls
in the High Schools of Arizona
(Where possible check answers by X)

Part A - To be answered by the superintendent or principal.

1. Is physical education a part of your curriculum?

- a. Yes 36 b. No. 1 c. Elective 3
d. Compulsory 29 e. How many years?
1. Four years 24
2. Three years 7
3. Two years 3

These answers are particularly encouraging to both physical educator and educator who appreciate the values the physical education both as a means to and an end of one of the objectives of education, namely, health.

2. Is your physical education instructor for girls:

- a. Man 7 b. Woman 30 c. Hired solely
as instructor in physical education? 11
d. Hired as an academic instructor? 15
e. Hired as a full time instructor? 15
f. Hired as a part time instructor? 5

3. What other subjects does your instructor in physical education for girls teach?

- a. Biology 3 b. History 2 c. English 9
d. Language 8 e. Additional subjects:
Music 3, Home Economics 5, Science 5,
Mathematics 4.

The results from questions 2 and 3 show that the teacher of physical education must be prepared to teach a subject or subjects other than her major and that such preparation increases her value as a teacher. It is to be regretted that

seven of Arizona's high schools have men teaching girls' physical education. The situation cannot be anything other than a makeshift, for men do not, as a rule, understand or consider the problems and capabilities of the girl as they do those of the boy.

4. Does the high school instructor supervise physical education in the grades? Yes 9 No 28
 - a. Is there a special teacher of physical education for the grades? Yes 6 No 26
 - b. Do grade teachers have charge of the play period? Yes 32 No 2
 - c. Is there play supervision in the grades? Yes 31 No 2

Play supervision in the grades naturally contributes to a better program of high school physical education. Where there is a direct relationship between the high school and grades such as exists in nine schools in the state, there will be better understanding of the problems of each. The student who plans to teach high school physical education cannot neglect the work of the elementary school. Preparation and practise teaching in the grade schools as well as in the high school would seem advisable for adequate training.

5. What qualifications should the teacher of physical education possess?
 - a. Training.
 1. College degree in physical education 22
 2. Normal school training in physical education 12
 3. No special work in physical education aside from those courses required in her general training 4

The importance of proper training in a subject as important as physical education is recognized by thirty-four of the principals. Four do not appreciate that general college work alone in physical education does not fit a young woman to teach the subject with proper understanding of material and methods.

b. Personal qualities. (Please indicate by numbers 1, 2, 3, etc., the order in which you would place the following:)

1. Dependability 2
2. High scholarship 10
3. Sense of humor 9
4. Moral judgment 3
5. Moral responsibility 4
6. Cooperation 7
7. Initiative 5
8. High ability in sports 11
9. Ability in dancing 12
10. Leadership 1
11. Loyalty 8
12. Qualities for guidance 6

It is interesting to note here that those qualifications which the ordinary person places first as indicative of the physical education teacher, namely ability in sports and dancing, are placed last by the principals, who seem to sense the bigger end--result of such abilities in leadership and put it in first place.

6. Should credit be given in physical education on the same basis as it is in academic subjects?
Yes 26 No 11

The present situation with regard to credit in physical education is an unfortunate one. The importance of the subject is recognized; it is almost universally required in the

United States; (thirty-six states have laws making it compulsory) yet it is given only a small amount of credit, or too often, none at all. In the study at hand, the situation seems to be appreciated. (See also questions 8 and 9.)

7. Does the physical education program now offered in your school seem adequate to you? Yes 18
No 20
- a. Are you convinced that physical education, as a subject, is important in the educational scheme and contributes to the objectives of general education? Yes 37 No 1
8. If you have any objections to the physical education program as now taught in your school, are they:
- a. To the subject matter as organized? 8
- b. To the present methods of instruction? 7
- c. Enumerate others, and give opinion.
1. There is too much emphasis on boys' physical education at the expense of the girls' program.
 2. There is not enough emphasis placed on physical education in the grades.
 3. Competitive sports are over-stressed.
 4. Adequately trained teachers are necessary.
 5. Credit should be given, but no grade.
 6. Funds, time allotment, space, and equipment are insufficient to carry on the desired program.

One principal writes optimistically and with understanding when he says "Our program is in a state of development. We are working it out."

9. What, in your opinion, is most needed to make your program of physical education for girls more successful? (In answering this question consider funds, space, time, specific items of teacher training.)

N.B. - Answers are ranked in the order of their importance, on the basis of the number of replies.

1. Adequately-trained teacher.
2. Sufficient funds.
3. Necessary equipment.
4. Better division of time.
5. Space for girls independent of boys.
6. Adequate program of health education.
7. Public appreciation of health education.
8. Teacher trained to work with small groups.
9. Teacher trained in giving remedial work.
10. Teacher trained in individual sports.
11. Enlarged program.
12. Physical examination given by a doctor.
13. State syllabus in physical education.
14. Promotion of physical education with a view to the better use of future leisure time.
15. Less stress on winning games and more on physical development.

The above answers are most gratifying and show intelligent thinking along the lines of modern physical education. The opinions stated are entirely in accord with those of leaders in the field of physical education.

To refer once more to the subject of credit the following is quoted: "I do not like our present system of requiring the subject, giving a grade, but no credit. I believe that credit should be given, but no grade. Merely passing or not passing should be the system of grading."

Other noteworthy answers to question 9 are here included:

"Teachers must understand how to meet responsibilities to pupils who are physically inferior."

"Teachers should be trained in something besides competitive athletics. There is a big field for group games for older girls."

"We need well-qualified, enthusiastic teachers, capable of developing a good course of study."

"We need teachers who appreciate the fundamental aims of actual physical education as distinguished from physical training."

The most important problem of the present system of physical education in Arizona is here shown to be that dealing with teachers and their training in the subject. The suggestions here made by the principals offer an opportunity to the present major students of physical education to see what will be required of them as teachers.

Part B - To be answered by principal or physical education teacher.

1. How many girls are enrolled in your school?²
 - a. How many take physical education?²

The average of column 3 shows 85% of all high school girls in the state enrolled in physical education.

- b. Give reasons for exemptions from physical activity:
 1. Doctor's excuse.
 2. Physical condition.
 3. Conflict with other classes.
 4. Work outside of school.
 5. Substitution of band, glee club, dramatics.
 6. Junior or senior standing.

Only the first two reasons named are sufficient ones for excusing girls from physical education classes. Some provision should be made to encourage every normal girl to receive the benefits of exercise and group activity.

- c. Give number of physical education periods per week:

1 period -	1 school
2 periods -	12 schools
3 periods -	7 schools
5 periods -	12 schools
6 periods -	8 schools
8 periods -	1 school

2. See Table I, page 11.

TABLE I SUMMARY

1. The number of girls enrolled in high schools in Arizona.
2. The number of girls taking physical education.
3. The percentage of girls enrolled taking physical education.
4. The size of the gymnasium in square feet.
5. The size of the outdoor play space in square feet.

School	1	2	3	4	5
			eee		
A	20	18	90	3200	25000
B	26	26	100	4050	240000
C	269	151	56	e	None
D	269	180	66	2345	None
E	46	ee	ee	e	e
F	56	52	92	2982	e
G	29	20	68	4500	60000
H	28	15	54	e	21780
I	e	e	e	e	e
J	95	92	97	e	e
K	38	30	80	2405	None
L	60	56	93	e	e
M	243	205	84	3000	20000
N	120	70	58	e	e
O	67	62	92	1925	27000
P	60	60	100	2400	160000
Q	2093	1018	49	e	21300
R	313	296	95	4050	13600
S	17	17	100	e	30000
T	13	e	e	None	43560
U	e	53	e	e	e
V	86	83	96	2600	200000
W	52	50	96	e	e
X	44	35	80	3500	174240
Y	25	25	100	None	55000
Z	360	356	99	None	30000
AA	269	248	92	None	108900
BB	690	550	80	7560	13500
CC	34	32	94	3500	e
DD	92	88	96	e	e
EE	56	52	92	e	13500
FF	71	60	85	None	e
GG	113	100	88	6630	108900
HH	46	43	93	None	174240
II	250	212	85	4500	9600
JJ	167	158	95	2800	43560
KK	142	125	89	5400	30000
LL	253	140	55	e	5400
MM	15	15	100	e	217800

- e Questionnaire incomplete.
- ee No physical education offered.
- eee Average total percentage of girls taking physical education in the high schools of the state is 85%.

d. How long are your physical education periods?

30 minutes	-	2 schools
40 minutes	-	1 school
42 minutes	-	2 schools
45 minutes	-	25 schools
50 minutes	-	1 school
55 minutes	-	5 schools
60 minutes	-	5 schools

e. What size are your physical education classes?

125 pupils	-	1 school
88 pupils	-	2 schools
60 pupils	-	2 schools
50 pupils	-	3 schools
40 pupils	-	12 schools
35 pupils	-	7 schools
30 pupils	-	10 schools
25 pupils	-	3 schools
20 pupils	-	7 schools
17 pupils	-	1 school
16 pupils	-	8 schools
12 pupils	-	2 schools
7 pupils	-	1 school

The wide range in size of classes is the natural result where the school enrollment varies as it does in the group of schools being studied.³ Groups larger than fifty present a serious problem for one teacher. Slightly less serious is the problem of a class of less than twenty, for then team games become difficult. The question of class size determines the program to a great extent. The most flexible program can undoubtedly be achieved with a group of about thirty girls. Such a number allows enough players for the larger group games and sports or may be conveniently divided into two or more smaller groups, still allowing for adequate super-

3. See Table I, page 11.

vision by the teacher.

2. Equipment for girls. Check those of the following which you have.

a. Indoor gymnasium 27 How large (sq. feet)? ⁴

- (1) Basketball court and basketball 34
- (2) Volleyball net and volleyballs 34
- (3) Indoor baseballs and bat 35
- (4) Gymnasium mats 23
- (5) Indian clubs 10
- (6) Wands 8
- (7) Piano 28
- (8) Phonograph and records 19
- (9) Climbing ropes 3
- (10) Rings 3
- (11) Horses and other apparatus 7
- (12) Hockey sticks and balls 9
- (13) Soccer balls 20
- (14) Archery tackle 2
- (15) Quoits 4
- (16) No equipment 0

b. Outdoor play space 25 How large (sq. feet)? ⁴

- (1) Hockey-soccer field 17
- (2) Space for games of low organization 24
- (3) Tennis courts 24
- (4) Archery field 4
- (5) Track 23

Where the schools have gymnasiums, they are moderately well-equipped and adequate as to size. The outdoor play spaces, however, are, except in a few cases, inadequate in size. The Playground Association of America recommends that a proper size playground be from four to five acres (174,240 to 217,800 square feet).

c. Is the above equipment shared with the boys of your school? Yes 33 No 5

Girls should have their own equipment. Too frequently

4. See Table I, page 11.

when boys "share" their equipment with the girls, it means that the girls may use it when the boys do not want it.

3. What system do you use in grading physical education?

- a. Students graded on same basis as academic subjects 27
- b. Students marked passed or failed 7
- c. Students marked for attendance only 4

The question of grading in physical education is a perpetual one. The method of grading "Pass" or "Fail" is desirable until one considers that it may discourage effort. Grading for attendance only is equally deplorable. Undoubtedly, until a better solution is found, the method of grading on the same basis as in academic subjects, is preferable.

4. Are physical education grades given:

- a. At the end of every four weeks? 2
- b. At the end of every six weeks? 26
- c. At the end of every nine weeks? 1
- d. At the end of the semester? 15

5. Is a physical examination required of all girls at the beginning of the year? Yes 12 No 23
At the end of the year? Yes 3 No 27

The situation with regard to physical examinations is not by any means an ideal one. If physical education is to take its place with other subjects in the curriculum, it must be carried on scientifically and measured for the standards set for it. One method of achieving these standards is

to carry on a program of physical examinations at the beginning and end of the year's work. Other factors, of course, enter in to affect the results, but at least a beginning of research will have been made.

6. Is a medical examination a part of your program?
Yes 14 No 19

a. Given by doctor 11

b. Given by nurse 12

The medical examination, given by a qualified doctor or nurse, is an essential which should not be overlooked, particularly in this state where so many of the school children come from homes which have sickness in them. The medical examination protects both the individual and the group.

7. Is health education a part of your program?
Yes 34 No 5

The recent emphasis on health education as a phase of physical education has drawn wide attention. The physical educators of Arizona are to be congratulated where they have introduced health education as a part of their program.

8. Is the teaching of health accomplished by:

a. Discussions in physical education classes? 28

b. A definite class, not a part of the physical education program? 6

9. Is health instruction given by:

a. Physical education instructor? 26

b. Special health instructor? 3

- c. Home economics instructor? 8
 - d. Another instructor? 2 Which? Nurse - 3
10. Do you have a special type of health instruction for those exempt from active physical education?
Yes 7 No 26
- a. Of what does it consist?
 - 1. Health discussions 9
 - 2. Corrective exercises 8
 - 3. Modified forms of activity 5
 - 4. Report to library 1

Special provision for those girls who are exempt from active work is of particular value to them both as efficient machines and as happy citizens. If physical education is to achieve its aims of health, happiness and skills, it must offer something tangible to the girl who is unable to take active work as well as providing for the robust, normal girl. At the University of Arizona, a system of health discussions, with weekly advice from the Director of Physical Education, and complete records of rest, sleep, study, and health habits has resulted in an interested group anxious to improve and actually showing improvement both physically and mentally. Such a situation approaches the ideal.

11. Does formal gymnastics constitute a part of your program? Yes 23 No 14

- a. If so, approximately how many minutes per week are given over to it?

- 100 minutes - 1 school
- 60 minutes - 1 school
- 30 minutes - 5 schools
- 25 minutes - 1 school
- 20 minutes - 6 schools
- 15 minutes - 3 schools
- 5 minutes - 1 school

Formal gymnastics is now looked upon as a most artificial form of activity, satisfying a need for exercise within a very small space, and advisable only under such conditions. In teacher-training institutions the question of including formal gymnastics in the major students' course is a debatable one, since she may not use the material. Such has been the case at the University of Arizona. Answers to question 11 show that formal gymnastics is still being given in the state in the majority of the schools reporting.

12. Is preparation for leisure time one of the main objectives of physical education in your school?
Yes 26 No 8

a. If so, is this accomplished through:

1. Individual stunts? 9
2. Individual sports, such as archery, tennis, etc.? 21
3. Girls' Athletic Association? 1
4. Tournaments and clubs? 1
5. Discussions of leisure time activities? 1
6. Understanding of major sport rules? 1

The recent attention paid to the achievement of health through exercise and the wide public interest in recreation and sports, together with the changing status of society with regard to shorter working hours and increased leisure time have presented a new problem to education and to physical education, a problem which must be considered seriously in the present program.

The last four means stated as preparation for future leisure time were inserted in the replies to the questionnaire

by the principal or instructor. Point number 6 is a bit amusing and shows an appreciation for the development of intelligent spectators.

Training in individual forms of activity is most desirable, since it is very rarely that the adult who is out of school can assemble twenty-one other people for a game of hockey, eleven or seventeen for a game of basketball or baseball. She will more easily be able to enjoy a game of tennis with one opponent, or a swim or round of archery by herself.

13. Does your sports program include:

a. Volleyball	<u>34</u>
b. Basketball	<u>34</u>
c. Hockey	<u>8</u>
d. Tennis	<u>32</u>
e. Archery	<u>3</u>
f. Soccer	<u>17</u>
g. Track	<u>19</u>
h. Baseball	<u>36</u>
i. Dancing	<u>20</u>
j. Speedball	<u>5</u>
k. Swimming	<u>4</u>
l. Tumbling	<u>4</u>
m. Horseshoes	<u>3</u>
n. Paddle tennis	<u>2</u>
o. Hiking	<u>1</u>
p. Handball	<u>1</u>
q. Fieldball	<u>1</u>
r. Skating	<u>1</u>

Individual sports are receiving almost as much attention as the team games of basketball, baseball, and volleyball.

Both types of sport are valuable.

14. Do you have a program of less strenuous activity for physically handicapped girls? Yes 8 No 27

a. If so, what does it include?

1. Modified games of less strenuous type.
2. Corrective exercises.
3. Game officials.
4. Checkers.
5. Miniature golf.

The idea that checkers is a form of physical activity is hard to conceive and causes one to wonder at the type of training of the instructor who is no more resourceful in providing activity which might contribute to improvement in health. At best, checkers and "acting as game officials" are forms of "busy-work", and offer little, if any, opportunity for physical improvement and exercise to the physically handicapped.

15. Do you have intramural competition in the various sports offered? Yes 32 No 5
- a. Is every normal girl in school given an opportunity to belong to an intramural team? Yes 24 No 4
 - b. If so, approximately what per cent of the girls take advantage of this opportunity? 100% - 10 schools; 75% - 7 schools; 50% - 6 schools; 25% - 3 schools.
 - c. Is a complete medical examination required of all girls playing on a team? Yes 9
No 21
 - d. Does the size of your physical education staff permit an after-school sports program for intramural competition? Yes 14
No 21
1. Approximately how many hours after school per week are spent in this manner?
- | | | | |
|----------|---|---|---------|
| 1 hour | - | 5 | schools |
| 2 hours | - | 3 | schools |
| 3 hours | - | 2 | schools |
| 4 hours | - | 2 | schools |
| 5 hours | - | 2 | schools |
| 6 hours | - | 1 | school |
| 7 hours | - | 1 | school |
| 10 hours | - | 2 | schools |

The fact that the physical education teacher is hired solely for that purpose seems to have no relation to the percentage of girls reporting for intramural sports.⁵ One would expect that a full time teacher of physical education could promote wider interest and enthusiasm for intramural activities and after-school sports than one who must divide her time with other subjects and duties. However, other factors enter into the situation. One may easily presume that in larger schools, where the physical education teacher devotes her whole time to physical education, there are many other forms of extra-curricular activities offered which attract the students. In the restricted program of the smaller school such cannot be the case.

16. Do you have the use of a swimming pool, either in your school, or in the town? Yes 20 No 14
- a. Is swimming taught? Yes 10 No 22
- b. Is Life Saving taught? Yes 6 No 23
- c. Do you foster interest in swimming by:
1. Swimming meets? 5
 2. Competition between individuals? 6
 3. Other ways?
 - a. Swimming tests
 - b. Learn-to-swim campaigns in cooperation with Y.W.C.A.
17. Is dancing a part of your program? Yes 20
No 17
- a. If so, which of the following:
1. Folk and clog 18
 2. Tap 10
 3. Interpretative and rhythmic 12

5. See Table II, page 21.

TABLE II SUMMARY

1. Whether or not the physical education instructor in the various high schools is hired solely for that purpose or not.
2. Percentage of girls reporting for intra-mural sports.

School	1	2
A	No	100
B	No	80
C	No	e
D	Yes	50
E	None	ee
F	No	100
G	No	None
H	No	60
I	No	None
J	No	65
K	No	100
L	No	100
M	Yes	None
N	No	e
O	No	100
P	Yes	50
Q	Yes	e
R	Yes	75
S	No	None
T	No	e
U	No	50
V	No	92
W	No	75
X	No	100
Y	No	98
Z	Yes	99
AA	Yes	30
BB	Yes	25
CC	No	None
DD	No	25
EE	No	65
FF	No	None
GG	Yes	75
HH	No	None
II	Yes	75
JJ	Yes	50
KK	No	50
LL	e	e
MM	No	100

e Questionnaire incomplete.

ee No physical education offered.

b. If omitted from your program, please give your reasons for so doing.

1. No trained instructor.
2. No available music.
3. No time.
4. No space.
5. Public sentiment against it.
6. No funds.

(Ranked in order of importance)

Again, the training of the instructor limits the program and offers another challenge to teacher-training departments and institutions. The teacher who allows a lack of music to prevent her from teaching dancing is making a grave mistake. The rhythmic fundamentals of dancing may be given by means of hand clapping or tapping a window pole on the floor as accompaniment. In this manner simple rhythm patterns and suitable bodily movements may be created which are satisfying in every respect. The teacher who understands the principles of rhythm and has a knowledge of form and basic steps may teach folk, tap, and rhythmic dancing, in an elementary manner at least, with no music whatsoever.

GENERAL SUMMARY OF FINDINGS

The summary of the questionnaire is as follows:

1. Replies were received from thirty-nine out of sixty-three questionnaires sent out.
2. Thirty-six schools offer physical education as part of their curriculum. In twenty-nine schools it is compulsory, in three elective. One school reports no work in physical education whatsoever. Twenty-four schools require four years; seven require three years; three require two years.
3. Women are hired in thirty schools to direct physical education for girls and nine of these teach no other subject. Additional subjects commonly taught are: Language, 17; Home Economics, 5; Science, 5; Mathematics, 4; Biology, 3; Music, 3.
4. Six schools report a special physical education supervisor for the grades. The high school instructor supervises in nine schools.
5. Twenty-two principals state that the physical education teacher should have a college degree in her subject; twelve consider normal-school training necessary; four think the general undergraduate requirement in physical education sufficient to enable her to teach it.

6. In the opinion of the principals, the personal qualifications most essential for teachers are: leadership, dependability, moral judgment, moral responsibility, initiative, qualities for guidance, cooperation, loyalty, sense of humor, high scholarship, ability in sports, ability in dancing.
7. That credit should be given for physical education on the same basis that it is given in academic subjects is the opinion of twenty-six principals.
8. Eighteen principals are satisfied with the program as now conducted by their physical education instructors; twenty are not satisfied.
9. Thirty-seven principals appreciate the importance of physical education in the scheme of general education.
10. Twenty-four of the schools reporting in this investigation have less than one hundred girls enrolled. One school reports two thousand and ninety-three. The others range between these two extremes.
11. The average number of girls who are taking high school physical education is eighty-five per cent of all those enrolled.
12. The major reasons for exemption from physical education are:

- a. Girls are excused by the doctor only.
 - b. Physical condition will not permit strenuous activity.
 - c. Physical education conflicts with other classes.
 - d. Students are working outside of school.
 - e. Students may substitute extra-curricular activities such as band, glee club, dramatics.
 - f. Students with junior or senior standing are not required to take physical education.
13. The number of physical education periods per week are as follows:
- One school requires only one; twelve schools require two periods; seven schools require five periods; two schools require six periods; one school requires eight periods.
14. The length of the physical education period varies from thirty to sixty minutes, with twenty-five of the schools reporting a forty-five minute period.
15. The average size of the classes is from thirty to forty pupils. However, one school reports classes numbering one hundred and twenty-five and another reports a class of seven.
16. Twenty-seven schools report moderately well-equipped gymnasiums. Twenty-five schools report out-of-door playing space varying in size from 13,600 square feet to 240,000 square feet.

17. In the majority of schools the equipment is shared by both boys and girls.
18. Twenty-seven schools grade physical education on the same basis as academic subjects; seven schools mark their students passed or failed only; four schools grade on attendance only.
19. Twenty-six schools give physical education grades every six weeks; fifteen schools give grades at the end of the semester; two schools every four weeks; and one school every nine weeks.
20. Twelve schools require a physical examination of all girls at the beginning of the year; twenty-three schools do not. Three schools require a physical examination at the end of the year; twenty-seven schools do not.
21. A medical examination is given in fourteen schools. Nineteen schools do not have such a requirement.
22. Thirty-four schools include health education in their program. The major responsibility for this phase of the work is assumed by the physical education teacher.
23. Special health instruction is provided in seven schools for those girls exempt from active work. This instruction takes the form of health discussions, corrective exercises, and modified forms of

activity. Reporting to the library is required in one case: .

24. Formal gymnastics is taught in twenty-three schools.
25. Twenty-six principals state that preparation for leisure time is one of the main objectives of their physical education program. Individual sports are being stressed with a view to attaining this objective.
26. The eight leading sports, in ranking order, are: baseball, basketball, volleyball, tennis, dancing, track, soccer, hockey.
27. Intra-mural programs are carried on in thirty-two schools. Three schools reported 25% participating; six schools reported 50%; seven schools reported 75%; and ten schools 100%.
28. Twenty schools have the use of a swimming pool. Swimming is taught in ten schools. Life-saving is taught in six schools.
29. Dancing is a part of the program in twenty schools. It is omitted from the program in seventeen schools, the chief reason being that the instructor is not trained to teach it.
30. Some of the reasons for not approving the present program of physical education are:
 - a. There is too much emphasis on boys' physical education.

- b. There is not enough emphasis on physical education in the grades.
- c. Competitive sports are stressed too much.
- d. A specially trained teacher is necessary.
- e. The present methods of instruction are at fault.
- f. The subject matter is not well organized.
- g. Credit should be given, but no grade.
- h. Funds are inadequate to provide necessary equipment and space.
- i. The amount of time allotted to physical education is insufficient.
- j. The teacher should give more attention to individuals.
- k. Small groups need a teacher trained in individual sports.
- l. Teacher training in therapeutics and orthopedics is necessary.
- m. A more adequate health program with methods of creating public appreciation for such is needed.
- n. The physical education program should be enlarged.
- o. The physical examination should be given by a doctor.
- p. A state syllabus in physical education is needed.

- q. Physical education should be promoted for the better use of future leisure time.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions from this study of the status of physical education for girls in the high schools of Arizona must be formulated in accordance with the limitations of the investigation. The major limitations are:

1. Replies to the questionnaire were received from only thirty-nine of the sixty-three high schools in the state.
2. Some of the principals failed to answer all of the questions asked. This necessarily causes discrepancies in the data received.

In view of the data collected the following conclusions and recommendations seem to be justified:

1. Eighty-five per cent of all girls enrolled in the high schools of the state are taking some form of physical education. The most interesting fact is that physical education is a part of the curriculum in all but one school reporting in the study. Health education is regarded as an important phase of physical education in thirty-four schools.
2. The principal reasons for excusing girls from physical activity are:
 - a. Exemption by a doctor's excuse.
 - b. Poor physical condition.
 - c. Conflict with other classes.

- d. Work outside of school.
 - e. Junior or senior standing.
3. The major needs in the field of physical education in the state of Arizona are:
- a. Adequately trained teachers.
 - b. Sufficient funds.
 - c. More equipment.
 - d. More space.
 - e. Sufficient time.
4. The above needs are ranked in their order of importance as given by the principals. The one underlying problem which, if solved, could readily solve the others, is that of funds. A sufficient budget would allow for the hiring of a well-trained, full-time teacher, provide the required amount of space and necessary equipment, and undoubtedly alleviate the problem of time.
5. Conditions in the field of physical education within the state as indicated in this study illustrate the need for teachers prepared to meet the problems of the small group, the large group, insufficient space and equipment, individual and group sports, public attitude toward the subject, the normal girl and the one who is physically under par.

The practise of having the "physical defect-

ives" report to the library during the physical education period, as indicated in several instances, is to be deplored. Often, these people are allowed to carry a heavier schedule and need the gymnasium period for study. The girls who are unable to take active exercise should not be permitted to carry as heavy a program of academic work as those who are physically fit. Cooperation between the principal, or the adviser of girls, and the physical education instructor with a view to working out a program suitable to individual needs, is the solution to this problem. The teacher should, to the best of her ability stimulate interest in the physical education program, and point out to her girls the advantages of rest or individual exercises, where such would prove beneficial.

6. There is much room for improvement in the actual organization and administration of the physical education program, particularly with respect to the conducting of periodical physical and medical examinations by qualified persons, the apportionment of time to the subject, the provision of well-trained, enthusiastic teachers, a uniform system of requirements, grading and credits, and

the setting up of worthy objectives.

7. The preparation of a state syllabus in physical education would be a worthwhile undertaking by a group of major students in the field. Such a manual would serve a double purpose: (1) It would help to solve the problems of the present teachers throughout the state. (2) It would acquaint the major student with the type of problem to be encountered in the teaching of physical education and stimulate them to suggest practical means of solution.
8. Actual conditions such as those reported in this investigation should form the basis for preparing the present major students of physical education, that they may, as teachers, go into positions here in the state and cope with situations which may arise, because their training has been inclusive enough to make them alert and resourceful.

The present survey offers, in a small way, at least, a means of knowing the conditions with regard to physical education for girls in the high schools of Arizona. Anyone interested in the field, either from the standpoint of training teachers, or from that of offering suggestions as to program in the form of a state syllabus, should base his work on the status of physical education in Arizona, and not go ahead on

the assumption that methods which have proved successful in other states can be used to advantage in this state.

