5-1941

A Study of the Physical Education Facilities and Programs in Three Southern Utah High Schools

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A STUDY OF THE PHYSICAL EDUCATION FACILITIES AND PROGRAMS IN THREE SOUTHERN UTAH HIGH SCHOOLS

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A thesis submitted in partial fulfillment of the requirements

for the degree of

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ACKNOWLEDGMENT

I wish to express appreciation to Professor H. B. Hunsaker, Professor J. R. Jenson, and Dean E. A. Jacobsen, for their many helpful suggestions in completing this work. I acknowledge, also, the valuable assistance of my wife, who has aided in typing.

F. H. Slater

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INTRODUCTION

In the field of physical education there has been formulated by leading physical education authorities an ideal program for use in high schools, but this program cannot always be used in our high schools because of certain problems that are always present. However, we can adopt the ideal program and modify it to fit any situation that may arise in the various schools. The physical education program is an unstatic program. It is always changing with the changing philosophy of physical education.

> The need for a more uniform program of physical education throughout the schools of America has been evident to all progressive thinkers for many years. Probably everyone interested in physical education has at some time felt that a basic uniform program should be evolved. Always, however, the question has arisen, Is it practicable to formulate a program that will be adaptable to widely varying geographic and climatic conditions, local needs and interests, varying facilities, and the widely differing viewpoints of teachers, administrators and school boards?[1]

Educators are now emphasizing the value of measuring the elements of the school's physical education setup. Nielson expresses this idea:

> Supervisors and other persons are often asked to criticize and evaluate physical education programs. In the absence of objective means they give their best subjective opinions in terms of personal experience and attitudes. We may assume that administrators, supervisors, and teachers have the desire to improve their programs. There can be little doubt, therefore, as to the value of measuring objectively a school's physical education program. An accurate evaluation will be useful when making school surveys and also in concentrating the attention of instructors, principals, supervisors, superintendents, boards of education, and communities upon the particular points of strength and weakness.

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1 The Physical Education Curriculum (A National Program). University of Southern California Press, Los Angeles, 1937. p. 7.

> Probably the best way to evaluate physical education in a school is to measure the progress pupils make under the influence of the program. To do this at the present time seems almost impossible. The hereditary and environmental conditions affecting pupils are so numerous and variable that one can never be certain as to how much of a pupil's progress in physical education is due to the school program and how much is due to other factors.
>
> Not having adequate tools to measure pupils' progress in terms of their abilities, the next best procedure seems to be that of measuring the elements of the school's physical education set-up and then to assume a close correlation between set-up and progress of students.[2]

A survey of this kind helps to show the presence of difficulties arising in different physical education programs and offers an enlightenment on the improvement of these programs. It helps the teacher to see his own program and compare different programs. It shows the status of his school's facilities and equipment as compared with others. It shows where his program may be inadequate, and it may offer a stimulation to the improvement of his program should he find it lacking at some points.

In making this survey I have chosen three southern Utah high schools which represent three different size schools, large enrollment, medium enrollment, and small enrollment. In this district a total of 300 students or more is considered a large enrollment; a medium enrollment is approximately 200 pupils, and the number in a small enrollment is near 100.

This study was made because of my own interest in the subject and that of members of the Utah State Agricultural College Physical Education Department. It relates to the adequate and inadequate physical education facilities of three southern Utah high schools. Another incentive for

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2 Bulletin No. E-2. A Score Card for Evaluating Physical Education Programs for High School Boys. California State Department of Education Division of Health and Physical Education.

making the study was the desire to study the qualify of professional training in physical education in this district.

STATEMENT OF PROBLEM

It is the purpose of this study to determine, and as far as possible, to evaluate in terms of the Score Card for Evaluating Physical Education Programs for High School Boys[3] the following items as found in three Southern Utah high schools: To present a survey of the physical education (1) programs, (2) instructional staff, including professional preparation, kind, extent, recency, membership in professional organizations, and attendance at professional meetings, (3) facilities, including area, placement of buildings on school site, indoor facilities, outdoor facilities, equipment, supplies (general and first aid), (4) program organization, percentage of pupils enrolled, time allotment for physical education, physical examination of pupils by physician, dentist, and nurse, physical examination of pupils by the physical education teacher, assignments of students to classes, size of classes (normal group), size of classes (corrective or restricted group), teacher load (assigned time), records kept and used, credit, method of marking, and award system, (5) program activities, including instructional period, intramural activities, and interscholastic athletics, (6) professional assistance, including professional magazines, and (7) to offer constructive proposals for changes and improvements in the program.

Since an administrator must know the characteristics of an effective physical education program and the prevailing practices of the physical

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3 Nielson, N. P. Score Card for Evaluating Physical Education Programs for High School Boys. Bulletin No. E-2. California State Department of Education Division of Health and Physical Education.

education programs in different schools before he can carry on a program of physical education effectively, this study may be of value in calling attention to the needs of the high school physical education program and directing the administrator's attention toward them.

REVIEW OF LITERATURE

There are quite a number of surveys in physical education, ranging from small intensive studies to extensive studies national in scope. Outstanding among these are the studies of Carl L. Nordly, Ph.D. in the University of Minnesota in the Study of Physical Education Facilities and Equipment of the Accredited Public Secondary Schools of Minnesota; John E. Codwell's Study of the Status of Physical Education for Boys in the State Accredited Class A High School for Negroes in Texas, and the study of John M. Harmon in Study in the Methods of Procedure in the City Comprehensive School Health and Physical Education Surveys.

The purposes of Mr. Nordly's study are as follows:

1. To obtain information about facilities in communities throughout the state so that more helpful suggestions may be given when requests are received by the members of the Department of Physical Education and Athletics at the University of Minnesota for advice relative to specific physical education and recreation programs.

2. To acquaint those who train physical education and recreation leaders with the obstacles to be overcome by prospective teachers in this state (Minnesota).

3. To obtain information useful for advising teachers appointed to new positions.

4. To determine the needs for physical education and recreation facilities.

5. To determine cooperatively with the State Department of Education standards for physical education facilities and

equipment.[4]

The technique used in this study was a questionnaire prepared from an analysis of the physical education literature. This questionnaire was mailed to 16 physical education teachers with the request to respond to the questions as accurately as possible, indicate the amount of time required for completion, and suggest revisions. From the original group the questionnaire was revised slightly in the light of the suggestions. The questionnaire was sent to 462 schools regarding the school facilities and equipment for physical education and recreation. Approximately 82 per cent of the 477 questionnaires which were sent, including the 15 from the original group, or 389, were returned. His findings are as follows:

> Outdoor Play Space - One hundred thirteen (34%) of the schools have less than two acres of outdoor space at school for all physical education activities. Of this group 75 have enrollments of 350 or less. Only 59 (18%) of the schools have in excess of five acres of such space on the school site. Fifty-eight per cent have playgrounds and athletic fields on separate sites.
>
> Gymnasium - The number of school gymnasium was reported as follows: none, 54 (15%); one, 250 (71%); two, 45 (13%); three or more, 2 (1%). Nine per cent of the schools have assigned separate gymnasium to girls and boys. In 181 (54% of the schools, the shower room, locker room, and gymnasium are on the same floor and adjacent to each other. Such practice facilitates supervision, especially where the physical education offices are placed between the gymnasium and the locker room.
>
> Lockers, Baskets, and Locks - Two hundred eleven schools have provided lockers or lockers and baskets. Eighty-nine schools reported the use of baskets; fifty schools have box lockers for physical education. The kinds of locks in the boys' locker rooms are: miscellaneous pupils' padlocks, 143; combination school-owned padlocks, 109; permanent door locks, 46; and school-owned key padlocks, 36. Need for padlocks was indicated by 34 per cent of the schools.

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4 Nordly, C. L. University of Minnesota Study of Physical Education Facilities and Equipment of the Accredited Public Secondary Schools of Minnesota. Research Quarterly, May, 1939. pp. 122-123.

Shower Baths and Towels - Shower baths for boys are lacking in 6% of the schools and for girls in 14% of the cases reported. The towels systems employed by 344 schools are as follows: furnished free to each pupil, 6 per cent; towel fee is required, 2 per cent; pupil supplies his own, 92 per cent.[5]

The purposes of Mr. Codwell's study are:

1. To obtain facts concerning the present practices and policies in the organization and administration of the program of physical education for boys in the twelve accredited class A high schools for negroes in Texas.

2. To offer upon the basis of these facts certain constructive proposals for changes and improvements in the high school programs should the need for such become evident.[6]

A letter of instruction and questionnaire were sent to the directors of physical education in 12 high schools. The physical education directors were requested to fill out the questionnaire. The questionnaires were called for by the investigator, who visited each school included in the study. His findings are as follows:

1. This study reveals that the programs of physical education in this accredited class A high schools for negroes in Texas, while deserving of commendation in certain respects, stand in need of improvement.

2. There were four of the schools with no required programs of physical education.

3. More than half of the physical education teachers were poorly trained for this work, indicating a decided need for prepared instruction in the field of physical education. Fifty-five per cent of the physical education teachers in the schools studied did not even meet the minor requirement of eighteen semester hours in physical education.

4. From an observation of the data, it appears evident that the size of the physical education classes in half of the

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5 Nordly, C. L. University of Minnesota Study of Physical Education Facilities and Equipment of the Accredited Public Secondary Schools of Minnesota. Research Quarterly, May, 1939. pp. 122-123.

6 Codwell, John E. The Status of Physical Education for Boys in the State Accredited Class A High Schools for Negroes in Texas. The Research Quarterly, May, 1939. p. 114.

schools with required programs should be reduced and a definite limitation much less than the present number be established. It seems reasonable to assume that the more the sizes of these physical education classes conform to proposed standards the more efficient teaching should result, other things being equal.

5. An analysis of the data pertaining to grading reveals that much improvement is needed in these school programs in regard to methods of marking. If one of the primary purposes of the physical education period is learning activity skills, then it seems certain that the degree to which one attains this knowledge should be a major factor in grading pupils. Regularity of attendance, costumes, and other factors have their places in computing grades, but they should not be considered solely or preferably to the exclusion of the factor of achievement in skills and knowledge. There seems, therefore, to be a definite need in these schools for more emphasis on acquiring knowledge and efficiency in skills as a method of marking.

6. A lack of suitable facilities has hindered greatly the physical education programs in the schools investigated. The listing of inadequate facilities as a major difficulty associated with the physical education program by the respective directors further attests to this program deficiency. Gymnasium in all the schools would be a great aid. The fact that no instruction has been offered in swimming can be definitely attributed to the lack of swimming pools. It would seem that the provision for these facilities in particular is a primary need in these schools.

7. The data also indicated that more attention should be given to the inclusion of some "carry-over" activities - such as tennis, golf, etc. - in the required physical education programs. It is believed, however, that with the securing of facilities for these activities, their appearance in the required program will be a natural sequence.

8. Programs of intramural and interscholastic athletics have been developed in all the schools. Such a finding may be attributed to the following reasons: (1) intramural and interscholastic participation, from a natural tendency, have attracted more interest both from the administration and the students than the required program of physical education; (2) the lack of or deficiency in the required physical education program has probably created an added emphasis in intramural and interscholastic athletics; (3) facilities and equipment are more available for both types of athletic work than

the required program.[7]

Harmon's[8] dissertation is a research in setting up a check list or score cards for use in surveying the efficiency of a high school department of student health, physical education, and athletics.

With the cooperation of prominent leaders in the field of physical education the writer formulated a score card by requesting them to evaluate every item by the distribution of an arbitrary number of 2,000 points. The best way to get the group judgment was by a medium score. This complete score card, to survey school health and physical education programs, was made up from reports of experts. Harmon's recommendations from analysis of reports are:

1. The topic of school health and physical education has been neglected in the school survey.

2. Most surveys that have included physical education and health have resorted to a subjective review of the program as the major method of procedure.

3. More than one-fourth of the city school surveys have omitted entirely school health and physical education.

4. The chief recent development in methods of surveying school health and physical education programs is theuse of health knowledge tests.

5. Some of the most valuable methods of procedure have been omitted during the last ten or more years.

6. There is a need for standard procedure in the city school health and physical education survey.

7. School health programs have been given more attention than physical education in city school surveys.

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7 Codwell, J. E. The Status of Physical Education for Boys in the State Accredited Class A High Schools for Negroes in Texas. Research Quarterly, Vol. 10. May, 1939. pp. 120-121.

8 Harmon, John M. Methods of Procedure in the City Comprehensive School Health and Physical Education Surveys. Research Quarterly, March, 1935. p. 54.

8. There has not been a trend toward improvement in methods used in city school health and physical education surveys during the last ten years.

9. City school health and physical education surveys were just as comprehensive previous to 1918 as they have been since that time.

10. Most of the methods used in city school health and physical education surveys have been very subjective.

11. Many items have been overlooked in the school health and physical education surveys.

12. The athletic administrators, the school health administrators, and the physical education administrators consider their own program of greater potential value than it is judged to possess by either of the remaining two groups.

13. Interschool athletics should not be included in the elementary school program.

14. The inter school athletic program in the junior high school should be a very limited program, amounting at the most to only one-sixth part of the physical education program.

15. In the high school the interscholastic athletic program should be about one-third of the physical education program.

16. Upon the basis of the judgment of the juries of experts cooperation in this study, a school corporation would be justified in dividing its budget for the school health and physical education program, in the twelve grades, upon the following basis: 12 per cent to interschool athletic programs, 48 per cent to the remainder of the physical education program, and 40 per cent to the school health program.

17. A group of fifty-eight leading school athletic administrators have indicated that they believe that the winning of games is of minor importance in comparison with many other results in the athletic program.

18. In measuring the efficiency of a high school athletic department, the proper procedure in the daily practice of the major sports is of more importance than the way in which the game is conducted, and the winning or losing of games.

19. The personal contact of the coach with the players and the community is of more importance than the winning or losing of games.

20. The sanitation of and mental hygiene in the dressing room is of more importance than of winning of games.

21. The proper business management of athletics is of more importance than the winning of games.

22. The length of the daily football practice is of more importance in high school programs than the winning of games.

23. The time allotment, or limiting the daily basketball practice, is of more importance than the number of games won.

24. The time allotment to baseball practice is of more importance than the number of games won.

25. The proper division of the daily practice time in football to fundamentals, scrimmage, signal practice, and lecture is of more importance than the percentage of games won.

26. The proper division of the daily practice time in basketball to fundamentals, scrimmage, signal practice, and lecture is more important than the percentage of games won.

27. The moral conduct of the team is of more importance than the number of games won.

28. The coach's methods of teaching the game are of more importance than the percentage of games won.

29. The attitude of the coach during the game is of more importance than the percentage of games won.

30. It is of more importance that the coach have four or five individual office conferences with every member of his squad during the season than that they win games.

31. It is of more importance that the coach make many social and civic contacts in the community than that his teams win games.

32. It is of more importance that the dressing rooms be cleaned perfectly after every day's use than the teams win games.

33. In the school health program, it is of more importance that a good health education program be a part of the curriculum in every grade than to maintain a good follow-up program in health service.

34. The health education program is of more importance than the discovery and correction of physical defects.

35. It is of more importance that an excellent program in the control of communicable disease be maintained than that the health of teachers be supervised.

36. It is of more importance that special classes for defective be maintained where needed than a program of morning inspection for all pupils be carried out.

37. It is of more importance that parents be sent a written report of the physical defects of pupils, and advised relative to the best procedure, than that health education have a place in the curriculum for every grade.

38. The placing of health education in the curriculum of every grade is of more importance to the pupil than the immunization of all pupils against diphtheria, smallpox, typhoid fever, and scarlet fever.

39. The factor of regular visits to the home by the school nurses is of more potential value than the immunization of all pupils or the health class in the curriculum.

40. The instructional staff, their training, and other qualifications are more vital in a good physical education program than any other consideration in the program.

41. The facilities for physical education, the program organization, and the program of activities are of equal importance to good results.

42. The professional assistance to teacher is of more importance than any other single item other than those items mentioned in conclusion numbers 40 and 41.

43. The kind of training the teachers of physical education have had is of more importance than the extent of their training.

44. The physical fitness of the physical education teachers of boys is of equal importance to the extent of professional training they have had.

45. Training in the technique of many games and other activities is of more importance than any other type of training.

46. One year of professional training in addition to a master's degree in physical education is indicated as the maximum standard of training for men teachers of physical education.

47. The recency of training of teachers is very important even in comparison with the kind and extent of training.

48. The personality and character of instructors is of more importance than the extent of training.

49. The kind of training and the personality and character of instructors is of equal importance.

50. Their efficiency in teaching is of more importance than the extent of training that teachers may have had.

51. Ample play space is of more importance than any other facilities for physical education.

52. Out door facilities are of more importance in physical education for high school boys than are indoor facilities.

53. The most important item among the indoor facilities is the playing floor.

54. The most important single item among the outdoor facilities for boys is the baseball diamond.

55. The most important item of equipment in the gymnasium for boys is mats.

56. It is of equal importance that all pupils be enrolled in physical education classes and that they be examined annually for physical defects.

57. A class of forty pupils is accepted as the standard-size class in physical education.

58. In corrective physical education work the classes should have twenty or fewer pupils.

59. Sixty minutes daily for high school boys is accepted as the best standard in time allotment for physical education.

60. A large variety of activities in both the physical education instructional period and in the intramural program is one of the most important responsibilities of the physical education teacher and administrator.

61. Efficient supervision of instruction is worth as much to a physical education program as excellent library service in providing ample books and professional magazines.

62. Interschool athletics should not be a part of the elementary school program.

63. All elementary school teachers should be trained in health and physical education.

64. Special teachers of physical education in the elementary school should receive at least two years of special training in health and physical education.

65. Time allotment in physical education in elementary schools should be at least thirty minutes daily in addition to the free play periods before school, at recess periods, and after school.

66. Most important in facilities for the elementary school physical education program is ample play space. A good teacher with ample time allotment provides other essentials to a good elementary school physical education program.

67. Most important in activities for the elementary school physical education program is that 100 per cent of the pupils take part in a large-muscle activity program daily.[9]

PROCEDURE

These data were secured by the writer through the use of a score card. The writer made personal visits to the three high schools being investigated and checked the score card himself. The score card, being the essential feature of the study, was carefully constructed by the California State Department of Education assisted by a seminar group of leading physical education directors and graduate students and with the help of about one hundred fifty other physical education directors. The seminar group included: Maryline Barnard, a graduate student in physical education at Mills College; Rosalind Cassidy, Director, Department of Physical Education, Mills College; Lucile Davis, a graduate student in physical education at Mills College; Rosine Gallison, Instructor in Physical Education, Berkeley High School, Berkeley, California; Alice Harwood, Instructor in Physical Education, Berkeley High School; Edith

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9 Harmon, John M. Methods of Procedure in the City Comprehensive School Health and Physical Education Surveys. Research Quarterly, March, 1935. pp. 58-62.

Lindsay, Instructor in Physical Education, Mills College; N. P. Neilson, National Health and Physical Education Secretary; Naomi Russell, a graduate student in physical education, Mills College; Ruth Sheller, a graduate student in physical education, Mills College; Jane Springer, a graduate student in physical education, Mills College; Winifred Van Hogen, Director Department of Physical Education for Women, Santa Barbara State Teacher's College, Santa Barbara; Irene Williamson and Evelyn Woodroof, Instructors in Physical Education, Mills College. N. P. Neilson acted as chairman and Miss Rosalind Cassidy was the director of the seminar group.

The score card in physical education for senior high school boys was begun in February, 1929, at the first regional conference on health and physical education and was completed in 1931. At the 12 conferences held many valuable ideas were discussed and incorporated into the score card. Each unit was considered for inclusion in the score card and it was checked against the following criteria:

(a) Does the unit have validity?
(b) Does the unit justify its inclusion in terms of the state objectives?
(c) Does the unit justify its inclusion in terms of the principles of physical education which are generally accepted?
(d) Does the unit allow the school an opportunity to improve its score?
(e) Does the unit encourage the school to improve its score?[10]

The units were set together in preliminary form and the score card mimeographed and sent to 50 responsible physical education men. They were asked to render judgments on the score card, alloting 2,000 points

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10 Neilson, N. P. Score Card for Evaluating Physical Education Programs for High School Boys. Bulletin No. E-2. California State Department of Education Division of Health and Physical Education.

to the five major headings and the rest of the allotments to the other sub-headings. The judgment of 112 persons was given in the summary sheets returned. The range and medium of the judgments were obtained by the tabulation of each unit. The mediums were a constant guide in making the final allotment of points to each unit in the score card.

The value of the score card lies in the analysis of the detailed score of each unit.

In collecting the data for this paper the writer took the score card in the spring of 1940 to the three high schools in Southern Utah being used in the study. The writer had personal interviews with the physical education director of each school and discussed the situation appearing in each school program as compared with each unit of the score card. The data obtained from the use of the score card was analyzed in each detailed score in every unit. The score card has a set standard score for each detail unit and the different schools were evaluated in terms of the standard score. Each unit was then analyzed according to the standard or set score for each unit.

The three schools in the study have been assigned code numbers which will be used to conceal the identities of the schools concerned.

TERMINOLOGY

Part-time teachers of physical education. Those combining the teaching of academic subjects with physical education teaching and coaching.

Full-time teachers. Those teaching only physical education classes.

Facilities. Buildings and grounds and other permanent structural units or items.[11]

Equipment. Apparatus of various sorts, and other items which are rather permanent but movable and which are not built-in features of buildings or grounds, as mats and jumping standards.[12]

Supplies. Items which are perishable or are used up each year or so and need continual replacement, as balls, nets, and first-aid supplies.[13]

RESULTS

A. Instructional Staff. The superintendent, in considering a teacher for employment as a physical education instructor in his school, should pay attention to the professional preparation of the applicant in the field or fields for which the teaching is being employed. The preparation needed to teach physical education should include basic courses as in the fields of sciences, biology, anatomy, chemistry, hygiene, physiology, psychology and sociology; in the field of physical education, the administration of physical education, principles of physical education, and research in education, activity courses in physical education, practice training, and courses in education.

The course and field names listed in table 1 include those required in California for the credential in physical education and those advocated in Bulletin E-1, "A Curriculum for the Professional Preparation

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11-12-13 Report of Subcommittee A-6 on Standards for Facilities and Equipment of the National Study on Teacher Training in Physical Education. The Research Quarterly, Vol. VI, October, 1935. No. 3.

of Physical Education Teachers for Secondary Schools."[14] The credential requirements and Bulletin E-1 are the results of much experience and thinking, as well as many conferences on the part of more than one hundred different experts in the field of physical education in California.[15]

Table 1. Professional preparation (kind)

Group	No.	Course names	Points possible	Total points made I	II	III
A	1	Anatomy	5	5	5	5
	2	Biology	5	5	5	5
	3	Chemistry	4	4	4	4
	4	Hygiene	5	5	5	5
	5	Physiology	5	5	5	5
	6	Psychology	5	5	5	5
	7	Sociology	5	5	5	5
		TOTALS	34	34	34	34

14 State Department of Education, A Curriculum for the Professional Preparation of Physical Education Teachers for Secondary Schools. Bulletin E-1, Sacramento: California State Printing Office, 1930.

15 Bulletin No. E-2. A Score Card for Evaluating Physical Education Programs for High School Boys. California State Department of Education, Division of Health and Physical Education.

Table 1 -(continued) Professional preparation (kind)

Group	No.	Course names	Points possible	Total points made I	II	III
	8	Administration of Physical Education	5	5	5	5
	9	Public Health	3	3	3	3
	10	Community Recreation	3	3	0	0
	11	Corrective Physical Education	5	5	0	5
	12	First Aid	3	0	3	3
	13	Growth and Development of the Child	5	5	5	5
	14	Kinisiology	3	3	0	0
B	15	Normal Diagnosis	5	5	0	0
	16	Physiology of Exercise	4	4	4	4
	17	Principles of Health Education	3	3	3	3
	18	Principles of Physical Education	5	5	5	5
	19	Research in Physical Education	5	0	0	5
	20	Seminar of Physical Education	5	5	0	5
	21	Supervision of Physical Education	5	0	0	0
	22	Tests and Measurements in Physical Education	4	4	0	4
		TOTALS	63	55	28	47

Table 1 - (continued)

Group	No.	Course names	Points possible	Total points made I	II	III
	23	Canoeing	1	0	0	0
	24	Diving	1	1	0	0
	25	Life Saving	2	2	0	2
	26	Rowing	1	0	0	0
	27	Swimming	3	3	3	3
	28	Games of Low Organization	2	2	2	2
	29	Apparatus	1	1	0	0
	30	Free Exercises	2	2	0	2
	31	Marching	1	1	1	1
	32	Pyramid Building	1	1	1	1
	33	Stunts	1	1	1	1
	34	Tumbling	1	1	1	1
	35	Clog Dancing	2	0	0	0
	36	Folk Dancing	1	0	0	0
	37	Social Dancing	2	2	2	2
	38	Boxing	2	0	2	0
	39	Fencing	1	1	0	1
	40	Weaponless Defense	1	0	0	1
	41	Wrestling	2	2	2	2
	42	American Football	2	2	2	0
C	43	Archery	1	1	1	1
	44	Baseball	2	2	2	2
	45	Basketball	3	3	3	3
	46	Golf	2	0	0	0

Table 1 - (continued)

Group	No.	Course names	Points possible	Total points made I	II	III
	47	Handball	2	2	0	0
	48	Soccer	1	0	0	0
	49	Speedball	1	0	1	1
	50	Squash Racquets	1	0	0	0
	51	Tennis	3	3	3	3
	52	Track and Field	2	2	2	2
	53	Volley Ball	1	1	1	1
	54	Water Polo	1	1	1	1
		TOTALS	51	35	29	32
	55	Practice Teaching	5	5	5	5
	56	Educational Administration	3	3	3	3
	57	Educational Psychology	5	5	5	5
	58	Educational Tests and Measurements	2	2	2	2
	59	Elementary Statistics	4	4	4	4
D	60	History of Education	2	2	0	0
	61	Principles of Secondary Education	4	4	4	4
	62	Methods of Teaching	2	2	2	2
	63	Vocational Guidance	2	2	2	2
		TOTALS	29	29	27	27
		GRAND TOTALS	177	153	116	141

Out of 177 possible points, 140 points is the maximum number which will be allowed for any one instructor: 140/2 equals 70.

Score possible	Score given		
	I	II	III
70	70	56	70

The analysis of table 1 shows that the professional preparation in physical education has been met by two of the teachers, nos. I and III, while the third physical education teacher, no. II, has completed 80 per cent of the professional preparation required. The table reveals, also, that there could be more activity courses to improve professional preparation. One teacher, no. I has almost completed the basic courses in the fields of science, physical education and education. The two teachers, no. II and III, have a few physical education and education courses to complete.

The extent of the physical education teacher's training is of less importance than the kind of training he has had. Table no. 2 gives additional points to the industrious teachers who have 10 credit intervals above college graduation.

Table 2. Professional preparation (extent)

College credits earned above high school graduation Semester hours	Points possible	Total points made I	II	III
60-74 Credits	5		5	5
75-89 Credits	10	10		
90-104 Credits	15			
105-119 Credits	20			
120-129 Credits	30			
130-139 Credits	40			
140-149 Credits	45			
150-over Credits	50			
TOTALS	50	10	5	5

Score possible	Score given I	II	III
50	10	5	5

The data of table 2 reveal that all three teachers have a chance to improve the extent of professional preparation, yet only one, teacher no. I, seems to be adding additional credits in his preparation for teaching physical education.

The continuation of training in some form above the willingness of teachers to try to improve their professional preparation. The philosophy of physical education changes so rapidly that teachers should have additional training, either by correspondence, extension, or residence courses, every few years to keep within the philosophy of physical education. There are new demands thrown on the physical education teacher every year and

he has to be able to meet these demands by the improvement of his qualifications and the knowledge of changing trends.

Table 3. Professional preparation (recency)

Instructor has completed the number of credits within	Credits 2	4	6	Total points made I	II	III
	Points					
Three years	20	25	30	30	30	30
Four years	15	20	25			
Six years	10	15	20			
Eight years	5	10	15			
			TOTALS	30	30	30

Score possible	Score given I	II	III
30	30	30	30

In analyzing the data in table 3 we find that all three teachers score a perfect score. This means that within the last three years these teachers have completed 6 credits or semester hours, either by correspondence, extension or residence courses.

For a strong and efficient professional teaching organization all teachers should belong to local, state, and national associations, and should show willingness to support such organizations to advance the teaching profession. The publications of these organizations have gone far in advancing physical education and teaching as a profession.

Table 4. Membership in professional organizations

At the present time instructor is a member of the following organizations	Points	Total points made I	II	III
National Education Association	3	3	3	3
American Physical Education Association	3	0	0	0
The State Education Association	3	3	3	3
The State Physical Education Association	3	3	3	3
A Local Education Association	3	3	3	3
A Local Physical Education Association	3	3	3	3
Any Other Professional Association	3	0	0	0
TOTALS	21	15	15	15

From a total of 21 points the possible score given is 12.

Score possible	Score given I	II	III
12	12	12	12

Table 4 shows that all three teachers are members of at least four organizations. In these organizations the teachers are able to advance their interest and the interest of their organization to a professional organization.

At the professional organization meetings teachers gain through personal contacts with other teachers which stimulates professional growth. They may exchange ideas and enrich their philosophies.

Table 5. Attendance at professional meetings

Number of professional meetings other than departmental attended during last 12 months	Points	Total points made I	II	III
One	2			
Two	4			
Three	6		6	
Four	8	8		8
Five	10			
Six	12			
	TOTALS	8	6	8

Score possible	Score given I	II	III
12	8	6	8

Table 5 reveals that out of a possible score of 12 the teachers' highest scores were 8. Two teachers attended four meetings while the other one attended three. All three teachers show an interest in the work of the professional organizations.

B. Facilities. Ample play space is stressed in the modern physical education program in the high school where playing many different team games necessitates a large, level outdoor play area. The play space for physical education should be adequate to accommodate the physical education classes, intramural athletics, and interscholastic athletics, and should adjoin or be close to the school buildings. "Provision for adequate play space near the school building is both an educational and

fiscal economy since such procedure facilitates a balanced program, provides for saving of time of faculty members and pupils, and eliminates hazards of crossing main thoroughfares and railroad tracks."[16]

With proper construction it is possible to use certain areas for a number of different activities at a different time. The area can be used alternately for archery, badminton, paddle tennis, tennis, for handball and squash, and for basketball and volley ball if the surface is not hard. The same area could be used for baseball, field hockey, football, soft ball, soccer, speed ball, and track and field if necessary. The same area could be used, also, for apparatus, boxing, corrective physical education, fencing, gymnastics, rhythms, tumbling, and wrestling.

The minimum standard area for senior high school is from ten to fifteen acres.

Table 6. Area of school site

Total school enrollment	Number of acres (usable)							Score Made		
	Less than 4	4-5	6-9	10-14	15-19	20-29	30 over	I	II	III
0-100	0	30	70	90	95	95	95		0	
101-300	0	25	60	90	95	95	95	25		60
301-600	0	20	50	80	90	95	95			
601-1000	0	15	40	70	90	95	95			
1001-1800	0	10	30	60	90	95	95			
1801-over	0	0	20	50	80	90	95			
							TOTALS	25	0	60

Score possible	Score given I	Score given II	Score given III
95	25	0	60

16 Nordly, Carl L. University of Minnesota. Study of Physical Education Facilities and Equipment of the Accredited Public Secondary Schools of Minnesota. Research Quarterly, Vol. X. May, 1939, No. 2, p. 124.

Table 6 shows that outdoor physical education needs were not considered to be important when these school properties were acquired. One of the schools, school no. II, is completely lacking in usable acreage at the school site. The other two schools, nos. I and III respectively, have a score of 25 (26 per cent of possible score of 95, or 4-5 acres usable), and 60 (63 per cent of possible score of 95 or 6-9 acres usable). School no. I has so little acreage that it is handicapped in its activities; School no. III has the space to take care of most of its activities.

The outdoor physical education play area should be unbroken by the school buildings. When the buildings are badly placed on school sites, the play areas are too small for regulation fields and courts.

Table 7. Placement of buildings on school site

Placement of buildings	Points	Points made I	II	III
Play Space Badly Broken by Buildings	0		0	
Play Space Partly Broken by Buildings	10	10		
Play Space Unbroken by Buildings	25			25
	TOTALS	10	0	25

Score possible	Score given I	II	III
25	10	0	25

Out of three schools (table 7) only one school, no. III, had its play space unbroken by buildings.

There are certain indoor facilities essential for a well-balanced physical education program. Exercise floors, dressing rooms, showers, toilet facilities, office space for instructors, health service rooms, rest rooms, locker space, and storage space are necessary.

Standards for Each Facility.[17]

Exercise Floor - Minimum sizes should be as follows:

Boys Enrolled	Width	Length	Height to Square*
0-150	46'	80'	18'
151-500	50'	85'	20'
501-900	60'	90'	22'
901-over	70'	100'	22'

Maple or other hardwood floor; lines painted; walls smooth; interior painted light color, but not glaring; windows easily opened; radiators recessed if lower than seven-foot level; adequate light, heat, ventilation and sanitation; away from academic building; acoustics good; accessible to students and public; maximum of six basketball goals (2 cross courts and one end court); smooth area at least 12 feet high along one end or side wall for handball or tennis strokes,; sliding partitions not recommended.

Bleachers - Seating arrangements in gymnasium for half of student body enrollment (as a minimum); seats permanent or temporary, with temporary preferred; line of sight correct; safe; clean; without splinters.

Apparatus or Activity Room - A smaller exercise floor where mats, apparatus, etc., are kept; to be used for a second activity room; minimum sizes:

Boys Enrolled	Width	Length	Height to Square
301-500	30'	40'	16'
501-900	35'	50'	16'
901-over	40'	60'	18'

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17 Details of sizes of courts, diamonds and fields will be found in the following references: Nash, J. B. The Administration of Physical Education (A. S. Barnes and Company, 1932); Williams, J. F. and Brownell, C. L. The Administration of Health and Physical Education (W. B. Saunders Company, 1934); California State Department of Education, Score Card for Evaluating Physical Education Programs for High School Boys and for High School Girls. Bulletin No. E-2 and No. E-3, 1931.

* Meaning height of side wall from floor to beam.

Maple or other hardwood floor; lines painted; walls smooth; interior painted light color, but not glaring; windows easily opened; adequate light, heat, ventilation and sanitation; accessible; separate facilities for storing temporary bleachers, piano, and apparatus assumed to be convenient to this room and the main exercise floor.

Kitchen or Kitchenette - The social, recreational use of the gymnasium requires the inclusion of a kitchen or kitchenette; outside delivery entrance; stove; sink; hot and cold water; cupboards; dishes; silverware; service counter to exercise floor.

Class Room - To be used for health education classes, talks by instructors to athletic teams, general announcements, registration or home-room classes; minimum size, 20'x30'; equipped with seating facilities, blackboard space, desk, book shelves, closet, still or moving picture screen, and charts; adequate light, heat, ventilation and sanitation; in large schools, part of physical education plant; in small schools, convenient to physical education department.

Corrective Room - Size approximately 20'x30'; minimum height 12' (equipment is scored under equipment); adequate light, heat, ventilation and sanitation; arrangement good; accessible.

Rest Room - Rest room for boys; to be used by limited number of boys when ill, injured, convalescent, or when rest is prescribed; minimum floor area 160 square feet and to increase with enrollment; sun room in connection; adequate light, heat, ventilation, sanitation; supplied with good quality cots - one for each 50 boys taking physical education during the maximum period load; convenient to instructors' offices and examination room; closet for storage.

Health Unit Rooms - This unit should include one or more rooms to be used for first-aid, physical examinations, personal health conferences, and by physician, dentist and nurse. One room may serve all these purposes up to an enrollment of 500 boys; where enrollment exceeds 500 boys, other rooms should be added to include an office for physician and nurse and a waiting room; minimum floor area, 200 square feet; maximum floor area, 500 square feet; minimum length of examination room, 22 feet; adequate light, heat, ventilation and sanitation; equipped with single hospital bed; hot and cold water; first-aid supplies; chairs; desk; sink; soap; eye chart; full-length mirrors; one or more folding screens; files; table; toilet facilities adjoining; closet; cabinets.

Instructors' Offices - In a school one or two physical education instructors for boys, a single office 10'x12' will suffice; with several instructors, two small offices; one to be used as a consultation room, and a large office sufficient to contain instructors'

desks should be provided; adequate light, heat, showers, dressing room and toilet facilities for instructors; book case for department library; instructors' desks; cupboard; drawers; files; chairs; lockers; mirror.

Supply Room - Minimum floor area, 60 square feet; size to increase with enrollment; used to store supplies which are in constant use; adequate light, heat, ventilation and sanitation; equipped with shelves; delivery counter; convenient to offices and dressing rooms; storage space for clean and soiled towels. In larger schools a separate room for towels and swimming suits is desirable.

Store Room - To be used for storing supplies not in daily use; should be adjacent to supply room; minimum floor area, 100 square feet and size to increase with enrollment, adequate light, heat, ventilation and sanitation; equipped with shelves, storage bins and clothes hanger.

Dressing Room - Area to be used for dressing purposes; large enough to provide free space (exclusive of lockers) equal to 12 square feet per pupil for the largest number dressing in any one class period; adequate light, heat, ventilation and sanitation; provided with strong nonmovable benches; adequate drainage so floor can be hosed out; room painted light color, but not glaring; toilet adjacent; drinking facilities; washing facilities; mirrors; location permitted under bleacher areas providing sufficient headroom, one outside wall, and floor is at or above ground level. Dressing room not to be placed under other floor areas unless for unilateral lighting the width of the room is not over twice the distance from the window tops to the floor; dressing room built in one story and with skylights in ceiling preferred.

Extra Dressing Rooms - Where interschool athletic competition is held, an extra dressing room for visiting teams is desirable. It should have a minimum floor area of 200 square feet; adequate light, heat, ventilation, sanitation, toilet and shower facilities convenient; provided with lockers or hooks where clothes can be hung. In larger schools additional dressing rooms, with showers, are necessary for faculty and athletic teams.

Lockers - Individual steel lockers, 12"x12"x36"; 7"x18"x36" or 9"x18"x36" with open back for ventilation and service, preferred; lockers in double teir; set on four inch concrete or tile covered base; arranged properly as to light and conservation of space; individual combination padlocks or locks preferred; large individual lockers used by athletic team members during a season. Where other types of systems, such as basket system, cubicle system, light or six in one, etc., are used, scoring is to be done on the basis of adequacy, sanitation, safety and convenience.

Drying Room (Suits) - Necessary in larger schools and especially where no other provisions have been made. Used for drying athletic uniforms; minimum floor area, 120 square feet and to increase with enrollment; adequate ventilation and sanitation; equipped with heat and facilities to hanging suits.

Shower Rooms - Size of room to vary with enrollment of boys in physical education; 14 square feet of floor area for each shower head. The number of shower heads recommended is 1 for each 4 boys; no school should have less than four shower heads; tiled floor area and walls tiled 4'x9' high, preferred; adequate light, heat, ventilation, sanitation and drainage; drainage to side of room; no floor covering; no steps; hot and cold water; liquid soap from central container, from nickle-plated wall stubs; shower heads and controls exposed; piping behind walls; fixed shower heads close to wall placed at three levels at chin height to prevent wetting hair; overhead type not desirable; central maximum heat control; individual hot and cold mixing values at each shower; drying room between shower and dressing room preferred; size of drying room in proportion to enrollment; towel service convenient to drying room.

Swimming Pool - Pool may be covered or open-air, depending upon climatic conditions; size 35'x75'; depth, 3'6" shallow end, and 8 to 10 feet in deep end; should not be under a building unless light ratio is properly maintained and in no case should the net height be less than 18'0"; pool, runways, and 5'0" wainscot preferred in tile; adequate light, heat, ventilation, sanitation and drainage; ladders recessed; runways surrounding four sides, sloping to drain in wash gutter and minimum width 4 feet, except behind spring board where it should be 7'0"; runway not to exceed 12" above water level in pool; provision for preventing spectators in street shoes from walking or standing on the runways; swimmers' entrance to the pool through shower room; adequate machinery for heating, filtration, and sterilization; standard spring board; depths of pool and floor lanes marked; safety provisions; no exposed pipings; all radiators brass and recessed; all exposed metal noncorrosive; bleachers for one-fifth of student enrollment (as a minimum); bleachers temporary or permanent (temporary preferred); bleachers must be safe, clean and without splinters.

Sanitary Fixtures - An adequate number should be provided; toilets and urinals should be convenient to dressing room and play areas; natural ventilation, cross circulation by windows; cement, tiled or terazzo steps about 5 inches high pitched toward urinal. Toilets stalls 4'9" high; windows with removable screens; wash basins; soap containers; paper towels or drying machines; mirrors; drinking fountains; janitors' closet. All fixtures should be in a sanitary condition.

Internal Arrangement - Units should be arranged in logical order according to the service they are designed to render.

Table 8. Indoor facilities

Name of facility	Number of rooms	Score possible	Total points made I	II	III
Exercise Floor	1 or 2	10	10	6	10
Bleachers		5	1	1	5
Apparatus or Activity Room	1	6	0	0	0
Kitchen or Kitchenette	1	3	0	0	3
Class Room	1	5	2	2	5
Corrective Room	1	5	0	0	0
Rest Room	1	4	0	0	4
Health Unit Rooms	1 to 3	8	2	2	8
Instructors' Offices	1 to 3	8	8	5	8
Supply Room	1	3	1	1	3
Store Room	1	3	1	1	3
Dressing Room	1	10	3	4	10
Extra Dressing Room	1 to 3	4	0	0	0
Lockers	1	10	2	2	6
Drying Room (Suits)	1	3	0	0	0
Shower Room	1	10	3	2	10
Swimming Pool	1	15	0	0	0
Sanitary Fixtures		6	3	3	6
Internal Arrangements		7	2	2	7
	TOTALS	125	37	32	97

Score possible	Score given I	II	III
125	37	32	97

Table 8 reveals that of the indoor facilities of the three schools studied only one, no. III, has anywhere near the score possible. The highest score is 97 (77.4 per cent of a possible score of 125). The other two scores were 37 (29.6 per cent) for school no. I and 32 (25.6 per cent) for school no. II.

The table also shows that the three schools have exercise floors in good condition. One school, no. III, has bleachers. None of the schools have an apparatus or activity room, corrective room, extra dressing room, drying room, or swimming pool. Two schools, nos. I and III, are without a kitchen or kitchenette. All three schools have some kind of class room, health unit rooms, instructors' offices, supply rooms, store rooms, dressing rooms, lockers, shower room, sanitary fixtures, and internal arrangements. Only one school has a rest room; all have the most important item for indoor facilities and that is the exercise floor. Two of the schools, no. I and III, have large gymnasiums and the other one, no. II has a small one.

Only one school of the three appears to meet the equipment requirement of table 8.

Physical education standards require a program which has certain types of valuable activities to be carried on out of doors. It is important that the various activities have specific fields and courts according to the nature of each.

Standards for Each Activity.[18]

> Basketball Courts - Size 45'x80' plus 5 feet of side and end space; surfaced; for good drainage, slope .2" for 50'; permanent lines marked; good basketball backstops and goals; courts running north and south.

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18 California State Department of Education. Score Card for Evaluating Physical Education Programs for High School Boys. Bulletin No. E-2.

Handball Courts - Size 20'x36' plus additional side and end space for one wall single courts; height of wall 18'; three or four wall courts much preferred; walls of concrete or tongue and groove wood, painted; hard surfaced or wood flooring; courts running north and south; lines painted; for rapid drainage slope 2" for 50'.

Tennis Courts - Size 36'x78' net; total width 50'; total length 120'; surfaced area 50'x120'; slope for rapid drainage 2" for 50'; lines marked; good net and net posts (removable); court running north and south; courts surrounded by No. 9 chain link (2-inch mesh) fence, 12 feet high; metal posts of fence set in concrete; at least one gate.

Paddle Tennis Courts - Size 18'x39' net; total width, 28'; total length 60' (50' where superimposed on tennis courts); total area surfaced; slope for drainage 2" for 50'; lines marked; net; removable net posts; courts running north and south preferred.

Quoitennis Court - Size 16'x24' net; total width, 24'; total length 32'; total area surfaced; lines marked; removable metal posts or wood posts 4"x4"x5' above ground; net 1' wide.

Volley Ball Courts - Size 30'x60' net, with 4'0" borders; entire area surfaced; for rapid drainage slope 2" for 50'; metal or wooden posts (4"x4") eight feet above ground; good net; lines marked; courts running north and south.

Baseball Diamond - Size 90'x90'; field limit 235'; may be superimposed on some other field or in schools having less than 301 boys enrolled in physical education; good turf in field area; dirt in good shape within diamond area; home plate in northeast corner; adequate backstop; good bases; lines marked; field approximately level.

Playground Baseball Diamonds - Size 69'x60'; field limit 135'; may be superimposed on some other field or in free play area; surface - dirt in good shape or turf; home plate in northeast corner; adequate backstop; good bases; lines marked; field approximately level.

Football Field - Size 160'x240'; 15' additional space on each side and end; standard goal posts; good turf; lines marked; field running north and south; adequate watering and drainage; approximately level; may be superimposed on speedball field in schools having less than 151 boys enrolled in physical education.

Soccer Field - Size 160'x240'; 15' additional space on each side and end; standard goal posts; good turf; lines marked; field running north and south; adequate watering and drainage system; approximately level. May be superimposed on speedball fields having less than 901 boys enrolled in physical education.

Speedball Field - Size 160'x360'; 15' additional space on each side and end; standard football goal posts; good turf; lines marked; field running north and south; adequate watering and drainage system; approximately level.

Track - One-fourth mile, minimum width 20' except straightaway; 220-yard straightaway, 30' wide; curves banked; curb of wood or concrete; cinders or sandy loam surface; drain tile and drainage beds all around the edge. Track should surround speedball or football field.

Pole Vault Pits - Size 14'x14'; pit filled with sawdust or wet loose sand 12" deep; standards with movable center piece; wood box for pole hole; sufficient level space for run on cinder or sandy loam pathway; edges of pit beveled.

Broad Jump Pits - Size 14'x14'; pit filled with sawdust or wet loose sand 12" deep; standards; sufficient level space for run on cinder or sandy loam pathway; take-off board; edges of pit beveled.

High Jump Pits - Size 10'x14'; pit filled with sawdust or wet loose sand 12" deep; standards; sufficient level space for a right, left or straight run on cinder or sandy loam pathway.

Bleachers - Outside bleachers with minimum seating capacity equal to one-half of student body enrollment; safe; not unsightly; toilet facilities under the bleachers for the public.

Archery Lanes - Size 10'x100'; good target of standard make; safe; turf.

Croquet Court - Size 30'x60'; turf or ground well prepared; level; boundary limits marked.

Golf Driving Cages - Size 10'x12'; height 12'; constructed of steel frame and small mesh wire; canvas drop at back; good tee.

Golf Puttings Greens - Size 5,000 square feet for nine holes; standard turf; standard cups; surrounded by good fence.

Horseshoe Courts - Size 40' between pegs; iron pegs; pitch board frame around peg 6'x6'; pitchers box filled with damp clay 6" deep; court on level ground; 10' between different courts; 10' of extra space at each end of each court.

Fence - Good quality chain link fence surrounding playground part of school site; fences where needed to control spectators and automobiles.

Table 9. Outdoor facilities

Name of facility	Number of units	Score possible	Total points made I	II	III
Basketball Courts	1 to 4	18	0	0	0
Handball Courts	1 to 4	14	0	0	0
Tennis Courts	1 to 4	18	18	0	18
Paddle Tennis Courts	1 to 3	6	0	0	0
Quoitennis Courts	1	6	0	0	0
Volley Ball Courts	1 to 4	10	0	0	0
Baseball Diamond	1	12	0	0	7
Playground Baseball Diamonds	1 to 4	10	4	0	5
Football Field	1	16	12	0	16
Soccer Field	1	14	0	0	14
Speedball Field	1	14	0	0	14
Track	1	14	8	4	12
Pole Vault Pits	1 to 2	6	6	5	5
Broad Jump Pits	1 to 2	8	8	5	8
High Jump Pits	1 to 2	8	8	5	5
Bleachers	1	6	0	0	6
Archery Lanes	1 to 2	6	0	0	0
Croquet Courts	1	6	0	0	0
Golf Driving Cages	1 to 2	6	0	0	0
Golf Putting Greens	1 to 2	6	0	0	0
Horseshoe Courts	1 to 2	6	3	3	5
Fence		8	0	0	8
	TOTALS	218	67	22	124

Total points made----, divided by 2 equals the score given.

Score possible	Score given I	II	III
109	33.5	11	62

The outdoor facilities, table 9, of the schools studied are far below the equipment standard needed for an effective physical education program. School I has a score of 35.5 points (30.7 per cent) out of a total 109 points. No. I has outdoor facilities for tennis, playground baseball diamonds, football field, track, pole vault pits, high jump pits, broad jump pits, and horseshoe courts. School II shows a score of 11 points (10.9 per cent) of a 109 total. School no. II has outdoor facilities for track, pole vault pits, broad jump pits, high jump pits, and horseshoe courts. School no. III, with a score of 62 points (56.9 per cent) of a 109 total, has the highest score of the three. It has tennis courts, baseball diamond, playground, baseball diamonds, football field, soccer field, speedball field, track, pole vault pits, broad jump pits, high jump pits, bleachers, horseshoe courts, and a fence.

The most important item of outdoor facilities is the playground baseball diamond; and only two schools have a playground baseball diamond on or near the school site.

An effective physical education program requires an adequate supply of equipment. This equipment is of movable type and usually needs less replacement than supplies. The equipment on hand usually determines the type of activity program found in the school.

Table 10. Equipment

Name of equipment	Number needed	Score possible	Total points made I	II	III
Piano	1	9	9	9	9
Mats	2 to 8	12	7	0	7
Corrective Room Equipment		14	0	0	0
Horizontal Bars	1 to 2	7	0	0	0
Parallel Bars	1	4	0	0	0
Buck	1	4	0	0	0
Horse	1	4	0	0	0
Climbing Ropes	1 to 6	5	0	0	0
Rings (Pairs)	1	4	0	0	0
Scales	1	6	6	6	6
Spirometer	1	4	0	0	0
Hand Dynamometer	1	4	0	0	0
Leg and Back Dynamometer	1	4	0	0	0
Hurdles	10 to 60	4	0	7	7
Maintenance Equipment		14	4	4	8
	TOTALS	102	26	24	36

Total points made ____ divided by 2 equals score given ____.

Score possible	Score given I	II	III
51	13	12	18

Table 10 reveals that no. III school has the highest score, 18 (35.3 per cent) of a possible 51 score. The equipment owned by no. III is a piano, mats, scales, hurdles, and maintenance equipment. No. I has a score of 13 (25.3 per cent) of a possible score of 51. It has a piano, scales, mats, and maintenance equipment. No. II has a score of 12 (23.5 per cent) of a possible 51. It owns a piano, scales, hurdles, and maintenance equipment.

The most important item of the equipment is the mats, and only two schools have these. None of the schools have corrective room equipment, horizontal bars, or any kind of heavy apparatus.

The physical education program requires a wide variety of supplies which are ready for constant use in order to present a wide variety of skills. The supplies most commonly used in the physical education programs in the past and at present in the largest majority of schools are basketballs, footballs, volley balls, soccer balls, soft baseballs, and bats. In addition to these supplies already mentioned the more progressive schools have others which are used for carry-over activities. These are supplies for archery, badminton, golf, handball, tennis, deck tennis, ping pong, shuffle board, darts, paddle tennis and various sorts of table games.

The greater the number and variety of supplies the more versatile are the activities of a physical education program.

Table 11. General supplies

Name of supply	Score possible	Total points made I	II	III
Archery Arm and Finger Guards	2	0	0	0
Archery Arrows	2	2	0	2
Archery Bows	2	2	0	1
Archery Targets and Easels	2	1	0	1
Ball, Baseball (Hard)	4	0	0	0
Balls, Playground	4	4	4	4
Balls, Basket	15	15	15	15
Balls, Foot	13	13	0	10
Balls, Golf	4	0	0	0
Balls, Hand	8	0	0	0
Balls, Soccer	10	5	5	5
Balls, Sport, 24"	3	0	0	0
Balls, Tennis	7	0	0	7
Balls, Volley	6	6	6	6
Bases, Baseball (Sets)	2	0	0	0
Bases, Baseball (Playground, Sets)	2	0	0	0
Bats, Baseball	3	0	0	0
Bats, Baseball (Playground)	3	3	3	1
Bean Bags	3	1	0	1
Cambric Various Colors (Yds.)	3	0	0	0
Catcher's Outfits, Baseball	2	0	0	0
Cross Bars	3	0	3	3
Gloves, Baseball	2	0	0	2
Gloves, Boxing (Prs.)	3	3	3	3

Cont. next page

Table 11. General supplies (con't).

Name of supply	Score possible	Total points made I	II	III
Golf Clubs, (Driver)	2	0	0	0
Golf Clubs, (Mashie)	2	0	0	0
Golf Clubs, (Mid Iron)	2	0	0	0
Golf Clubs, (Putter)	2	0	0	0
Indian Clubs	2	2	2	2
Inflators (Ball)	2	2	2	2
Laces, Rawhide	2	0	0	2
Lime, Air Slacked 80 lb. sacks	4	0	0	4
Mending Kits	2	0	0	0
Needles, Lacing (handled)	2	0	0	0
Nets, Tennis	2	2	0	2
Nets, Volley Ball	2	2	2	2
Pistols	2	2	2	2
Score Books, Baseball	2	0	0	2
Score Books, Basketball	2	2	2	2
Score Books, Football	2	0	0	2
Score Books, Tennis	2	0	0	0
Sets, Badminton	2	2	0	2
Sets, Croquet	2	0	0	0
Sets, Darts	2	2	0	2
Sets, Horseshoes	2	2	2	2
Sets, Paddle Tennis	2	2	0	2
Sets, Quoitennis	2	2	0	2
Shots, (8 lbs)	2	0	2	2

Cont. next page

Table 11. General supplies (con't).

Name of supply	Score possible	Total points made I	II	III
Shots, (12 lbs.)	2	2	2	2
Tape, Black Friction (Rolls)	2	0	2	2
Tape Lines (50 ft.)	2	0	2	2
Tape Lines (100 ft. steel)	2	0	0	0
Tennis Racquets	4	2	2	2
	A clean towel available daily			
Towels, Bath	12	0	0	0
Vaulting, Poles	3	1	3	3
Watches (Timer & Stop Watch)	3	3	3	3
Whistles (Instructors')	4	4	4	4
Yarn, White (Balls)	2	0	0	2
TOTALS	194	88	64	109

The total points made ___, divided by 2 equals the score given ___.

Score possible	Score given I	II	III
97	44	32	54

The general supplies of the three schools studied are far below the quota of an ideal program. The three schools have the supplies commonly used in the majority of schools. The most commonly used supplies are basketballs, footballs, volley balls, soccer balls, soft baseballs, and bats. The most important item in the general supplies is basketballs.

Table 11 shows that school no. III has the highest score, 54 points or 55.6 per cent of a possible score of 97. No. I's score is the next high with a total of 44 or 45.3 per cent of a possible 97. No. II school has a score of 32 or 33 per cent of a possible score of 97. All of the

schools studied would be equipped for better work if they included more general supplies in their programs.

First aid supplies are a very important item of the physical education facilities. In an activity program there is more chance of being injured than in any other program. Most of the accidents in physical education are preventable, yet in spite of precautions they do occur. The first aid supplies must be on hand so proper first aid may be rendered when it is needed. These supplies should be kept in the instructor's offices and in the equipment offices if a full-time nurse is not available.

The supplies that are most useful are absorbent cotton, adhesive tape, various sized gauze bandages, antiseptics, and scissors.

Table 12. First aid supplies

Name of supply	Score possible	Total points made I	II	III
Absorbent Cotton, 4 oz. package	4	4	4	4
Adhesive Tape, 1 in. x 10 yds.	2	2	2	2
Adhesive Tape, 3 in. x 10 yds.	4	4	4	0
Alcohol, Rubbing (Pint)	2	2	2	2
Ammoniated Mercury Ointment (oz.)	2	0	0	0
Applicators, Wood (72 doz. box)	2	1	0	0
Aromatic Spirits of Ammonia (oz.)	2	2	2	2
Bandage, Gauze, (1 in. x 10 yds.)	4	1	4	4
Bandage, Gauze, (2 in. x 10 yds.)	4	1	2	0
Bandage, Muslin, 2 in.	2	2	2	0
Bandage, Triangular	2	0	0	0
Chloragene Antiseptic Tablets (box)	2	0	0	0
Mercurochrome (liquid) (oz.) or Iodine	4	4	4	0
Splint Boards (Assorted)	2	0	0	0
S. T. 37 (16 oz. bottle)	2	0	0	0
Tongue Depressors (Gross)	2	0	0	0
Tweezers (4 in.)	2	2	2	2
Unguentine (Tube)	2	0	0	0
Vaseline, Carolated (Tube)	2	0	0	0
Zinc Oxide Ointment (Tube) (oz.)	2	0	0	0
TOTALS	50	24	30	16

The total points made ____, divided by 2 equals the score given ____.

Score possible	Score given I	II	III
25	12	15	8

The three schools studied have the most useful first aid supplies that are needed in the physical education program. All three schools have the services of a county nurse whose offices are located in the school buildings. The score shows that all could improve their first aid supplies to advantage. From a possible score of 25 points, no. II has a score of 15 or 66 per cent; no. I, next high with a score of 12 or 48 per cent; no. III has a score of 8 or 32 per cent of a possible 25 points.

C. Program Organization. The physical education program should affect all the pupils in the school. The greater the number of students who take part in physical education, the more adequate the program may be. There should be definite instruction in a variety of activities available for every student.

Table 13. Percentage of pupils enrolled

School	Percent Possible	Percent made	Score possible	Score made
Number I	100	61 to 70	90	36
Number II	100	50 to 60	90	27
Number III	100	61 to 70	90	36

Score possible	Score given I	II	III
90	36	27	36

Table 13 shows that the total per cent of school no. I lies between 61 and 70 and the score is 36 out of a possible 90. School no. II has a per cent between 50 to 60 and a score of 27 of a possible 90. School

no. III has a per cent between 61 to 70 and a score of 36. The percentage is low because the State Department of Education requires only two years of physical education credit for high school graduation and these three schools are on a four-year school system. The students take physical education in the first and second years and are dismissed from the subject during their third and fourth years.

The ideal time allotment in physical education is based on a daily period of 60 minutes. The more a student plays, the greater becomes his perfection in neuro-muscular skills. The class periods should be held five days a week, if possible.

Table 14. Time allotment for physical education

School	Length of periods in minutes	Times per week	Score possible	Score made
Number I	60	3	90	65
Number II	50	3	90	35
Number III	45	3	90	27

Score possible	Score given I	II	III
90	65	35	27

No. I school, table 14, has the longest time allotment for class instruction. No. I has class periods of 60 minutes three times a week. The other two days are for health instruction. School no. I has a score of 65 of a possible 90. School no. II has class periods of 50 minutes

three times a week and the other two periods devoted to health instruction. This school has a score of 35 of a possible 90. No. III has class periods of 45 minutes three times a week and the other two periods for health instruction. 27 is the rating of school III. It is interesting to note that three schools in close locality have three different time allotments for class instruction.

A medical examination should be provided and required of every student before he participates in any form of activity in the physical education program. These examinations, given by a competent physician, dentist, or nurse, will enable the physical education instructor to adapt the physical education program to the needs of each pupil.

> No student should be permitted to participate in strenuous activities, either in class or on athletic squads under the supervision of the school without such prior medial examination. Both the hazards to the child and the legal liability to the school justify such examination even though the cost may be considerable.[19]

The extent of the medical examinations must include the heart, lungs, vision, hearing, nose, teeth, and state of nutrition. Examination should be given annually.

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19 The Physical Education Curriculum (A National Program). University of Southern California Press, 1937. p. 45.

Table 15. Physical examination of pupils by physician, dentist, and nurse

Extent of examination	Score possible	Total points made I	II	III
Heart	16	14	14	16
Lungs	16	14	14	16
Vision	12	10	10	12
Hearing	10	8	8	10
Nose	10	8	8	10
Teeth	10	8	8	10
Throat	10	8	8	10
State of Nutrition	8	7	7	8
Skin	6	5	5	6
Family Health History	6	0	0	0
Personal Health History	8	0	0	0
TOTALS	112	82	82	98

The total points made ____, divided by 2 equals the score given.

Score possible	Score given I	II	III
56	41	41	49

Table 15 points out the importance placed by each school on the medical examination. It shows that the examination was required by all three schools but the family health and personal health histories were neglected. Schools nos. I and II received a score 41 because they examine their pupils every second year and no. III rated a score of 49 because it examines its pupils annually. More points are given to the schools who examine each year.

For the physical education teacher's own use in classifying the pupils in the physical education program, his own physical examination of pupils is of much importance. The instructor can adapt and classify the pupils into groups of same age, weight, height, and needs. This helps him in formulating his physical education program.

Table 16. Physical examination of pupils by physical education teacher

Extent of examination	Score possible	Total points made I	II	III
Age	6	0	0	0
Weight	8	0	0	8
Height	8	0	0	8
Lung Capacity	6	0	0	0
Spine Deviations	10	0	0	10
Posture	10	0	0	10
Feet	8	0	0	8
TOTALS	56	0	0	44

The total points made ___, divided by 2 equals score given ___.

Score possible	Score given I	II	III
28	0	0	22

Table 16 shows that the physical examination of pupils by the physical education teachers is lacking in two of the three schools, nos. I and II. In one of the schools with the low score the board of education does not permit examination by the teacher and in the other, the instructor considers the one examination by the doctor to be sufficient.

In order to make the physical education program as effective as it should be, the individual needs of the pupils are determined through examination. The teacher may then incorporate in his program the work and activities which will prove to be of most benefit to the majority of students.

Table 17. Assignment of students to classes

Methods of assignment to classes	Score possible	Total score made I	II	III
Largely Irregular	10		10	
Largely by Year in School	20	20		20
Largely by Year in School and Efficiency in Skills	30			
Largely According to Individual Needs Determined Thru Examination	40			
TOTALS	40	20	10	20

Score possible	Score given I	II	III
40	20	10	20

Table 17 indicates that classes are assigned largely by the students' year in school in nos. I and III schools and a score of 20 from a possible 40 is given each. School no. II assigns its classes irregularly.

To achieve the desired and adequate program in physical education the teacher should be able to determine the status of his students by examinations in order to organize his work and properly place them.

The size of classes in physical education depends mainly on the class work and the facilities present. Normally, it is considered that classes

should not exceed 45 in enrollment and should never be over 60. The smaller the enrollment in each class, the more highly skilled the pupils may become. There will be more time for individual help from the teacher and more opportunity for each student to use the class room equipment.

Table 18. Size of classes (Normal group)

Size of classes	Score possible	Total score made I	II	III
No definite Assignment of Students to Instructors	0			
90 per cent of Pupils Enrolled in Classes of 60 or Under	10			
90 per cent of Pupils Enrolled in Classes of 50 or Under	20			
85 per cent of Pupils Enrolled in Classes of 45 or Under	30			30
85 per cent of Pupils Enrolled in Classes of 40 or Under	40	40	40	
TOTALS	40	40	40	30

Score possible	Score given I	II	III
40	40	40	30

Table 18 indicates that schools no. I and II have a score of 40 each. This means that each has class enrollments under 40 pupils. School III has a score of 30 with its class enrollment numbered under 45 pupils.

The classes in the corrective or restricted group should be divided into small units in order to give the students more individual attention. No more than 30 students are to be assigned to one class.

Table 19. Size of classes (Corrective or restricted group)

Size of classes	Score possible	Total points made I	II	III
No Class or Individual Arrangement for Handicapped Group	0	0	0	0
85 per cent of Pupils Enrolled Are in Classes of 30 or Under	10			
80 per cent of Pupils Enrolled Are in Classes of 25 or Under	18			
80 per cent of Pupils Enrolled Are in Classes of 20 or Under	25			
TOTALS	25	0	0	0

Score possible	Score given I	II	III
25	0	0	0

There are no classes or individual arrangements for handicapped groups in any of the schools used in this study, and no indication is shown that these schools need this work.

> In order that a teacher may do efficient work the assignments for class instruction should not exceed five clock hours or the equivalent class periods per day, or fifteen hundred minutes per week. In no case should they be permitted to exceed six clock hours per day or eighteen hundred minutes per week. This maximum should include after school responsibilities, estimated on a clock hour basis comparable to the assignments for the regular school day. Such responsibilities will include team coaching, intramural sports or playground direction, or other extra-curricular assignments. This assumes additional time spent in preparation, in grading papers, etc., outside of assigned class hours. Each teacher should have available at least one period during the day for office consultation and individual conferences.[20]

20 The Physical Education Curriculum (A National Program), University of Southern California Press, 1937. p. 47.

Table 20. Teacher load (Assigned time)

Average number of minutes assigned weekly	Score possible	Total points made I	II	III
1400-less	50			
1401-1500	47			
1501-1600	43			
1601-1700	38			
1701-1800	32			
1801-1900	25			
1901-2000	15			
2001-2100	5			
2101-over	0	0	0	0
TOTAL	50	0	0	0

	Score given		
Score possible	I	II	III
50	0	0	0

The teacher load, shown in table 20, is over the maximum number of minutes per week. All of the teachers receive a score of zero.

Records should be kept on class enrollment, physical examinations by the physician and physical education teacher, the issuing of supplies and team uniforms, intramural and athletic accomplishments, inter-scholastic athletic accomplishments, and all finance connected with the department.

Table 21. Records kept and used

Type of record	Score possible	Total points made I	II	III
Class Roll (or Card) Record	4	4	4	4
Enrollment Record (Permanent)	4	4	4	4
Physical Examination Record (by Physician)	4	4	4	4
Physical Examination Record (by Instructor)	4	0	0	4
Record of Issue of Team Uniforms, etc.	4	4	4	4
Record of Issue of Supplies	4	4	4	4
Record of Students' Intramural Athletic Accomplishment	4	4	0	4
Record of Students' Interscholastic Athletic Accomplishment	4	4	4	4
Record of Students' Improvement Shown by Skill Tests	4	0	0	4
Record of Finance Connected with Department	4	4	4	4
TOTALS	40	32	24	40

Score possible	Score given I	II	III
40	32	24	40

No. III school has kept the most records (table 21). From a possibble score of 40, school no. III made a total of 40. School no. I has a score of 32 points of a possible 40. School no. II made a total number of 24 out of 40 points.

It is widely recognized that physical education work be given credit toward high school graduation. Leading educators are placing the value of physical education on the same school basis as other academic subjects.

Table 22. Credit for physical education

Credit for physical education	Score possible	Total points made I	II	III
No Credit Given for Physical Education	0			
Credit Given but not Required for Graduation	10			
Credit Given and Required for Graduation	20	20	20	20
TOTALS	20	20	20	20

Score possible	Score given I	II	III
20	20	20	20

As shown in table 22, all three schools required physical education for graduation. The State Department of Education requires at least two years of physical education credit for high school graduation.

The grades given in physical education should serve the same purpose as those in other academic fields. It is recommended[21] that the grades be based on the following four major items:

1. Performance skills.
2. Knowledge of rules, general performance and strategy.
3. Social attitudes including cooperativeness, sportsmanship, leadership and effort.
4. Posture and bearing.

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21 The Physical Education Curriculum (A National Program), University of Southern California Press, p. 48.

Table 23. Method of marking

Factors considered in computing mark	Score possible	Total score made I	II	III
Regularity of Attendance	3	3	3	3
Effort	3	3	3	3
Sportsmanship	3	3	3	3
Achievement in Knowledge, Skills, and Attitudes	3	3	3	3
Posture	3	3	3	3
Improvement in Physical Fitness	3	3	3	3
Taking Showers	3	3	3	3
Costume (Neatness and Change Required)	3	3	3	3
TOTALS	24	24	24	24

Score possible	Score given I	II	III
24	24	24	24

Table 23 shows that all three schools consider the same factors in the method of marking. All three rate a score of 24 points with the possible score of 24.

In most of the schools throughout the state awards are given to pupils who have participated in some form of activity. The purpose of these awards is to stimulate effort and to recognize success attained by the pupils. These awards should be open to all the students in the schools both boys and girls and all should have an equal chance to win them.

Table 24. Award system

Conditions	Score possible	Total points made I	II	III
The School Monogram With a Paper Certificate is the Only Award Given	4	0	0	0
Boys and Girls May Win Identical Type Monograms	4	0	0	0
Eligibility for Awards is Computed on a Point Basis	4	0	4	4
Points are given for Mental, Physical and Social Efficiency	4	0	0	0
100% of the Pupils in School are Eligible to Receive Points Toward Award	4	0	4	4
TOTALS	20	0	4	4

Score possible	Score given I	II	III
20	0	8	8

Table 24 reveals that of the three schools studied one school, no. I, has no award system of any kind. No. II and III compute their award system on the same basis, on points earned by the pupils and all of the students in the school are eligible to receive points toward the awards. Schools II and III have equal scores of 8 from 20 points.

D. Activity Program. A variety of activities in a physical education program contributes to more physical, mental, and social development of a larger number of pupils. The greater the number of activities; the more adequate is the physical education program.

Pupils of high school age should have the development which comes

from participation in a large number of physical education activities. Each activity makes a different contribution to the student. The ten major objectives of physical education as given by William R. LaPorte[22] are listed as follows:

1. Development of useful and desirable skills in aquatic, gymnastic, rhythmic and athletic activities for both developmental and avocational (hobby or carry over) purposes.

2. Acquiring comprehensive knowledge of rules and techniques and strategy of above activities suitably adapted to the given age level.

3. Developing acceptable social standards, appreciation and attitudes as a result of intensive participation in above activities in good environment, and under capable and inspired leadership.

4. Develop essential safety skills for self and other.

5. Effect the removal of remediable defects, based on adequate physical and health diagnosis.

6. Development of normal conditions of the body organs and functions including postural mechanics.

7. Develop power of self-expression and reasonable self-confidence (poise) by mastery of difficult physical and social problems in activity.

8. Developing leadership capacity through medium of actual responsibility for activities under careful supervision.

9. Developing of powers of observation, analysis, judgment, and decision in complex mental-physical situations.

10. Development of essential health habits, knowledge and attitudes as result of specific instruction and supervision of health situation.

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22 LaPorte, Wm. R. The Ten Major Objectives of Physical Education. California Physical Education, Health and Recreation Journal. January, 1936. p. 6.

Table 25. Instructional period

Activities	Points given for extent of pupil participation (Boys)			Points possible	Total points made I	II	III
American (Touch) Football	% 70	40	10				
	Points 78	5	2	8	8	5	8
Apparatus Light and Heavy	% 70	40	10				
	Points 10	6	2	10	0	0	0
Archery	% 80	50	20				
	Points 7	5	2	7	0	0	2
Baseball Hard	% 50	30	10				
	Points 7	5	2	7	0	0	0
Basketball	% 80	50	20				
	Points 15	9	3	15	15	15	15
Boxing	% 50	30	10				
	Points 4	3	2	4	0	4	3
Corrective Physical Education	% 5	3	1				
	Points 16	10	4	16	0	0	0
Croquet	% 90	60	30				
	Points 3	2	1	3	0	0	0
Dancing (Clog)	% 80	50	20				
	Points 5	3	1	5	0	0	0
Dancing (Folk)	% 80	50	20				
	Points 5	3	1	5	0	0	0
Dancing (Social)	% 80	50	20				
	Points 4	3	1	4	3	3	4
Fencing	% 50	30	10				
	Points 3	2	1	3	0	0	0
Free Exercises	% 90	60	30				
	Points 8	5	2	8	0	0	5
Games of Low Organization	% 90	60	30				
	Points 9	6	3	9	5	5	9
Golf	% 80	50	20				
	Points 8	5	2	8	0	0	0
Handball	% 70	40	10				
	Points 11	7	3	11	0	0	0

Cont. next page

Table 25. Instructional period - (cont.)

Activities	Points given for extent of pupil participation (Boys)				Points possible	Total points made I	II	III
Horseshoes	%	90	60	30				
	Points	3	2	1	3	2	2	1
Life Saving	%	50	30	10				
	Points	5	3	1	5	0	0	0
Marching	%	90	60	30				
	Points	3	2	1	3	0	0	3
Playground Baseball	%	80	50	20				
	Points	7	5	2	7	7	7	7
Pyramid Building	%	70	40	10				
	Points	4	3	1	4	4	4	4
Quoitennis	%	80	50	20				
	Points	3	2	1	3	1	0	3
Soccer	%	80	50	20				
	Points	12	7	2	12	0	0	0
Speedball	%	80	50	20				
	Points	12	7	2	12	0	0	12
Stunts	%	70	40	10				
	Points	4	3	1	4	3	3	4
Swimming	%	90	60	30				
	Points	15	9	3	15	0	0	0
Tennis	%	90	60	30				
	Points	15	9	3	15	3	0	3
Tennis (Paddle)	%	80	50	20				
	Points	4	3	1	4	1	0	1
100-Yard Run	%	50	30	10				
	Points	3	2	1	3	2	2	3
$\frac{1}{4}$-Mile Run	%	50	30	10				
	Points	2	1	0	2	1	1	1
$\frac{1}{2}$-Mile Run	%	50	30	10				
	Points	2	1	0	2	0	1	0
Mile Run	%	50	30	10				
	Points	2	1	0	2	0	0	1

Cont. next page

Table 25. Instructional period - (cont.)

Activities	Points given for extent of pupil participation (Boys)				Points possible	Total points made I	II	III
Cross Country Run	%	70	40	10				
	Points	2	1	0	2	0	0	0
Hurdles Low and High	%	50	30	10				
	Points	2	1	0	2	0	1	1
Broad Jump	%	70	40	10				
	Points	2	1	0	2	2	2	2
High Jump	%	50	30	10				
	Points	2	1	0	2	2	2	2
Pole Vault	%	50	30	10				
	Points	2	1	0	2	2	2	2
Shot Put	%	70	40	10				
	Points	2	1	0	2	1	2	2
Tumbling	%	70	40	10				
	Points	4	3	1	4	4	0	4
Volley Ball	%	90	60	30				
	Points	9	6	3	9	9	3	9
Wrestling	%	50	30	10				
	Points	4	3	1	4	4	0	4
				TOTALS	250	80	64	117

Of 250 possible points, 226 is the maximum number which is allowed. The total points made (not to exceed 226) is the score given.

Score possible	Score given I	II	III
226	80	64	117

Investigation of table 25 reveals that school no. III has the highest score of the three schools studied. No. III's score is 117 of a possible score of 226. No. I has the next highest score of 80 from

possible score of 226. No. II has a score of 64 of 226 points.

The instructional period of school II consists of the following activities: American touch football, basketball, boxing, social dancing, games of low organization, horseshoes, playground baseball, pyramid building, stunts, track and field, and volley ball. The activities found in the instructional period for school no. I are American touch football, basketball, social dancing, games of low organization, playground baseball, pyramid building, quoitennis, stunts, tennis, paddle tennis, track and field, tumbling, volley ball and wrestling. In addition to the activities listed for schools I and II, school no. III has archery, boxing, free exercise, marching, and speedball. No. III school has the greater variety of activities.

In the program of physical education there are three phases of activities: (1) physical education athletics, (2) intramural athletics, and (3) interscholastic athletics. These three phases of athletics form a pyramid.

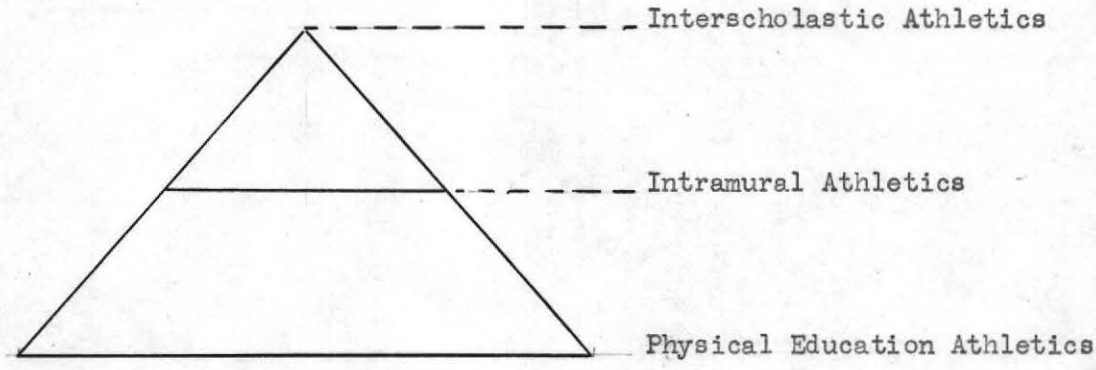

Figure I. The Three Phases of the Physical Education Activity Program.

Physical education athletics forms the base of the pyramid for this is where instructional time is allotted for pupils to learn the neuro-muscular skills. The physical education period is open to all to learn various activities. Intramural athletics forms the middle line, about half way, of the pyramid. This phase of athletics provides a place for the pupils who have been taught skills in the physical education instructional period to play and enjoy themselves. Physical education athletics should place over half of its students in intramurals. The intramural program should extend the opportunity to everyone to play some form of activity during his leisure time.

Table 26. Intramural activities

Activities	Points possible	Total score made I	II	III
American Football (Touch)	6	6	0	0
Archery	7	0	0	7
Basketball	10	10	10	10
Croquet	4	0	0	0
Darts	3	0	0	3
Fencing	3	0	0	0
Golf	9	0	0	0
Handball	10	0	0	0
Horseshoes	4	4	4	4
Playground Baseball	7	7	7	7
Quoitennis	4	0	0	0
Soccer	8	0	0	0
Speedball	9	0	0	9

Cont. next page

Table 26. Intramural activities - (cont.)

Activities	Points possible	Total score made I	II	III
Swimming	10	0	0	0
Tennis	10	10	0	10
Tennis (Paddle)	4	4	0	4
100-Yard Run	5	5	5	5
Relay Running	6	6	6	6
Hurdles (Low and High)	3	0	3	3
Broad Jump	4	4	4	4
High Jump	4	4	4	4
Pole Vault	3	3	3	3
Shot Put	2	2	2	2
Volley Ball	10	10	0	0
TOTALS	145	75	51	81

Out of 145 possible points, 114 points is the maximum number which is allowed. The total points made (not to exceed 114) is the score given.

Score possible	Score given I	II	III
114	75	51	81

An analysis of the data collected (table 26) shows that all three schools sponsor some kind of intramural athletic program. School no. III has the highest score, 81 of a 114 points. This means that no. III has more activities to offer its pupils. School no. I has the next high score of 75 points, and school no. II rates 51 from a possible score of 114.

Playground baseball, basketball, horseshoes, tennis and track events are the most frequent activities sponsored by these three schools.

Interscholastic athletics, the third phase of the physical education activity program, is placed at the top of the pyramid (figure I). Interscholastic athletics are for a few pupils who have excelled in the skills of a specific activity. The skills of these students are used to represent their school in competition with other schools.

> Interscholastic athletics are now considered a definite part of the physical education program of the secondary school. Whether they are a desirable part is dependent very largely upon the policies and practices of their organization, administration, and coordination with the general school program. That athletics can become an evil is evident by the possibility of there arising in the setup, among other things, such obstacles as poor sportsmanship on the part of player and spectators, improper scheduling of games, and a poor financing of the institutional program. On the other hand, interscholastic athletics, properly managed, may contribute to a wholesome school spirit, provide a source of competition for certain pupils who have attained the higher levels in physical skills, and furnish a stimulus for interesting students in the intramural and instructional period programs.[22]

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[22] Codwell, John E. The Status of Physical Education for Boys in the State Accredited Class A High Schools for Negroes in Texas. Research Quarterly, Vol. X. No. 2. May, 1939. Pp. 119.

Table 27. Interscholastic athletics

Activities	Points possible	Total points made I	II	III
American Football	8	8	0	8
Archery	4	0	0	0
Baseball (Hard)	5	0	0	0
Basketball	8	8	8	8
Golf	6	0	0	0
Handball	6	0	0	0
Horseshoes	3	0	0	0
Playground Baseball	5	0	0	0
Soccer	6	0	0	0
Speedball	6	0	0	0
Swimming	7	0	0	0
Tennis	7	7	0	7
100-Yard Run	2	2	2	2
200-Yard Run	1	1	1	1
$\frac{1}{4}$-Mile Run	1	1	1	1
$\frac{1}{2}$-Mile Run	1	1	1	1
1-Mile Run	1	1	1	1
Hurdles (Low and High)	2	2	2	2
Relays	3	3	3	3
Broad Jump	2	2	2	2
High Jump	2	2	2	2
Pole Vault	1	1	1	1
Shot Put	1	1	1	1
Volley Ball	5	0	0	0
TOTALS	93	40	25	40

Out of 93 possible points, 74 points is the maximum number which is allowed. The total points made (not to exceed 74) is the score given.

Score possible	Score given		
	I	II	III
74	40	25	40

In interscholastic athletics (table 27) schools no. I and III have the same score of 40 out of a possible 74. School II has a score of 25.

All of the schools include basketball, and track and field events in their program of interscholastic sports. Two schools, nos. I and III have interscholastic competition in tennis and football in addition to the other activities.

E. Professional Assistance. In order to receive professional assistance in his work the instructor in physical education should subscribe to at least three or four professional magazines and several up to date books dealing with his subject. The improvement of the teacher in his thinking, organization, and method of work gives his pupils more opportunity to improve themselves through their contact with him. The physical education teacher had a better opportunity to give guidance and assistance to students than any other teacher because his work brings him into more constant contact with them.

Table 28. Professional magazines

Name of magazines	Points possible	Total points made I	II	III
Journal of National Education Association	3			
Journal of Health and Physical Education	3			3
A State Educational Journal	3	3	3	3
Mind and Body	3			
The Athletic Journal	3	3	3	3
Hygiea	3	3		
Recreation	3			
Sportsmanship	3			
Any Other Professional Magazine	3	3		
TOTALS	27	12	6	9

Out of 27 possible points, 15 is the maximum number which is allowed. The total points made (not to exceed 15) is the score given.

Score possible	Score given I	II	III
15	12	6	9

School no. I (table 28) with subscriptions to four magazines has the highest score, 12 from possible 15 points. No. III school with three magazines is next with a score of 9, and school no. II which takes two magazines has a score of 6 out of a possible score of 15. All three schools are taking the State Educational Journal and The Athletic Journal. School no. III in addition, has the Journal of

Health and Physical Education and school no. I takes the Hygiea and other Professional Magazines.

SUMMARY

In interpreting the information compiled in this investigation, it should be remembered that this study represents data from only three high schools. However, it seems logical and reasonable to assume that conditions in other high schools of the state are similar to those in the study.

Table 29. Summary sheet

		Units	Score possible	Score I	Score II	Given III
	I	Professional Preparation (Kind)	70	70	56	70
	II	Professional Preparation (Extent)	50	10	5	5
A	III	Professional Preparation(Recency)	30	30	30	30
	IV	Membership in Professional Organization	12	12	12	12
	V	Attendance at Professional Meetings	12	8	6	8
	Total Score for A--Instructional Staff		174	130	109	125
	I	Area of School Site	95	25	0	60
	III	Placement of Buildings or School Site	25	10	0	10
	III	Indoor Facilities	125	37	32	97
B	IV	Outdoor Facilities	109	33	11	62
	V	Equipment	51	13	12	18
	VI	Supplies (General)	97	44	32	54
	VII	Supplies (First Aid)	25	12	15	8
	Total Score for B -- Facilities		527	174	102	309

Cont. next page

Table 29. Summary sheet - (cont.)

		Units	Score possible	Score I	Score II	Given III
	I	Percentage of Pupils Enrolled	90	36	27	36
	II	Time Allotment for Physical Education	90	65	35	27
	III	Physical Examination of Pupils by Physician, Dentist and Nurse	56	41	41	49
	IV	Physical Examination of Pupils by Physical Education Teacher	28	0	0	22
	V	Assignments of Students to Classes	40	20	10	20
C	VI	Size of Classes (Normal Group)	40	40	40	30
	VII	Size of Classes (Corrective or Restricted Group)	25	0	0	0
	VIII	Teacher Load (Assigned Time)	50	0	0	0
	IX	Records Kept and Used	40	32	24	40
	X	Credit	20	20	20	20
	XI	Methods in Marking	24	24	24	24
	XII	Award System	20	0	8	8
		Total Score--Program Organization	523	278	229	276
	I	Instructional Period	226	80	64	117
D	II	Intramurals Athletics	114	75	51	81
	III	Interscholastic Athletics	74	40	25	40
		Total Score D--Program Activities	414	195	140	238
E	I	Professional Magazines	15	12	6	9
		Total Score C--Prof. Assistance	15	12	6	9
		Total Score Card	1653	789	586	957
		Dividing Score by 2	826.5	394.5	293	478.5
		Percentage Score for School	100	47.6	35.45	57.9

In the instructional unit, school no. I has a score of 130 or 74.7 per cent of the requirements needed for an adequate physical education program. School II has a score of 109 or 62.5 per cent and school no. III has a score of 125 or 71.8 per cent of the requirements needed for an adequate program.

In the facilities unit, school no. I has a score of 174 or 33 per cent of a possible score of 527 points. School no. II has a score of 102 or 19.4 per cent, and school no. III has a score of 309 or 58.7 per cent of the adequate facilities needed for an ideal physical education program. All three schools together represent only 37 per cent of the requirements of the facilities unit.

The unit on program organization reveals that all three schools studied have the same kind of organization. School no. I has a score of 278 or 53 per cent; school no. II has a score of 229 or 43.8 per cent and school no. III has a score of 276 or 52.8 per cent of a possible score of 523 for an adequate program.

The activity program (table 29) shows that school no. I has a score of 195 or 47 per cent; school no. II has a score of 140 or 33.8 per cent; and no. III has a score of 238 or 57.4 per cent of an adequate physical education program.

The unit on professional assistance shows that all schools are getting enough literature to further their professional growth.

School no. III has the highest total score of 478.5 or 57.9 per cent. School no. I has the next highest score, 394.5 or 47.6 per cent; and school no. II rates 293 or 35.45 per cent of the total possible score

which is 826.5 for the whole physical education program.

The units, as shown in table 29, that are the most inadequate are the facilities and the activity programs. Codwell[23] shows in his study that the difficulties associated with the physical education programs were inadequate facilities (92 per cent) untrained teachers (25 per cent) and giving no credit (25 per cent).

In summarizing the total score of the three physical education programs we find that all of the schools rate, as a whole, far below the requirements needed for an adequate physical education program.

RECOMMENDATIONS

The data in this study call attention to the fact that the programs in these three schools are insufficient for the proper physical education work and all three are in need of improvement.

The first apparent need in the kind of professional preparation is the learning of more skills in a variety of activity courses. A prospective teacher may take many academic courses during his training and neglect the skills, yet he must be able to teach both phases of physical education. All three teachers should show a better attendance at professional meetings. Attendance at professional meetings enriches professional growth.

Another outstanding need is that of more working tools, that is,

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23 Codwell, John E. The Status of Physical Education for Boys in the State Accredited Class A High Schools for Negroes in Texas. Research Quarterly, Vol. X. No. 2. May, 1939. Pp. 117.

usable school land for ample play; more indoor facilities, as bleachers, corrective rooms, rest rooms; supply rooms, store rooms, extra dressing rooms, and swimming pools; additional outdoor facilities, as basketball courts, handball courts, volley ball courts, soccer field, speedball field, and outdoor bleachers; more equipment, as mats, horizontal and parallel bars and climbing ropes, more general supplies, including baseball sets, handballs, tennis balls, archery facilities, and towels; and additional first aid supplies.

There should be a larger number of pupils enrolled in physical education, the physical examination of students by the teacher to aid him in planning his program, and opportunities for physical education and corrective work for handicapped students.

The three teachers are carrying too many hours for good work. The standard teaching load should be near 1500 minutes per week, and these teachers work 2100 minutes. This number should be reduced to fewer working hours.

And finally there is need for more activities to be included in the activity program, intramural athletics, and interscholastic athletics. In order that students may derive the full benefit from physical education work they should be given every possible opportunity for the proper development, physically, mentally, and socially. Physical education should be a pleasurable recreation.

APPENDIX

THE SCORE CARD

A--INSTRUCTIONAL STAFF

1--Professional Preparation (Kind)

To Score--After all instructors have had their preparation score, add points across to the right, then add all columns down. The sum of the "total points made" column should equal the sum of the totals of the individual instructors' columns, and this divided by the number of instructors gives the average number of points. The average number of points divided by 2 equals the score given.

Group	No.	Course Names	Points	Instructors A	B	C	D	F	G	Points Made
A	1	Anatomy	5							
	2	Biology	5							
	3	Chemistry	4							
	4	Hygiene	5							
	5	Physiology	5							
	6	Psychology	5							
	7	Sociology	5							
		TOTAL	34							
B	8	Adm. of Physical Education	5							
	9	Adm. of Schl. Health Prgm.	3							
	10	Community Recreation	3							
	11	Corrective Physical Education	5							
	12	First Aid	3							
	13	Growth & Development of child	5							
	14	Kinesiology (Appld. Physiology)	3							
	15	Normal Diagnosis	5							
	16	Physiology of Exercise	4							
	17	Prin. of Health Education	3							
	18	Prin. of Physical Education	5							
	19	Research in Physical Education	5							
	20	Seminar in Physical Education	5							
	21	Supervision of P. E.	5							
	22	Tests & Measurements in P. E.	4							
		TOTAL	63							
C	23	Canoeing	1							
	24	Diving	1							
	25	Life Saving	2							
	26	Rowing	1							
	27	Swimming	3							
	28	Games of Low Organization	2							
	29	Apparatus	1							
	30	Free Exercise	2							
	31	Marching	1							
	32	Pyramid Building	1							
	33	Stunts	1							
	34	Tumbling	1							

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II--Professional Preparation (Extent)

To Score--Each instructor verifies the total number of college credits he has earned. Three quarter hours are equal to two credits or two semester hours. Graduation from college is considered to require 120 credit hours. Record for each instructor in the appropriate column the number of points assigned opposite the number of credit hours he has earned. Include all persons teaching in the boys' physical education department. The average for all instructors being scored is the score given.

College Credits Earned above High School	Points	Instructors A	B	C	D	E	F	G	H	II	Total Points Made
60-74	5										
75-89	10										
90-104	15										
105-119	20										
120-129	30										
130-139	40										
140-149	45										
150-over	50										
								TOTAL			

The total points made _____, divided by the number of instructors ____, equals the score given _____.

Score Possible	Score Given
50	

III--Professional Preparation (Recency)

To Score--Record for each instructor in his column the number of points according to the recency of the credit hours completed. Example: If an instructor has completed 6 credits within the last four years immediately preceding the time of scoring, he would be scored 25 points; if he has completed only 2 credits within the eight years, he would be scored 5 points. Score each instructor only once. Include all persons teaching physical education in the boys' department. The average for all instructors being score given.

Instructor has Completed the Number of Credits Within:	Credits 2	4	6	Instructors A	B	C	D	E	F	Total Points Made
	Points									
Three years	20	25	30							
Four years	15	20	25							
Six years	10	15	20							
Eight years	5	10	15							
							TOTAL			

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Group	No.	Course Names	Points	Instructors A	B	C	D	F	G	Points Made
	35	Clog Dancing	2							
	36	Folk Dancing	1							
	37	Social Dancing	2							
	38	Boxing	2							
	39	Fencing	1							
	40	Weaponless Defense	1							
	41	Wrestling	2							
	42	American Football	3							
	43	Archery	1							
	44	Baseball	2							
	45	Basketball	3							
	46	Golf	2							
	47	Handball	2							
	48	Soccer	1							
	49	Speedball	1							
	50	Squash Racquets	1							
	51	Tennis	3							
	52	Track and Field	2							
	53	Volley Ball	1							
	54	Water Polo	1							
		TOTAL	51							
	55	Practice Teaching in Phy. Ed.	5							
	56	Educational Administration	3							
	57	Educational Psychology	5							
	58	Edu. Tests and Measurements	2							
	59	Elementary Statistics	4							
	60	History of Education	2							
	61	Prin. of Secondary Education	4							
	62	Public Education	2							
	63	Vocational Guidance	2							
		TOTAL	29							
		GRAND TOTAL	177							

Out of 177 possible points, 140 points is the maximum number which will be allowed for any one instructor; $\frac{140}{2}$ equals 70. The total points made ___, divided by the number of instructors _____, equals the average points made _____; the average points made _____, divided by 2 equals the score given _____.

Score Possible	Score Given
70	

The total points made _____, divided by the number of instructors ____, equals the score given _____.

Score Possible	Score Given
30	

IV--Membership in Professional Organizations

To Score--Record for each instructor in his column the points alloted for each organization named of which he is at present a member. The maximum score for any one instructor is 12 points. Membership in any four out of the seven organizations yields a perfect score. When any one instructor scores more than 12 points, circle all points over 12 and do not add circle points when adding to the right. The average for all instructors being scored is the score given.

At Present Time Instructor Is a Member of the Following Organizations:	Points	Instructors A	B	C	D	E	F	Total Points Made
National Education Assoc.	3							
American Phys. Edu. Assoc.	3							
The State Education Assoc.	3							
The State Phys. Edu. Assoc.	3							
The Local Education Assoc.	3							
The Local Phys. Edu. Assoc.	3							
Any Other Professional Assoc.	3							
						TOTAL		

The total points made _____, divided by the number of instructors ____, equals the score given _____.

Score Possible	Score Given
12	

V--Attendance at Professional Meetings

To Score--Count only meetings where attendance is voluntary. Institute meetings, or meetings where attendance is required, called by the immediate department in which the teacher is working are not to be counted. Include all persons teaching physical education in the boys' department. Record for each instructor in his column the number of points alloted according to the number of professional meetings, other than departmental, which he has attended during the last 12 months. If only required meetings have been attended score zero in the instructor's column. The average for all instructors being scored is the score given.

No. of Professional Meetings Other Than Departmental Attended During Last 12 Months	Points	Instructors A	B	C	D	E	F	Total Points Made
One	2							
Two	4							
Three	6							
Four	8							
Five	10							
Six	12							
							TOTAL	

The total points made _____, divided by the number of instructors _____, equals the score given _____.

Score Possible	Score Given
12	

B--FACILITIES

I--Area of School Site

To Score--Determine the total number of acres in the school site, then deduct the approximate acreage which is entirely unsuitable for buildings, playgrounds or other purposes of any kind. This is the acreage usable. Next locate the total school enrollment--(boys and girls). The points in the column under the school acreage (usable), and opposite the total school enrollment, are the number of points to be given. Circle these points and record in square "Score Given."

Total School Enrollment	Number of Acres (Usable) Less Than 4	4-5	6-9	10-14	15-19	20-29	30 & Over
10-100	0	30	70	90	95	95	95
101-300	0	25	60	90	95	95	95
301-600	0	20	50	80	90	95	95
601-1000	0	15	40	70	90	95	95
1001-1800	0	10	30	60	90	95	95
1801-over	0	0	20	50	70	90	95

Score Possible	Score Given
95	

II--Placement of Buildings on School Site

To Score--Record the points found opposite the statement which describes most nearly the condition which exists.

Placement of Buildings	Points	Points Made
Play Space Badly Broken by Buildings	0	
Play Space Partly Broken by Buildings	10	
Play Space Unbroken by Buildings		

Score Possible	Score Given
25	

III--Indoor Facilities

To Score--For each type of facility, three factors must be considered: (1) the number of boys enrolled in physical education; (2) the number of units required; (3) the quality and condition of each facility. The points to be given each facility after considering these factors are indicated in the form. The score for each type of facility should be estimated according to how well it meets the standards given, the rating being (a) good, (b) average (c) poor. Absence of the facility (where required) would score zero. Wherever the facility is not required, i.e. a school with 50 boys would not need a corrective room or a second exercise floor, an * has been placed and part or all of the number of points for this facility allowed under "score possible" should be given, provided some other facility can be used to accommodate the activity. In no case can the "total points made" be greater than the "score possible." Under Number of Rooms, circle the number of rooms being scored.

In small schools, because of cost, it may be necessary for boys and girls to use certain facilities in common. Where this is done, the same facility may be judged for both up to a total school enrollment as follows: Exercise floor, 300; apparatus or activity room, 1000; kitchen or kitchenette (total enrollment); classroom, 600; corrective room, 600; health unit rooms, 100; swimming pool, 1800.

Name of Facility	No. of Rooms	Boys Enrolled in Physical Education																Score Possible	Total Points Made
		0-50			51-150			151-300			301-500			501-900			901-over				
		a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c		
Exercise Floor	1	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	5	3	1	10	
	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10	6	2		
Bleacher		5	3	1	5	3	1	5	3	1	5	3	1	5	3	1	5	3	1	5	
Apparatus or Activity room	1	*	*	*	*	*	*	*	*	*	6	4	1	6	4	1	6	4	1	6	
Kitchen or Kitchenette	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	
Class Room	1	*	*	*	*	*	*	5	3	1	5	3	1	5	3	1	5	3	1	5	

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Name of Facility	No. of Rooms	Boys Enrolled in Physical Education																Score Possible	Total Points Made
		0-50			51-150			151-300			301-500			501-900			901-over				
		a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c		
Corrective Room	1	*	*	*	*	*	*	5	3	1	5	3	1	5	3	1	5	3	1	5	
Rest Room	1	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	2	1	1	
Health Unit Rooms	1	8	5	2	8	5	2	8	5	2	8	5	2	4	3	1	5	2	0		
	2	*	*	*	*	*	*	*	*	*	*	*	*	8	5	2	6	4	1	8	
	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8	5	2		
Instructors Offices	1	8	5	2	8	5	2	8	5	2	8	5	2	4	3	1	5	2	0		
	2	*	*	*	*	*	*	*	*	*	*	*	*	8	5	2	6	4	1	8	
	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8	5	2		
Supply Room	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	
Store Room	1	*	*	*	3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	3	
Dressing Room	1	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	10	
Extra Dressing Rooms	1	*	*	*	4	3	2	4	3	2	3	2	1	3	2	1	2	1	0		
	2	*	*	*	*	*	*	*	*	*	4	3	2	4	3	2	3	2	1	4	
	3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	3	2		
Lockers	1	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	10	
Drying Room	1	*	*	*	*	*	*	3	2	1	3	2	1	3	2	1	3	2	1	3	
Shower Room	1	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	10	6	2	10	
Swimming Pool	1	*	*	*	15	10	4	15	10	4	15	10	4	15	10	4	15	10	4	15	
Sanitary Fixtures		6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	
Internal Arrangements		7	5	2	7	5	2	7	5	2	7	5	2	7	5	2	7	5	2	7	
																	TOTALS			125	

Score Possible	Score Given
125	

IV--Outdoor Facilities

To Score--Again for each type of facility three factors must be considered: (1) the number of boys enrolled in physical education; (2) the number of units required; (3) the quality and condition of each facility. Points to be given each facility after considering these factors are indicated in the form. The score for each type of facility should be estimated according to how well it meets the standards given, the rating being (a) good, (b) average (c) poor. Absence of the facility (where required) would score zero. Wherever the facility is not required, i. e.,a school with 50 boys would not need a second or third tennis court, an * has been placed and part or all of the number of points allowed for this facility under "score possible" should be given. In no case can the "total points made" be greater than the "score possible." Under Number of Units, circle the number of units present which are being scored.

In small schools, because of cost, it may be necessary for boys and girls to use certain play areas in common. Where this is done, the same facility may be judged for both up to a total school enrollment as follows: 100 pupils, 1 field; 300 pupils, 2 fields; 600 pupils, 2 fields; 1000 pupils, 3 fields; 1800 pupils, 4 fields; and over 1800 pupils, 5 fields; croquet courts, 1000; golf driving cages, total enrollment; gold putting greens, total enrollment.

Name of Facility	No. of Units	Boys Enrolled in Physical Education																Score Possible	Total Points Made
		0-50			51-150			151-300			301-500			501-900			901-over				
		a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c		
Basketball	1	18	14	6	18	14	6	9	7	3	9	7	3	6	4	2	4	3	1		
	2	*	*	*	*	*	*	18	14	6	18	14	6	12	9	4	8	6	2	18	
Courts	3	*	*	*	*	*	*	*	*	*	*	*	*	18	14	6	12	10	4		
	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18	14	6		
Handball	1	14	8	4	14	8	4	7	4	2	7	4	2	5	3	1	3	2	1		
	2	*	*	*	*	*	*	14	8	4	14	8	4	9	6	3	7	4	2	14	
Courts	3	*	*	*	*	*	*	*	*	*	*	*	*	14	8	4	10	6	3		
	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14	8	4		
Tennis	1	18	14	6	18	14	6	18	14	6	9	7	3	6	4	2	4	3	1		
	2	*	*	*	*	*	*	*	*	*	18	14	6	12	9	4	8	6	2	18	
Courts	3	*	*	*	*	*	*	*	*	*	*	*	*	18	14	6	12	10	4		
	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18	14	6		
Paddle	1	6	5	3	6	5	3	3	2	1	3	2	1	3	2	1	3	2	1		
Tennis	2	*	*	*	*	*	*	6	5	3	6	5	3	4	3	2	4	3	2	6	
Courts	3	*	*	*	*	*	*	*	*	*	*	*	*	6	5	3	6	5	4		
Quoitennis Court	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	
Volley	1	10	8	4	10	8	4	5	3	2	4	2	1	3	2	1	3	2	1		
Ball	2	*	*	*	*	*	*	10	8	4	7	5	3	5	3	2	5	3	2	10	
Courts	3	*	*	*	*	*	*	*	*	*	10	8	4	7	5	3	7	5	3		
	4	*	*	*	*	*	*	*	*	*	*	*	*	10	8	4	10	8	4		
Baseball Diamond	1	12	7	3	12	7	3	12	7	3	12	7	3	12	7	3	12	7	3	12	
Playground	1	10	8	4	10	8	4	5	3	2	5	3	2	4	2	1	3	2	1		
Baseball	2	*	*	*	*	*	*	10	8	4	10	8	4	7	5	3	5	3	2	10	
Diamonds	3	*	*	*	*	*	*	*	*	*	*	*	*	10	8	4	7	5	3		
	4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10	8	4		
Football Field	1	16	12	5	16	12	5	16	12	5	16	12	5	16	12	5	16	12	5	16	
Soccer Field	1	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	
Speedball Field	1	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	
Track	1	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	
Pole Vault Pits	1	6	5	3	6	5	3	6	5	3	6	5	3	6	5	3	3	2	1		
	2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6	5	3	6	

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Name of Facility	No. of Units	Boys Enrolled in Physical Education																Score Possible	Total Points Made
		0-50			51-150			151-300			301-500			501-900			901-over				
		a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c		
Broad Jump Pits	1	8	5	2	8	5	2	8	5	2	8	5	2	4	3	1	4	3	1		
	2	*	*	*	*	*	*	*	*	*	*	*	*	8	5	2	8	5	2	8	
High Jump Pits	1	8	5	2	8	5	2	8	5	2	8	5	2	4	3	1	4	3	1		
	2	*	*	*	*	*	*	*	*	*	*	*	*	8	5	2	8	5	2	8	
Bleachers		6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	
Archery Lanes	1	6	5	3	6	5	3	6	5	3	3	2	1	3	2	1	3	2	1		
	2	*	*	*	*	*	*	*	*	*	6	5	3	6	5	3	6	5	3	6	
Croquet Court	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	
Golf Driving Cages	1	*	*	*	6	5	3	6	5	3	6	5	3	3	2	1	3	2	1	6	
	2	*	*	*	*	*	*	*	*	*	*	*	*	6	5	3	6	5	3		
Golf Putting Greens	1				6	5	3	6	5	3	6	5	3	3	2	1	3	2	1		
	2	*	*	*	*	*	*	*	*	*	*	*	*	6	5	3	6	5	3	6	
Horseshoe Courts	1	6	5	3	6	5	3	3	2	1	3	2	1	3	2	1	3	2	1		
	2	*	*	*	*	*	*	6	5	3	6	5	3	4	3	2	4	3	2	6	
	3	*	*	*	*	*	*	*	*	*	*	*	*	6	5	3	6	5	3		
Fence		8	5	2	8	5	2	8	5	2	8	5	2	8	5	2	8	5	2	8	
																	TOTAL			218	

The total points made _____, divided by 2 equals the score given_____.

Score Possible	Score Given
109	

V--Equipment

To Score--Commercial equipment varies in kind and quality. Therefore, a detailed description of each type is not attempted. The points indicated in the form are alloted for number, quality, and condition of equipment according to enrollment. The corrective room equipment should include low and high plinths, stall bars, stools, body mats 3' x 6', mirror 6' x 4', weighing scale, horizontal ladder, balance beam, square hair pillows, pedograph, schematograph, and hospital screen. Horizontal bars should be adjustable. Mats 5' x 15' are preferred. Hurdles should be adjustable for 2' 6" height and 3' 6" height. Maintenance equipment should include line marker, float, drag, lawn mower, rakes, hoes, shovels, hose, cart, wheelbarrow, sprinklers, cord and roller. (Maintenance work should be done by workmen other than physical education instructors.) In the case of mats, horizontal bars, climbing ropes and hurdles, two rows of numbers appear. One row is points and the other the number of units of equipment judged to be needed according to enrollment.

The score for each type of equipment listed should be estimated according to how well it meets the standards given, the rating being (a) good, (b) average, (c) poor. Absence of the equipment where required would score zero. Wherever the equipment is not required, i.e., a school with 50 boys would not need a parallel bar, an * has been placed and the number of points allowed for the equipment under "Score Possible" should be given. In no case can the "Total Points Made" be greater than the "Score Possible."

Certain types of equipment may be used for both boys and girls. The total school enrollment, where the same equipment may be used for both boys and girls, are: piano, 300; mats, 300; corrective room equipment, 600; climbing ropes, 300; scales, 100; spirometer, 600; maintenance equipment, total school enrollment.

Name of Equipment	No. Needed	Boys Enrolled in Physical Education												Score Possible	Total Points Made
		0-50			51-150			151-300			301-500			501-900			900-over				
		a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c		
Piano	1	9	5	2	9	5	2	9	5	2	9	5	2	9	5	2	9	5	2	9	
Mats	2-3-4	12	7	3	12	7	3	12	7	3	12	7	3	12	7	3	12	7	3	12	
	6-8	2			3			3			4			6			8				
Corrective Room Equip.		*	*	*	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	
Horizontal Bars	1-2	7	5	2	7	5	2	7	5	2	7	5	2	7	5	2	7	5	2	7	
		1			1			1			1			2			2				
Parallel Bars	1	*	*	*	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	
Buck	1	*	*	*	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	
Horse	1	*	*	*	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	
Climbing Ropes	1-2-3-4-5-6	5	3	1	5	3	1	5	3	1	5	3	1	5	3	1	5	3	1	5	
		1			2			3			4			5			6				
Rings (Pairs)	1	*	*	*	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	
Scales	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	4	1	6	
Spirometer	1	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	2	1	4	
Hand Dynamometer	1	*	*	*	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	
Leg and Back Dynamometer	1	*	*	*	*	*	*	4	2	1	4	2	1	4	2	1	4	2	1	4	
Hurdles	10-20	7	5	2	7	5	2	7	5	2	7	5	2	7	5	2	7	5	2	7	
	40-60	10			20			20			40			60			60				
Maintenance Equipment		14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	8	4	14	
																			TOTAL	102	

The total points made _____, divided by 2 equals score given _____.

Score Possible	Score Given
51	
_____	_____

VI--Supplies (General)

To Score--The number placed in each enrollment column after each supply named is the quantity of each supply judged to be needed annually and kept on hand for use during the 12 months immediately preceding the time of scoring. The baseball catcher's outfit should include body protector, shin protectors, mask and mit; if lime is purchased by the barrel rather than by the sack, estimate in terms of 80-pound sacks. It is assumed sets for croquet, darts, horseshoes, paddle tennis and quoitennis will include everything necessary to play the game. In computing pupil periods for number of clean towels needed daily, include pupil periods in intramural and interschool athletics. Certain types of supplies such as tennis balls should be purchased as needed.

If the quantity of supply listed has been available at the school, of good quality and ready for use, then give points allowed under "Score Possible." The total number of points made divided by 2 is the score given.

Name of Supply	Boys Enrolled in Physical Education 0-50	51-150	151-300	301-500	501-900	901-over	Score Possible	Total Points Made
Archery Arm and Finger Guards	2	2	4	8	10	12	2	
Archery Arrows	12	12	24	48	60	72	2	
Archery Bows	2	2	4	8	10	12	2	
Archery Targets and Easels	1	1	2	2	3	3	2	
Balls, Baseball (Hard)	12	18	24	48	72	96	4	
Balls, Playground	6	12	18	24	48	60	4	
Balls, Basket	4	8	12	18	24	30	15	
Balls, Foot	4	6	8	12	18	24	13	
Balls, Golf	6	12	18	24	30	36	4	
Balls, Hand	12	18	24	36	48	60	8	
Balls, Soccer	3	6	9	12	18	24	10	
Balls, Sport, 24"	1	1	1	1	2	2	3	
Balls, Tennis	12	18	24	36	60	72	7	
Balls, Volley	2	2	3	4	6	8	6	
Bases, Baseball (Sets)	1	1	1	1	2	2	2	
Bases, Playground Baseball (Sets)	1	1	2	2	3	4	2	
Bats, Baseball	6	8	12	18	24	30	3	
Bats, Playground Baseball	6	10	16	20	24	30	3	
Bean Bags	12	15	18	21	24	27	3	
Cambric, Various Colors (Yds.)	3	6	8	12	18	24	3	
Catcher's Outfits, Baseball	1	1	1	1	2	2	2	
Cross Bars	12	18	24	30	36	42	3	
Gloves, Baseball	4	4	5	6	7	8	2	

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Name of Supply	Boys Enrolled in Physical Education 0-50	51-150	151-300	301-500	501-900	901-over	Score Possible	Total Points Made
Gloves, Boxing (pairs)	2	6	10	14	18	20	3	
Golf Clubs (Driver)	1	1	2	2	3	4	2	
Gold Clubs (Mashie)	1	1	2	2	3	4	2	
Golf Clubs (Mid Iron)	1	1	2	2	3	4	2	
Golf Clubs (Putter)	1	1	2	2	3	4	2	
Indian Clubs	6	8	10	12	15	18	2	
Inflators (Ball)	1	1	1	1	2	2	2	
Laces, Rawhide	12	15	18	24	36	48	2	
Lime, Air Slacked (80 lb. Sacks)	4	8	12	16	24	36	4	
Mending Kits	1	1	1	1	1	1	2	
Needles, Lacing (Handled)	2	2	3	3	4	4	2	
Nets, Tennis	1	1	2	3	4	5	2	
Nets, Volley Ball	1	2	3	4	5	6	2	
Pistols	1	1	1	1	2	2	2	
Score Books, Baseball	1	1	1	2	2	2	2	
Score Books, Basketball	1	1	2	2	3	3	2	
Score Books, Football	0	1	1	2	2	3	2	
Score Books, Tennis	1	1	1	2	3	4	2	
Sets, Badminton	0	1	1	1	1	2	2	
Sets, Croquet	1	1	1	1	1	1	2	
Sets, Darts	1	1	1	1	2	2	2	
Sets, Horseshoe	1	1	2	2	3	4	2	
Sets, Paddle Tennis	1	1	2	2	3	3	2	
Sets, Quoitennis	1	1	1	1	2	2	2	
Shots (8 lb.)	1	1	1	2	2	2	2	
Shots (12 lb.)	1	1	1	2	2	2	2	
Tape, Black Friction (Rolls)	4	6	10	16	24	30	2	
Tape Lines (50 Feet)	1	1	2	2	3	3	2	
Tape Lines (100 Feet Steel)	1	1	2	2	3	3	2	
Tennis Racquets	4	6	8	12	16	18	4	
Towels, Bath	A clean towel available daily for each pupil							

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Name of Supply	Boys Enrolled in Physical Education 0-50	51-150	151-300	301-500	501-900	901-over	Score Possible	Total Points Made
	period participation						12	
Vaulting Poles	2	3	4	4	6	6	3	
Watches (Game Timer and Stop Watch)	1	1	1	2	2	3	3	
Whistles (Instructors)	4	5	6	8	12	18	4	
Yarn, White (Balls)	1	1	2	2	3	4	2	
					TOTAL		194	

The total points made _____, divided by 2 equals the score given _____.

Score Possible	Score Given
97	

VII--Supplies (First Aid)

To Score--Consider only such first aid supplies as are on hand for taking care of injuries. The quantity suggested here does not include supplies on hand required for use by the physician, nurse or dentist in their school health service work, or for use in connection with athletics. Estimate the score which should be given each type of supply in terms of amount required for school enrollment. Absence of the supply would yield a zero score. If the required amount of the supply has been on hand during the 12 months just preceding the time of scoring, then allow the full number of points allotted. The total of the points made divided by 2 is the score given.

Name of Supply	Boys Enrolled in Physical Education 0-50	51-150	151-300	301-500	501-900	901-over	Score Possible	Total Points Made
Absorbent Cotton, 4 oz. package	12	15	18	24	36	48	4	
Adhesive Tape, 1 in. x 10 yds.	4	6	9	12	15	18	2	
Adhesive Tape, 3 in. x 10 yds.	4	6	9	12	15	18	4	
Alcohol, Rubbing (Pint)	1	1	2	2	3	4	2	
Ammoniated Mercury Ointment (oz.)	2	2	3	4	5	6	2	

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Name of Supply	Boys Enrolled in Physical Education 0-50	51-150	151-300	301-500	501-900	901-9ver	Score Possible	Total Points Made
Applicators, Wood 72 doz. box	1	1	2	2	3	4	2	
Aromatic Spirits of Ammonia (oz.)	1	1	2	2	3	4	2	
Bandage, Gauze, 1 in. x 10 yds.	12	15	18	24	36	48	4	
Bandage, Gauze, 2 in. x 10 yds.	12	15	18	24	36	48	4	
Bandage, Muslin, 2 in.	3	4	6	8	10	12	2	
Bandages, Traingular	2	2	3	4	5	6	2	
Chlorazene Anti-septic Tablets (box)	2	2	3	4	5	6	2	
Mercurochrome (oz.) (Liquid) or Iodine	4	6	8	12	14	16	4	
Splint Boards (Assorted)	1	2	3	4	5	6	2	
S. T. 37 (16 oz. bottle)	1	2	3	4	5	6	2	
Tongue Depressors (Gross)	1	1	2	2	3	3	2	
Tweezers (4 in.)	1	1	1	1	2	2	2	
Unguentine (Tube)	1	2	2	3	3	4	2	
Vaseline, Carbolated (Tube)	1	2	3	4	5	6	2	
Zinc Oxide Ointment Tube oz.	2	3	4	6	7	8	2	
						TOTALS	50	

The total points made _____, divided by 2 equals the score given _____.

Score Possible	Score Given
25	

C--PROGRAM (ORGANIZATION)

I--Percentage of Pupils Enrolled

To Score--Pupils who report to the physical education class instructor for attendance, and then are sent to the rest room (never study hall), or for a modified activity program, are considered as taking physical education. Pupils assigned to after-school athletic groups for practice during a given sport season, and who at the close of the sport season are returned to the school physical education class period are also considered to be taking physical education. Where

military training is substituted for physical education allow one-third of the enrollment in military training as enrollment in physical education.

Compute the percentage of boys taking physical education from the total number of boys enrolled in the school at the date of scoring. The points allotted to the range in which this percentage falls is the score given. The total number of boys enrolled in school = _____; the number of boys taking physical education = _____; number of boys substituting military training = _____; Computed percentage = _____.

Per cent enrolled in Physical education out of total number of boys in school	99 100	96 98	92 95	86 91	79 85	71 78	61 70	50 60	38 49	24 37	23 or less
Points	90	81	72	63	54	45	36	27	18	9	0

Score Possible	Score Given
90	

II--Time Allotment for Physical Education

One of the objectives of physical education is generally accepted to be the development by pupils of many neuro-muscular skills. Time at play is necessary for the perfection of these skills. It seems obvious that pupils will have greater opportunity to secure the many contributions to mental, physical and social development which are inherent in physical education activities if the time allotment is adequate.

To Score--The time allotment for the instructional period only is measured here, and does not include time which should be spent in practice or in intramural and interschool games. Periods longer than 60 minutes are assumed to be double periods. Locate the number of times physical education is required of each student per week; also locate the number of minutes in the period. In the appropriate square will be found the points which are to be given as the score. If the length of periods and times per week are not constant, then use averages. Where class periods are taken from the physical education time allotment for health instruction, they may be counted in this unit up to one period per week for two semesters. The length of the period includes time used in passing from class to class and also the time used at the beginning and end of the period for dressing.

Times per Week	Length of Periods in Minutes														
	20	25	30	35	40	45	50	55	60	70	80	90	100	110	120
1	1	1	1	2	2	3	3	4	5	4	4	3	3	2	1
2	3	3	4	5	6	7	10	14	18	14	10	7	6	5	3
3	5	6	7	10	18	27	35	60	65	58	27	18	10	7	5
4	7	9	15	28	50	65	75	80	83	75	50	28	12	9	4
5	10	15	35	55	80	84	86	88	90	86	48	24	10	6	2

Score Possible	Score Given
90	

III--Physical Examination of Pupils by Physician, Dentist and Nurse

To Score--From the physical examination records in the physical education department determine the extent and frequency of examination of pupils. Record opposite each item of examination the estimated number of points according to frequency and percentage of boys examined. The percentages and points are to be read as follows: if 90 or more per cent of the boys enrolled in physical education have their hearts examined each year, then allow 16 points; if 60 to 89 per cent, allow 12 points; if 30 to 59 per cent, allow 8 points, etc. If certain items of examination are omitted, score them zero. It is assumed the family health history will be taken only once during the four-year high school period. In some schools certain items of examination under Units III and IV may be interchanged, but this should result in no loss of points.

Extent of Examination	Frequency of Examination												Score Possible	Total Points Made
	Each Year			Every Second Year			Every Third Year			Every Fourth Year				
%	90	60	30	90	60	30	90	60	30	90	60	30		
Heart	16	12	8	14	10	6	12	8	4	10	6	2	16	
Lungs	16	12	8	14	10	6	12	8	4	10	6	2	16	
Vision	12	10	8	10	8	6	8	6	4	6	4	2	12	

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Hearing	10	8	6	8	6	10	6	4	2	4	2	1	10
Nose	10	8	6	8	6	4	6	4	2	4	2	1	10
Teeth	10	8	6	8	6	4	6	4	2	4	2	1	10
Throat	10	8	6	8	6	4	6	4	2	4	2	1	10
State of Nutrition	8	6	4	7	5	3	6	4	2	5	3	1	8
Skin	6	5	4	5	4	3	4	3	2	3	2	1	6
Family Health History	*	*	*	*	*	*	*	*	*	6	3	1	6
Personal Health History	8	6	4	7	5	3	6	4	2	5	3	1	8
									TOTALS				112

Score Possible	Score Given
56	

The total points made _____, divided by 2 equals the score given _____.

IV--Physical Examination of Pupils by Physical Education Teacher
(For statement of principles and instructions on scoring, see previous unit.)

Extent of Examination	Frequency of Examination												Score Possible	Total Points Made
	Each Year			Every Second Year			Every Third Year			Every Fourth Year				
%	90	60	30	90	60	30	90	60	30	90	60	30		
Age	*	*	*	*	*	*	*	*	*	6	3	1	6	
Height	8	6	4	7	5	3	6	4	2	5	3	1	8	
Weight	8	6	4	7	5	3	6	4	2	5	3	1	8	
Lung Capacity	6	5	4	5	4	3	4	3	2	3	2	1	6	
Spine Deviations	10	8	6	8	6	4	6	4	2	4	2	1	10	
Posture	10	8	6	8	6	4	6	4	2	4	2	1	10	
Feet	8	6	4	7	5	3	6	4	2	5	3	1	8	
									TOTALS				56	

V--Assignment of Students to Classes

To Score--Largely irregular, means the assigning of pupils to physical education in the periods they have left after settling the rest of their programs; largely by year in school, means that the individual physical education class is composed almost entirely of freshmen or sophomores, etc., and in large schools of low freshmen, high freshmen, etc.; largely by year in school and efficiency in skills, means the grouping of pupils into classes by year or half-year and then by low skill, average skill and advanced skill determined by observation, or better still, by giving a battery of skill tests; largely according to individual needs determined through examinations, means assignment according to need as found through physical examinations by physician and teacher, functional tests, motor ability tests, strength tests and a large number of activity skill tests. Assignment by choice of pupil or by some arbitrary point system would be roughly equivalent to assignment "largely by year in school."

Record the score allotted to the description which most nearly describes the method of assignment being used.

Method of Assignment to Classes	Score Possible
Largely irregular	10
Largely by year in school	20
Largely by year in school and efficiency in skills	30
Largely according to individual needs determined through examinations	40

Score Possible	Score Given
40	

VI--Size of Classes (Normal Group)

To Score--Record the points allotted opposite the condition which most nearly describes the situation. Unless pupils are not assigned to instructors, first find the total number of boy pupils enrolled in physical education, and then compute the percentage enrolled in classes of 40 or under. If the percentage is less than 85, try computing for the next higher category. The same procedure in scoring is used in Unit VII. When scoring Unit VII in schools with fewer than 151 boys, allow full score if individual arrangements are made instead of a class organized. Ordinarily from four to seven per cent of the pupils should be found doing special corrective work.

Size of Classes	Score Possible
No definite assignment of students to instructors	0
90 per cent of pupils enrolled in classes of 60 or under	10
90 per cent of pupils enrolled in classes of 50 or under	20
85 per cent of pupils enrolled in classes of 45 or under	30
85 per cent of pupils enrolled in classes of 40 or under	40

Score Possible	Score Given
40	

VII--Size of Classes (Corrective or Restricted Group)

(For a statement of principles and an explanation of method of scoring, see previous unit.)

Size of Classes	Score Possible
No class or individual arrangement for handicapped group	0
85 per cent of pupils enrolled are in classes of 30 or under	10
80 per cent of pupils enrolled are in classes of 25 or under	18
80 per cent of pupils enrolled are in classes of 20 or under	25

Score Possible	Score Given
25	

VIII--Teacher Load (Assigned Time)

To Score--Compute the average number of minutes per week each instructor is assigned to duty by the principal or head of the department; consider all instructors who are assigned to the instructional period, intramural athletics or interschool athletics; consider after-school work according to the amount of time spent, but not to exceed 120 minutes daily; where the teacher has academic classes and classes in physical education, record for his total teaching assignment. Estimate average

weekly time where seasonal differences in assignment occur. Record for each instructor in his column, and opposite his assigned time, the number of points allotted; add across and down. The total points made, divided by the number of instructors, is the final score given.

Average Number of Minutes Assigned Weekly	Score Possible	Instructors A	B	C	D	E	F	G	H	Total Points Made
1400 or less	50									
1401-1500	47									
1501-1600	43									
1601-1700	38									
1701-1800	32									
1801-1900	25									
1901-2000	15									
2001-2100	5									
2101-over	0									
									TOTAL	

The total points made _____, divided by the number of instructors ____, equals the score given_____.

Score Possible	Score Given
50	

IX--Records Kept and Used

To Score--Estimate the score for each type of record kept according to completeness, neatness, value and use made of the record. Score zero when the type of record is not kept. The total points made is the score given.

Type of Record	Score Possible	Total Points Made
Class Roll (or card) Record	4	
Enrollment Record (Permanent)	4	
Physical Examination (By Physician) Record	4	
Physical Examination (By Instructor) Record	4	
Record of Issue of Supplies (For Period Only)	4	
Record of Issue of Team Uniforms, etc. (Seasonal)	4	
Record of Students' Intramural Athletic Accomplishment	4	
Record of Students' Interscholastic athletic Accomplishment	4	
Record of Students' Improvement Shown by Skill Tests	4	
Record of Finance Connected with Department	4	
TOTALS	40	

Score Possible	Score Given
40	

X--Credit

To Score--Locate the points opposite the condition which exists and record as "Score Given."

Credit for Physical Education	Score Possible
No Credit given for physical education	0
Credit given but not required for graduation	10
Credit given and required for graduation	20

Score Possible	Score Given
20	

XI--Method of Marking

To Score--In schools having more than one instructor it is assumed a uniform system of marking will have been adopted for the department. Record in the "points made" column the number of points possible opposite each factor which is included by the teacher when computing the pupil's marks. If the factor is not included, score zero for that factor. The total points made is the "score given."

Factors Considered in Computing Mark	Score Possible	Points Made
Regularity of Attendance (Including Tardiness)	3	
Effort	3	
Sportsmanship	3	
Achievement in Knowledge, Skills, Attitudes	3	
Posture	3	
Improvement in Physical Fitness	3	
Taking Showers	3	
Costume (Neatness and Change Required)	3	
TOTALS	24	

Score Possible	Score Given
24	

XII--Award System

To Score--The unit implies there is only one award system for all students for all activities in the school. Record in the "points made" column the points possible opposite each condition stated, providing the award system meets the condition. Score zero opposite any condition not met. The total points made is the score given.

Conditions	Score Possible	Points Made
The school monogram with a paper certificate is the only award given	4	
Boys and girls may win identical type monograms	4	

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Eligibility for award is computed on a point basis	4
Points are given for mental, physical and social efficiency (Minimum in each)	4
100% of the pupils in school are eligible to receive points toward award	4
TOTALS	20

Score Possible	Score Given
20	

D--PROGRAM (ACTIVITIES)

I--Instructional Period

To Score--When scoring this unit, failure to have a large variety of activities in the instructional program causes the school to lose points. By a larger allotment of points to certain activities and by inserting percentages of pupils which should be taught the activities, the relative emphasis and extent of participation are scored. Do not count participation in intramural athletics or interscholastic athletics, as that is scored in the units which follow.

Activities	% Time	Points Given for Extent of Pupil (Boys) Participation			Points Possible	Points Made
American Football (Touch)	4	% 70	40	10	8	
		Points 8	5	2		
Apparatus (Light and Heavy)	4	% 70	40	10	10	
		Points 10	6	2		
Archery	3	% 80	50	20	7	
		Points 7	5	2		
Baseball (Hard)	4	% 50	30	10	7	
		Points 7	5	2		
Basketball	7	% 80	50	20	15	
		Points 15	9	3		
Boxing	1	% 50	30	10	4	
		Points 4	3	1		

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Activities	% Time		Points Given for Extent of Pupil (Boys) Participation			Points Possible	Points Made
Corrective Physical Education	5	%	5	3	1	16	
		Points	16	10	4		
Croquet	½	%	90	60	30	3	
		Points	3	2	1		
Dancing (Clog)	2	%	80	50	20	5	
		Points	5	3	1		
Dancing (Folk)	2	%	80	50	20	5	
		Points	5	3	1		
Dancing (Social)	1	%	80	50	20	4	
		Points	4	3	1		
Fencing	½	%	50	30	10	3	
		Points	3	2	1		
Free Exercises	5	%	90	60	30	8	
		Points	8	5	2		
Games of Low Organization	5	%	90	60	30	9	
		Points	9	6	3		
Golf	5	%	80	50	20	8	
		Points	8	5	2		
Handball	5	%	70	40	10	11	
		Points	11	7	3		
Horseshoes	½	%	90	60	30	3	
		Points	3	2	1		
Life Saving	1	%	50	30	10	5	
		Points	5	3	1		
Marching	½	%	90	60	30	3	
		Points	3	2	1		
Playground Baseball	4	%	80	50	20	7	
		Points	7	5	2		
Pyramid Building	1	%	70	40	10	4	
		Points	4	3	1		

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Activities	% Time	Points Given for Extent of Pupil (Boys) Participation			Points Possible	Points Made
Quoitennis	½	% 80	50	20	3	
		Points 3	2	1		
Soccer	5	% 80	50	20	12	
		Points 12	7	2		
Speedball	5	% 80	50	20	12	
		Points 12	7	2		
Stunts	½	% 70	40	10	4	
		Points 4	3	1		
Swimming	8	% 90	60	30	15	
		Points 15	9	3		
Tennis	6	% 90	60	30	15	
		Points 15	9	3		
Tennis (Paddle)	1	% 80	50	20	4	
		Points 4	3	1		
100-yard Run	1	% 50	30	10	3	
		Points 3	2	1		
220-Yard Run	½	% 50	30	10	2	
		Points 2	1	0		
¼-mile Run	½	% 50	30	10	2	
		Points 2	1	0		
½-mile Run	½	% 50	30	10	2	
		Points 2	1	0		
Mile Run	½	% 50	30	10	2	
		Points 2	1	0		
Cross Country Run	1	% 70	40	10	2	
		Points 2	1	0		
Hurdles (Low and High)	1	% 50	30	10	2	
		Points 2	1	0		
Broad Jump	½	% 70	40	10	2	
		Points 2	1	0		

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Activities	% Time		Points Given for Extent of Pupil (Boys) Participation			Points Possible	Points Made
High Jump	½	%	70	40	10	2	
		Points	2	1	0		
Pole Vault	½	%	50	30	10	2	
		Points	2	1	0		
Shot Put	½	%	50	30	10	2	
		Points	2	1	0		
Tumbling	1	%	70	40	10	4	
		Points	4	3	1		
Volley Ball	4	%	90	60	30	9	
		Points	9	6	3		
Wrestling	1	%	50	30	10	4	
		Points	4	3	1		
TOTALS	100					250	

Out of 250 possible points, 226 points is the maximum number which is allowed. The total points made (not to exceed 226) is the score given.

Score Possible	Score Given
226	

II--Intramural Athletics

To Score--In the enrollment columns and opposite each activity listed there appears the minimum number of different boys who are expected to participate in a well organized intramural athletic program. Using the points allotted in the "points possible" column, estimate the number of these points which should be given to each activity according to how well the school meets the standards set. Each pupil within the minimum number suggested must have participated in the activity at least three times within the twelve months preceding the time of scoring, if he is to be counted. Score zero for each activity where no intramural program exists. Allow the full number of points for activities where they are starred. The total points possible (145) is greater than the "Score Possible" (114) to allow for a choice as each school is not expected to have an intramural program in all the activities listed. The program is not classed as intramural unless it takes place outside of the instructional class period.

Activities	Boys Enrolled in Physical Education						Score Total	
	0-50	51-150	151-300	301-500	501-900	901-over	Pos-sible	Points Made
American Football (Touch)	*	*	*	30	60	90	6	
Archery	5	10	15	20	25	35	7	
Basketball	*	16	32	64	96	128	10	
Croquet	4	6	8	12	18	30	4	
Darts	4	6	8	12	18	30	3	
Fencing	*	*	*	*	6	10	3	
Golf	4	6	8	12	18	30	9	
Handball	4	8	16	32	64	128	10	
Horseshoes	4	8	12	16	24	32	4	
Playground Baseball	24	36	48	60	72	90	7	
Quoitennis	4	8	12	16	24	32	4	
Soccer	*	*	30	60	90	120	8	
Speedball	*	*	30	60	90	120	9	
Swimming	*	*	20	30	50	70	10	
Tennis	6	12	20	30	60	90	10	
Tennis (Paddle	4	8	16	24	36	52	4	
100-yard Run	8	16	32	48	64	96	5	
Relay Running	8	16	32	48	64	96	6	
Hurdles (Low and High)	4	8	12	16	24	32	3	
Broad Jump	8	16	32	48	64	96	4	
High Jump	8	16	32	48	64	96	4	
Pole Vault	4	8	12	16	24	32	3	
Shot Put	4	8	12	16	24	32	2	
Volley Ball	12	24	48	84	120	156	10	

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TOTALS	145

Out of 145 possible points, 114 is the maximum number which is allowed. The total points made (not to exceed 114) is the score given.

Score Possible	Score Given
114	

III--Interscholastic Athletics

To Score--In the enrollment columns and opposite each activity will be found the estimated minimum number of pupils who should actually have participated in an interscholastic program during the twelve months preceding the time of scoring. Wherever an * has been placed, full credit is to be allowed if no team exists. In cases where the * and a number both appear, the school has the option as to whether a team is to be maintained. In this case, if no team exists, allow full score, and if the team exists score according to standards. Where team is required, but none exists, score zero. In rural areas where the school is isolated, allowances should be made. Estimate for each activity the number of points out of those listed in the "Points Possible" column according to numbers participating and the quality of the competition; record points in "Points Made" column and then total the column. The "Score Possible" is less than the total "Points Possible" in order to allow the school a selection of activities.

Activities	Boys Enrolled in Physical Education						Score Possible	Total Points Made
	0-50	51-150	151-300	301-500	501-900	901-over		
American Football	*	*/18	22	22	36	36	8	
Archery	2	3	4	5	6	6	4	
Baseball (Hard)	*	*/15	15	15	30	30	5	
Basketball	*/8	*/ 8	8	16	24	24	8	
Golf	*/2	*/ 3	4	5	6	6	6	
Handball	*/2	*/ 2	4	4	6	6	6	
Horseshoes	2	2	4	4	6	6	3	
Baseball (Playground)	*/12	*/12	12	12	24	24	5	
Soccer	*	*/15	15	15	30	30	6	
Speedball	*	*/15	15	15	30	30	6	

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Activities	Boys Enrolled in Physical Education						Score Possible	Total Points Made
	0-50	51-150	151-300	301-500	501-900	901-over		
Swimming	*	*/ 6	8	8	10	12	7	
Tennis	2	4	4	6	8	8	7	
100 yard Run	*	*/ 2	2	3	4	4	2	
220 yard Run	*	*/ 2	2	3	4	4	1	
¼ Mile Run	*	*/ 2	2	3	4	4	1	
½ Mile Run	*	*/ 2	2	3	4	4	1	
1 Mile Run	*	*/ 2	2	3	4	4	1	
Hurdles (Low and High)	*	*/ 2	2	3	4	4	2	
Relays	*	*/ 4	4	4	8	8	3	
Broad Jump	*	*/ 2	2	3	4	4	2	
High Jump	*	*/ 2	2	3	4	4	2	
Pole Vault	*	*/ 2	2	3	4	4	1	
Shot Put	*	*/ 2	2	3	4	4	1	
Volley Ball	*/ 8	*/ 8	8	16	16	24	5	
						TOTALS	93	

Out of 93 possible points, 74 points is the maximum number which is allowed. The total points made (not to exceed 74) is the score given.

Score Possible	Score Given
74	

E--PROFESSIONAL ASSISTANCE

I--Professional Magazines

To Score--In the column "Points Made" record the number of points allotted to each professional magazine listed which is in the school or

departmental library and available to the men instructors of physical education. The "Score Possible" is less than the total number of points listed in the "Points Possible" column in order to allow for a selection.

Name of Magazine	Points Possible	Points Made
Journal of the National Education Association	3	
Journal of Health and Physical Education	3	
A State Educational Journal	3	
Mind and Body	3	
The Athletic Journal	3	
Hygeia	3	
Recreation	3	
Sportsmanship	3	
Any Other Professional Magazine	3	
TOTALS	27	

Out of 27 possible points, 15 points is the maximum number which is allowed. The total points made (not to exceed 15) is the score given.

Score Possible	Score Given
15	