To be returned
to Dr. Allen

STATE OF KANSAS

DEPARTMENT OF EDUCATION

GEO. L. McCLENNY
SUPERINTENDENT OF PUBLIC INSTRUCTION

W. A. STACEY
ASSISTANT SUPERINTENDENT

MISS LOUIE LESSLIE
SECRETARY STATE BOARD OF EDUCATION

TOPEKA

November 24, 1942

Administrators and
Instructors of Physical Education

Dear Friends:

We are enclosing a "skeleton outline" of the long awaited Physical Education Program. This outline will be of value only and until the complete program is off the government press. We hope this will be in the near future. The enclosed brief outline was suggested by Mr. Strong Hinman, who was chairman of the committee which worked out the course in Washington, D. C., during the past summer in conjunction with representatives of the Army, Navy, Air Corps, and the U. S. Office of Education. It has the full support of these groups.

You will also find enclosed a schedule of Area Institutes which will be conducted in the various areas of Kansas by representatives who attended the recent Institute at Lincoln, Nebraska. I am glad to report our state had a total of sixty-five representatives present. This was a splendid showing and indicates a vital interest in the Health and Physical Fitness of our youth.

This program at this date is not compulsory, but it is highly recommended and desirable for every high school--both large and small--in the state. No part of the high school curriculum is more vital at this particular time, since boys of 18-19 years may be in the Army in the near future. The healthier and stronger the boy, the better his chances of survival during the war--and after, as well.

Administrators should attend these institutes and should require the attendance of their Physical Education instructors--both men and women of senior and junior high schools. All others interested are welcome to attend.

Yours truly,

Geo. L. McClenny

Geo. L. McClenny
State Superintendent of Public Instruction

GLMcC:mg

SCHEDULE
of
HEALTH AND PHYSICAL FITNESS INSTITUTES

State of Kansas

DECEMBER 5, 1942:

School	Institute Conducted by
Atchison	Physical Training Department, Atchison High School
Kansas City	Physical Training Department, Kansas City High Schools (To be held in the Wyandotte High School Gymnasium)
Garnett	Physical Training Department, Kansas University
Independence	Professor Losey, Independence Miss Lucille Hatlestadt, KSTC, Pittsburg
Newton	Professor Unruh, Head of Physical Education Department of Bethel College Miss Daisy Simpson, Head of Girls' Physical Training Department, KSTC, Emporia
Manhattan	Professor Washburn, Physical Education Department Kansas State College Members of Physical Education Department, Manhattan High School Members of Physical Education Department, Junction City High School Members of Physical Education Department, Abilene High School
Pratt	Members of Physical Education Department of The University of Wichita and the Wichita High Schools
Hays	Members of Physical Education Department of Russell High School Professor Strong Hinman, Topeka
Oberlin	Professor Dissinger, Physical Education Department of Oberlin Miss Mariah Jones, Director of Physical Education, McPherson
Concordia	Ruth C. Burnett, Department of Health Education, Concordia Superintendent A. O. Hainline, Belleville Floyd Currier, Instructor of Physical Education, Abilene
Marysville	Physical Education Faculty, Topeka High School
Salina	Members of Department of Physical Education, Salina High School

DECEMBER 12, 1942:

Lawrence	Physical Education Department, Kansas University (To be held at the University Gymnasium)
Topeka	Physical Education Department, Topeka High School
Pittsburg	Physical Education Department, KSTC, Pittsburg Physical Education Department, Pittsburg High School (To be held in Roosevelt Junior High School Gymnasium)
Fredonia	Physical Education Department, Fredonia High School
Emporia (KSTC)	Miss Daisy Simpson, Head of Department of Women's Physical Dep. Otto Unruh, Physical Education Director, Bethel College (To be held in College Gymnasium)
Wichita	Members of High Schools Physical Training Departments Members of University of Wichita Physical Training Department Superintendent Claude Kissick, Wellington (To be held in Wichita High School East Gymnasium)
McPherson	Members of Department of Physical Education.
Belleville	Superintendent A. O. Hainline, Belleville Miss Ruth C. Burnett, Physical Education Department, Concordia
Osborne	Physical Education Department, Russell High School
Colby	Superintendent R. L. Dennen, Colby Quentin Groves, Director of Physical Education
Great Bend	Principal Hogan, Great Bend O. C . Ostenberg, Director of Physical Education Myrtle Bloomberg, School Nurse, Russell Schools
Dodge City	Physical Education Department, Dodge City
Garden City	Physical Education Department, Garden City

Note: Meetings will be held in high school gymnasiums unless otherwise noted.

FOREWORD

All thoughtful citizens recognize the fact that America is engaged in the most serious and difficult war the Nation has ever faced. A successful culmination of the struggle can be assured only through the earnest, sustained, and sacrificial efforts of everyone. This will involve service in the armed forces for most young men and work in agriculture or industry for many young women.

Wartime service demands a condition of strength, endurance, stamina, coordination, and agility beyond what is ordinarily required for peace time pursuits. There are many data and reports of observations by competent persons which indicate that American youth are deficient in the physical characteristics needed by soldiers, sailors, and airmen. Military and naval authorities have stated often that the praparation of recruits for active service could proceed more rapidly if the young men who are inducted into the armed forces were in better physical condition.

The high schools of the country have recognized the seriousness of the situation confronting the Nation and have indicated repeatedly their eagerness to make the maximum contribution of which they are capable to the war effort. One of the definite and objective things that the high schools can do, which will show almost immediate results, is a program of physical education for all normal high school boys and girls. The selection of pupils for participation in a program of vigorous and rugged activities should be based on acceptable examinations and tests in order that the curriculum may be adapted to the needs and abilities of each individual.

This bulletin has been prepared as a guide to high school principals and teachers in planning and executing wartime programs of physical education. It is one of the publications in the Victory Corps series and is intended for use in connection with all five divisions of the High School Victory Corps.

The Army, Navy, United States Public Health Service, physical educators, and staff members of the Office of Education have collaborated in the preparation of this manual, and it has been endorsed by the National Policy Committee.

The program outlined in this volume is recommended for use in high schools in order that American boys and girls may become more physically fit to carry their unusually heavy responsibilities during the next few years.

J. W. Studebaker

U. S. Commissioner of Education.

CHAPTER I

A Physical Fitness Program for Every School

The Program

This bulletin presents a wartime program of physical education that is planned to contribute to the physical fitness of high school pupils as a part of the total war effort. The content of the program, the selection of pupils for participation, and the methods of fitting the program into the total curriculum program of a school are explained. The program emphasizes instruction and practice in aquatics, gymnastics, combatives, sports and games, and other vigorous activities adapted to intensity and duration to the individual needs of pupils are emphasized. The choice of activities and methods of presentation are made in the light of the needs of youth at the present time and the recommendations of representatives of the Army and Navy.

It is recognized that programs of health service, health instruction, healthful school living, physical education, and recreation, all have an important influence on physical fitness. The content of this bulletin, however, is directed definitely toward the conditioning of high school pupils for service in the armed forces and industry and agriculture.

In general, the activity program should provide at least one regular school period daily of instruction in physical education for all pupils. The instructional period should be supplemented by an elaborate participation program including intramural and interscholastic athletics, and other vigorous activities. It is recommended that all normal pupils, after an adequate period of training, should participate in competitive athletics, mass athletics, road work, hikes, week-end journeys, camping, hard physical work such as plowing, cutting wood, or digging dirt, and similar events for at least ten hours each week in addition to the physical education period that is included in the school schedule.

Camping provides one of the most desirable forms of activity outside the regular daily school schedule. Camping experience contributes to physical fitness and provides training in many skills and activities that are of direct military value. The recent statements of Army officers corroborate the observations of the Civilian Conservation Corps and other leaders of youth during the past decade that most American youth do not have the ability to live comfortably and safely in the open country. It is true, for example, that large numbers of boys do not know how to hold and use an ax, build and use a fire out-of-doors, arrange a comfortable sleeping place in the woods, and avoid the hazards and discomforts of insect, reptile, and plant poisoning. It is recommended, therefore, that such attention and emphasis be given to providing extensive camp experience on week-ends, during holidays and vacations, for all boys, and if possible for all girls. Many educators have stated that school systems should provide camps for all high school boys during two months each summer in which training would be provided in woodcraft, camp craft, swimming, sports, gliding, and ground training in aviation. This larger program may not be practicable now but every school can provide shorter periods of camping experience.

Purpose

The purpose of the program outlined in this manual is to make secondary school pupils physically fit to carry their responsibilities as members of the armed forces when they are inducted into service, and as efficient and effective workers in the war effort. This includes the development of:

1. Strength, endurance, stamina, and bodily coordination.

2. Physical skills that will be of direct value and use in the armed forces and war work.

Initiating the Program

In fitting the physical fitness program into the total program of a school it is necessary that there be provided the minimum essentials of (1) adequate time in the daily schedule, (2) a competent teacher, (3) a place for conducting the classes, and (4) at least a minimum amount of supplies and equipment.

The initiation of the program on a nation-wide basis will demand an expenditure of time, effort and money. It promises, however, reasonable certainty of attaining the objective of maximum physical fitness for the participants. Basically it calls for but two changes in the usual high school program. The first is an increase in teaching time alloted to instruction in physical education, and the second change is an increase in the intensity of the exercises.

Adaptation of Program for Small Communities.

A proposed program is flexible enough to permit schools of all types, including large and small urban and rural schools, to make such adaptations as will enable them to undertake it. Many of the activities can be conducted without apparatus or equipment, but the greater values should be expected where at least a minimum amount of supplies and equipment are provided, and adequate buildings and playing fields are available. In cases of necessity, there are many activities that can be practiced during inclement weather in school buildings that do not have gymnasiums. The maximum use and adaptation should be made of corridors, classrooms, basements, auditoriums, stages in auditoriums, and paved outdoor courts in poorly equipped schools. Some of the activities that can be used under unfavorable conditions are calisthenics, gymnastic stunts, chinning, and the hanging half lever on removable bars in doorways or on bars attached to brackets on the walls of corridors; the push-up; the sit-up; climbing ropes suspended in corridors, auditoriums, or stages; the leg-lift; the forward-bend; jump and reach; standing broad jump on mats or other soft surfaces; potato races in corridors, auditoriums, or basements; grip and chest exercises that can be practiced with low-cost spring or elastic equipment; and bar vault in corridors, auditoriums, stages, or basements, where a safe bar and mats may be provided.

There are many days during the cold winter months on which warmly clothed children can participate in vigorous activities out-of-doors. This is particularly true in situations where there are paved surfaces that can be kept free of snow, ice, mud and water. It is recommended, therefore, that paved courts be provided where they seem to be needed and that a maximum use be made of the outdoors for physical education activities.

There are probably many communities in which existing facilities and personnel can be used to supplement the school facilities and personnel in carrying out the instructional and participation phases of the physical education program. Consideration should be given to the possibility of cooperation between schools, YMCA's, Athletic clubs, recreation department, granges and other community agencies in planning and executing the school program of physical fitness.

The Need for Physical Fitness

Large numbers of pupils now enrolled in high schools will enter into service in the armed forces and wartime industry in the immediate future. In addition to the boys who will be called to some form of service. it has been estimated that by the end of 1943, 6,000,000 women will be employed in war production, many of whom will be drawn from the high school age group. These youth must be fit in order to render effective service. They must be fit not only from the standpoint of technical skill and morale, but also physically fit, which means that they must have the strength, skill, stamina and endurance required for active service and hard work.

Army and Navy officers have stated that large numbers of the young men inducted into military service whose physical examinations reveal no serious physical defects, lack development, skills, strength and endurance to such a degree that the program of military training is retarded for several months while the recruits are being built up physically.

It is common knowledge among physical education instructors in high schools and colleges that large numbers of their male students are weak, have poor coordination, cannot climb a rope, carry a burden equal to their own weight, or vault out of a trench the height of their chests. The poor physical condition of the majority of American young people is a serious handicap in training soldiers, sailors and airmen, and interferes with the maximum industrial and agricultural production.

The Nature of Physical Fitness

A person who is physically fit for military or naval service must be capable of maintaining sustained effort with a maximum of speed and skill. This means that one must have strength, stamina, endurance, and good coordination. Speed, agility and flexibility in movement are important factors in skill.

There are several conditions that affect the development and maintenance of a desirable level of physical fitness. Participating regularly in a rational program of physical education has been demonstrated to be one of the most important elements that contributes to physical fitness. Other significant factors that influence physical fitness are physical defects, communicable disease, accidents, nutrition, personal health habits, and environmental conditions.

The development of physical fitness through the use of physical education activities demands vigorous participation over protracted periods of time. An individual must press his effort until it hurts. This means that he must not stop at the first sign of fatigue, but continue his exertions until he is tired.

Preparation for service during war times demands that boys must learn to swim long distances while fully clothed and carrying equipment; they must be able to keep themselves afloat for many hours. Arm and shoulder strength must be developed so that they can climb down ropes or scale walls while carrying heavy loads. The ability to take hard falls without serious injury must be developed. In combative activities it is necessary to stress delivering their energy in a quick explosive effort rather than feinting, parrying and maneuvering. Games and sports must develop a spirit of aggresive attack and ability to take physical punishment without flinching. For industrial groups, which are far greater numerically than the armed forces, physical strength and stamina are needed to speed up w ork for longer hours without absences which would slow production.

CHAPTER IV

Activities for Boys

Introduction

The activities for boys that are recommended in this chapter have been selected in terms of the previously stated objectives which are to develop (1) strength, endurance, stamina and bodily coordination, and (2) physical skills that will be of direct value and use in the armed forces and war work.

The traditional objectives of physical education are usually classified under the headings of (1) developmental, (2) recreational, and (3) educational. The material included in this chapter is directed definitely toward the accomplishment of the first objective. It seeks to develop strong and rugged boys who can become excellent soldiers or sailors promptly after entering the armed services, or efficient workers if they are rejected by the Army and Navy. The recreational and educational objectives of physical education are important and should be stressed in a school program during times of peace. The urgency of the present situation makes it wise, however, to emphasize the developmental aspects of physical education.

In connection with the wartime program of physical education for boys the following items are emphasized:

1. Five periods each week of instruction in physical education activities forall high school pupils.

2. The continuous observation of all pupils by the teacher and a more complete inspection by a physician of all children who appear to deviate from the normal.

3. Increased emphasis on interscholastic and intramural athletics, road work, hard physical labor and camping.

4. The use of vigorous and rugged activities instead of many of the recreational sports that have been used.

The activities are grouped under four headings. These are: (1) Aquatics; (2) gymnastics; (3) combative activities; (4) sports and games.

Interscholastic Athletics

It is recommended that the program of interscholastic athletics be expanded to meet wartime demands. Probably never before has there been so great a need to develop in boys the spirit of competition and the will to win. Interscholastic athletics provide unusual opportunities to develop these characteristics. It is suggested therefore that the necessary modifications be made in the interscholastic athletic programs to permit many more pupils to participate.

Some practices which have been adopted by schools to increase participation and to meet the restrictions now placed upon transportation are:

1. The number of teams representing a school in a given sport has been increased. Instead of one team competing, arrangements are being made so that four or more may compete.

2. Schedules have been arranged so that a school plays another school more than one time in the same season.

3. Schedules have been arranged so that all schools played are conveniently located on a railroad line and the distance traveled is short.

4. Leagues have been formed of schools in the same geographical area and all games are played within the league.

It is believed the important criticisms of interscholastic athletics may be met by expanding the program rather than curtailing it; by giving more opportunity to participate in rugged activity rather than less.

Aquatics

Our armed forces are operating under conditions that demand an ability on the part of the individual to handle himself successfully in the water while fully clothed. The success of the program depends upon the maximum use of all available school and community facilities.

Objectives

1. To stay afloat for a long period of time.
2. To swim under water.
3. To swim long distances without exhaustion.
4. To enter the water without submerging.
5. To be at home in the water fully clothed.
6. To render assistance to another person in water.

Organization

1. Classes should not exceed fifty boys.
2. Classes should be subdivided into small units.
3. Wherever possible the "Buddy" system should be used which provides for boys to be paired and required to stay near each other in the water.
4. Adequate check-in and check-out of swimmers is essential for safety.

Activities

STAYING AFLOAT

All boys should be taught to stay afloat by:
Floating. See American Red Cross Swimming and Diving Manual, p.59.
Breathing and Breath Holding. pp. 19-20; p. 54.
Sculling. Ibid. p. 69.
Treading Water. Ibid. p. 149.

Fundamental Strokes

Side Stroke; Breast Stroke; Back Stroke; Crawl Stroke; Endurance Swimming; Swimming under water; and Swimming fully clothed.

Entering the Water

This term is used, rather than diving, to meet the needs of the war situation. While the practice of diving does develop skill and coordination, emphasis should now be placed upon jumping into the water with and without clothing.

1. Jump feet first.
2. Jump without submerging: Used to keep equipment dry.
3. Dive head first.

Life Saving

See American Red Cross Life Saving and Water Safety, 1937, and War Department Basic Field Manual, FM 21-20, Physical Training, March 6, 1941, p. 119.

Suggestions:

1. The teacher of swimming must be familiar with life saving practices.
2. Safety precautions should be observed.
3. Teaching practices suggested in the manuals of the American Red Cross and War Department Manual FM 21-20 should be followed.
4. For practice in swimming fully clothed, shirt, trousers and shoes are needed. They should be white or fast-dye, and shed as little lint as possible. Clothing should be laundered before use in the pool.

Gymnastics

This phase of the program contributes readily and easily to improved muscle tone, and bodily development. When properly conducted, gymnastics are highly beneficial.

The activities which follow are based on the need for body conditioning, particularly the development of the musculature of the shoulder girdle, abdominal region, and legs.

Objectives

1. To develop endurance.
2. To increase strength.
3. To develop agility.
4. To develop specific skills applicable to the war situation.

Activities

MARCHING AND RUNNING

The purposes of marching are to teach some fundamentals of military tactics, and to move groups quickly and efficiently from one place to another. Marching, except for those two purposes, has little value in this program. The following commands come under Marching regulations:

Attention	At ease	Facings: Right, Left
Dress	Quick Time	Double Time
Halt	Mark Time	Side Step
Face in Marching	Change Directions	

Running develops endurance, and some forms given here develop ability and specific skills in getting over, or around obstacles. Where pupils are required to run one hundred yards or over, special care must be exercised. Before permitting pupils to run any of the longer distances, several weeks of preliminary training should be demanded.

Training in long distance running should be preceded by a medical examination by a properly qualified physician. Where such an examination is impractical, the teacher should administer the Pulse Rate of Recovery Test before the training period begins. After one week of training the test should be given again. Unless the second test shows the pupil's pulse returns to normal more quickly than at the time of the first test, serious consideration should be given to the failure of the cardio-vascular system to respond to training before permitting the pupil to continue with the training program. Advice of a qualified physician should be secured if possible. No boy in the ninth grade should be permitted to train for or attempt to run distances greater than 220 yards.. The younger boys in grade 10 as well as those who appear to be less mature physically, should either be barred from running 440 yards or longer distances, or be given more careful attention than the older more mature pupils.

In general, the training program should be characterized by starts, short bursts of speed, and jogging on the grass during the preliminary training period. In no instances should pupils be permitted to run 100 yards at top speed before the end of the second week. In the 440 yard run and 880 yard run, if the full distance is covered, only the first half should be run at top speed and the second half jogged.

Road Work

Road work is a combination of hiking and running to develop the ability to cover long distances in the shortest possible time. The starting distance should be between three to five miles. This hike is a brisk walk, interspersed with running (not jogging). At each practice the distance should be covered in less time, and gradually increased until boys are able to cover eight to ten miles in fast time.

Cross Country

The course may be over hills, through woods, across brooks, over open fields, or parks a nd golf courses. It is not running on city streets or highways.

Steeple Chase

Steeple chase is a set form of obstacle racing using hurdles and water jumps. The National Collegiate Athletic Association and the Amateur Athletic Union publish rule books that describe these events and give the rules for them.

Obstacle

Obstacle running may be done either indoors or outdoors. Each school may set up its own course using any available obstacle. Indoors, the horse, parallel bars, buck, benches, ropes and ladders, are usable. Outdoors, the obstacles may be hurdles, fences, ditches, walls and posts.

Relays

Relay races add interest and competition to the program as well as vigorous exercises. Teams should not number more than nine members so that few will be standing idle. The distances in the relays should be long enough to require the players to put forth sustained and vigorous effort. The distances involved in the different relays may be progressively increased as the boys improve in physical condition.

Rather than disqualify a team when infractions occur, such as running out to meet the next runner, it is better to charge a foul and then add the number of fouls to the team's order of finish.

There are eight types of relays used: Shuttle relay, Jump Stick relay, Duck Waddle, All Fours, Crab Walk; Wheelbarrow, and Horse and Rider.

Conditioning Exercises

Three types of conditioning drills are given here: A general conditioning drill; a grass drill; and ranger activities. They can be adapted to indoor or outdoor use in limited space and require no equipment. Strength and endurance are developed quickly through regular use of these drills, especially if there is a steady increase in the number of times each exercise is performed.

General Conditioning Drill. To be most effective and to reach the objectives for which the drill is designed it is imperative:

1. To do the exercises in good form, i.e., exactly as described and with energy in each movement.

2. To increase the number of times each exercise is performed, as the capacities of each individual develops.

3. To maintain sustained effort without rest or pause between exercises. Each exercise must be thoroughly learned before going on to the next one. When the drill is memorized, then all the exercises should be done without stopping.

4. To master unit number one before going on to unit number two, and likewise units one a nd two, before going on to unit number three.

5. Finally, to perform each exercise the maximum number of times indicated.

Formation

Open order. Form closed order in a column of 3's and 4's. On the command, 1, extend to the left. 2, MARCH, all raise arms sideward and run to the left until they are at least twelve inches between finger tips. The boys on the right flank stand fast. "COVER" (i.e., straighten lines from front to back) and lower arms to sides. This is one of the many ways of opening order. See War Department Basic Field Manual, F.M. 21-20. Physical Training, March 6, 1941, p. 24, for another method.

Unit One

Exercise (1).
Starting position: Stand with feet about a foot apart, knees slightly bent, arms raised backward.

Count 1 - Swing arms forward and jump upward.
Count 2 - Swing arms backward and jump upward.
Count 3 - Swing arms forward, upward and jump upward about 1 foot.
Count 4 - Swing arms backward and jump upward 5 to 12 times.

Exercise (2)
Starting position: Position of attention.

Count 1 - Squat rest, (a squat rest is a deep knee bend with hands on floor in front of feet.)
Count 2 - Extend legs backward to front leaning rest, (the body is straight from shoulder to feet, weight supported on hands and toes).
Count 3 - Return to squat rest.
Count 4 - Return to attention. 12 to 25 times.

Exercise (3)
Starting position: Feet slightly apart, and elbows bent with fists at shoulders.

Count 1 - Bend knees deeply and thrust arms forward, keeping body erect.
Count 2 - Return to starting position.
Count 3 - Bend trunk forward, and thrust arms downward, touching toes, keeping knees straight.
Count 4 - Return to starting position. 10 to 20 times.

Exercise (4)
Starting position: Lie on back, arms stretched sideways.

Count 1 - Raise legs slowly swinging them over head and touching toes to ground above head.

Count 2 - Lower legs slowly to starting position. The count is slow; 10 to 20 times.

Unit Two

Exercise (5)
Starting position: Stand erect, arms in running position.

Exercise: Run in place. Begin slowly and run about 10 steps (count only step of left foot). Speed up for another 10 steps, raising knees hip high. Then run 10 to 25 steps at full speed, raising knees hard. Then run slowly 10 steps.

Exercise (6)
Starting position: Feet about 30 inches apart, arms extended overhead, hands clasped.

Count 1 - Bend sideward left.
Counts 2 and 3 - Continue bend to the left trying to go deeper on each count.
Count 4 - Return to starting position. Same right. 10 to 20 times.

Exercise (7)
Starting position: Lie on back, arms extended overhead. Keep feet flat on thr ground, legs straight.

Count 1 - Sit up, and at the same time draw knees to chest, leaning forward and swinging arms forward to a "rowing position".
Count 2 - Return to starting position. 10 to 20 times.

Exercise (8)
Starting position: Position of attention.

Count 1 - Squat rest (see exercise number 2)

Count 2 - Front leaning rest (see exercise number 2).
Count 3 - Bend elbows, touching chest to floor.
Count 4 - Straighten elbows.
Count 5 and 6 - Repeat counts 3 and 4.
Count 7 - Return to squat rest.
Count 8 - Return to position of attention. 5 to 12 times.

Unit Three

Exercise (9)
Starting position: Feet about 24 inches apart, hands clasped behind head, elbows well back, chin in.

Count 1 - Bend trunk forward.
Count 2 - "Bounce" trunk downward and at the same time rotate trunk to the left.
Count 3 - "Bounce" trunk downward and rotate trunk to the right.
Count 4 - Return to starting position. 10 to 20 times.

Exercise (10)
Starting position: Left foot about 8 inches forward, hands clasped on top of head.

Count 1 - Sit on the right heel.
Count 2 - Bounce from this position and spring upward, knees straight. Change position of feet.
Count 3 - Drop to squat on left heel.
Count 4 - Spring and change position of feet. Add two a week until able to do 25.

Exercise (11)
Starting position: Lie on back, arms sideward, palms down, legs raised straight up with feet together.

Count 1 - Swing legs vigorously to left touching ground on the left side.
Count 2 - Same to the right. Begin slowly and increase the tempo gradually.

Exercise (12)
Starting position: Front leaning rest. See Exercise number 2.

Count 1 - Bend elbows and touch chest to floor.
Count 2 - Straighten elbows. Repeat 8 to 20 times.

Note: Many will be unable to continue this exercise and keep the rhythm. These individuals may change to the "knee-rest position", i.e., hand and knees on floor, feet raised from it. If they are still unable to continue, they may relax the whole body and simply push up the shoulders. But they should NOT STOP TRYING.

Suggestions:

1. The numbers given after each exercise indicate the minimum and maximum number of times the exercises are to be performed, e.g., in exercise 2 the dosage indicated is 12 to 25. This means to begin with 12 times and gradually increase to 25 as the condition of the boys improves.

2. "To master unit number one", means that the class is able to do better than the minimum set for each exercise before unit number 2 is begun. Continue to increase the number of times in unit 1 as unit 2 is added. The same procedure is to be followed in adding unit 3.

3. To overcome stopping between exercises the teacher must anticipate the next one by saying just before the last execution of any exercise, "Ready for the second exercise".

4. In teaching the exercises:

   a. Demonstrate each before asking the class to do it. Correct demonstration is more valuable than a lengthy explanation.

   b. Give commands clearly and concisely. The tone of voice can help materially in stimulating the class to action.

c. Keep the class working together by counting. Exercises may vary in number of counts. "1-2-3-4, 1-2-3-4," or"1-2, 1-2" may be used. Directions may be indicated by "up" - "down" - "left" - "right". Clapping the hands, beating time with the heel on the floor, or using the tom-tom or drum may be substituted for the voice.

d. The teacher should not perform with the class at all times because he must be free to observe and correct faults. He should observe from front, side and rear, commenting on the good performance, correcting the faulty one, urging all to better performance.

e. The boys should be encouraged to improve their performance by individual practice at home.

1 Grass Drill

The grass drill was originally used as part of the training for football squads to develop agility and endurance. The exercises are given in varied order, at the will of the instructor, and upon his command.

Formation: Open order. See description under "conditioning drill".

Front - Up - Back

At the command "Front", the boys fall to the ground quickly, face down, breaking the fall with the hands. On the command "Up", they bend forward and fall back, breaking the fall by rolling to a seat, then lie on their backs. On the command "Front", they change to a position of face down, hands toward the front of the class. If the command "Back" is given when boys are face down, they squat through (i.e., support the weight on the hands and extend the legs through the arms and lie down"). Vary the order of the commands so the boys cannot anticipate the next movement. 2 to 5 minutes.

In order to round out the grass drill, additional exercises to develop the shoulder and abdominal muscles should be inserted at the will of the instructor. Some of these exercises are:

Sit up: Lie on back, hands behind the head, raise the trunk and twist so that the left elbow touches the right knee. Return to lying position. Repeat with right elbow touching left knee. Continue.

Push up: Lie face down, place hands on floor, shoulder width apart. Push up, keeping back straight so that weight is supported on hands and feet, arms straight, return to starting position. Continue.

Bicycling: Lie on back, raise legs and hips high. Imitate movements of riding a bicycle.

Deep knee bending: Place hands on hips, bend knees deeply, back straight, until sitting on heels. Return to standing position. Continue.

Legs Overhead: Lie on back, raise legs upward and touch toes to floor behind the head. Return to position. Keep legs straight. Continue.

Legs right and left: Lie on ba ck, arms sideward, palms down, legs raised straight up. Swing legs vigorously sideward right until legs practically touch the ground. Same to left.

Front leaning rest: Place hands on the floor in front of feet, bending knees. Thrust feet backward to front leaning rest position. Return in reverse order. Slowly at first, and gradually speed up.

These exercises are of such value that they may be practiced individually or in groups.

Suggestions. The grass drill does not demand the same precise performance required in the conditioning drill. It may be modified for use indoors. The teacher must change the exercise or stop the drill before the class is unduly fatigued. Care must be used in adding exercises to the grass drill. Select only a few, in order not to make the drill too strenuous.

Response Drills. Response drills are valuable in the practice of skills which are needed in combat. They develop an ability to respond accurately and quickly to commands.

Go - Stop

At the command "Go", the boys spring forward as a football team does in running signals. At the command "Stop", they drop to the lineman's crouch. At "Go", they again sprint forward. This may be varied by the command "Drop", (i.e., fall to the ground face down as in grass drill). At the command "Right", they turn and sprint to the right at an angle of about 45 degrees. If the command is "Left", they run to the left at a 45 degrees angle. "Go", in each case means sprint straight forward. "To the rear" means reverse the direction. Whistle signals may be substituted. 2 to 5 minutes.

Zigzag Run and Drop

Upon the signal to go the boys run fast at an angle of about 45 degrees to the right, and at the whistle signal, zigzag to the left at about 45 degrees, and on the whistle signal, drop to the ground. At the next whistle, spring to the feet and repeat the zigzag run and drop. Continue until signal is given to halt. 2 to 5 minutes. This is similar to the manner in which men advance under fire.

Suggestions.

1. Teach the boys how to "drop", first by breaking the fall with the hands and then without the use of the hands.

2. The boys must know exactly what is expected of them.

3. The time between signals must be varied to develop the quick reactions desired.

Ranger Exercises

Ranger exercises are so named because they are patterned after movements which ranger troops use.

Formation: Single circle, if less than 30 boys.
Double circle, if between 30 and 60 boys.
Each boy eight feet behind the one in front.

Procedure: The instructor directs the boys to walk forward at a slow relaxed pace, 80 to 90 short steps per minute, keeping the circle formation. The class does not walk in step. The instructor, standing in the center of the circle, calls the name of an exercise, then demonstrates it, and then commands, "Start". Immediately each boy starts to perform the exercise, continuing to move around the circle. After performing the exercise for about 10 to 30 seconds, the instructor commands, "Relax", upon which all resume the original slow walk. After 5 to 15 seconds, the instructor names and demonstrates a new exercise, and at the signal, "Start", the class performs it. The time between exercises should vary with the nature of the exercise, and the condition of the boys.

Description: 1. All fours, face down, on hands and feet. Walk forward.

2. Rear Walk. Face down, on hands and feet, travel forward by moving the right arm and right leg simultaneously, and then the left arm and left leg simultaneously.

3. Leap Frog. Count off by twos. At whistle, the evens leap over the odd numbers. At the next whistle, the odds leap over the even numbers. Repeat continuously raising the backs higher and higher.

4. Duck Waddle. Assume the full knees-bent position, hands on hips. Retain this position and waddle forward.

5. Squat Jump. Assume the full knees-bent position. Retain this position and travel forward by short bouncing jumps.

6. Indian Walk. Bend knees slightly, bend trunk forward, arms hanging down until back of hands touch ground. Retain this position and walk forward.

7. Crouch Run. Lean forward at the waist until the trunk is parallel with the ground. Retain this position and run forward at a jogging pace.

8. Straddle Run. Run forward, leaping obliquely to the right as the right foot advances, leaping obliquely to the left as the left foot advances.

9. Knee Raise Run. Run forward, raising the knees as high as possible on each step. Swing arms vigorously.

10. Hop. Travel forward by hopping on the left foot. Take long steps. Change to right foot and repeat.

Carries:

Before starting these exercises, have the group count off in twos, then place them in pairs (side by side). In all cases the "Ones" carry the "Twos" at the signal "Start". At the signal "Change", the men reverse positions, "Twos" carry "Ones", and continue the same exercise. On the signal "Relax", both resume their original positions and walk forward.

11. Fireman's Carry. "One" places his left arm between the legs of "Two", so that the crotch of "Two" is at shoulder of "One". "Two" leans forward until he lays across the shoulders of "One". "One" straightens up, lifting "Two" off the ground. "One" using the hand of the arm through "Two's" crotch, grasps the wrist of "Two's" arm which is hanging over his shoulder. Retaining this position, "One" runs forward.

12. Cross Carry. "One" standing in front of "Two", leans forward. "Two" bends forward until he is lying across the middle of "One's" back. "One" then places one arm around "Two's" shoulders, and straightens up, lifting "Two" from ground. Retaining this position, "One" runs forward.

13. Single Shoulder Carry. "One", standing in front of and facing "Two" assumes a semi-squatting position. "Two" leans forward until he lays across "One's" left shoulder. "One" clasps his arms around "Two's" legs and straightens up, lifting "Two" from the ground. Retaining this position, "One" runs forward.

14. Arm Carry. "One" standing beside "Two", bends his knees and lifts up "Two", by placing one arm below his thighs, and the other around the small of his back. "Two" places his near arm around "One's" shoulders and clasps his other hand. Retaining this position, "One" runs forward.

Suggestions:

1. Use variety in choice of exercises.
2. Use a maximum of six exercises in a 10 minute period.
3. Choose the easy exercises first.

Apparatus

Exercise on apparatus is especially valuable in developing strength, agility, and endurance. Only a few of the many exercises which contribute to these objectives on some types of apparatus have been selected. Extreme care should be exercised in the construction, maintenance, and use of apparatus to prevent accidents.

Formation

The class arrangement is dependent upon the size of the class, of the gymnasium, and upon the apparatus available. Divide the class into groups according to facilities. Keep the group small to provide maximum participation. Arrange the class and apparatus so that:
(a) Those waiting their turns may see the performer; (b) so that there is safe and easy access to and from the apparatus.

Apparatus and Activities

Climbing ropes and poles

a. Climbing

1. Ordinary climb (hand over hand).
2. Climb without aid of feet (legs dangling).
3. Climb without aid of feet (knee kick in each step).
4. Swing on two ropes, vaulting for height. (pendulum vault)
5. Swing on one rope, vaulting over obstacles.

b. Oblique and horizontal ropes or poles

1. Travel, using hands and legs.
2. Travel, using hands only.

Note: It is important that boys learn to descend the rope hand under hand. Caution them to save enough energy to climb down. In developing climbing ability, it may first be necessary to develop leg and arm strength on other pieces of apparatus.

Parallel Bars (low or high)

From end of bars:

1. Dip while supported on hands.
2. Dip while swinging.
3. Travel forward on hands in support.
4. Side vault left (right).
5. Rear vault left (right)
6. Swing with upper arm hang.

From side of bars:

7. Side vault left (right) over both bars.
8. Front vault over both bars.
9. Elephant vault. Cover both bars with gymnasium mat. From a run, vault over elephant. A springboard may be used to increase height.

Horizontal Bar (chinning bar)

High Bar (beyond reach)

1. Chin from a hang. Any grip.
2. Hang. Raise knees.
3. Hang. Raise legs.
4. Hang. Swing feet forward and upward over the bar to a support.

Low Bar (shoulder high)

1. Side vault.
2. Front vault.
3. Bar vault for height. Swing under the bar and over the jump standards.

Horse and Buck

1. Straddle vault.
2. Side vault, left (right).
3. Front vault, left (right).
4. Raise apparatus and vault for height.
5. Cover the horse or buck with a gymnasium mat and use as an obstacle.

Stall Bars

1. From a hang, facing bars - chinning.
2. From a hang, back to bars - knee raising
   leg raising
3. Sitting on the floor or on a bench, feet fixed between rungs, trunk lowering and raising (sit-ups).

Flying Rings

1. Hand and chin.
2. Swing and pull up at end of swings.
3. Hang or swing - raise knees.
4. Hang or swing - raise legs.

Horizontal Ladders - Grip rounds or beams.

1. Chin (pull-ups).
2. Travel forward.
3. Travel sideward.
4. Hang - raise knees.
5. Hang - raise legs.

Suggestions

1. Mats should be used as a safety precaution.
2. Boys should be taught correct grips.
3. Assistance should be provided during practice periods.
4. The height of the apparatus is dependent upon the height of the boys and the type of activity.
5. Exercise may be made more difficult by raising the apparatus; by increasing the distance between the take-off and the apparatus; by adding obstacles, (such as placing a medicine ball on the end of the horse for vaulting).

Tumbling

The tumbling here given aims to teach boys how to jump and fall without being hurt; to give them sufficient practice so that they will have a sense of "whereaboutness", and an ability to carry one another without injury. Tumbling develops the ability to control the body in flight.

Care should be taken to follow proper safety measures such as adequate rests, sufficient assistance, definite instructions during the training period, and the use of mats when the events are conducted on floors or other hard surfaces.

Formation

Divide the class into small squads to increase participation. Place each squad either sitting or standing along the side of the mat.

1. Forward Roll

From a stand, bend forward, bend knees, and place hands on mat. Duck head between legs, roll forward, on back of neck and shoulders, grasping knees. Come to a stand.

2. Shoulder Roll

Turn slightly to the r ight, place hands on the mat to left. Roll forward on the left shoulder, pulling the left arm in to the chest, rolling on the back and up to the feet.

3. Backward Roll

From a sta nd, lean forward, fall backward to a seat, roll backward, placing hands on the mat over the shoulders, and and at the same time drawing the knees to the chest. Push off with the hands, and roll to a stand.

4. Dive Roll

Same as Forward Roll, preceded by a short dive, from a stand take off from both feet, stretching arms forward, dive and roll. Do the same from a running start.

5. Cartwheel

From a run, make a quarter turn left, placing right foot sideward, right arm upward, throw the weight on the right foot, placing the right hand on the mat. Raise the left leg up, at the same time placing the left hand on the mat, arms and legs spread. Bring the left foot to the mat as the right hand is raised. Follow through to a stand.

6. Head Spring

From a run, shift weight onto right foot, raise left leg forward and arms overhead. Swing the left foot down, bend at the waist, swing hands to the mat, placing head on mat between hands. Follow through, swinging right leg overhead, push up with the hands, arch the back, snapping to a stand.

7. Hand Spring

Same as Head Spring except that the head does not touch the mat.

8. Supplementary Activities

a. Jump from heights.

Use any available apparatus or platform. Begin at a height of about 4 feet, increase the height gradually as skill improves. Break the fall by landing on the balls of the feet.

b. Jump from heights and roll to a stand, using a forward roll.
c. Jump from heights and roll to a stand, using the shoulder roll.
d. Dive over obstacle and roll to a stand. See dive and roll description.
e. Companion stunts. (Two high)

1. Sitting on Shoulder.
The top man spreads his legs and stands with his back to the bottom man. The bottom man places his head between the legs of the top man, who springs upward as the bottom man rises to a stand.

2. Standing on Shoulders.
Men face each other with hands joined and arms crossed. The bottom man places his left leg forward and bends his knees. The top man places his left foot on the left thigh of the bottom man, and steps up, placing the right foot on the right shoulder of the bottom man and the left foot on the left shoulder. The bottom man releases hands and places his hands behind the knees of the top man.

3. Fall and Roll
From two-high (sitting or standing on shoulders) at a signal both men lean forward, disengage and roll forward to a stand.

Suggestions
1. Use several thicknesses of mats for safety.
2. Place mats end to end to increase distance and difficulty as class progresses.
3. Use an assista nt on the difficult exercises such as the Head Spring and Hand Spring.

f. Grenade Throwing.

The Grenade Throw is a combination of a shot put and a catcher's peg. Before the grenade is thrown the safety pin must be pulled out with a pulling twisting motion. The pulling of the safety pin arms the grenade, but it will not fire until the thrower releases the lever.

"The throw is executed by bringing the right arm up until the elbow is on a line with the shoulder. The palm of the hand is up near or touching the shoulder. At the same time, the left arm is extended, palm down, and pointing toward the target. The weight is on the right foot with the eyes sighting along the left arm. The right arm is then thrown upwards, as in shot-putting, but straightens out and follows through as in a catcher's throw." (How to Throw a Grenade. Scholastic Coach, 12:26. September, 1942)

There should be no muscle strain or pull at any point. Rocks of approximately twenty ounces in weight can be used for practice in grenade throwing. Rocks or other objects may be wrapped with friction tape if a more realistically shaped article is desired.

Combative Activities

The activities listed under this title consist of individual and group contests of a rough a nd strenuous nature. They are valuable in developing the ability to react instantly with a maximum of energy for the purpose of overcoming an opponent.

Objectives

1. To develop aggressiveness in personal combat.
2. To develop initiative in personal combat.
3. To develop resourcefulness in personal combat.

Activities: Hand to hand.

In hand to hand combat in war, victory if achieved, usually comes in the first few seconds. Defeats suffered in early practice will be compensated for by habits of aggressiveness and by the quick and adaptive thinking which will grow from such practices. The activities described below are developmental and not the ones of actual warfare.

Formation: Arrange the class in pairs, according to size.

1. Hand Pull. Contestants grasp hands (one or both) and attempt to pull the opponent over to one's own position. In grasping hands, each individual should grasp the wrist of the opponent so that there is a double grasp with heels of ha nds in contact and with each hand grasping the other's wrist. This ca n be varied by hopping.

2. Neck Pull. Grasp the back of opponent's neck with one hand; for example, each contestant grasps the ba ck of opponent's neck with right hand. In this case the right foot would be forward. Attempt to pull opponent out of position.

3. Rooster Fight. Hop on left foot with arms folded across the chest. Use the right shoulder and right side of chest to butt opponent. The object is to make the opponent lose his balance and fall, or to unfold his arms or to touch his free foot to the ground.

4. Hand Wrestling. Opponents grasp right (or left) hands. Right foot is forward, and each attempts by pulling, pushing, by a sideward movement or other maneuvering to force opponent to move one or both feet from original position. Change hands after each bout.

5. Mounted Wrestling. Men fight in pairs. The "rider" sits astride the neck of the "horse" with his lower legs under the "horse's" arms and his feet clasped behind the "horse's" back. Two pairs of such horses and riders then wrestle, the object being to unseat the rider or to cause the rider to touch the ground anyway. If both pairs fall at the same time, the rider touching the ground first is the loser.

6. Indian Wrestling. Contestants lie on the ground, side by side, with hands in opposite directions. Link right elbows. Upon signal of instructor or by mutual agreement, raise right leg far enough to engage the heel of the

opponent. In order to time the contest, individuals usually raise the leg three times rhythmically and the third time engage opponent's heel, attempting to roll him over backwards. After each three bouts, change legs.

Boxing. (See any standard boxing guide for detailed descriptions.)

The fundamentals of boxing are very valuable, especially the foot work and thrusts. Competitive boxing should not be encouraged, except under expert supervision and control. The following skills are of value and should be practiced:

1. On guard.
2. Footwork:
   Advance and retreat
   Side stepping
3. Straight right or left.
4. Hooks
   Right or left

Wrestling. (See any standard wrestling guide for detailed description of wrestling holds.)

Wrestling is one of the most valuable forms of combative activity. It is particularly valuable in the present emergency in teaching boys how to secure bodily advantage over an adversary quickly. In all forms of wrestling, both during the training period and in matches, the emphasis should be upon overcoming one's opponent instantly. Competitive wrestling should not be encouraged except under expert supervision. Some of the wrestling positions lend themselves to hand to hand combat.

Sports and Games

Sports and games contribute to the development of endurance and skill and are of va lue in developing the combative spirit and the will to win. In order to derive the maximum benefits from the game program there must be more participation by more people, i.e., more games, longer periods, and more boys in the games.

Objectives

1. To develop cooperation (subordination of the individual for the good of the group).
2. To develop leadership and fellowship.
3. To develop aggressiveness.
4. To develop initiative.

Activities

Group Games. Many group games can be made more vigorous and rugged to meet the objectives of this program.

1. Broncho Tag. (Developed from Three Deep). The players are scattered about in pairs. The boy standing behind wraps his arms around the waist of the one in front. One chaser and one runner are selected. The chaser attempts to tag the runner. The runner may escape by clasping the waist of the rear boy of