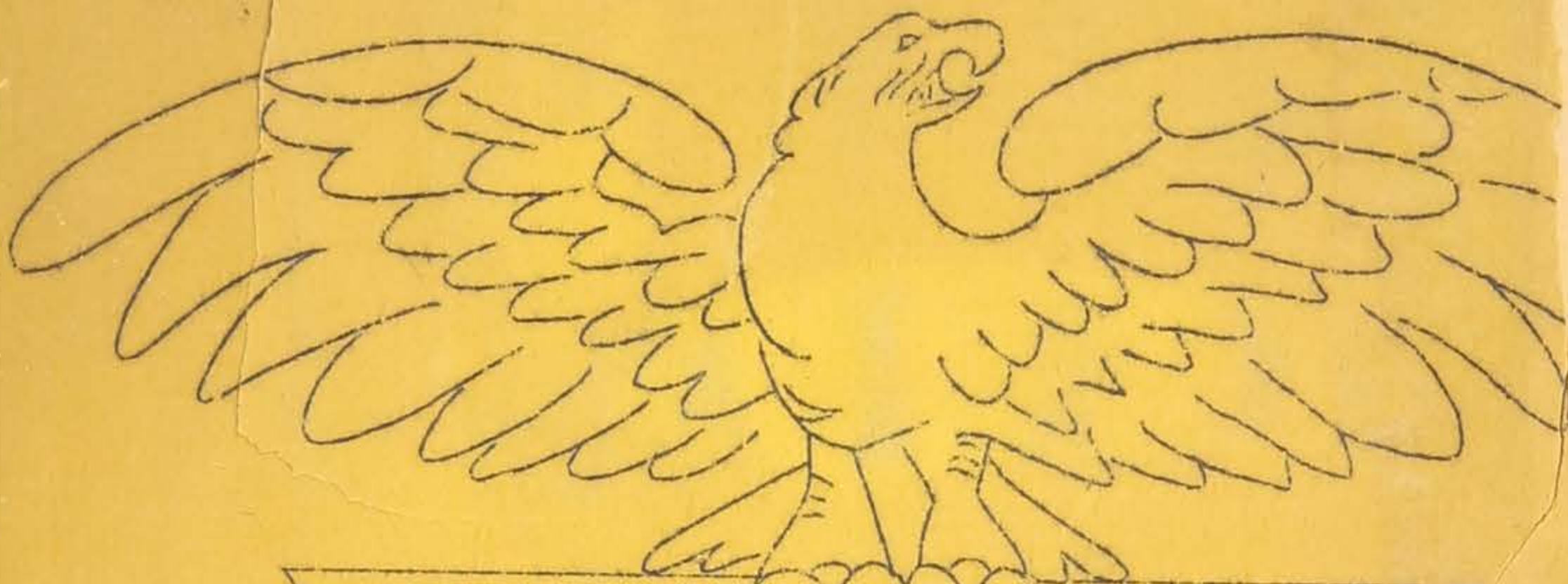


**GV
224
.I8
I65
1942**

**Physical fitness program for high school boys,
for emergency use in the physical education
classes in the high schools of Iowa (1942).**



EVERY IOWA
HIGH SCHOOL
BOY
PHYSICALLY
FIT

Iowa
371.73
109p

FOR

THE NATIONAL EMERGENCY

PLEASE RETURN TO
STATE TRAINING LIBRARY

Cir
Feb

Iowa
371.73

pam.

1090

Iowa. Public instruction department.
Physical fitness program for high
school boys.

TRAVELING LIBRARY

OF THE STATE OF IOWA

To communities, and schools, books for re-
loaning are loaned for a three month's period.
To individuals and to clubs for study use,
books are loaned for two to four weeks.

Borrowers are requested to return the books
as soon as the need for them is passed, and *al-
ways* when books are due. Where books are re-
loaned, fines may be charged by the *local li-
brary* and *retained* when the books are re-
turned.

DAMAGES. The pages of these books must
not be marked and librarians are required to
note the condition of books when loaned to
borrowers and when returned by such bor-
rowers and to report damages beyond reason-
able wear to the State Traveling Library.

Circular #7
February, 1942

State of Iowa
DEPARTMENT OF PUBLIC INSTRUCTION
Jessie M. Parker, Superintendent
Des Moines

PHYSICAL FITNESS PROGRAM

FOR

HIGH SCHOOL BOYS

THE VETERANS LIBRARY
STATE OF IOWA

For Emergency Use in
the Physical Education Classes
in the High Schools of Iowa

EMERGENCY PHYSICAL FITNESS PROGRAM FOR HIGH SCHOOL BOYS

Contents

	Page
Foreword	
I. Purpose and Scope of This Bulletin	4
II. Increased Time Allotment Necessary for Physical Fitness Program	5
III. Organizing the High School for the Emergency Physical Fitness Program	6
A. The Interscholastic Athletic Program Should be Curtailed	6
B. Suggestions for Finding More Time and Teaching Force for Physical Education	6
C. Health or Physical Examination Should be a Part of the Physical Fitness Program	8
D. Serious Thought and Immediate Attention Should be Given to the Reorganization of the Physical Education Program	9
IV. Program for Out-of-School Youth Recommended	10
V. Types of Activities Included in Emergency Physical Education Program	11
A. Conditioning Exercises	11
B. Combative Contests	14
C. Games and Sports	20
1. Types and purposes	20
2. Games and activities of low organization	20
3. Sports and games of high organization	23
VI. Informal Tests of Strength and Performance	25
VII. Suggested Typical Forty Minute Period of Activity to Develop Physical Fitness	31
VIII. Scope of Physical Training According to U. S. Army Manual	32
IX. Selected Books on Physical Training that should be in Every High School	35

F O R E W O R D

In this time of national emergency physical fitness on the part of all persons, including oncoming generations, is vital.

The schools can contribute to defense by seeing that every pupil through proper health and physical education is brought to the best possible condition.

This bulletin is prepared in view of the above objectives as an aid to schools.

Grateful acknowledgment is made to Mr. A. J. Steffey of the State Department of Public Instruction who acted as chairman of the committee, and to the following members of the Iowa Physical Education Association who have given generously of time and work in preparing this bulletin:

E. M. McGrew, Superintendent of Schools, Williamsburg; Hugo Otopalik, Associate Professor of Physical Education for Men, Iowa State College, Ames; Roy B. Moore, Physical Education Director, Monticello; David A. Armbruster, Associate Professor and Swimming Coach, State University of Iowa, Iowa City; C. T. Peterson, Physical Education Instructor, University of Dubuque, Dubuque; Fred Winter, Supervisor of Physical Education, Cedar Rapids; Roscoe O. Abbett, Physical Education Instructor, Des Moines; John Johnson, Supervisor of Physical Education, Des Moines; Noel Petree, Professor of Physical Education for Men, Drake University, Des Moines.

We wish also to express appreciation to Mrs. Bernice Setzer, Director of Art Education in the Des Moines Schools, who made the cover design for this booklet.

I

PURPOSE AND SCOPE OF THESE MATERIALS

The purpose of the materials in this bulletin is to give superintendents and physical education teachers some definite, practical assistance in organizing the physical education program so that it will effectively contribute to the development of physical fitness in every high school boy -- more especially physical fitness necessary to meet the present war emergency. Military officials have been consulted, and it is understood that specific military training in the public high schools is not desired in the present emergency. Rather, the responsibility of the schools is to give the types of training or exercises that will develop physical fitness and that are basic or preliminary to the specific military training given after the boys are inducted into service. Therefore, the activities in this bulletin are designed principally for that purpose.

Since the materials in this bulletin were prepared under time pressure on account of the sudden entrance of our country into the war, they are designed especially for one phase of the physical and health education program -- that of developing physical fitness on the part of all boys in high school. Reference is made to the importance of a health examination, but particular health instruction and the broader health program have not been included. Neither has the physical and health education program for girls been dealt with. These problems will be handled in other courses of study already prepared or in the process of preparation, and in conferences, study centers and institutes which will be held later in every section of the state.

II

INCREASED TIME ALLOTMENT NECESSARY FOR PHYSICAL FITNESS PROGRAM

The Iowa law states that the teaching of physical education, exclusive of interscholastic athletics, shall be required in every public elementary and high school of the state. The course must occupy not less than fifty minutes per week, exclusive of recesses. Consequently, most schools in the state have based their programs on this minimum time allotment. Most school officials admit that such a time allotment is utterly inadequate to develop an effective program. Leaders and authorities in physical education insist that an immediate increase in time allotment is necessary.

Recognizing the existing war emergency and the pressing need for greater physical fitness of the boys of Iowa, the superintendent of public instruction requested a group of competent physical education leaders to outline plans and activities to meet this demand for physical fitness in our youth. In order to have sufficient time for an effective program, it is recommended that the program of studies be so organized that every boy in high school will have one period daily for the development of physical fitness.

III

ORGANIZING THE HIGH SCHOOL FOR THE EMERGENCY PHYSICAL FITNESS PROGRAM

A. The Interscholastic Athletic Program Should Be Curtailed

Competitive athletics are undoubtedly a powerful motivating force for the physical conditioning of high school boys. Both the committee and the department of public instruction recognize this fact. The chief weakness of interscholastic team competition, however, lies in the fact that most of the practice time is devoted to the training and development of the relatively small number who participate. Competitive athletics, therefore, do not provide a physical fitness program for all boys. Such a program can better be provided through intramural sports, mass athletics and group games, and activities of the type outlined in this bulletin.

In order that more emphasis will be placed upon the development of physical fitness in all high school boys, less time should be devoted to interscholastic competition. In the first place, some of the time now devoted to the practice of actual playing techniques should be used for conditioning exercises such as those given in this bulletin. In the second place, fewer interschool competitive games should be scheduled. Many high schools in Iowa are now playing two regularly scheduled games of basketball per week and ordinarily play the same number of baseball games per week in the spring and fall. Beginning with baseball, schools should schedule no more than one game per week for this spring and next fall. In arranging basketball schedules for next winter, only one game per week should be scheduled. In these ways not only may more time be made available for the development of physical fitness in all boys, but also tire and transportation expense will be conserved and the regular work of the school less interrupted.

B. Suggestions for Finding More Time and Teaching Force for Physical Education

If one period of instruction per day is provided for every boy in high school, reorganization and adjustments will have to be made in the daily program and schedule of studies so that additional time and teaching force will be available for physical education. Since the size, organization, and relative teaching staff available vary so greatly in the schools of the state, it is impossible to give suggestions that would fit specifically into each situation. Superintendents and principals will have to give considerable thought to this problem and devise ways that are most effective and appropriate in particular schools. Some general suggestions are given here in order that this bulletin will be as helpful as possible in solving these emergency problems. The suggestions are intended principally for the typical Iowa school which has an enrollment of less than one hundred pupils.

In consolidated schools at present, practically all practice for athletic teams is held during school hours, since boys and girls must go home on the school busses. Frequently two activity periods are scheduled so that music, physical education and other activities may be alternated as between rooms, periods and days of the week. In many schools team practice is held during the noon hour. If the practice is held soon after lunch, this is probably a positive harm to health and physical fitness. This plan, therefore, is not recommended. If the

school is so small that all boys are effectively provided for during the daily practice period for athletic teams, then some of the time each day should be devoted to the types of exercises given in this bulletin. If all of the boys are not included in the practice for athletic teams and it is impossible to find time in the daily program of studies for a sufficient number of classes in physical education to provide a period daily for every boy, then the school time devoted to practice for athletic teams should be reduced. Many schools now play two scheduled games per week. With this actual playing experience, daily practice periods in most cases not only are a waste of time but probably actually cause staleness rather than improved team play, especially late in the season.

In many small schools some small classes can be eliminated by combining more groups, alternating more subjects, or reducing electives. Frequently small classes in typing and shorthand, especially second year classes, are operated. Such small classes are often unnecessary and unjustifiable. They require as much of a teacher's school time as a large class and are extremely expensive. Economy and the present war emergency demand that such costly, inefficient and indefensible practices be discontinued. It seems there should be little question about the relative importance of physical fitness and, for example, the ability to type sixty words per minute, if one of the two has to be sacrificed.

In many high schools, class periods are 55 to 60 minutes in length. In some schools the usual 45-minute period is followed during part of the day and the 60-minute period during the remainder. This variation in the length of periods offers a possibility of finding more time for the emergency physical fitness program. In consolidated schools where hour periods are used, sufficient periods could be shortened to provide another period in the school day. The studying now done at school could be done at home. In city and town schools where team practice is held after school hours, some periods could be reduced to forty-five minutes and the extra time used for the physical fitness program. IT SHOULD BE EMPHASIZED HERE, HOWEVER, THAT ADDITIONAL TIME FOR PHYSICAL EDUCATION IS JUSTIFIABLE ONLY WHEN IT IS DEFINITELY PLANNED AND ORGANIZED AND WHEN IT INCLUDES ACTIVITIES OF THE TYPE THAT DEFINITELY CONTRIBUTE TO THE DEVELOPMENT OF PHYSICAL FITNESS IN ALL BOYS.

If enough classrooms and teachers are available, some additional time and teaching force can be saved by scheduling all class groups so that there are no pupils in the study hall during some periods, thus doing away with the necessity of study hall supervision.

In many cases the superintendent is now teaching all, or more than, he should. However, in some cases he could teach more classes, thus making more time available for the physical education teacher to devote to more classes in this subject. Many of the office details now requiring vacant periods could be attended to before or after school. This would mean a longer day for the superintendent, but these unusual times are going to mean longer hours and harder work for people in all occupations.

Sometimes in order to give preference to certain subjects, such as typing, music, basketball, dramatics, etc., or to assign preferred subjects to certain teachers, fundamental principles of teacher preparation are disregarded and the teaching load unevenly distributed. A careful study of the training of each teacher and the assignment of each subject within a field to the teacher best prepared in that subject, instead of dividing the classes in a subject among several teachers,

would reduce the number of and the time required for preparations for some teachers. Careful assignment of subjects would make it possible for some teachers to teach more classes with an actual improvement in the quality of instruction.

In those schools in which the gymnasium is fully occupied with the present program, it will be necessary to increase the number of activities that can be directed out of doors. In some cases vacant rooms and corridors can be utilized. Although the gymnasium facilities in many schools are now quite adequate because of building additions in recent years, by checking through the physical education bulletin teachers will find activities that are adapted to schools with limited facilities.

C. Health or Physical Examination Should Be A Part of the Physical Fitness Program

The program outlined in this bulletin is designed for all high school boys. It should, therefore, be a required program. Since every boy should be included, some will have physical defects which will not permit them to engage in certain types of activities. It is, therefore, recommended that arrangements be made in each school for an examination of each pupil by a doctor and dentist. The principal purpose of an examination should be to screen out pupils with heart and other weaknesses and detect for corrective purposes vision and teeth defects.

Since this bulletin is not designed to cover the health education program, details for such a program that is adaptable to the varying health education facilities in the schools of Iowa cannot be given here. These details are covered effectively in the Iowa Public Health Bulletin entitled "Health Education for the Elementary Schools of Iowa," issued by the State Department of Public Instruction and published by the State Department of Health in Special Bulletin 2A, July, 1936. Copies were sent to every school in Iowa. The following suggestions were taken from this bulletin:

Steps Suggested in Arranging for Examination by Doctor and Dentist

"Obtain the advice and support of the school board first.

"Obtain the advice and support of the local dental and medical societies.

"Consult and obtain the aid of the county or school nurse, if there is one.

"Consult and seek the aid of local health agencies such as the Christmas Seal Committee, the Red Cross Chapter, or health committees of local organizations.

"Obtain the consent of each parent before examining each child.

"See that the results of the examination are recorded and kept in the school file for reference from year to year.

"Record cards may be obtained from Iowa Tuberculosis Association through your local Christmas Seal Committee."

Suggestions for Carrying Out Examination Plans

"A. By physician and dentist

While individual examinations by the family physician and dentist are preferable, it may be advisable or necessary to start first with group examinations. If the doctor and the dentist cannot come to the school, the children may be transported through the help of parents or by the use of the school bus to the place where the examination is to be given. This place may be a doctor's office, a community hall, or a school, or best of all, plans may be made so that parents may take their children to the doctors' and dentists' offices individually during a specified period for the examinations. All arrangements, including financial, should be clearly set up before the examinations are made. Sometimes the school board bears the expense. In other cases, funds may be obtained from local health agencies. Sometimes funds may be arranged by parents through entertainments and the like. In other communities it may be feasible for each parent to pay a small amount for such an examination. The methods chosen depend upon the community attitude toward health and their understanding of examinations. It must be clearly understood that group examinations are not as inclusive or as individual as the doctor can give his private patient. Therefore, no standards can be set either as to the fee charged or as to the examination.

"B. By nurse

When it is not possible to arrange for examination by a physician or a dentist, it may be possible to arrange for an inspection by a public health nurse.

1. If there is a community or school nurse, arrange with her to make the inspection.
2. If there is not a community or school nurse, it is sometimes possible to make arrangements for itinerant nursing through the local Christmas Seal Committee or the local Red Cross Chapter.
3. Records should be kept of this inspection as mentioned under examinations."

Some very fine additional helps on the health education program will be found in the above bulletin.

D. Serious Thought and Immediate Attention Should Be Given to the Reorganization of the Physical Education Program

Although on first thought it would seem that increasing the time allotment for physical education as recommended in this bulletin is unwarranted, it will be readily admitted that basically there are no more important subjects in the curriculum than physical and health education. If these subjects are effectively organized and taught, they should develop individuals who will not only live longer, happier and more efficient lives, but who will also have the strength and courage to serve their country in times of such emergencies as the present.

School administrators are, therefore, urged to study their programs of studies very carefully, to evaluate them very critically and to make every effort to reorganize these programs so that sufficient time and teaching force will be available to develop, maintain and establish physical fitness in every boy and girl. THE GOVERNMENT AND THE PUBLIC MUST BE CONVINCED THAT THE SCHOOLS ARE DISCHARGING THIS RESPONSIBILITY OR FUNDS WILL BE DIVERTED FROM SCHOOL CHANNELS AND THE JOB GIVEN TO SOME OTHER AGENCY.

IV

PROGRAM FOR OUT-OF-SCHOOL YOUTH

This bulletin is prepared especially for high school boys. However, it is recommended that wherever possible classes in physical fitness be organized for out-of-school youth. These young men could be scheduled for an evening school period and the materials in this bulletin used for the group.

TYPES OF ACTIVITIES INCLUDED IN EMERGENCY PHYSICAL EDUCATION PROGRAM

A. Conditioning Exercises

1. Purpose

- a. To give the individual a general fundamental training in body control
- b. To develop good posture in every movement
- c. To improve ability to respond instantly and accurately to the spoken command
- d. To transform an unorganized group into an orderly group
- e. To promote organic vigor, strength and endurance
- f. To promote a feeling of general well-being
- g. To develop mental alertness

2. Organization for class activities*

- a. "Fall In" in front rank
- b. "Attention" (Stress rhythmic and regular breathing while at attention)
- c. Count off by 4's or by 2's or by 3's
- d. To open order for exercises --

Count off by 4's
 No. 1's hold fast
 No. 2's take 2 steps forward
 No. 3's take 4 steps forward
 No. 4's take 6 steps forward

For example:

<u>Instructor</u>											
4				4				4			
	3				3				3		
		2				2				2	
4	3	2	1	4	3	2	1	4	3	2	1

*Note - See Gymnastic Nomenclature, Associated Press, 124 East 28th St., New York, N.Y.

Also see Mass Physical Training by Joseph Edward Raycroft, Washington, D.C., United States Infantry Association.

3. Exercises

a. Warming-up exercises

Warming-up exercises are most essential at the beginning of the exercise period. They should also be used before strenuous combative contests such as wrestling.

(1) Stationary running - 2 minutes

- (a) Start slowly, gradually increasing speed and raising knees until finally reaching hip level.
- (b) Stretch toes toward floor each time leg is lifted.
- (c) Swing arms vigorously with elbows bent during stationary run. This can also be done by running around room, field or track.

b. Conditioning exercises

(1) To develop the arms and shoulder muscles

- (a) Move arms in circle vigorously forward and backward, clenching and unclenching hands; from bent arm position, thrust arms vigorously forward, downward, upward, and sideward.
- (b) Push up from floor, body held straight.

(2) To develop hip and leg muscles

- (a) Quarter, half, full knee bends -- trunk erect
- (b) Duck walk -- walk in squat position
- (c) Inverted bicycle riding
- (d) High kicking
- (e) Jumping
- (f) Hopping and skipping
- (g) Flutter kicking while lying on back
- (h) Sideward heel clicking

(3) To develop the trunk muscles

- (a) Body bending -- forward, backward, sideward, rotating, and circling

(4) Combination exercises of arms, legs and trunk

- (a) From standing position to full knee bend to front leaning rest and returning. Place hands on floor. Extend legs, body straight, arms straight. Bring feet up to hands. Resume erect position.

(b) Lying on back, lift legs alternately and together, coming to sitting position, touching toes with hands.

(c) From standing position and arms overhead, bend forward, touching floor with hands.

(d) Jump, touching both feet with both hands simultaneously.

Emphasize: Sit straight, stand straight and walk straight!

c. Gymnastic marching

(1) Class should be organized as explained in A, 2, a and b, "Organization for class activities," above.

(2) Right dress -- Left dress

At the command "Right dress" the left hand is placed on the left hip with the elbow just touching the man on the left; the head is turned sharply and lined up with the chest of the man on the right. At the command "Front" the left arm is snapped to the side and the head is turned sharply to the front.

"Left dress": Left hand on hip, head turned left, etc.

(3) Count off by 3's.

(4) Facings

(a) Right face: pivot on the heel of the right foot and the ball of the left foot on first count; on second count bring left heel even with right.

(b) Left face: pivot on heel of left foot and the ball of right, making a quarter turn, in two counts as above.

(c) About face in two counts: (1) the toe of the right foot is placed behind the heel of the left foot; (2) push with right toe, pivot on left heel, making a half turn to the right.

(5) Commands

All marching commands consist of (a) the preparatory followed by (b) a short interval, then (c) the command execution -- "March!"

(6) When marching in line, guide right by glancing at chest of man at right.

(7) Tempo

The tempo of marching rhythm is 120 steps to the minute; double time is 180 steps per minute. Double timing is especially recommended for conditioning purposes.

- (8) Forward March -- start with left foot
- (9) To the rear, march -- the preparatory command "To the rear" is given; after a suitable interval, the command "March" is given as the right foot strikes the floor. The left foot is advanced a full step, pivot on the balls of both feet to the right a half turn and step off in the opposite direction with the left foot. Considerable practice should be given this movement in column formation, also in front or line formation.

Reference: U. S. Army Infantry Manual

- d. Additional strengthening activities if equipment is available
- (1) Chinning
 - (2) Rope climbing
 - (3) Apparatus vaulting
 - (4) Jumping from height onto mats to practice ease of landing on feet

B. Combative Contests

A relatively large number of boys who enter our high schools, as well as our colleges, have had no experience whatever in competitive athletics. Consequently, their knowledge of what it takes or means to pit their mental and physical powers against others in some contest is very limited. They cannot know the meaning of condition, fight, the never-give-up spirit, or the will to win under tough opposition.

A certain few, on the other hand, have had some experience in grade or high school football or basketball; but it may be safely inferred that relatively few have had the thrill of the individual combative type of sport where the winning or the losing depends upon the lone contestant himself. In team sports boys will depend a great deal upon the assistance of other players, but in individual competitive athletics a boy must be independent in thought and act. He cannot expect others to help him, so he learns self-confidence and belief in himself and in his own ability. He must be more aggressive and a better competitor. He must think and act by himself. He naturally develops leadership.

The following compilation of personal combative activities is recommended to stimulate and inculcate an independent effort to win, where the winning is up to the individual. Boys who have never entered into any competitive sport can here learn the fundamentals and the rudiments that are so essential in either defending oneself or overcoming an opponent. The spirit to excel and the spark to win may get their inception here. These stunts are also well adapted for warming-up exercises preparatory to participation in more strenuous contests, or they may be utilized in a recreational way at the close of a formal physical fitness daily program. They are recommended for all boys. Two boys or two hundred may compete at the same time, depending upon the amount of space that is available. If mats are at hand in the gymnasium, very good; if not, the bare floor or the playground is satisfactory.

The group should be arranged in rank formation, rank and individuals facing each other. The leader or instructor should be at the front where he may be best seen and heard. Endeavor to have boys of the same weight competing against each other. Any type of clothing is acceptable. Each one of these stunts may take up one or two minutes in competition, so two or three stunts may be used at the close of a daily program as suggested above. They are especially appropriate for warming-up exercises before wrestling.

The boys not only will have a lot of fun in competing in these contests but will soon develop a confidence and an aggressiveness that will later stand them in good stead. Strength, coordination and all-around ability and development will result. Once boys taste victory over an opponent, they will call for more, for every red-blooded American boy likes to compete and wants to excel. The Japanese youth are required to participate in all such contests, and especially are required to know jujitsu, their national form of wrestling, as an aid to self-defense and offense. The Japs are good hand-to-hand fighters. Therefore, American boys must have all types of rugged wrestling and boxing if they are to be prepared and ready to defeat the enemy.

1. Foot-to-foot wrestling

Opponents stand facing each other, approximately four feet apart. Each extends right leg forward with foot off the ground and stands on opposite leg. They turn feet in and hook each other's raised foot. At signal of leader, contestants pull each other with hooked feet and hop around on opposite leg. Object is to upend opponent. In second round, they use other leg and foot.

2. Collar and elbow wrestling

Contestants stand facing each other. Each places right hand behind opponent's neck. Each holds opponent's right elbow with his own left hand. Feet are well apart, body slightly bent forward with heads together. Neck hold and elbow hold are retained throughout contest. At signal, each endeavors to bring opponent to the ground by pushing, pulling or tripping. As soon as any part of the opponent's body, above the knees, touches the ground, he is defeated.

3. Foot-to-foot and hand wrestling

Contestants face each other, with right feet extended forward and close to each other. Left feet are well back. Grasp right hands as though shaking hands. At signal, contestants endeavor by pulling, pushing or jerking of grasped hands to displace each other's right foot. In second round, use opposite hand.

4. Back-to-back wrestling

Contestants stand with backs to each other, interlocking or hooking both arms with each other. At signal, each boy endeavors to raise his opponent on to his own back. This is also an excellent exercise if boys alternately bring opponents onto their own backs without any resistance.

5. Squat wrestling

Boys face each other, squatting down with feet and knees well apart; arms folded behind back. At signal, each tries to bowl the other over by pushing with his upper arm and shoulder against the shoulder of his opponent. Falling to ground is a defeat.

6. Indian wrestling

Boys lie down on backs with legs extended in opposite directions. Right shoulder of one is next to right shoulder of other. Hook each other's right arm. At start, legs are extended on the ground. At signal, each raises his inside leg to perpendicular two times, and the third time endeavors to hook opponent's leg, pulling him over onto his back. In second round, opposite legs and arms are used.

7. Hand wrestling

Boys, standing, face each other with right hands grasped as though shaking hands. Right feet are ahead of left. A line may be drawn between the extended feet. At signal, each endeavors to pull opponent onto his side of the line. In second round, opposite hands are used.

8. "Horse and rider"

A light-weight boy is placed on shoulders of a heavier boy. The top boy straddles head of other and hooks his feet at the side of "the horse." The "horse" should also hold the ankles of "the rider." Pairs face each other and at signal each pair endeavors to dismount the opposite rider by use of hands of "the rider."

9. Broomstick wrestling

Boys, standing, face each other, grasping a stick, each with both hands. At given signal, each boy by pulling, jerking or pushing, endeavors to gain control of the stick.

10. Monkey wrestling

One boy is down on his own hands and knees. The other is "on top" or "behind," taking any hold or grip he desires. At given signal the underneath boy endeavors to dislodge the top boy and, of course, the top boy endeavors to retain his position. As soon as the "rider" loses his position, he loses the contest. In second round, positions are reversed.

11. Monkey roll

Three boys face same direction on hands and knees -- 1 - 2 - 3 -- about three feet apart. Starting, No. 2 rolls over to left under No. 3. At same time, No. 3 springs over No. 2, and then rolls under No. 1. At same time No. 1 springs

to left over No. 3. After each roll, each boy comes to his knees quickly, ready to spring over the boy who is rolling toward him. All three must be alert and spring over and roll continually.

12. Side hold wrestling

Boys stand side by side facing in the same direction. Inside arm of each is placed around waist or shoulder of the other. Outside hands are grasped in front. These "holds" are retained throughout the contest. At signal, each tries to bring opponent to ground by tripping, pulling, pushing or bodily force.

13. Tug-of-war wrestling

Boys sit down facing each other, feet together. Opponents' hands are gripped together. At signal, each endeavors, by pulling, to raise opponent off ground.

14. Neck-tug wrestling

Boys face each other standing. Each interlaces his own fingers behind neck of other at arm's length. Feet are well apart. At signal, each endeavors to pull his opponent toward himself a distance of five feet.

15. Hand-push wrestling

Boys face each other, feet well apart, arms extended forward. Hands are placed against chest of opponent. At signal, each endeavors to push opponent a distance of five feet backward.

16. Rooster wrestling

Boys face each other, each standing on one foot. Other foot is raised off ground and grasped by hand on that side. Hopping on one leg, each endeavors to pull other over by body pushing or using his one loose hand. Change to other leg in second round.

17. Arm-pull wrestling

Boys face each other standing, both arms extended forward, hands grasping opponent's upper arms or shoulders. At signal, each tries to pull opponent over to his side of a line on floor a distance of five feet.

18. Boxing nats

Boys, standing, face each other in regular boxing position, with left foot forward and body turned sideward to the right so that left arm is extended ahead of body. Boys should learn to properly shift body and cleverly move feet. Hands are kept open and each tries to touch the top of head of opponent or knock his nat off. Care should be taken not to

strike face or neck of opponent. Each time a boy touches his opponent on head or knocks his hat off a point is scored. Each keeps his own points for two or three one-minute rounds. Regular boxing with gloves, if under strict supervision, should be encouraged.

19. Scholastic wrestling

Wrestling is a highly specialized form of activity, but boys will naturally take to it and readily learn under proper supervision. IT SHOULD NOT BE ATTEMPTED UNLESS CLOSELY SUPERVISED. Participation may take place on mats in the gymnasium or on a grassy plot on the playground. Several of the aforementioned contests may readily be included in actual wrestling combat. No special uniforms are necessary. Sweat suits, gymnasium outfits, or overalls are satisfactory. Wall charts and several texts dealing with tactics are available. These should be procured, studied, and practiced under supervision. Space here does not permit full, technical details on actual wrestling as a sport, but the following short analysis should be instructive and helpful to physical training teachers who have had no training in wrestling.

Wrestling is a personal combat between two persons in which one endeavors to bring the other to the mat with the objective in view of pinning the opponent to the mat for a period of ten seconds. In order to do this, each contestant must learn, practice, and be able to execute several tricks, stunts, or maneuvers under each of the six phases of the sport. These are: (1) bringing the opponent to the mat; (2) retaining "the top" or the position of advantage; (3) "breaking down" an opponent in order to bring him into a position whereby a pinning hold may be applied; (4) reversing of position or breaking away free from an opponent; (5) pinning combinations; (6) blocking or preventing the first five.

Before actually participating on the mat with an opponent, the beginner should "loosen up" and "warm up" his muscles by running, jumping the rope, tumbling, boxing, climbing the rope, using chest weights, etc. No wrestler should ever go into a contest with "muscles cold."

In order to be a wrestler, a beginner should read about the game, study pictures of the various moves, watch demonstrations closely, then practice one or two maneuvers under each of the phases given above. He should first go through each maneuver with an opponent without much resistance. Then after the learner feels he is able to hold his own with someone of his own weight, he can wrestle with him a few minutes. He should be careful not to strive too strenuously until he has mastered "the tricks of the trade," and then only after he is in fairly good condition. If the contestant is physically fit, there will be much less chance of injury.

Wrestling is a sport in which the participant must be willing to "mix it" with an opponent. He must take a chance; must want to show superiority; must have the will to win. The good wrestler must always be alert to take advantage of his adversary at every opportunity. He must make moves or feints to get his opponent off-balance; must use his weight and momentum to

his own advantage. The wrestler must never take his eyes off his opponent; must use every bit of his strength to advantage; must have the never-give-up spirit. He may be tired, but he must always remember that his opponent may be more tired and that a little extra effort or a slight move may turn the tables. The good wrestler feels deep down that he is the better man and can't be beaten. With that spirit he becomes a winner.

MANEUVERS TO PRACTICE IN MASTERING EACH OF THE SIX PHASES OF WRESTLING GIVEN ABOVE:

a. To bring an opponent to the mat

Use leg dive, leg trips, arm drags, wing locks and hip throws, front chancery and bar arm, and standing switch.

b. To retain "the top" or position of advantage

Use waist and arm lock, cross-body ride, body scissors, leg holds, and proper use of weight.

c. To break down an opponent

Pull his body toward you and either push his near arm forward or pull it back; grasp both his arms and push his body away from you; grasp farther leg and arm from underneath and force him away from you; use cross-body combination; body scissors.

d. To reverse position

Use switch, side roll, sit out, stand up and turn, wrist locks, leg twists, step over and arm lock.

e. Pinning combinations

Use half nelson combination, head or body scissors, head and arm locks, wrist and key locks.

f. Blocking

There must be a block for every move made in the six phases. Space prohibits details here. In general, block the opponent's moves by anticipating what he intends to do, and counter with a quick move the tactic he intends to use. Remember it is far easier to prevent him from attaining an advantage than it is to get away from it, once it is secure. Be alert, and move faster than the opponent.

This brief explanation of several of the simpler moves in wrestling is just a beginning for a man wishing to become a finished wrestler. If you are desirous of teaching or learning wrestling, you should obtain a book on the subject.

References: Otopolik, Hugo, Modern Wrestling, Chas. Scribners' Sons, Chicago

Gallagher, E.C., Amateur Wrestling, Cooperative Publishing Co., Guthrie, Oklahoma

Bishop, Austin, Wrestling (Order through sporting goods house)

C. Games and Sports

1. Types and purposes

Games should be presented at each class period with games of higher organization (volleyball, basketball, handball), alternating with games of lower organization (see below) on succeeding days. The purposes of these games are --

- a. To develop organic strength and endurance
- b. To multiply opportunities for student initiative and leadership
- c. To give fun
- d. To adapt activities to the abilities and strength of participants
- e. To give all students varied social situations
- f. To teach skills so that other purposes may be realized
- g. To take students out of doors, where weather and personal equipment permit

2. Games and activities of low organization

a. Characteristics

- (1) Short-time unit (may stop any time)
- (2) Simple playing rules
- (3) Skills not specialized (anyone can do them)
- (4) Officiating of minimum importance (students serve)
- (5) Little equipment needed
- (6) Adaptable to small and large spaces

b. Organization

- (1) Squads or teams of about equal ability
- (2) Student leader for each squad or team working under instructor
- (3) Student captain of each squad
- (4) Group equipment manager
- (5) Practice formations in circle, line, parallel lines, etc.

c. Activities

- (1) According to type of play --

Continuous	Tag
Team	Elimination
	Individual

(2) According to functional activity --

Running	Climbing
Jumping	Lifting
Throwing	Combative
	Miscellaneous

(3) Suggested games according to functional activity --

(a) Running (See Chapters 1, 12 and 13, Active Games and Contests*)

1¹ Relays - Standard

Simple file
Shuttle relay
Spoke relay
Circle relay

2¹ Relays - Novelty

Hopping
One leg
Crawling
Kangaroo jumping
Crab
Seal
Tunnel
Tandem
Wheelbarrow

3¹ Obstacle

Jump the stick, over and under

4¹ Riding

Horse and rider (See Chapter 18, Active Games and Contests*)

5¹ Throwing

Zig zag
Shuttle
Basketball
Pass and shoot

6¹ Chasing

Fox and geese

(b) Jumping (See Chapter 3, Active Games and Contests*)

Jump, skip and hop (See page 102, Games, Contests and Relays**)

Vaulting
High jump

* Mason and Mitchell, Active Games and Contests, A. S. Barnes

**S. C. Staley, Games, Contests and Relays, A. S. Barnes

(c) Vaulting

For distance
 For height
 Rope wing vault
 Hop, step and jump

(d) Rope skipping

By music for height and endurance

(e) Throwing

Target with basketball, baseball, volleyball
 Bounce and catch, pass and dribble, keep-a-way
 Spud, dodge ball, bombardment, guard pin
 Snowball battle
 Deck tennis, horseshoes, dartball
 Shuffleboard, clock golf, clock basketball

(f) Climbing

Chinning and bar stunts
 Simple pyramids
 Wall scaling
 Fence vaulting

(g) Lifting

Bar bells, various carries

(h) Tumbling (See Teaching of Tumbling and Stunts*)

Forward, backward and shoulder rolls
 Cartwheel, head stand, walking on hands
 Front hand spring, head spring, snap up
 Pyramid building

(i) Tag (See Chapter 18, Active Games and Contests**)

Prisoner's base	Three deep
Pom-pom pull-away	Bull in ring
Kick the can	Steal the bacon
Black and white	Cross tag

(j) Water activities (See Chapter 17, Active Games and Contests**)

(k) Winter activities (See Chapter 18, Active Games and Contests**)

Ice skating - speed, figure, distance
 Coasting and tobogganning
 Skiing
 Fox and geese
 Snowshoe activity
 Cross country

*Mason and Mitchell, Active Games and Contests, A. S. Barnes

**S. C. Staley, Games, Contests and Relays, A. S. Barnes

3. Sports and games of high organization

a. Description

Sports and games of high organization have rather complicated rules, much technique, definite team plays, and require a definite number of players. Much time is required in the teaching of the rules and skills of these games which are included in the interscholastic program of athletics and in intramural sports. Such activities are a part of, and furnish a stimulus to, our scheme of physical education.

b. Purpose

- (1) To give an outlet to natural play and competitive interests
- (2) To teach courage, self-reliance, etc.
- (3) To teach fundamentals of good citizenship--loyalty, fairness, sportsmanship, cooperation, etc.
- (4) To develop strength and endurance

c. Subject matter and equipment

(1) Team games

Basketball
 Volleyball
 Soccer
 Touch football
 Long ball
 Speed ball
 Progressive dodge ball, using circle or lines

(2) Suggested variations of above games

(a) Line basketball

Divide class into two equal groups, possibly counting off by 2's or by squad formations. Group one line up outside of basketball boundary lines across one end and one side of the court. Group two does likewise, along opposite end and side. Group one removes shirts and is known as the "Skins." Group two leaves on shirts, and thus is known as the "Shirts." Three or four players from opposite ends of each team come out onto the court ready for play. The "Skins" shoot for the basket, under which is the line of the "Shirts" and vice versa. After the ball is put in play from the center, both teams can work the ball toward the goals by passing it to respective teammates along the sides. At the end of two minutes of play, another group comes on the court for play. Basketball rules are the rules of play. Any boy behind the boundary line may at any time, so long as he stays behind the boundary line, try to block the play.

3. Sports and games of high organization

a. Description

Sports and games of high organization have rather complicated rules, much technique, definite team plays, and require a definite number of players. Much time is required in the teaching of the rules and skills of these games which are included in the interscholastic program of athletics and in intramural sports. Such activities are a part of, and furnish a stimulus to, our scheme of physical education.

b. Purpose

- (1) To give an outlet to natural play and competitive interests
- (2) To teach courage, self-reliance, etc.
- (3) To teach fundamentals of good citizenship--loyalty, fairness, sportsmanship, cooperation, etc.
- (4) To develop strength and endurance

c. Subject matter and equipment

(1) Team games

Basketball

Volleyball

Soccer

Touch football

Long ball

Speed ball

Progressive dodge ball, using circle or lines

(2) Suggested variations of above games

(a) Line basketball

Divide class into two equal groups, possibly counting off by 2's or by squad formations. Group one line up outside of basketball boundary lines across one end and one side of the court. Group two does likewise, along opposite end and side. Group one removes shirts and is known as the "Skins." Group two leaves on shirts, and thus is known as the "Shirts." Three or four players from opposite ends of each team come out onto the court ready for play. The "Skins" shoot for the basket, under which is the line of the "Shirts" and vice versa. After the ball is put in play from the center, both teams can work the ball toward the goals by passing it to respective teammates along the sides. At the end of two minutes of play, another group comes on the court for play. Basketball rules are the rules of play. Any boy behind the boundary line may at any time, so long as he stays behind the boundary line, try to block the play.

(b) Indoor soccer

Divide class into two equal groups. Line them up behind the boundary line at opposite ends of the court. Three players from opposite corners are called onto the court for play. To start the play, the ball is in the center. Two opposing players place the inside of one foot against the ball. At the starting signal, they foot the ball to their teammates on the court. In order to score, the ball must hit the wall behind the players standing at the end of the court. Their job is to force the ball back onto the court, preventing it from hitting the wall, but they dare not step over the boundary line. After the players have played one to two minutes, another group comes on, etc.

(c) Four court volleyball

Cross two nets across the court at right angles. Proceed to play according to volleyball rules, but four teams instead of two will be scoring points.

(d) Pin soccer

Three Indian clubs are set up as pins at each end of the gymnasium. Two teams opposing each other attempt to knock over the opponents' pins by kicking the ball into them. Rules are the same as for soccer, except there is no out-of-bounds. Team kicking the three pins over first wins. Less confusion may occur if the gymnasium is divided into two or three courts with an equal number of opposing players in each court. Rotate after each game.

(3) Individual sports

Tennis
Handball
Golf
Horseshoes
Archery
Ping pong
Deck tennis
Badminton
Track and field
Swimming, if a pool is available

References: Bancroft, Jessie, Games for Playground, Home, School and Gymnasium, Macmillan Company

Mitchell, E. D., Organized Play, A. S. Barnes

Mitchell, E. D., Intramural Athletics, A. S. Barnes

McClow and Anderson, Play Gymnastics, Crofts

VI

INFORMAL TESTS OF STRENGTH AND PERFORMANCE

On account of the desire of the department of public instruction to make helpful materials available for use in the emergency physical fitness program at the earliest possible time, there has not been sufficient time for the committee to work out a testing program in events for which standards are available at present. However, every teacher should work out practical tests that can be administered without too great an expenditure of time and effort. The committee submits the informal tests and suggestions given below, hoping that they will be useful in the present emergency.

Schools interested in a more comprehensive plan of whole-school or inter-school competition or in the scientific measurement of athletic power and progress are referred to "A Program of Athletic Activities for Boys" by Dr. C. H. McCloy, State University of Iowa. An article by the author explaining this program appeared in the December, 1941, issue of "The Journal of Health and Physical Education." Reprints of this article, including tables and instructions on how to compute the "athletic quotient," are available through the Extension Division, East Hall, State University of Iowa, Iowa City.

A. Purposes of These Tests

1. To stimulate pupils to have an interest in all-round physical development
2. To interest pupils in their play through a fair evaluation of their efforts
3. To assist in finding the pupils' strengths, weaknesses, and skill status so that a program of activity can be adapted to their needs
4. To measure pupils' improvements in skills

Age, height and weight should be recorded, though these factors may not be used in determining a score.

Each test item is subject to rapid and easy measurement and a limited amount of testing apparatus is required.

B. General Directions

1. Precede the actual testing with group instruction as to how the test is to be given and scored.
2. Demonstrate each event and allow pupils some practice.
3. Permit warm-up, but see that fatigue does not become a factor influencing performance.
4. When a contestant fails to comply with the rules established, he should repeat the trial; or if the violation occurs during the test, only fair trials should be scored.

5. Record mixed numbers by using dash; as, six feet and two inches should be recorded 6-2.

DO NOT TEST PUPILS WHO HAVE JUST RETURNED TO CLASS AFTER ILLNESS OR THOSE WHO SHOULD BE EXCUSED BECAUSE OF SOME SERIOUS DISABILITY.

C. General Test Items

The items selected for testing should lend themselves to reasonably accurate measurement. When the fundamental activities are used as test items, they afford the individual an opportunity to watch his own development.

Following are some suggested tests:

- | | |
|----------------------------------|----------------------------------|
| 1. Push-up | 10. Leg lift from lying position |
| 2. Pull-up | 11. Shot put |
| 3. Rope climb | 12. Standing broad jump |
| 4. Jump and reach | 13. Running broad jump |
| 5. Basketball throw for distance | 14. 50-yard dash |
| 6. Basketball throw for goal | 15. High jump |
| 7. Softball throw for distance | 16. 440-yard run |
| 8. Softball throw for accuracy | 17. 100-yard swim |
| 9. Base running | |

Various combinations of the above and other activities not suggested here can be made into a simple and yet effective test.

DIRECTIONS FOR GIVING TESTS

Test No. 1 Push-Up

Stand at attention, then squat, bending the knees and turning them out; place the hands on the floor, shoulder-width apart with fingers forward. Jump the feet to the rear so the entire body weight rests on hands and toes; arms straight; feet together; neck, back, and knees in a straight line. Pupil must avoid both the "sway-back" and high hip positions. Bend the arms until the chest touches or nearly touches the floor. Then straighten the arms to lift the body to the same position as before the dip.

Repeat as many times as possible. Score only full-dip and push-up and count one for each push-up completed.

Test No. 2 Pull-Up

Pupil grasps horizontal bar with overhand grip, i.e., the back of the hands toward his face, thumbs under bar, and hands shoulder-width apart. His feet must clear the ground when his body is fully extended.

Hanging from the bar with arms and legs straight and feet together, he must pull himself up so his chin is even with or over the bar, and lower himself after each pull-up until his arms are entirely straight.

Repeat as many times as possible. Score only full pull-up without snap, swing or kick; one for each completed.

Test No. 3. Rope Climb

If the gym is equipped with a climbing rope, time pupils in ascent. In descent, stress looping rope around foot for arm rest. Score is ascent time in seconds.

Test No. 4 Jump and Reach

The pupil stands on the floor facing a wall, feet together and toes touching the wall. With both hands held together, he reaches as high as possible, keeping heels on the floor, and makes a mark with a piece of chalk.

Pupil then stands side to the wall, holding chalk in one hand, and jumps as high as possible, marking the wall at the height of his jump. The distance between the two marks is the pupil's record.

Measure distance between marks to the nearest half inch and record in feet and inches.

Each pupil has three trials in succession. The best performance of the three trials is the pupil's recorded score.

Test No. 5 Basketball Throw for Distance

Line up at one end of gym. Ball should be thrown overhand and underhand. Measure when ball hits floor. Score is distance ball is thrown.

Test No. 6 Basketball Throw for Goal

Use regulation ball and goal. Pupil takes first throw from free throw line using any type of throw he wishes, and follows up with successive shots from the point where the ball is recovered from the preceding throw. He should try to recover the ball before it strikes the floor. After recovering the ball, the contestant may take only one step in making the next throw. If the ball rebounds to some distance, he may dribble in for the next throw.

See that no one interferes with the ball or player during the test.

Give warning command of "Ready" and start signal "Go." Use stop watch and count the number of goals made in one minute for score.

Test No. 7 Softball Throw for Distance

Line up as above. Underhand throw--stress keeping arm parallel to body. Overhand throw--stress getting shoulder and body into throw. Score is distance.

Test No. 8 Softball Throw for Accuracy

Mark on the wall of the gymnasium or on a mat with chalk or tape a target having inside measurements of 15 inches wide by 40 inches high and with the lower margin of the target 18 inches from the floor.

Draw a throwing line 40 feet from the target and directly in front of it. The pupil stands on or back of the throwing line in making his throws at the target. One foot must be on or back of this line when the ball is released. The free overhand throw should be used, each contestant getting ten throws in succession.

Test each pupil twice (with a time interval between tests) and record only the best score of the two tests. In scoring, count one for each properly thrown ball which strikes inside or directly on the target line.

Test No. 9 Base Running

Time each student for bases. Also put a man on each base. At signal, all run. Winner can be determined as one who first reaches starting point. Score is base running time in seconds.

Test No. 10 Leg Lift

Lie flat on back, arms at side. Count number of times both legs are lifted to a vertical position. Keep head, arms and back in contact with floor; feet together. Score is number of times legs are lifted and lowered.

Test No. 11 Shot Put

Use 8-pound shot for 7th and 8th grade boys; 12-pound shot for 9th, 10th, 11th and 12th grade boys.

Shot should be put from the shoulder and shall not pass behind or below the shoulder. Trials should be made from a circle 7 feet in diameter.

Stepping on or over the line of the circle or on top of the toe board shall not be a fair trial.

Measure the put from the nearest point in the circumference of the circle to the first mark made by the shot.

Each contestant shall have three fair trials. Record only the best trial. Score is distance of shot put.

Test No. 12 Standing Broad Jump

Pupil stands on both feet toeing a starting line. He may rock forward and back but not lift either foot or cross the starting line. The jump is made from both feet to a landing on both feet. After landing, the pupil must fall or walk forward.

Measure from starting line to the nearest point on the floor touched by any part of the body as the jump is made. Measure distance to the nearest half inch and record in feet and inches.

Each pupil has three trials. The best trial of three is the pupil's record.

Since gym mats tend to slip, the test is more accurate if given on the floor.

Test No. 13 Running Broad Jump

Contestant may have unlimited run but must take off from or behind a scratch line. Use regulation pit and keep landing surface leveled.

If the contestant's shoe marks the ground beyond the scratch line, the trial shall not be counted.

Allow each jumper three fair jumps and record only the best jump.

All measurements are to be from the scratch line to the nearest point on the ground touched by any portion of the jumper's body.

Test No. 14 50-Yard Dash

Test one runner at a time over a measured 50 yards from starting line to finish line. Have boys practice at starting each other by the usual commands, "on your mark," "get set," and then the start signal.

Allow considerable time, 6 to 8 seconds, "on the mark" before the "get set" command. The minimum time the runner should be in the "set" position is two seconds. The start signal should be sharp and distinct, as a clap of the hands.

The instructor should do the actual timing or coach one or two boys of the class to handle the stop watch.

Test No. 15 High Jump

Standards and cross bar should be as accurate as it is possible to have them.

Measure each height by tape and call jumpers in turn as in actual meet competition.

Three trials are allowed at each height.

Displacing the bar, running under the bar, or leaving the ground in an attempt shall count as a trial.

Record greatest height cleared by the contestant.

Test No. 16 440-Yard Run

If a test of stamina is desired and if a medical examination has been given, a one-fourth mile run is excellent after a proper conditioning period. Record time under 75 seconds.

Test No. 17 100-Yard Swim

(If a pool is available)

Record time under 1 minute, 20 seconds.

Test-Record Sheet

Pupil _____ School _____

Grade _____

Age				
Height				
Weight				
Date of Test				
No.	Event	Score	Score	Score
1.	Push-Up			
2.	Pull-Up			
3.	Rope Climb			
4.	Jump and Reach			
5.	Basketball Throw for Distance			
6.	Basketball Throw for Goal			
7.	Softball Throw for Distance			
8.	Softball Throw for Accuracy			
9.	Base Running			
10.	Leg Lift			
11.	Shot Put			
12.	Standing Broad Jump			
13.	Running Broad Jump			
14.	50-Yard Dash			
15.	High Jump			
16.	440-Yard Run			
17.	100-Yard Swim			

VII

TYPICAL FORTY-MINUTE PERIOD OF ACTIVITY TO DEVELOP PHYSICAL FITNESS
SUGGESTED BY COMMITTEE

1. Warm-up and calisthenics, 10 to 15 minutes, including:
 - a. Stationary running--2 minutes
 - b. Calisthenics--8 minutes
 - (1) Arm
 - (2) Leg
 - (3) Trunk
 - (4) Coordinated (all three combined)
2. Marching--5 to 7 minutes
3. Combative contests--4 minutes
 - a. Collar and elbow wrestling--2 minutes
 - b. Foot wrestling--2 minutes
 - c. Alternate or rotate other combative contests suggested in that section
4. Games--20 minutes
 - a. Low organization in season
 - (1) Tumbling, "horse and rider," etc., suggested in that section
 - b. High organization in season
 - (1) Basketball
 - (2) Volleyball
 - (3) Touch football
 - (4) Others suggested in the outline

Activities in 3 and 4 above should be given on alternate days.

VIII

SCOPE OF PHYSICAL TRAINING ACCORDING TO U. S. ARMY FIELD MANUAL

In a preceding section of this bulletin, Purpose and Scope of These Materials, it was pointed out that military authorities are not advocating specific military training in public high schools at present. However, since one of the major purposes of the materials in this bulletin is to outline some exercises and types of training that are basic or preliminary to military service, suggestions and viewpoints of military authorities with reference to physical training are pertinent. The following notes were taken from the "Basic Field Manual" of the War Department. They are not quoted verbatim. They are given here because they emphasize the types of activities recommended by the committee in this bulletin. It is thought, too, that this additional information may be helpful to schools in organizing their physical fitness program.

A. Types of Activities

1. Setting-up exercises

These cannot be overemphasized in effecting an all-around development. They should form an important part of every course in physical training.

2. Marching in quick and double time, and running

They call into action various parts of the body. Through them coordination, poise, posture, carriage and rhythm should be developed.

3. Rifle exercises

Note: While these are part of the physical training program in the army, they are not included as a part of high school physical education. The committee of Iowa physical education teachers and the department of public instruction consider such exercises the function of the army.

4. Climbing

(1) Poles. (2) Ropes, using both arms and legs, brings into action every muscle of the body and exerts considerable influence on the heart.

5. Jumping

A series of eight or ten jumps of moderate length in succession are leg-and-heart-developing exercises.

6. Gymnastics

These are supplementary to all other forms of training to develop --

(a) Ability to control body while weight is supported or suspended from arms and hands

(b) Muscular strength of entire body, arms and legs in particular

(c) Agility, decision, self-reliance

7. Personal (combative) contests

Antagonistic gymnastics in which contestants are pitted against each other in rivalry for superiority.

8. Mass athletics and group games

These must include all members of the command.

9. Swimming

This is the best single means of all-around physical development.

10. Boxing and wrestling

These are important factors in the development of bodily strength, assurance, self-reliance, courage, endurance, and self-control.

11. Bayonet training

See note above under 3. Rifle exercises.

B. Organization of the Army Program

1. Grouping

Men are grouped according to condition and aptitude into

(a) Recruit class

(b) Trained-soldier class

Instructions are that the work in each group should be well within the capability of the average man. They are regrouped as development progresses.

2. Time allotment

One hour in the morning; one hour in the afternoon; not less than half hour after meal.

3. Typical army physical education hour period

(a) Morning

(1) Marching and double timing-5 minutes

(2) Setting-up exercises-20 minutes

(3) Gymnastics, jumping, climbing-20 minutes

(4) Recreational games and personal contests-
15 minutes

(b) Afternoon

(1) Bayonet training and rifle exercises to
alternate daily with boxing and wrestling-
20 minutes

(2) Mass athletics or group games-40 minutes

PHYSICAL TRAINING SHOULD BE CARRIED ON OUT-OF-DOORS WHEN-
EVER WEATHER PERMITS.

