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## A Proposed Program of Physical Education For the Negro Senior High School of Muskogee, Oklahoma

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## A PROPOSED PROGRAM OF PHYSICAL EDUCATION FOR THE NEGRO SENIOR HIGH SCHOOL OF MUSKOGEE, OKLAHOMA

A Problem Submitted in Partial Fulfillment of the Requirements for the Course in Research Problems 390b

By

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Pittsburg, Kansas

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#### CHAPTER I

### INTRODUCTION

<u>Statement of the Problem</u>. This study is dedicated to the organizing of a program of Physical Education for the Negro Senior High School in Muskogee, Oklahoma. It is understood therefore that the writer will concern himself with only grades <u>ten</u> through <u>twelve</u> as a means of determining program content.

The material is presented not as an ideal program, but as a practical, workable one that should serve as a foundation that will accumulate height, strength and solidity from year to year as it is tried and tested in varying situations.

<u>Need for the Study</u>. Over a period of time it has been the author's observation that many Negro schools throughout the state of Oklahoma do not include in the curriculum provisions for physical education. The lack of physical education in the curriculum is due chiefly to lack of interest on the part of administrations and an insufficient amount of funds to operate the program.

The author has also observed that in towns which have recently established programs of physical education, only one instructor is hired and he is usually the coach or a man who has had no previous training in physical education.

It is the writer's opinion that many of the programs now in operation in Negro schools in Oklahoma are not of much

value to the students, and consist largely of someone giving them a ball and allowing them to play. Skills and fundamentals are unheard of and little or no time is given to their development.

Mr. Cox, who is the author's father, asked that such a program be devised in that it might be put into effect at Muskogee under his direction.

<u>Purpose of the Study</u>. The purpose of this study is to try to determine if a suitable program of physical education could be worked out for the Negro youth who will attend the Senior High School in Muskogee, Oklahoma.

It is hoped that the ideas and program of activities developed in this study will reveal the proper steps to be taken by the physical education instructor at Muskogee. It is also hoped that the students will develop well-rounded personalities, and attain a high degree of skills and techniques in the activities offered.

Limitations of the Study. The study is limited to the development of an organized program of physical education for the Negro Senior High School, Muskogee, Oklahoma. No attempt has been made to provide activities below that level.

Data for this study were collected during the Easter vacations, and was largely attained through the interview method.

### CHAPTER II

## OBJECTIVES OF PHYSICAL EDUCATION PROGRAM

Basis for Formulating Objectives. Physical education is a phase of general education, and its objectives should be interpreted in terms of the objectives of education as a whole.

The ultimate aim of physical education may well be to so develop and educate the individual through the medium of wholesome and interesting physical activities that he will realize his maximum capacities, both physically and mentally, and will learn to use his powers intelligently and co-operatively as a good citizen even under violent emotional stress.<sup>1</sup>

From this point of view the analysis which should constitute the basis for a formulation of administrative or teacher objectives must begin with the following questions as listed by Cozens.<sup>2</sup>

- 1. What are the needs in terms of growth, development, and adjustment, of the individuals or groups to be educated?
- 2. What activities will best contribute to the satisfaction of these specific needs?
- 3. Evaluation from time to time of the individual social and moral characteristics and needs.

1<sub>Wm.</sub> Ralph LaPorte, <u>The Physical Education Curriculum</u> (Los Angeles, Calif., The University of Southern California Press, 1947), p. 37.

<sup>2</sup>Nixon Cozens, <u>Introduction</u> to <u>Physical Education</u> (Philadelphia and London: W. B. Saunders Company, 1934), pp. 90-91. (Evaluation of this nature will have to be made on the basis of the judgement of leaders and fellow students, and other observers).

Upon the basis of analysis of these problems we should be able to set up a comprehensive body of objectives or steps in the direction of the "aim." Ultimately these objectives will relate to (a) determination of the needs of the individual, (b) choice of activities, (c) provision of a suitable environment.<sup>3</sup>

<u>Needs of the Individual</u>. It is the writer's opinion that the first phase of the analysis, which concerns the developmental and adjustment needs of the individual being educated, shows that a body of objectives is needed to guide procedure in determining what the specific needs are in the case of any individual. An individual differs from every other individual in his capacities and needs, and intelligent educational procedure should take these differences into a account. As an example, football in all instances might be a desirable activity for one eighteen-year-old boy and destructive to another.

With this in mind the following items are suggested as valuable in the determination of the specific needs.<sup>4</sup>

1. A thorough medical examination for each individual at intervals not greater than a year to determine his organic and anatomical condition, defects, and needs.

3 Ibid.

<sup>4</sup>Ibid.

- 2. Frequent test of the individual's skill in big-muscle activities, and ability to control bodily movements.
- 3. Evaluation from time to time of the individual social and moral characteristics and needs. (Evaluation made on the basis of the judgment of leaders and fellow students, and other observers).
- 4. Evaluation of the social and occupational conditions in which the individual is involved when out of the physical education environment.
- 5. Determination, in so far as possible, of the probable social and occupational status of the individual in later years, with a view to determining also his probable future needs in forms of recreation and exercise.

To determine the needs of any one individual cannot, of course, be foretold. Therefore, the author has chosen as a means of determining the needs of Negro boys in Muskogee, a man who has been in the school system for nineteen years as coach. He is well liked by both parents and students alike. He has worked with such groups as the Hi-Y and Boy Scouts, and is a member of the Board of Control of the local Y.M.C.A. in Muskogee, Oklahoma.

In an interview with Mr. Cox the following information was attained:<sup>5</sup>

There is a lack of muscle coordination and there are faults of posture due to inadequate amounts of muscularactivity.

A lack of regular habits of exercise.

<sup>5</sup>Statement by W. W. Cox, Personal interview, April 12, 1952.

A need for the development of interest in wholesome recreational activities.

Boys have come in contact with little desirable skills in activities suitable during leisure times. (Only soft-ball, football, and basketball participated in by a very few).

Little or no knowledge of rules.

Very little leadership capacity is exemplified by students.

Health habits, knowledge, and attitudes are poor, attributed to the low economic level of the homes from which they come.

<u>Types of Activities Contributing to the Satisfaction of</u> <u>Needs</u>. Assuming that the purposes in determining the needs of the individual have been attained the problem of a choice of activities to meet these needs is apparant. In this connection one objective only is necessary; to determine as accurately as possible the activities which give the greatest promise of meeting the specific needs of the particular individual.

In light of the above mentioned interview activities which involve strength, agility, speed, endurance, strategy, and manipulated objects, should be included in the program.

It is the writer's opinion that the program be centered around the following activities.

- 1. Individual gymnastics
- 2. Rhythmic activities
- 3. Apparatus work
- 4. Games of high and low organization

- 5. Stunts
- 6. Athletics
- 7. Team games
- 8. Outing activities

The above mentioned activities should provide instruction in the motor activities that have a high frequency of occurrence in the daily lives of many people and should give practically no time to instruction in activities that are foreign to the needs of the great majority of individuals.

<u>Objectives</u>. In light of the needs of boys which will attend the senior high school the following objectives are offered for the proposed program.<sup>9</sup>

- 1. The development of fundamental skills in gymnastics, rhythmics, and athletic activities for immediate educational purposes--physical, mental, and social.
- 2. The development of useful and desirable skills in activities suitable as avocational interest for use during leisure time.
- 3. The development of essential safety skills and the ability to handle the body skillfully in a variety of situations for the protection of self and others.
- 4. The development of a comprehensive knowledge of rules, techniques and strategies in activities suitably adapted to various age levels.
- 5. The development of powers of observation, analysis, judgment, and decision through the medium of complex physical situations.
- 6. The development of the power of self-expression and reasonable self-confidence, (physical and mental poise); by mastery of difficult physicalmental-social problems in supervised activities.
- 7. The development of leadership capacity by having each student within the limits of his ability,

<sup>9</sup>LaPorte, <u>op</u>. <u>cit</u>., p. 37.

assume actual responsibility for certain activities under careful supervision.

8. The elimination of remedial defects and the improvement of postural mechanics insofar as these can be influenced by muscular activities and health advice based on adequate physical and health diagnosis.

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### CHAPTER III

### THE PROGRAM OF ACTIVITIES

The most conspicuous features of the physical education program are the big muscle activities. They are its very heart in that they represent direct muscular response. It is not, however, desirable that the program be of such that big muscle activities be the dominant factor, but rather the program includes such activities as are specifically appropriate to the needs of the group.<sup>1</sup>

Certain prominent characteristics are evident in students at the senior high level and this period is ideally suited to the development of interest and skills in team games of higher organization. It is here that special attention should be given to the development of an intramural program. Gymnastics activities and competition in the more strenuous forms of sports and athletics have a legitimate place in the program In order to develop properly boys need large amounts for boys. of time in rugged activities. There should be developed a considerable degree of skill in carry-over activities. Delay in learning these skills handicaps the individual in later efforts to attain them. In addition, such a large number of students from Manual Training fail to reach college that it is not desirable to postpone further the learning of "carryover" skills.

1Cozen, op. cit., p. 109.

<u>Activities at Senior High Level</u>. The activities which go to make up the physical education program at the various schools and their levels as listed by Sharman<sup>2</sup> are as follows:

- I. Acquatics 1. Swimming and diving 2. Life saving
- II. Combative
  - 1. Boxing
  - 2. Wrestling
  - 3. Fencing
- III. Gymnastics
  - 1. Gymnastics games and relays
  - 2. Tumbling and pyramids
  - 3. Heavy apparatus
  - 4. Free exercise
  - 5. Marching
  - 6. Stunts
  - IV. Individual Sports
    - 1. Tennis
    - 2. Track and field
    - 3. Golf
    - 4. Handball
    - 5. Archery
    - 6. Badminton
    - 7. Code ball
    - 8. Horseshoes
    - 9. Skating
    - V. Rhythmics
      - 1. Clog and tap dancing
      - 2. Natural dancing
      - 3. Gymnastic dancing
      - 4. Folk dancing
      - 5. Singing games
  - VI. Games
    - 1. Football
    - 2. Basketball
    - 3. Playground ball
    - 4. Soccer
    - 5. Speedball

<sup>2</sup>Jackson R. Sharman, <u>Introduction to Physical Education</u> (A. S. Barnes and Company, New York, 1934), pp. 136-137.

	6. Volleyball
	7. Base ball
	8. Softball
	9. Touch football
VII.	Outing Activities
	1. Camping
	2. Canceing
	3. Hunting
	4. Fishing
	5. Hiking
	6. Winter sports

This method of grouping activities recognizes the kind of motives or interest which stimulates participation.

Many of the activities, (as listed by Sharman) are applicable to the activity program, others are not in that provision and student interest would not warrant their inclusion.

It is the writer's opinion that such activities as boxing, fencing, a certain degree of apparatus work, and marching should be excluded from the physical education program, because such activities have a tendency to formalize the program.

## YEARLY ACTIVITY PROGRAM

As a proposed yearly program for the Senior High School the following activities have been taken in part from Sharman's list of activities.

It is the writer's opinion that the schedule should be used as a cycle program for the tenth and eleventh grades with both tenth and eleventh grades mixed together in classes, all of them taking the Number I program one year and the Number II program the next year. The twelfth graders would then have

## TABLE I

## YEARLY ACTIVITY PROGRAM

Dates	I. 10th Grade	II. 11th Grade	III. 12th Grade
Sept. 15 Oct. 31	Touch Football (fieldball)	Soccer (football)	Archery (touch foot- ball)
Nov. 1 Dec. 15	Volleyball (basketball)	Basketball	Badminton (table tennis)
Jan. 1 Feb. 15	Gym drills and apparatus	Tumbling and pyramids	Handball
Feb. 15 March 31	Tumbling	Rhythms	Social dancing (social games)
April 1 May 15	Softball	Track and field	Boxing (or wrestling, softball)
May 15	Speedball (testing)	Student elected (testing)	Tennis, Horse- shoes

to be registered separately for the elective program. Using this method all students with the exception of the first two graduating classes will receive three distinct programs of physical education.

## TABLE II

## MONTHLY-WEEKLY-DAILY SCHEDULE PROGRAM

lst Week	September 15 2nd Week	3rd and 4th Weeks
Monday		
History, general description and demonstration of the game of soccer	Soccer dribble Same procedure	Soccer goal kick and etc.
Tuesday		
Soccer kicking tech- nique, strategy and use, etiquette and safety precautions, individual, squad and team practice.	Dribble (review)	Goal kicks (review)
Wednesday		
Kicking (review)	Dribbling (review)	Goal kicks (review)
Thursday		
Soccer practiceuse same procedure as described for kicking	Soccer stepping Same procedure	Soccer volleying Same procedure
Friday		
Passing (review)	Stopping (review	) Volleying (review)
Worth of Activitie	es. Listed below ar	e some of the acti-
vities which are found	in the program with	information as to
their worth. <sup>3</sup>		

<sup>3</sup>Leslie W. Irvin, <u>The Curriculum in Health and Physical</u> <u>Education</u>, (St. Louis, Mo., C. V. Mosby Company, 1944), p. 170. <u>Basketball</u>: It is difficult to conduct basketball among boys without overemphasis due to its popularity. There is a tendency for boys to want to play the game during all class periods to the exclusion of all other activities. This should not be permitted. Emphasis should be placed on the fundamentals rather than actual playing although some time should be given to the game. When students are playing the game emphasis should be placed on proper application of the fundamentals.

<u>Soccer</u>: This is a suitable sport for boys during the autumn of the year. However, there are other sports which boys seem to prefer to soccer. If boys wish some other activity to soccer it should be included. However, if offered for the first time the fundamentals should be tried and the regulation game be modified until adequate skills have been developed.

Speedball: Speedball is considered in many instances a superior game for use in the autumn in that it embodies, and aids in developing, fundamentals of other sports. Speedball is based on soccer, fieldball, and basketball and contains some elements of football.

<u>Softball</u>: Much emphasis should be placed on softball in that it is one of the more highly organized sports that has considerable carry-over value. The equipment needed to play the game is comparatively inexpensive. It is recommended for use during the spring season although many schools use it as an autumn sport.

<u>Touch football</u>: At both junior high and senior high school levels touch football has come to be one of the most universal and popular of the autumn sports with a great deal of carry-over value. The fact that the game can be played safely on playgrounds, vacant lots, or any open area and with only one essential piece of equipment, a football.

<u>Track and Field</u>: Track and field activities are usually offered during the spring of the year. Some of the events may require modifying if there is found a lack of experience among students. Activities falling in this category are the javelin throw, and the middle distance runs. These activities are eliminated because of the danger of injury in care of the javelin and the need for extensive training to build up endurance in the middle distance runs.

<u>Volley ball</u>: Volley ball is a winter sport of high organization, however, when run in competition with basketball it is difficult on a successful basis.

Volley ball requires highly developed team work; if there is not this degree of team work the game is relatively slow and uninteresting. Experiments show that if players are coached to play with highly developed team work they enjoy the game immensely. To develop team work involves emphasis on passing, set-ups, and spiking.

The carry-over value of volley ball is sufficient to recommend that all students develop skill to assure interest in continued participation.

<u>Wrestling</u>: A winter season activity of high organization. The lead-up activities have many values in that it gives the boy in the lower ranges of ability in sport skill a chance for body contact work. The average boy develops a great interest in the activity. Special attention should be given to supervision.

<u>Tennis</u>: Tennis is classified as a recreational activity. In the majority of programs an attempt is made to teach at least the fundamentals. If tennis courts are lacking, important fundamentals can be taught in the gymnasium by using the walls to teach serving and form in the various strokes.

Although tennis is ordinarily a spring activity it may be used during the autumn quarter depending upon the best use of available facilities.

<u>Time Allotment</u>: A rough approximation of the relative amount of time to devote to the different types of activities for secondary school boys as listed by Irwin is:<sup>4</sup>

Apparatus, 5 per cent; Acquatics, 10 per cent; formal activities, 5 per cent; games and relays, 5 per cent; more highly organized sports, 35 per cent; recreational sports, 20 per cent; rhythms and dancing, 5 per cent; tumbling, 5 per cent; and winter sports, 10 per cent.

In that certain types of activities are not offered in the proposed program time will be given in proportionate amounts to those activities which are included. This is done because climatic conditions (winter sports) and facilities will not warrant these inclusions.

<sup>4</sup>Ibid., p. 183.

## TABLE III

	Activities	Perce 10th	ntage in Grades llth	12th
1	Apparatus	10	10	10
	Games and Relays	20	20	20
	Higher organized sports	40	35	25
	Recreational sports	20	30	40
	Tumbling	10	5_	5
	Total	100	100	100

## APPROXIMATE PERCENTAGE ALLOTMENT OF TIME FOR ACTIVITIES IN THE SENIOR HIGH SCHOOL PROGRAM

### CHAPTER IV

## ORGANIZATION OF THE PROGRAM

Extent of Program. There should be available for every student a definite program of instruction in activities. However, allowances should be made for temporary accidents, or illness, assignment to modified or restricted activity, and for after-school athletics during the season. No student because of physical defects should be deprived of instruction in physical education in that provisions for ailments of this nature can be cared for in modified or restricted activities, the substituting of office cleaning, clerical work, mascot on football team or other odd jobs around the gym, for physical education class period.<sup>1</sup>

<u>Time Allotment</u>. Class instruction should be on the basis of a five day a week. Today most progressive states require a minimum of one period per day of from forty to sixty minutes each in secondary schools.<sup>2</sup> Since Manual Training is on the long period of seventy minute classes, adequate time will be given to the instruction in activities.<sup>3</sup> However, no provisions are being made for the inclusion of health instructions with the physical education program.<sup>4</sup>

LaPorte, op. cit., p. 47.

2 Ibid.

<sup>3</sup>Statement by Principal of Manual Training High School, Personal interview, April 16, 1952.

4 Ibid.

It is the writer's opinion along with other authors in this field that one day should be set aside for instruction in health and whenever possible activity be offered five days per week, and the health instruction be given as an additional subject at some other period, preferably two or three times a week.

<u>Health Examinations</u>. Health examinations should be provided and required of every student at least once in each school level, and if at all possible, should be given annually.

No student should be permitted to participate in strenuous activities either in class or on athletic squads under the supervision of the school without such prior health examination.<sup>5</sup>

The examination of the student should include family history, personal history, age, grade, weight, height, vision, hearing, skin, glands, teeth, mouth, nose, throat, heart, lungs, genitals, posture, feet, communicable disease, tuberculin test, and schick test.<sup>6</sup>

On the basis of examinations of this nature the children should be classified on the basis of groups determined by the school physician or family physician. Those children having no defects and who can participate in the normal physical education program will go in one group or group X. The second group (Y) will be made up of those students whose condition demands limitation of activity with no vigorous

<sup>5</sup>LaPorte, <u>op</u>. <u>cit</u>., p. 47.

<sup>6</sup>Terry H. Dearborn, <u>A Check List for the Survey of Health</u> and <u>Physical Education Programs in Secondary Schools</u> (California: Stanford University Press, 1940), p. 8.

participation. The third group (Z) will include those having conditions which show signs of improvement in some degree, and should be classified in the modified or remedial program until such conditions are brought back to normal. In many cases the (Y and Z) groups can take physical education jointly. It is preferred that such remedial classes have not over twenty-five students in a section as individual instruction is needed.<sup>7</sup>

<u>Medical Examination</u>. The problem of securing medical examiners is difficult. However, it has been a practice at Manual Training that a physician give medical examinations to all boys going out for athletics. This in part is good, in that it is a safe-guard to the school; but the remainder ofthe school population receives no examination for the entire four years. It is suggested that a plan of using community physicians be followed and that all physicians be given the opportunity to participate. Physicians should be paid by the school board for their services on the basis of either so much per examination or so much per annual examination.<sup>8</sup> If the situation becomes too complicated it is the writer's opinion that the city or county health department be called in to perform this function.

<u>Size of Classes</u>. For systematic instruction in the fundamentals of highly skilled activities relatively small

<sup>7</sup>LaPorte, <u>op</u>. <u>cit</u>., p. 47. <sup>8</sup>Ibid., p. 49.

classes are necessary. More organization is required in large classes, hence there can be less liberty of action among students enrolled. There is wide recognition of the fact that activity classes should not exceed forty-five and in no case should they exceed sixty for one instructor.<sup>9</sup>

Students who fall into the remedial and restricted groups should receive more detailed instruction. Therefore, class size should vary from twenty to twenty-five and in no case exceed thirty.10

At Manual Training classes in physical education will be assigned by free periods and study halls.<sup>11</sup> It is expected that the average class size will run around thirty, the largest being thirty-eight.

<u>Teacher Loads</u>. The estimated number of boys to be enrolled in physical education at Manual will be 158. To arrive at this figure the author took the present enrollment of boys in the ninth, tenth, and eleventh grades, excluding this year's graduating class.

Since the average class size is estimated at thirty pupils, the pupil teacher ratio will be slightly higher than that recommended by the North Central Association of which Manual Training is a member.

<sup>9</sup>Jessie Feiring Williams, Clifford Lee Brownell, <u>The</u> <u>Administration of Health and Physical Education</u>. (Philadelphia and London: W. B. Saunders Company, 1934), p. 286.

10LaPorte, op. cit., p. 50.

11Statement by Principal, op. cit.

The North Central Association of Colleges and Secondary Schools recommends the following norms concerning teacher loads:12

- (1) Pupil-teacher ratio, 25 to 1
- (2) Number of classes taught by the teacher, five daily
- (3) The total number of pupil-periods per day, 150 per teacher

It is the writer's opinion that as the enrollment stands at present (158 pupils) one man can handle effectively the physical education program. But should the estimated enrollment increase some 20 or 30 boys in the September registration another man will be needed in the department.

<u>Giving Marks or Grades</u>. In many schools, grades are determined on the basis of pupil attendance, punctuality, effort, costume, and general attitude toward physical education. Since all of these methods require subjective judgment on the part of the teacher it is quite unsatisfactory. A sound grading system should be based upon such items as objective tests and knowledge tests that cover the areas of activity being taught.<sup>13</sup> It is the writer's opinion that subjective judgment cannot be entirely ruled out in physical education when such desired goals as cooperativeness, sportsmanship and social attitudes must be judged.

It is recommended that the grades be based on the following four major items, taken from LaPorte<sup>14</sup>, allowing about

<sup>12</sup>Sharman, <u>op</u>. <u>cit</u>., pp. 143-144.
<sup>13</sup>Williams, Brownell, <u>op</u>. <u>cit</u>., p. 288.
<sup>14</sup>LaPorte, <u>op</u>. <u>cit</u>., p. 50.

twenty-five per cent for each:

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

<u>Testing and Measuring</u>. In order to serve his pupils well a teacher must know something of their individual abilities. Subjective estimates are not always too accurate and often not possible until a number of weeks or months have passed after the beginning of the school year. However, the desired information may be gained through properly administered tests and the information attained at the time of most value to him is at the beginning of the season, thus aiding in the organizing of a purposeful program.<sup>15</sup>

No one test can measure everything in the physical education program. It is the writer's opinion however, that certain tests aid in determining innate potentialities in activities which require muscular coordination. Tests of this nature can be given at the beginning of the program and used to section students according to ability. A good test of this kind is the Physical Skill test,<sup>16</sup> which requires neuro-muscular coordination to perform.

15Charles Harold McCloy, <u>Test</u> and <u>Measurement in Health</u> and <u>Physical</u> <u>Education</u>, (New York: F. S. Crofts and Co., 1944), p. 2.

16See Appendices for complete test.

### CHAPTER V

## INTRAMURAL PROGRAM

"Intramural Program" means athletics carried on within any one school and does not involve competition between teams representing different schools. Where opportunities have been provided sixty to eighty per cent of the students have been found to take part in some form of athletics.<sup>1</sup>

Organization of Intramural Program. The intramural program should provide for participation in those activities which have been, and are being taught in the physical education curriculum. Recess periods and noon hours are the simplest periods for program assignments.<sup>2</sup>

The supervision of the noon hour and after school activities program is of such importance that the principal should appoint other members of the faculty to aid in assisting the physical education instructor in this program. An alternating schedule can be worked out whereby only one-fifth of the faculty will be on duty at one time. Another good practice is to assign student managers who should assume much of the responsibility of carrying out the program.<sup>3</sup>

The giving of individual awards is generally considered to be unwise. However, the giving of plaques, cups, or

<sup>1</sup>Sharman, <u>op</u>. <u>cit</u>., p. 161. <sup>2</sup>LaPorte, <u>op</u>. <u>cit</u>., p. 58. <sup>3</sup>Loc. <u>cit</u>., p. 161. 25

banners to the class group or unit that win the championship is considered to be good. A common practice is to have a point system whereby awards are given to groups or units which at the end of the year have accumulated the greatest number of points through participation in all the activities during the year.

<u>Activities of Intramural Program</u>. The following activities have been taken in part from Sharman.<sup>4</sup>

## TABLE IV

INTRAMURAL ACTIVITIES AT SENIOR HIGH LEVEL

Fall	Winter	Spring
Archery	Badminton	Archery
Football	Basketball	Softball
Horseshoes	Pool shooting	Tennis
Soccer	Gymnastics	Field-ball
Speedball	Ping Pong	Tennis
Touch football	Shuffle-board	Track Activities
Volley ball	Twenty-One	Volley ball
Tennis	Wrestling	•

4Ibid.

### CHAPTER VI

### CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

In light of the needs of boys who will attend the senior high school, the activities which are listed in this problem should provide for muscular coordination, development of interest in wholesome recreational activities, and the development of skills which have a high degree of carry-over value. It is further concluded that one man cannot effectively carry out the program as listed and an additional instructor be added.

### Recommendations

It is recommended that the program be put into effect as is with minor changes in curriculum as the need arrives.

- 1. It is recommended that another physical education instructor be hired, and that he should be a man holding a degree in the field.
- 2. A program for girls be introduced as soon as possible and patterned after this program with modification of activities and minor changes in curriculum.
- 3. An inclusion of health education in the program. It should be introduced either as a part of the physical education program or as a separate course at a different hour.

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#### BIBLIOGRAPHY

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# APPENDIXES

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## APPENDIX I

## PHYSICAL SKILL TEST (\*)

This test for determining native differences in physical skill is a group of exercises involving various method of locomotion for a distance of fifteen feet. As has been suggested, these exercises do not involve strength, speed, or endurance because these elements of skill are the product of experience and environmental conditions and are therefore acquired, not native. Moreover, the exercises are foreign to any sort of natural activity thus avoiding the possibility of the subjects having practiced similar activities. The subjects are given an oral explanation and an expert demonstration of each exercise before the members of the class attempt it. Thus they have a clear mental picture of the exercise and the problem is simply one of securing the necessary neuro-muscular coordination to perform it. The last in line has no advantage over the first because the mental picture secured from the demonstration is not improved by watching other students perform. We are testing, it is believed, native neuro-muscular coordination and nothing else.

The test is easily administered and can be given to twenty or thirty persons in the usual forty-minute gymnasium period. This test has a reliability coefficient of .97 and a validity coefficient of .69. Hence it is an adequate basis for dividing a class into sections or groups of equal ability. The only equipment needed is a sheet of ten ounce canvas about eight feet wide and twenty feet long, gymnasium mats, and a scoring sheet. This canvas is laid over two standard 6 x 10 gymnasium mats placed end to end, and the edges are tucked under or fastened down to keep the surface smooth.

The students may be lined up along one side of the chart where they can clearly see. The scorer may sit on the opposite side where he, too, can see every line. The scoring is objective, and is decided chiefly by whether or not the subjects feet touch the canvas at the proper places and within the specified boundaries.

The pattern, which is painted on the canvas, is a rectangle four and one-half feet wide and fifteen feet long, divided into squares eighteen inches on a side chart. This makes three lanes eighteen inches wide down the length of the painted chart. The main outline of the rectangle and the lines marking the lanes are painted black in lines three-fourths of

\*Granville B. Johnson, The New Physical Education. Burgess Publishing Company, 1950. p. 104. an inch wide. The second fourth and the center lane are not marked off as squares, but the first, third, and alternate spaces in this lane contain each a target twelve inches by three inches in the center of the square. There is another lane two feet wide marked in red down the center of the canvas, divided half way by a cross line of red; this is used only in the rolling exercise.

The instructor should explain the purpose and the general nature of the test, and point out the markings on the chart, disregarding the red markings until they are needed. He should also explain the method of scoring so that the subjects may observe and score each other. To explain this he simply demonstrates the errors on which the scoring is based: e.g., position, overstepping the grounds, lack of rhythm, etc. The mental picture of each exercise is presented through both eye and ear, the instructor giving explicit directions for each exercise and demonstrating it. The instructor must be completely familiar with the execution of the ten exercises; he must be able to give a perfect performance, he must also master the technique of giving the instructions. Each exercise is demonstrated only once, and the pupils must all perform it before the next exercise is introduced. The subjects must not imitate their classmates; they imitate only the instructor. The exercises are as follows:

## 1. Straddle Jump

Hands on hips. Start with feet together in first center target. Jump a straddle to first two black squares. Return feet-together position on second target. Proceed thus across mat in regular jumps, finishing on the finish target.

## 2. Stagger Skip

Hands on hips. Start with feet together in front of the right lane. Step with left foot on first center target and hop, still on left foot, to first black square to second black square on right. Continue in regular skips across mat.

## 3. Stagger Jump

Hands on hips. Feet together throughout the exercise. Start with feet together in front of right lane. Jump obliquely with both feet to first white square on right, then to second white square on left, finishing on finish target.

# 4. Forward skip, holding opposite foot from behind.

Start with feet together before either right or left lane (optional). Step with right foot into first white space, raising left foot behind and taking it with right hand behind right thigh. Hop in this position on left foot to second black space. Continue thus across the mat.

## 5. Front Roll

Disregard all black markings and perform in the red lane. Start outside of chart in front of center lane. Perform two front rolls, the first within the limits of the first half of the lane, the second within the limits of the second half never touching or over-reaching the red lane.

## 6. Jumping Half-turns, right or left

Start with feet together on first target and hands free. Jump, feet together, to second target while executing a half-turn right or left, ending on second target facing starting end. Jump to third target, executing another half-turn, rotating in same direction (as a barrel would be rolled along upright) ending on the third target facing the finish. Continue across mat, ending on finish target facing starting end.

7. Back Roll

Perform in red lane. Start in front of red lane with back to the pattern. Execute two back rolls, one on each half of the lane.

# 8. Jumping Half-turns, right and left alternately

Start as in (6) on first target. Jump with both feet, as in (6) to second target executing a half-turn either right or left. Jump, as in (6), to third target executing half-turn in the <u>opposite direction</u>. Continue across mat, alternating the direction of rotation, finishing as in (6).

9. Front and Back Roll Combination

Perform in red lane. Start as in (5), facing red lane. Perform a front roll in the first half of the lane, finishing with legs crossed at ankles and executing a twofeet pivot turn right or left. Perform a back roll in the second half of the lane.

## 10. Jumping Full Turns

Start outside of chart in front of first white space in either outside lane. Jump with feet together to first black space in same lane, executing a <u>full turn</u> with the body right or left. Continue across the mat, executing full turns, rotating in the same direction, being sure to land on both feet in the black space.

## Scoring

Maximum score 100; 10 for each exercise. Minimum score 0, for any exercise.

When a step, skip, or jump is made into any white or black square with one or both feet, feet must land entirely within the limits of that square. When a step, skip, or jump is made onto any target with one or both feet, feet must land touching the target and not touching side lines or outside lanes. In the rolls, the subject must not touch or over-reach the sidelines of the red lanes, and must complete each roll within the prescribed half of the lane, not over-reaching the end markings. All the exercises must be performed with a reasonably erect and dignified posture; the position in the first three exercises is "hands on hips." In any exercise the prescribed position must be observed throughout the exercise. The jumps must be performed with a regular rhythm, about two (short) jumps to the second or five seconds for each exercise.

- 1. Deduct one from the maximum score for each jump in which feet over-step squares or miss target, one for each jump in which feet do not land at the same time, one if position is discontinued somewhere in the exercise, and one if rhythm is not maintained. (If a subject completes a jump with heels over-stepping a square, but lifted so as not to touch the canvas, the jump is good.)
- 2. Score as in 1, except that feet do not come down together.
- 3. Score as in 1.
- 4. Deduct one for each step or jump in which subject over-steps a square, or in which he does not have the proper position, or both. Deduct one for lack of rhythm.
- 5. Count five for each roll. Deduct two for overreaching red line right or left in each roll. Deduct one for over-reaching end limit on each roll. For failure to perform a true roll, deduct five.
- 6. Five jumps. Deduct two for each jump in which the subject does not land with both feet on the target, or turns the wrong way, or both.
- 7. Score as in 5.

- 8. Score as in 6.
- 9. Score as in 5. Deduct one also if subject over-steps borders or executes turn wrong.
- 10. Score as in 6. Deduct two if subject fails to land on both feet, or over-steps black square, or turns too far or not far enough, or loses balance before starting next jump.

The total points deducted, subtracted from the maximum score of 100 gives the subject score on the physical skill test.

Sections can be made according to scores, using five or any other number of divisions. For five sections, the divisions can be based upon the natural curve of distribution. In each of the extreme divisions will be the same number of cases, and in each of the next extreme divisions the same number, according to the several systems in common use, as follows:

Section	1.	•		•	•	•	•	•	•	•	8%
Section	2.	•	•	•	•	•		•		•	24%
Section	3.	•		•	•	•		•	•		36%
Section	4.		•		•						24%
Section											

Or the total range of score of the group tested, from the lowest to the highest can be divided into five equal parts, to secure the range of the five sections. The first method allows a sectioning on the basis of the average ability of the group; the second permits a natural skewing of the curve to fit the peculiar distribution of the group. The middle group, in large and normal classes, will always be the largest.

This test has been given to 1,500 pupils of both sexes and ages ranging from 11 to 38 years. Physical size did not appreciably affect the functioning of the test. That is, a child of twelve years had no more difficulty in executing the exercises than did the college freshman. The curves of distribution of ability of both extreme age groups have the same characteristics. However, the correlation between intelligence scores and the physical test scores is markedly different for the two groups. For those on college students, a correlation of .49 was found, while for junior high pupils, it was only .13. We cannot account for this at the present time, except that it is likely a manifestation of maturation.

This test for sectioning must not be considered the last word in measurement of physical differences, but with intelligent use it is extremely valuable, especially in sectioning large classes in physical education. It is hoped that this presentation of the test will be useful to teachers, and that it will stimulatefurther research in the matter of differences in physical skill. As the test stands now, we can say of it, that:

- Within broad limits, it measures native physical skill;
- 2. With matured groups its results have a relatively high correlation (.49) with the results of intelligence tests;
- 3. It makes easy and valid the sectioning of classes into homogeneous groups.

## APPENDIX II

## BRACE SCALE OF MOTOR ABILITY TESTS (\*)

DIRECTIONS FOR THE BRACE SCALE OF MOTOR ABILITY TEST General Directions for Applying the Tests

- (1)Before giving the tests, read and study carefully the explanation of performance and scoring for each test. Study the illustrations. Be sure that you understand what constitutes failure and what success. Try each test yourself to see what it involves. Score yourself. Remember that you can demonstrate the test even though you are unable to perform it successfully.
- (2)Select a place to give the tests which will allow room to space your group properly. If possible, have girls wear gymnasium suits and boys wear tennis shoes. Older girls must be in appropriate clothes.
- (3)Provide a scoring blank and a pencil for each pupil taking the tests, and an ordinary watch for yourself. Use only the printed scoring blanks.
- (4)Directions for Handling Pupils:
  - Directions to be followed when the tests are to be A. given individually and score by an examiner:
    - (a) Test four pupils at a time.

    - (b) Have pupils stand in a line about 5 feet apart.(c) Say to the pupils: "You are to be given a test of your ability to do certain stunts. Listen to the explanation and watch the demonstration. Do not start until I say go. No practice trials are allowed. Try each stunt slowly and care-fully and do your best. Do not talk or laugh."
    - (d) Have each pupil properly fill in the spaces at the top of his scoring blank. Then collect these blanks and lay them on a talbe or on the floor in a row and in the order in which the pupils are standing.
    - (e) Explain and demonstrate the first test. Explain what constitutes failure and what constitutes success. Give the test and record the score on the proper blank. Repeat this process for each test.

(\*) Brace Kingsley David: Measuring Motor Ability; pp. 100-126. A. S. Barnes and Company (New York) 1927.

- B. Directions to be followed when pupils are to score themselves:
  - (a) Test children in groups of not more than 20 or 30 pupils in a group, who are in the fifth grade or above.
  - (b) Have each pupil fill out a score blank.
  - (c) Arrange the group in some form of open order so that there is at least six feet between pupils.
  - (d) Explain that each child is to score himself or herself on each test by marking an X for success and an O for failure.
  - (e) Have at least two pupil assistants. Explain to the group that the assistants will watch them to keep a check upon how they score themselves. Have the assistants walk among them and watch the scoring.
  - (f) Explain and demonstrate the first test and illustrate what constitutes success and what failure.
  - (g) Take special pains after each test to repeat the explanations of what constitutes failure. Students whose scoring is questioned should have their names noted and be retested on another day.
  - (h) Allow 30 minutes for the completion of all tests by this method.
- C. Directions to be followed when pupils score each other:
  - (a) Arrange pupils in parallel rows of even number. Have approximately 5 feet between pupils in a row, and 10 to 15 feet between rows. Pass out pencils and papers from the end of each row.
  - (b) Have pupils fill in the spaces for data at the top of scoring blanks. Instruct them to give their weight in street clothes without coats removed.
  - (c) Have every other row of pupils face about, thus having pupils in each two rows facing together.
  - (d) Have pupils exchange papers.
  - (e) Explain: "You are to be given a test of your ability to do certain stunts. Listen to the explanation and watch the demonstration. Do not start until I say go. No practice trials are allowed. When I say go, try each stunt slowly and carefully. Do your best. Do not talk or laugh."
  - (f) Number the alternate lines 1 and 2. Have all pupils in lines 1 sit on the floor. Have pupils in lines 2 lay their papers and pencils on the floor and step back two steps.
  - (g) Explain: "Those pupils standing will take the first ten tests. Each person sitting down will score the person whose score blank you hold.

Then we will change and those sitting will take the tests. You will all have a chance at each test."

- (h) Explain: "Watch the person you are scoring. Pay no attention to any one else. If the person you are scoring does the test successfully, exactly as I have explained, mark a cross (X) in the space after the number of test. If the test is not done correctly it is failed, so mark a zero (O). Be fair to the person you are scoring. I will watch to see that you do it correctly."
- (i) Explain and demonstrate the first test and illustrate what constitutes a failure. Do it correctly and say, "That would be scored a cross (X)." Do it incorrectly and say, "That would be scored a failure, zero (0)."
- (j) Use formal control while giving the tests. Always allow no talking or laughing. Do not allow a pupil to watch the scoring which is done on his or her blank.
- (k) It is well to have two or three pupil assistants patrol the scoring. Allow 35 to 40 minutes when the tests are pupil scored.
- (1) Give the first 10 tests (from M) to lines 2. Then change, have lines 2 sit and lines 1 stand. Give the second 10 tests (from N) to lines 1. Change and give the second 10 tests (from N) to lines 2. Change and give the first 10 tests (from M) to lines 1. This alternating reduces practice effect.
- (m) Follow explanations exactly.
- (5) When all the tests are completed, have the students check on the information at the top of the blank. Have papers and pencils passed to one end of each row and collected.
- (6) Score the blanks. Count the total number of tests passed and enter this number in the Tests Passed space.
- (7) Change the score to its corresponding Scale Score by using the Table of Scale Scores, at the end of test, provided in the booklet.
- (8) The scale score is a student's motor ability score.
- (9) Motor Ability Scale Scores may be interpreted as follows:

APPROXIMATE MEANING OF SCALE SCORES

and the state of the		
Scale Score	Per Cent	Approximate Meaning*
Above 50	50	About average
Below 50	50	Below average
Between 40-60	66	The middle 2/3
Above 60	16	The highest 1/6
Below 40	16	The lowest 1/6

\*In terms of all ages combined

DESCRIPTIONS AND INSTRUCTIONS ON SCORING

#### Form M

#### TEST I

Walk in a straight line, placing the heel of one foot in front of and against the toe of the other foot. Start with the left foot. Take 10 steps in all, 5 with each foot. Eyes open.

Failure----l. Losing the balance and stepping out of line.

- 2. Not walking in a straight line.
- 3. Not placing heel to toe.

## TEST II

Stand. Jump into the air and clap both feet together once, and land with the feet apart (any distance).

Failure----1. Landing with the feet touching each other. 2. Failure to clap the feet in the air once.

### TEST III

Lie flat on the back on the floor. Fold the arms across the chest. Raise the trunk to a sitting position. Do not raise the feet above the floor, or unfold the arms.

Failure---l. Raising the feet above the floor. (This does not include sliding the feet, which is permissible.)
2. Unfolding the arms.

3. Failure to sit up.

#### TEST IV

Stand. Fold the arms behind the back. Kneel onto both knees. Get up without losing the balance or moving the feet about.

Failure----l. Losing the balance either going down or getting up.

2. Moving the feet after standing up.

3. Unfolding the arms.

#### TEST V

Take a front leaning rest position, i.e., place the hands on the floor, arms straight, extend the feet back along the floor until the body is straight (in an inclined position to the floor). Bend the arms, touching the chest to the floor, and push up again to straight arms. Do this 3 times in succession. Do not touch the floor with the legs or waist.

Failure----1. Failure to push up 3 times.

- 2. Failure to touch the chest to the floor each time.
- 3. Resting the knees, thighs, or waist on the floor at any time.

#### TEST VI

Squat on the toes with feet together and knees out, and hands between the knees with fingers touching the floor. Spring up onto both heels, with legs straight and toes up, and swinging both arms out at the side level with the floor. The feet should then be about 18 inches apart. Head up. Repeat this exercise three times (in all) rhythmically.

- Failure---- Failure to get the arms and legs in position.
  - 2. Failure to do it three times in succession without stopping.

#### TEST VII

Stand with feet together. Jump into the air and make a full turn to the left, landing on the same spot. Do not lose the balance or move the feet after they strike the floor.

Failure---l. Failure to get all the way around. 2. Moving the feet after they strike the floor.

#### TEST VIII

Jump into the air and clap the feet together twice and land with the feet apart (any distance).

Failure---l. Failure to clap the feet together twice. 2. Landing with the feet touching each other.

#### TEST IX

Stand on the right foot. Grasp the left foot behind the right knee. Bend and touch the left knee to the floor, and stand up without touching any other part of the body to the floor, or losing the balance.

Failure----l. Touching the floor with any part of the body except the left knee.
2. Failure to touch properly and stand with

right leg straight, and without losing the balance.

#### TEST X

1 - - P-

Hold the toes of either foot in the opposite hand. Jump up and jump the free foot over the foot that is held, without letting go.

Failure---l. Letting go of the foot that is held.
2. Failure to jump through the loop made by holding the foot.

Form N

#### TEST XI

Jump into the air and slap both heels with the hands behind the back.

#### TEST XII

Stand, kick the right foot up so that the toes come at least level with the shoulders. Do not fall down on the floor.

Failure---l. Failure to kick as high as the shoulders.
2. Falling down and touching the floor with any part of the body other than the feet.

#### TEST XIII

Stand on the left foot. Bend forward and place both hands on the floor. Raise the right leg and stretch it back. Touch the head to the floor, and regain the standing position without losing the balance.

Failure---l. Inability to touch the head to the floor. 2. Losing the balance and having to touch the right foot down or step about.

#### TEST XIV

Stand with both feet tight together. Bend down, extend both arms down between the knees, around behind the ankles, and hold the fingers together in front of the ankles without losing the balance. Hold this position for five seconds. (Counted by scorer).

Failure----1. Falling over.
-2. Failure to touch and hold the fingers of both hands together.
3. Failure to hold the position for five seconds.

#### TEST XV

Stand with both feet together. Swing the arms and jump up in the air, making a full turn to the right. Land on the same spot and do not lose the balance, that is, do not move the feet after they first strike the floor.

Failure---l.

- 1. Failure to make a full turn and land facing in the same direction as at the start.
- 2. Losing the balance and having to step about to keep from falling.

#### TEST XVI

Kneel onto both knees. Extend the toes of both feet out flat behind. Swing the arms and jump to the feet without rocking back on the toes, or losing the balance.

Failure---l. Having the toes curled under and rocking back on both feet.
2. Failure to execute the jump, and stand still on both feet.

#### TEST XVII

Fold the arms across the chest. Cross the feet and sit down cross-legged. Get up without unfolding the arms or having to move the feet about to regain the balance.

Failurel.	Unfolding the arms.
2.	Losing the balance.
3.	Failure to get up.

### TEST XVIII

Stand on the left foot. Hold the bottom of the right foot against the inside of the left knee. Place hands on hips. Shut both eyes, and hold the position for ten seconds, without shifting the left foot about on the floor.

Failure----l. Losing the balance. 2. Taking the right foot down. 3. Opening the eyes or removing the hands.

#### TEST XIX

Take a squat rest position. That is, place the hands on the floor between the knees and close to the feet. Bend the elbows slightly and place both knees well over the elbows. Rock forward onto the hands, raising the feet from the floor. Support the body on the hands. Hold the position for five seconds (as counted by the scorer).

Failure---- Failure to keep the body off the floor for five seconds.

#### TEST XX

Stand on the left foot with the right foot extended forward off of the floor. Sit down on the heel of the left foot without touching the right foot or hands to the floor. Stand full up without losing the balance.

Failure---l. Failure to sit all the way down on the left heel.

- 2. Touching the right foot or hands to the floor.
- 3. Failure to stand up with left leg straight before touching the right foot.

# BRACE SCALE OF MOTOR ABILITY TESTS

Scoring Blank for Brace Scale of Motor Ability Tests

Date	Name		
Class	Height	Weight_	
School	_Age	Years	_Month

Form M

Form N

In Scoring X Means Success; O Means Failure

1. 1

No. of Stunts	lst Trial	2nd Trial	Nc. of Stunts	lst Trial	2nd Trial
1			11	;	*
2			12		
3			13		
4	•		14	•	
5	-		15		
6			16		
7			17		
8			18		
9			19		
10			20		

# MEASURING MOTOR ABILITY

Table For Converting Test Scores Into Scale Scores\*

For Ages 8 to 18

ter se de la constant	
Score (Tests Passed)	Scale Score
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	19 22 23 26 29 33 35 38 40 43 45 48 52 55 58 61 64 64 68 72 76 80

\*To Use this Table: Find the sum of tests passed--Forms M and N described in the test. The corresponding Scale Score is the score made by the student on the Motor Ability Tests.