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PLANNING FACILITIES, EQUIPMENT, ADMINISTRATION, AND
PRESENTATION OF A PHYSICAL EDUCATION PROGRAM
FOR THE SECONDARY SCHOOLS OF MONTANA

by

Lawrence H. Potter

B. A. Montana State University, 1943

Presented in partial fulfillment of the requirements for the
degree of
Master of Education

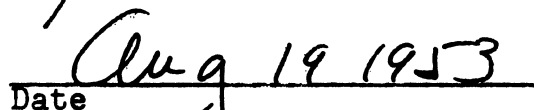
MONTANA STATE UNIVERSITY

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CHAPTER I

INTRODUCTION

The growth of physical education in America has been rapid but somewhat erratic and undirected. Throughout its early development much of its philosophy and activities were drawn from several European "systems" of physical training. The first organized programs of physical education appeared in American colleges between 1850 and 1860. The first public school programs appeared somewhat later.

I. GENERAL STATEMENT OF PROBLEM

Present day physical education is not only concerned with the development of physical strength and organic vigor, but also is interested in the development of the total personality, physically, mentally, emotionally and socially. Too many people think of physical education as a means merely for producing skilled performances in athletic contests. Athletic performances may be a desirable part of the program; however, physical education properly conceived includes in its objectives many fundamental understandings about sports, about the human body, and about physical fitness and recreation.

Physical education has been defined in many ways by the various leaders in the field. Several authorities in the field of physical education have given definitions which

might be quoted. Hetherington¹ has defined physical education as that phase of education which is concerned; first, with the organization and leadership of children in big muscle activities; and second, with the control of health or growth conditions naturally associated with the leadership of the activities so that the educational process may go on without growth handicaps.

Williams² has defined physical education as the process of the development of the organic systems of the individual through physical activities...Development of the neuro-muscular systems in general, and particularly in relation to control over certain fundamental skills...Development of certain attitudes toward physical activity and particularly toward play...Development of standards of conduct.

All children, all students in whatever grade of school are entitled to a physical education program geared to their interests and abilities. No one should be overlooked. The handicapped child should never be excluded from the physical education program because of his abnormality; a program adapted to his needs should be created for him. Girls should have opportunities equal to boys.

¹ Clark W. Hetherington, School Program in Physical Education, (New York: The World Book Co., 1922). p. 3

² J. F. Williams, Principles of Physical Education (Philadelphia and London: W. B. Saunders, 1930) p. 18

Physical education has suffered greatly from the fact that it has been thought of exclusively in terms of exercises, skills, muscle building, perspiration, and metabolism. Physical education should not be thought of as a "frill" or an ornament attached to the institution or school, but rather as an integral phase of educating the entire individual. When this understanding of the nature of physical education becomes generally accepted, one may look for less confusion about the subject and for more intelligent progress in the field.

II. PURPOSES OF PHYSICAL EDUCATION

Educators, teachers, parents, and administrators in general are becoming increasingly aware of the fact that physical education activities have much to contribute to the social and emotional development of the child. As physical education directors are bringing themselves to think constructively and to study their problems from a scientific point of view, physical education is being modified and in a real sense is making progress. Many new concepts with respect to the outcomes, content, organization and administration of our physical education programs have been held. New concepts have definitely resulted in the improvement of state, county and city physical education departments.

Physical education still lacks complete uniformity in certain of its various divisions; nevertheless, one may mention that the skepticism of some educators regarding the

contributions of physical education to the growth of youth as a whole has disappeared. This is a wholesome indication that physical education probably faces greater opportunities for advancement and for service in the next decade.

III. PURPOSE OF THIS STUDY

The chief purpose of this study was to collect and organize information for the use of physical education instructors concerned with (1) planning facilities for physical education programs, (2) equipment needed for an adequate physical education program, (3) the presentation of a physical education program for the secondary schools of Montana.

The second purpose was to provide school executives, school boards and boards of education, architects, parents, teachers, and other interested parties with factual data concerning the planning of facilities, equipment, administration, and presentation of the physical education programs.

The third purpose involves the possibility of deriving data which might make possible recommendations as to planning facilities, equipment, administration and presentation of the physical education program for the secondary schools of Montana.

IV. OBJECTIVES AND OUTCOMES OF PHYSICAL EDUCATION

General Objectives. The primary objective of physical education is to help each student to achieve the maximum

standard of health of which he is capable with the thought that good health is a prerequisite to the realization of all activities which make for complete living.

Specific Objectives. A physical education program should strive to attain the following specific objectives:

1. To contribute to the development of the physical, mental, and social potentialities of the individual.
2. To work with the medical profession in making the discovery of growth handicaps and remedial defects and to cooperate with them in their correction.
3. To provide a program of activities that will challenge the best efforts of the individual that will be within range of her or his abilities, and that will enable the student to develop organic and muscular power and to improve skill and coordination.
4. To provide by means of these activities situations in which the student may achieve self-confidence, happiness, and the satisfaction of accomplishment, and to encourage in the student through the situations the development of such traits as initiative, leadership, intelligent followership, fairness, unselfishness, reliability, tolerance, and other social attitudes and relationships.
5. To encourage through these activities an attitude toward exercise that will normalize one's life during high school years, influence one's actions in adult life and make one a worthy member of his community.

Desirable Outcomes. The following outcomes are important phases of a physical education program:

1. Physical outcomes. Increase in nerve, organic and muscular power, improvement in technique, coordination posture, and rhythmic response.
2. Mental outcomes. Interest in improving skill, and in attaining a high degree of physical fitness and good posture, knowledges of and appreciation for place of physical education activities in modern living.

courage, satisfaction, joy and appreciation of beauty.

3. Social outcomes. Worthy use of leisure time, leadership, followership, unselfishness, fairness, tolerance and cooperation.

For all general purposes, objectives and outcomes of physical education are to bring about useful changes in human conduct to the end that a more wholesome and better integrated personality results. Thus, though it may be said that it is developing the physical make-up of the individual; at the same time it is a means to educating the individual.

The major objectives and outcomes of physical education have become identical with the purposes of all education. It aims at the same general outcomes as do the other departments in a given school system. In the main, physical education must be considered educational, the only difference being the content used, the methods developed to teach the selected content, and the scope and extent of the results. Therefore, if physical education is educational, then, physical education, the same as general education, is interested in bringing about useful changes in human conduct through the education of the physical, and the education of the individual through the physical, so that the integrated personality may result.

V. PROCEDURES

Much of the available material in the field of physical education was carefully read in an endeavor to find several

common expert opinions pertaining to the problem of physical education. These sources included doctor's dissertations, doctor's field studies, master's theses, research studies and bulletins, textbooks, library indexes, magazines and bulletins of the National Education Association. Many physical education departments were visited and much valuable information was received from directors of physical education departments not only from high schools but colleges as well.

VI. DELIMITATION

This study is limited to planning facilities, equipment, administration and presentation of a physical education program for the secondary schools of Montana. The writer is aware that there is a tremendous need for further study in the field of health and athletic programs, but for purposes of conciseness, this study will confine its efforts entirely to the field of physical education.

VII. DEFINITION OF TERMS

Appropriation. A particular financial record that lists the appropriations set aside for specific purposes.

Budget. An estimate of proposed expenditures for a given period or purpose and the proposed means of financing them.

Detergent. A purifying substance having a strong

cleansing property such as soap, water softeners, Purex and the like.

Equipment. Articles such as furniture, machinery, and books that are used without being consumed; to be distinguished from supplies.

Facilities. The physical equipment, including land areas, buildings and other structures, used in connection with physical education.

Inventory. A detailed list showing quantities, descriptions, and values of goods held for use by the institution in a central storeroom.

Physical Education. The program of instruction and participation in big-muscle activities designed to promote desirable physical development, motor skills, attitudes, and habits of conduct.

Protective Cover. A soft outside covering for gym mats to facilitate cleaning and to give protection from mat burns.

Storage. A place devoted to storing of physical education equipment.

Supplies. Articles or materials consumed in the course of use, such as soap, bats, balls, and inflated materials.

The above definitions of terms have been given to aid in the clarification of a common interpretation of terms.

CHAPTER II

PHYSICAL EDUCATION FACILITIES

The purchase and care of equipment for high school athletics represents one of the major problems confronting those in charge of the program. In most schools, funds are limited, therefore, an organized program for the care of equipment is essential. Taking the best care of equipment can prove to be the greatest single money-saver in the physical education budget. This chapter considers facilities in the order in which a student would use them.

I. SUPPLY AND STORAGE ROOM

A well-planned program for the care of physical education equipment should follow this general pattern:

1. An adequate room for the storage of equipment;
2. A good marking system;
3. Efficient issuance of equipment;
4. Proper repair of equipment;
5. A positive program for educating the students to respect and care for the equipment.

In the opinion of Fait¹ a supply and equipment room should be planned in the following manner:

The equipment room should be an area which can be shut off from general use. It must be well lighted and ventilated.

¹Fait, Hollis., "Make Your Equipment Last Longer," Scholastic Coach, 21:20-22, January, 1952.

If the school does not have such a place, it might convert a storage room or a section of the dressing room or a nearby classroom could be partitioned off with caging wire to make the necessary provisions. The entrance door to the equipment room is often cut in half to allow the upper section to swing open while equipment is being issued. Such a door is functional, but doesn't always prevent students from swinging open the bottom section and helping themselves to supplies at will. To prevent this, put in a small window through which to issue the equipment.

The equipment room should be large enough to permit orderly arrangement of the equipment and large enough for the person in charge to work comfortably. The picture below reveals a well-planned supply and storage room.



Figure 1

Equipment Room

II. MARKING OF EQUIPMENT

The name or initials of the school should appear on all physical education clothing and equipment. All items of one type should be numbered consecutively. Stenciling is the most economical method. However, burning works better for some items such as leather and wood.

The size (or designation of small, medium, or large) should be labeled on the garments. For example, a pair of gym pants, size 28 and the first to be numbered, would be stenciled with 1-28. The second pair, size 30, would become 2-30 and so on.

To enable the physical education teacher to tell how old the equipment is, it is well to mark the year of purchase on the equipment. The marking on the size 28 pant mentioned above might then become 1-28-53.

The above described code number should appear on all supplies, as well as wearing apparel.

By having all properties marked consecutively it then aids a good deal in keeping an account of the "gear" when it is issued for use. To put down a number is much easier to record than a long descriptive entry on the student's issuance card.

III. ISSUANCE OF EQUIPMENT

Much athletic "gear" is lost or misused because of a poor check out system. Students who are found to be responsi-

ble can be appointed to issue equipment and keep the necessary records.

Checkouts listing the description of the article, as described in "Marking," can be easily prepared. Equipment room personnel can then jot down names opposite the item issued and check it as it is turned in. Any article that is damaged or lost can then be traced to the responsible party. To compel students who damage or lose equipment to make restitution is an effective and wise practice. Each article of equipment issued to a student should be charged to him on a permanent record card such as the one suggested below.

NAME _____		PHYSICAL EXAM. _____			
LOCKER _____		LOCK _____		COMBINATION _____	
PARENT'S CONSENT _____			DEPOSIT _____		
ARTICLE	NUMBER	ISSUED	ARTICLE	NUMBER	RETURNED
ROOM	GRADE	SIGNATURE _____			

Figure 2

Permanent Record Equipment Card

One of the basic requirements of such a system is simplicity. A system that requires an extensive amount of deskwork is tedious and of little value. An accurate list indicating the material on hand and material needed, is the only means of determining what purchases have to be made to effectuate the program.

IV. RULES AND REGULATIONS

The storage room should have rules and regulations that the students understand thoroughly. These rules and regulations should be explained carefully and emphatically at the beginning of the fall term. Below are some suggested rules that could apply to an equipment and storage room.

1. No equipment is drawn without signing for it.
2. No equipment will be replaced without the old garment.
3. Any equipment lost must be paid for.
4. Damaged articles should be returned for repair at once.
5. Proper attitude toward equipment must be maintained at all times.
6. No one besides the attendant is allowed in the equipment room at any time.

V. LOCKER ROOM

The locker room should be large enough to accommodate all who will take part in the physical education program. The size, number and arrangement of lockers may vary.

The Annual Report of The National Facilities Conference²

suggested:

That an average of fourteen square feet per pupil in the designed peak period load should be provided, exclusive of the space required for lockers. Lockers with ample space to accomodate street clothes should be provided if at all possible. Lockers should be constructed on a solid covered base six to eight inches high to allow for flushing and sweeping without damaging the lockers or their contents. Stationary benches secured to the floor are essential. Space relations of lockers to bench, and bench to bench should be planned for traffic control and dressing comfort.

A well lighted and well ventilated locker room is highly desirable and such a room should be provided by all means. In addition to adequate artificial lights, the lockers should be arranged to take full advantage of all available daylight.

The locker room is more than just a dressing room for the boys in physical education. It is an important part of the teaching situation. The director should have his locker in the near proximity with those of the boys where he can keep an eye on them at all times. In the locker room he will learn things about the boys he should know and that will help him immeasurably in his teaching. The locker room is a great place to teach by informal remarks, example, and radiation of desirable attitudes.

² Annual Report of National Facilities Conference, Chicago, Illinois, The Athletic Institute Incorporated, 1947, p. 61.

Basket-type lockers, so prevalent in many schools, are no longer recommended for these reasons: Basket-type lockers do not allow for hygienic care of dressing equipment; basket-type lockers are not economical because they are constantly moved, and are then subject to hard wear.

According to Buice³ the location of an attractive bulletin board should be an absolute requirement for the locker room. Reading a bulletin board, like participating in recreational activities, is something you don't have to do. So boards must have reader appeal. A sample of a board that was made up with such appeal is hereby submitted.

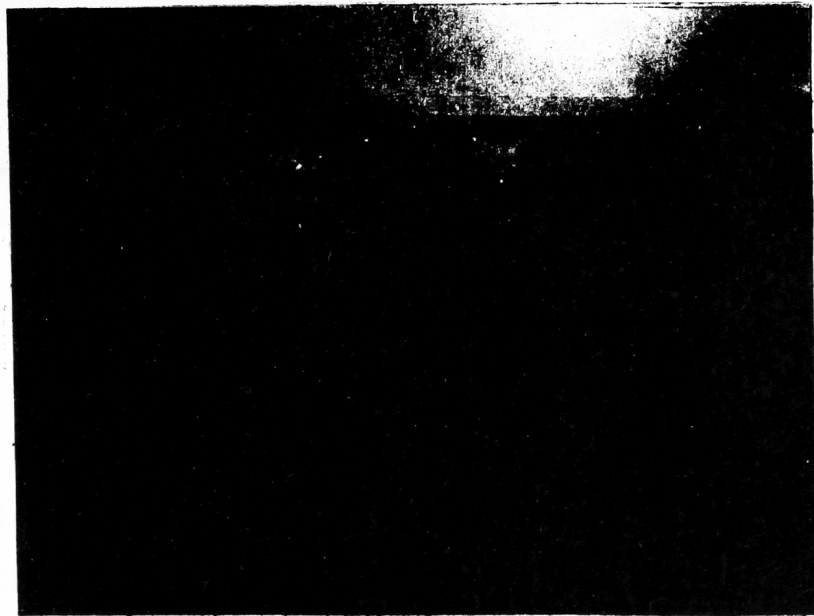


Figure 4

A Planned Bulletin Board

³Buice, Mary., "Better Bulletin Boards," National Education Journal, 38:603, November, 1949.

In many Montana schools the space allotted to locker rooms is entirely inadequate. One school partially solved the problem of hanging street clothes by the structure shown in the picture below.

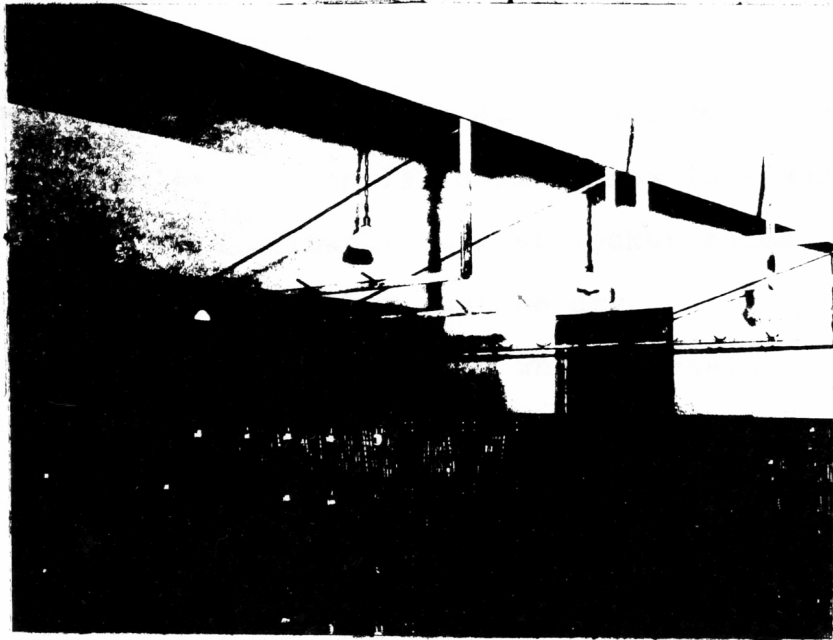


Figure 5

Clothes Hanging Device for Locker Room

The elimination of petty thievery in locker rooms is always a big job. A good plan to follow is to provide every student with a large manila envelope at the beginning of each semester. The student must sign his name on the envelope, and at the beginning of each class period he puts all his valuables in the envelope and hands it to a reliable student assigned to that job by the instructor. The student in charge is responsible for said envelopes, while within the office.

At the end of the period the student calls for his envelope at the office door. All articles are safe and sound.

Whenever a boy loses his envelope he is charged five cents to cover the cost of the loss. The small charge will almost pay for the complete service for the year. All boys who fail to check their valuables must assume full responsibility if losses occur.

The locker room, the same as the equipment room must have a set of rules and regulations. Below is a suggested list that might be applicable to most locker rooms:

1. The locker room floor must be dry.
2. The students remain seated while dressing.
3. Students walk with weight on the toes.
4. Students remove cleated shoes before entering locker room.
5. Students refrain from "Horse play."
6. All personal and school equipment is in the proper place.
7. Locker doors are kept closed.
8. Students enter and leave the locker room in an orderly manner.
9. Students are checked for athlete's foot and those who are infected are sent to the nurse.
10. The first aid kit is complete.
11. All students are dressed in proper gym suits and shoes before leaving for the gymnasium.

VI. SANITATION OF LOCKER ROOM

According to Mr. Lawther⁴ the proper sanitation of a locker room should follow these lines:

The locker room floor should be flushed regularly with some germicide, and the walls, lockers, benches, and furniture gone over with a cloth or mop dampened with the same germicide. Each locker should be cleaned and sponged with a disinfectant before it is assigned to a new boy. Skin fungi are likely to spread unless such precautions are taken.

Exchanging ideas with the custodian as to the methods to be used in maintaining proper sanitation will provide for a better understanding of a very important problem in physical education.

⁴Lawther, John D., Psychology of Coaching. New York: Prentice-Hall, 1951, p. 26.

VII. GYMNASIUM

The gymnasium is the main workshop for physical education and it should be a large, well-ventilated, and well lighted room usually located at the ground floor level. The location of the gymnasium should be such that noise will not cause interference in quiet areas, but at the same time it should be easily accessible for both students and the public and definitely be a part of the integral school plan. The various uses of the gymnasium, both immediate and proposed, will determine dimensions and size. It is not educationally sound to construct a gymnasium for basketball alone with primary consideration for the maximum number of spectators. The foresight and planning should take into consideration a well-rounded physical education program for the total education of the child. Adequate provision for the seating of spectators should be provided.

The gymnasium provides adequate space for large groups to actively participate in group games and social activities. Suitable space for calisthenics which in the main, is the core of the indoor activities, is usually provided for by all gymnasiums with average floor space and also provides areas that can be used for competitive games.

Some gymnasiums contain auditorium facilities. In a

recent survey of two hundred and ninety-six high schools by Guerrero⁵, ninety-nine and ninety-four one hundredths stated that auditorium and gymnasium combinations were definitely not suitable, due to scheduling conflicts.

All well-constructed gymnasiums provide a number of rooms that branch off the main floor and are sometimes called auxiliary rooms. These rooms usually consist of a corrective room, apparatus storage room, physical education classroom, club room, administrative offices and custodial maintenance rooms.

The pieces of apparatus usually placed in most gymnasiums consists of ropes, rings, parallel bars, springboard, horizontal bar, horse and buck, and mats.

The maximum amount of safety precautions should be put into practice in all gymnasiums. Many of the unnecessary accidents that occur in physical education result from improperly planned play areas. A suggested check list for safety in gymnasiums should be classified under two sets of controls, leadership and equipment. Under leadership control the following checks should be exercised:

1. All activities in the gymnasium should be under supervision at all times.
2. Supervisor should be aware of accident hazards, precautions, and remedies peculiar to their environment.

⁵ Joseph M. Guerrero, "A Survey of Physical Education Facilities," Scholastic Coach, 22:26-27, January, 1953.

3. Notices of regulations, possible hazards, and precautions should be posted in these locations.
4. The supervisor should be capable of administering first-aid.
5. A daily check of condition of gymnasium should be made and needed repairs made immediately.
6. The gymnasium floor must be swept carefully when needed.
7. The gymnasium should be cleared of all hazardous obstructions. Non-removable objects should be padded.
8. The supervisor should be instructed as to duties during fire drill.
9. Fire drill directions must be posted in gymnasium.
10. Supervisors should be trained in the use of fire extinguishers.

Under equipment control the following checks should be exercised:

1. The gymnasium floor should be constructed of wood or other resilient material.
2. The gymnasium floor should be free of splinters.
3. The gymnasium floor should have non-slippery finish.
4. Radiators, uprights, water fountains, and other obstructions should be recessed or flush with wall or padded and properly marked.
5. Gymnasium windows, lighting fixtures, clocks, and thermometers should be screened or otherwise protected from accidental breakage.
6. Sufficient fire extinguishers must be provided for in gymnasium.
7. The exit doors of gymnasium must open outward.
8. First-aid equipment should be available in gymnasium.
9. Gymnasium apparatus should be properly placed so it does not interfere with free spaces designed for sports.
10. The lighting should be satisfactory both as to natural and artificial.

11. There should be adequate storage and locks for all equipment.

Particular emphasis should be given to the custodial care of the gymnasium proper. Henry H. Linn⁶ lists specific instructions and procedures for sweeping and maintaining gymnasium floors. From the standpoint of health and sanitation, that the floor should be in first class condition as to cleanliness at all times is of the utmost importance.

VIII. SHOWER ROOM

The shower room is a very important room for the physical education student. A good shower together with other members of the class is a pleasure and a needed form of emotional therapy. The warmth of the shower eases and relaxes both muscular and nervous tensions and removes irritations. The frequent singing in the shower is an indication of resulting therapeutic value.

One of the leading deficiencies in physical education plant planning in Montana has been the lack of adequate shower facilities. A shower room should be provided with a sufficient number of shower heads to care for the peak period load. For a class of forty boys, twelve shower heads would be advisable.

One of the vital training areas of a physical education program is that of teaching health and body cleanliness.

⁶ Henry H. Linn, Leslie C. Helm, K. P. Garbarkiewicz, The School Custodian's Housekeeping Handbook. New York: Bureau of Publications Teacher College, Columbia University, 1948, p. 99.

Boys are to be encouraged and taught that showers after each class period are vitally necessary. Proper bathing may become difficult to teach and encourage if the shower rooms are unattractive and cold, or if the temperature of the student's shower changes with every additional showerhead turned on. Perhaps the most commonly neglected article, of this important room, is the showerhead. In some gymnasiums it is an utter impossibility to obtain a satisfactory stream of water. A systematic schedule for cleaning and regulating of these water outlets may add much to the willingness of the boys to shower. Pictured below is what is considered an attractive shower room.

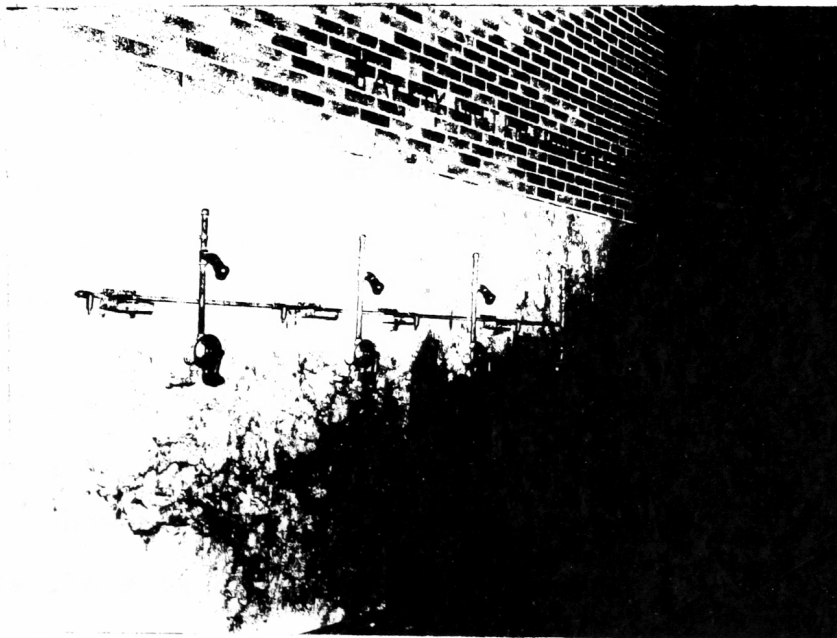


Figure 6

A Well Planned Shower Room

It is essential that the floors of the shower rooms are composed of non-slip material. If at all possible, a small room immediately adjoining the shower room should be used for a drying room, thereby preventing the carrying of water to the locker room.

All plumbing except valves and heads, should be recessed in the wall if possible. Lighting fixtures should be moisture proof and the switch located outside the shower room. There should be controlled ventilation for rapid removal of excess heat and moisture. Ample drainage is a vital necessity. Liquid soap containers have proven to be the best and they should be located between successive showerheads.

The custodian should flush down the walls and scrub the floor with a germicide at least once a week. Taking up the excess water from the floor should be a daily routine.

The shower room should be supervised and a check list set up to augment supervision. Below is a suggested check list of equipment controls.

1. There are sufficient shower heads to provide baths for maximum class.
2. There is a plentiful supply of hot water.
3. The shower heads are shoulder height.
4. The shower floor slopes gently toward the drain.
5. The floor is of non-slip material.
6. There is a master control valve system to the shower heads.
7. All water and steam pipes are recessed.

8. Manual control to shower heads are wheel type.
9. There are liquid soap dispensers.
10. There is a drying room.

Students respond well to a positive type of leadership.

The following suggestions for leadership control are important:

1. Students walk on the toes in the shower and dry room.
2. Bathers begin with a warm shower and finish with a cool shower.
3. The soap dispensers are filled.
4. Students do not leave soap on the floor.
5. The drying room is used by all bathers before entering the locker room.
6. Shower drains are open.

IX. FIRST AID OR TRAINING ROOM

Perhaps one of the most important rooms in the physical education program and unnecessarily the most neglected, is the first aid room commonly referred to as the training room. No physical education plant can be considered complete without a good training room. If such a room is not already in use, plans to construct one should be begun immediately. Equipment offers no challenge if a cooperative industrial arts department is willing to lend a hand.

The first and most important step is to find a vacant room, no matter how small. If a room is not available, perhaps a section of the locker room could be partitioned.

If the floor is concrete, it should be painted a tan or grey. From a health standpoint, the walls should be painted a very light color so as to show the dirt as much as possible. Frequent cleaning is highly desirable. Recruiting willing students from the physical education classes to help with the painting will pose no problem.

The chief function of first aid is to give immediate attention to injuries that occur on the gymnasium floor and the playground. It also serves the dual purpose of caring for injuries after they have happened. In most cases, a room, which should be located adjacent to the locker room, will serve both the physical education classes and the athletic teams. Here all the medical supplies will be stored for use in the program.

The first procedure in setting up a training room is to choose one student trainer and two assistants. Upon the graduation of the head trainer, the assistants move up according to ability. The progression from then on should be on the same level as that for athletic team managers.

That the student trainers know nothing about the care and the prevention of injuries must be assumed. A week's training course should be given whereby they can learn the necessary techniques. All the reading material that can be collected should be placed at their disposal. Most high school boys like a little authority and like to feel that they are fulfilling a vital function, and they are. They should be

taught to keep an accurate file of all injuries and all persons treated. An iron-clad rule must be strictly enforced and adhered to: No one can be treated without authorization from the director. Close supervision by the director in the beginning stages will be a necessity and should result in rapid student improvement.

Pictured below is one of the improvisations in the construction of a training table. An old science table dug out of the science store room and given a complete overhauling is the basis for this training table.

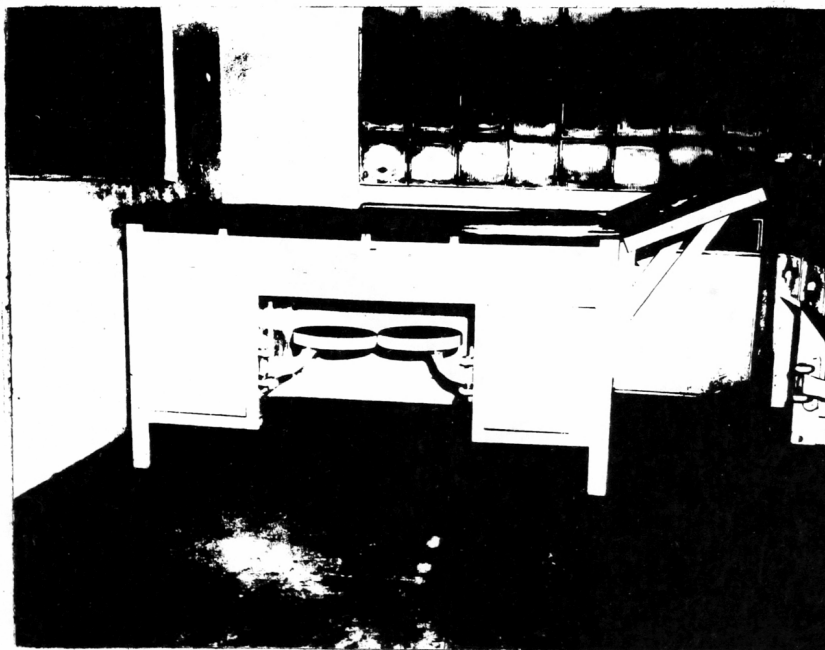


Figure 7

Reconstructed Training Table

A simple detailed plan for construction of a training room table is presented below.

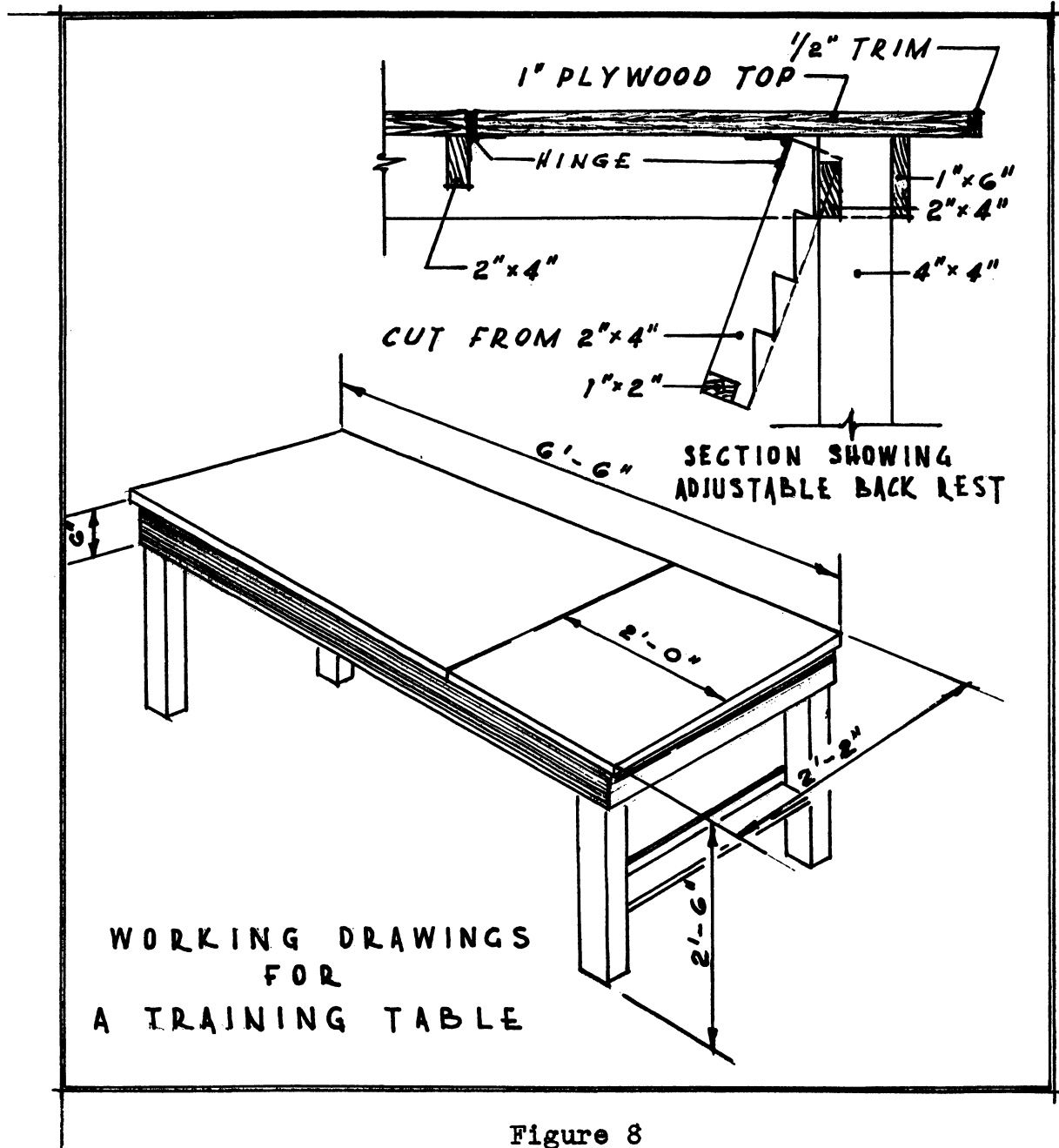


Figure 8

Drawings for Training Table

Anatomical wall charts have proven very useful in the training room. The student gains a better insight into his injury where the director shows him the bones or muscles that are affected and explains the nature of the injury to him.

Much attention should be given to the placement of signs about the room and what areas they will include. A few areas of concern might be as follows:

1. This is your room! Keep it clean!
2. No undressing in the training room.
3. Shower before being treated for minor cuts and scratches.
4. No horseplay allowed.
5. Remove spikes or cleats before entering.
6. Watch your language!

The one piece of equipment conspicuously absent in most Montana high school training rooms is the whirlpool bath. Because of its cost, only the most affluent of schools have been able to afford it. Where the budget permits, a school will do well to purchase a ready-made whirlpool bath. Where funds are limited, a school may build its own. A good homemade device may be constructed for less than fifty dollars. Appearing on the following page is a drawing that can be used to construct a whirlpool bath with a minimum of cost.

The training room equipment is extensive and varied. There are, however, certain essentials that must be included,

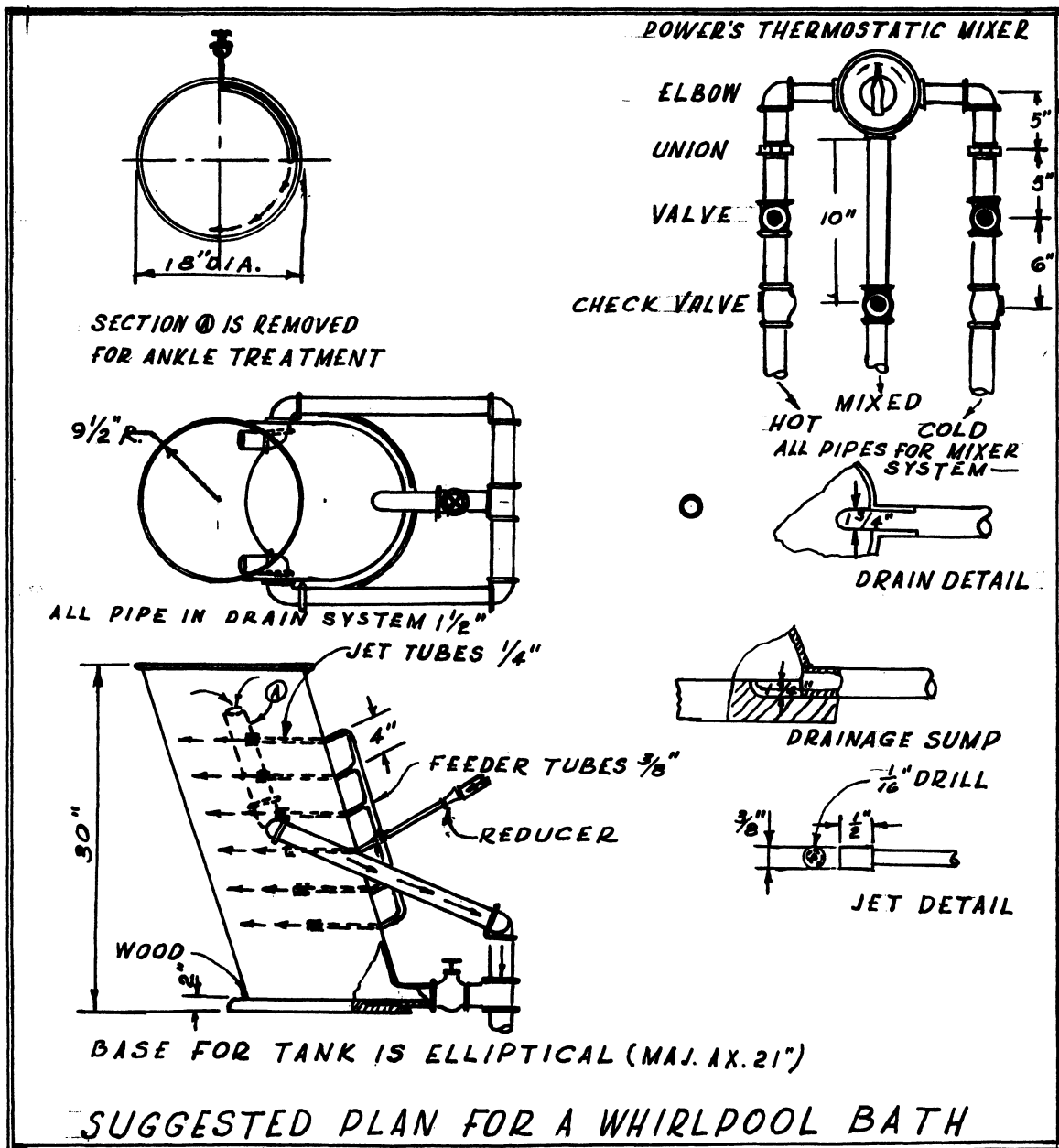


Figure 9

Working Drawings for Whirlpool Bath

among which are the following:

- | | |
|--|-------------------------|
| 1. Adhesive tape
1", 1½", 2" | 16. Felt |
| 2. Band aids | 17. Cotton long bench |
| 3. Ankle wraps and
rewrapping machine | 18. Rubdown liniment |
| 4. Tourniquets | 19. Merthiolate |
| 5. Gauze bandages | 20. Eye cup |
| 6. Elastic bandages | 21. Boric Acid solution |
| 7. Absorbent cotton | 22. Salt tablets |
| 8. Tweezers | 23. Sponge rubber |
| 9. Pliers | 24. Smelling salts |
| 10. Safety Pins | 25. Tongue depressors |
| 11. Ice bag | 26. Scissors |
| 12. Analgesic balm | 27. Rubbing alcohol |
| 13. Benzoin compound | 28. Athletic powder |
| 14. Green soap | 29. Medicine dropper |
| 15. Wood applicators | 30. Crutches |
| | 31. Stretcher |

Such items as laxative tablets, codine, aspirin, hypodermic needle and syringe are definitely left out of the training room. Nothing stronger than salt tablets should be given out in training rooms on the high school level. This will afford protection for the director in regard to the thin line drawn in regard to the medical code.

Presented on the following page is a working drawing for a medical cabinet.

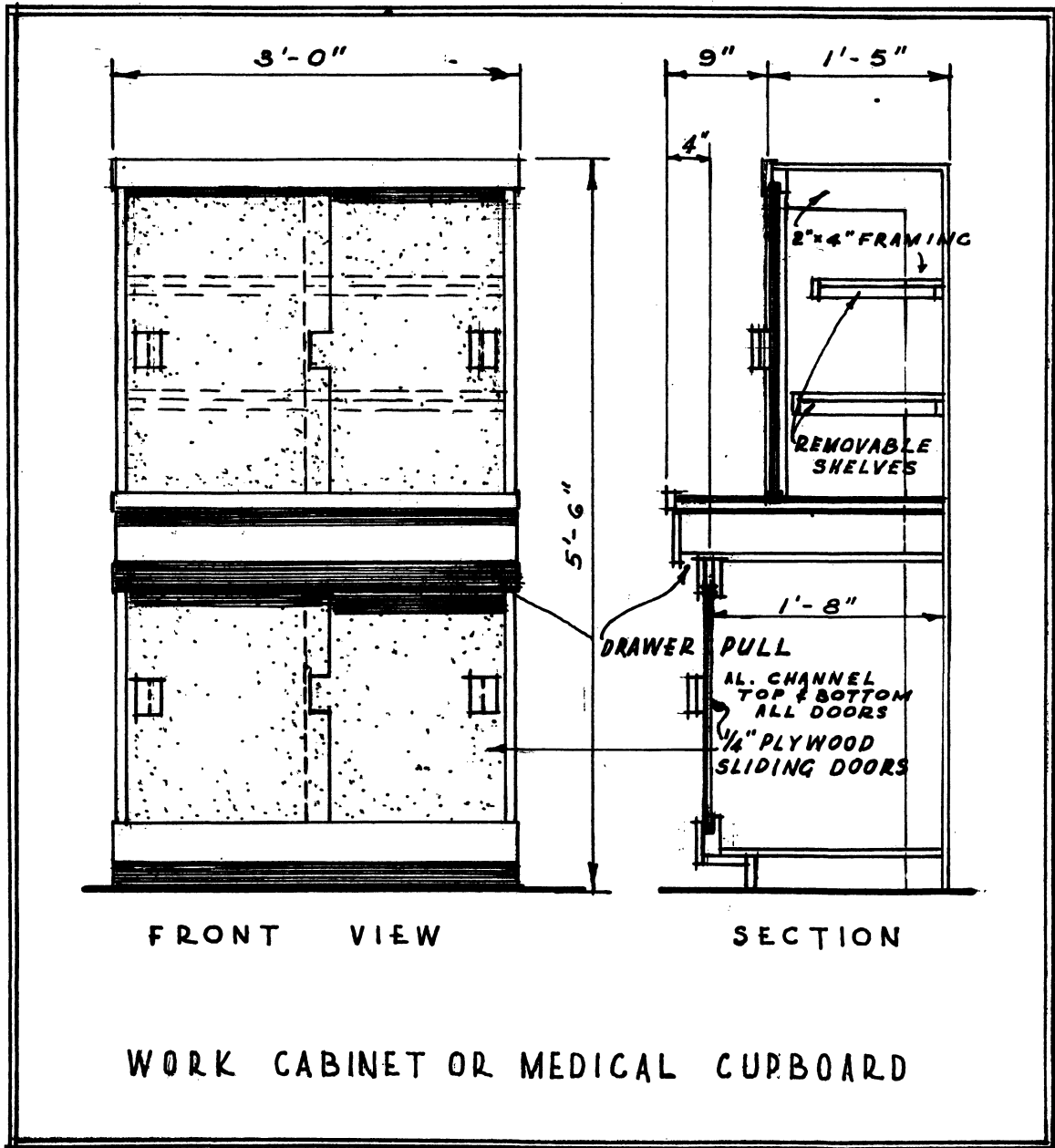


Figure 10

Drawings for Medical Cabinet

X. LAUNDRY ROOM

In the interest of sanitation a wise plan is to have laundry facilities to take care of the washing of towels, gym suits, and other cotton goods that are used in the physical education program. A small unit can be installed in the physical education plant through the purchase of a modern washing machine and dryer. The capital outlay may appear on the first examination to be much too large. After considering the average laundry bills over a period of years, evidence comes to light that a laundry unit will amount to no more than the cost for one year. The laundry unit can be used in conjunction with the athletic department, which could help defray the cost. Not only does the laundry unit save money but it also affords a convenience that is not otherwise enjoyed when the laundry is sent out.

Keeping the students equipped with clean uniforms has been found to be a great factor in building morale and making the students conscious of body cleanliness. This practice also does away with the piling of dirty laundry in lockers that contribute so much to that "locker room odor".

The small laundry unit described need not require too large a space. The best, however, is to have it located as near to the locker room as is possible. The prerequisite to any locker room, of course, is to have hot and cold running

water and proper drainage. The new models, on the market will fit in and appear presentable with the usual furniture found in a locker room.

The washing of towels will be the big item, and provisions should be made for an efficient towel exchange system. A tried and successful towel system that has been used at very little cost is hereby presented. At the beginning of the fall term the student is assessed a sum of seventy-five cents. This fee entitles him to a clean towel every period he has physical education plus the washing of his uniform once a week. Each day when the student reports for class he draws a towel from the attendant in charge of the laundry room. His name which appears on the towel sheet is checked. At the end of the period he turns in the used towel to the attendant who in turn checks his name off. Anyone who fails to return a towel is charged for it. No student can be excused from showering for lack of a towel--because a towel is always available. The often used practice of sharing a towel with another student is done away with as well as the practice of using soiled towels that may be hanging in the lockers.

In laundering uniforms each student has his uniforms marked with a number in laundry ink that corresponds to his basket or locker number. The laundry room attendant then merely returns the uniforms to the correct locker after they have been laundered. The amount of money levied in the

beginning covers the cost of cleaning materials used in the laundry for the year. One laundry room set-up, with which the writer is familiar is pictured below.

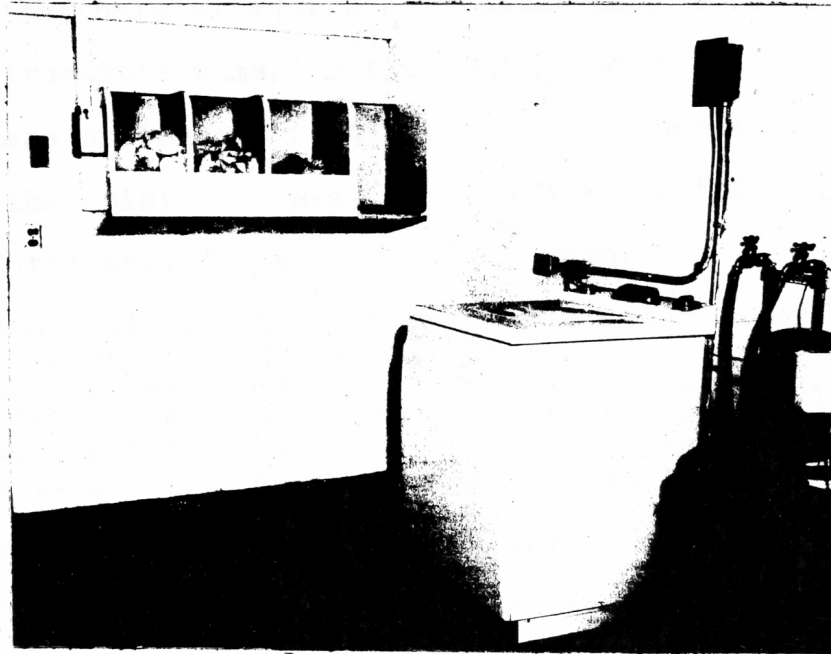


Figure 11

A Small Laundry Unit

Laundry facilities are a genuine asset, if properly planned, not only to the individual members who participate in a physical activity but also to the program.

CHAPTER III

EQUIPMENT

The provision of adequate supplies and equipment has always presented itself as a difficult administrative problem. The need for equipment, budgetary procedures, requisition, purchasing and care of equipment consume many hours of the physical director's time. Establishing definite policies regarding these procedures is of the utmost importance.

In the opinion of Nash¹ and others the following could be said of the need for equipment and supplies:

Equipment and supplies for gymnasium and outdoor fields are the tools of instruction. Their cost should be compared to the cost of textbooks, laboratory equipment and class supplies for academic subjects and (other) special fields such as music or industrial arts. It is impossible to teach a modern program without the adequate teaching tools.

Curriculum content and pupil participation are modified by the amounts and kinds of instructional materials found in any teaching situation. In the past, schools frequently have neglected to supply the necessary quantity of materials needed for physical education. The reason for such neglect could be the fact that earlier standards based their equipment needs on game play or on total school enrollment rather than on the instructional needs of an average class. A minimum amount of materials is needed to conduct an activity irrespective of the size of the school.

¹Nash, Jay B., Moench, Francis J., Saurborn, Jeannette B., Physical Education: Organization and Administration. New York: A. S. Barnes and Company, 1951, p. 98.

In order to have a well-rounded physical education program the necessary tools should be made available. In considering the pieces of equipment necessary to carry out such a program Trusler² offers a complete list for both the required and corrective program. Items which he suggests include:

Required Program

1. Parallels	1 set
2. Footballs	2
3. Mats (for each fifteen in a class five by eight by two)	1
4. Ball inflators	1
5. Basketball goals and boards (outside)	1 set
6. Basketball goals and boards (inside)	2 or 4 sets
7. Basketball (for each twenty in class)	1
8. Playground balls twelve-inch	12
9. Playground bats (regulation)	6
10. Bases for playground ball	1 set
11. Jumping standards (outdoor) adjustable for vaulting	2 sets
12. Cross bars	1 dozen
13. Jumping standards (indoors)	1 set
14. Climbing ropes	4
15. Weighing scales with measuring rod	1
16. Volley balls	2
17. Volley ball nets	2
18. Volley ball standards	2 sets
19. Stop watches (game timer)	1
20. Stop watch (split second)	1
21. Soccer footballs	2
22. Shots, 12-pound	2
23. Wall hangers for mats	2 sets
24. Badminton sets	3 sets
25. Mat racks	2
26. Horizontal bars (low)	1
27. Horizontal bars (high)	1
28. Horse (side with removable pommels)	1
29. Flying rings	1 pair
30. Boxing gloves	2 sets

²Trusler, V. T., Fundamentals of Physical Education.
Minneapolis, Minnesota: Burgess Publishing Company, 1947.
p. 40

31.	Mending kits	1
32.	Steel measuring tapes	2
33.	Spring boards (gymnasium)	2
34.	Starting pistol	1
35.	Adjustable hurdles	20
36.	Hand dynamometer	1
37.	Back and leg dynamometer	1
38.	Leap meter (can be made in Industrail arts)	1
39.	Tennis courts	4 to 8
40.	Tennis nets	4 to 8
41.	Eye charts	2
43.	Batons for relays	12
44.	First-aid kits	1

Corrective Programs

1.	Plinth	1
2.	Stall bars	4
3.	Small body mats, three by six	2
4.	Mirror, six feet by four feet	1
5.	Ceiling parallels (if possible)	1
6.	Horizontal ladders (if possible)	1
7.	Square hair pillows	2
8.	Stethoscope	1
9.	Metronome (with bell attachment)	1
10.	Pedograph (if possible)	1
11.	Schematograph (if possible)	1
12.	Wall chest weights	2 to 4 sets

The above list of equipment represents a rather large financial outlay and should be intelligently used and carefully managed.

Budgetary Procedure. The budget is a complete financial plan for a definite period which is based upon a careful estimate of expenditures to be made and of probable income, Its objectives are to keep expenditures within income, and to apportion available funds among the different items of expenditure so as to accomplish the most good. Instead of being intricate, the simpler the form that the budget can take, the better, and instead of being a mysterious feature of financial

operations on a large scale, it is the plain result of applying sane, matter-of-fact intelligence to the problem of planning expenditures, whether large or small.

Physical education directors are charged with the responsibility of setting up the annual budget. They have long recognized the job as a difficult one and are constantly seeking a yardstick of some sort to serve as a standard in evaluating the finished product.

Douglas A. Fessenden³ has recommended that administrators who develop budgets use the following fundamental principles:

1. Estimated expenditures should never exceed ninety per cent.
2. Allocations should be made on the basis of demonstrated need, and never on a hard-and-fast basis of a certain percentage to each respective sport. Averages computed over a period of three years should carry significant weight in budget preparation.
3. Actual figures, not guesswork, should be used as a basis for estimation.
4. All personnel concerned with the administration of the budget should be consulted before it is submitted for final approval.

In order to further clarify budgetary procedure a chart has been prepared for such purposes and is presented on the following page.

³Douglas A. Fessenden, "Planning the Athletic Budget". Scholastic Coach, 22:20-22, December, 1952.

DEPARTMENT OF PHYSICAL EDUCATION			
DATE	ITEMS	CREDIT	DEBIT
AUGUST 2, 1953	BUDGET ALLOWANCE	\$400.00	
SEPTEMBER 8, 1953	PARALLEL BARS REQUISITION NO. 120		46.90
SEPTEMBER 9, 1953	PLAYGROUND SUPPLIES REQUISITION NO. 127		112.00
			158.90
OCTOBER 1, 1953	BALANCE	241.10	

Figure 12

Budgetary Procedure Form

Requisition procedure. The use of some form of requisition seems almost universal. A requisition is a written request for specific articles or services to the purchasing officer. Requisitions must contain the information needed for proper approval and intelligent purchasing.

A well administered budget requires careful requisitioning. Physical education directors, should give consideration to the money available and to the quality, quantity, utility, place of manufacture, and actual cost of items before filing the requisition.

An important problem in connection with requisitions is that of centralizing purchases. There is often much confusion and uneconomical practice because of loose or uncertain delegation of the purchasing power. Unquestionably, efficiency is gained if one person, especially trained, is given the specific responsibility for all purchasing. The requirement of a requisition and the use of a regular order form, approved in advance, is highly desirable.

The purchase of equipment and supplies should be governed by established policy and procedure. Unless this is done, the physical education director may be subject to grave criticism which may lead to accusations of accepting gratuities. It is wise, when possible, to buy through regular purchasing office channels.

The problem of local versus wholesale buying is always present. All physical education directors will find pressures

put upon them to purchase locally. The argument is that school funds are raised through taxation. Local merchants pay taxes and, therefore, should be given consideration. There is real foundation to the argument, but often a compromise can be effected. The local dealers through manufacturers can give substantial reductions for group buying. Established policies relative to purchasing place the physical director above suspicion and pressure.

All purchases should first be recorded on some form of a requisition. A suggested form for such purchases is given below.

REQUISITION				
_____ HIGH SCHOOL			DATE _____	
TO THE SUPERINTENDENT OF SCHOOLS: THERE WILL BE NEEDED BY THE PHYSICAL EDUCATION DEPARTMENT OF THE _____ HIGH SCHOOL THE ITEMS DESCRIBED BELOW - BEFORE THE DATES INDICATED.				
_____ NAME OF DEALER		_____ TEACHER OR HEAD OF DEPARTMENT		
_____ ADDRESS OF DEALER		_____ PRINCIPAL		
QUANTITY	DESCRIPTION OF ITEM CATALOGUE NUMBER	DATE NEEDED	ESTIMATED COST	ACTUAL COST

Figure 13

Requisition Form for Purchases

CARE OF EQUIPMENT

The purchase and care of equipment for high school physical education presents itself as one of the major problems of those in charge of the program. As has been stated before, most school funds allotted to physical education are limited. But still on the other hand the sizes of the classes are literally "bursting at the seams". If safety precautions are to be followed, then the best equipment available should be purchased. Too often it is possible to buy, not that which is needed, but only that for which there are sufficient funds. In the light of what has already been stated it behooves a school to provide the best possible care of the equipment that has been purchased.

Leather goods. Cleanliness is the first order in the preservation of leather goods. Leather should be cleaned with a special kind of preservative or saddle soap. Leather inflated balls should be cleaned and deflated after every use. Balls should never be over inflated as they tend to lose their shape and resiliency. The amount of air pressure required will be stamped on all new balls. However, for added precaution a card stating how much pressure each type of ball should have could be posted directly over the pump. Proper drying of leather goods after they have become wet is vitally important. They should be dried at room temperature. Leather should never be forced in drying. After the goods are dry a preservative such as saddle soap or neatsfoot oil should be

applied to keep the leather from becoming stiff and hard. Balls should be normally inflated while drying, but partially inflated after they are dry and being put into storage. Being partially inflated will cause them to hold their original shape. A ball should never be put away totally deflated, as the rubber will tend to stick together and rot out. Boxing gloves should be treated with carbolic acid to reduce the danger of carrying an infection to the boxers. The leather on the buck and horse should be saddle soaped and cleaned frequently so that it will remain soft and pliable.

Wooden equipment. Keeping wood away from excessive heat is vitally important. Going over all wooden articles with a cloth soaked in linseed oil at least once a week is wise. As most wooden equipment is varnished, a good practice is to make periodic inspections and touch up spots where the varnish has cracked or peeled. All wooden equipment that is long and heavy at one end, such as a shuffle board cue or tennis racket, should be hung vertically with the heavy end down. Rackets should always be stored in presses, never hung by their strings.

Textiles. The chief destructive enemy of physical education wear is mildew. Care must be exercised to see that woolens, rayons, cottons and nylons are kept clean and stored in a dry and well ventilated room. An additional precaution must be taken with woolen materials as they can be destroyed by moths. This can be accomplished best by using an odorless

commercial spray and storing them in air-tight boxes or cartons. Nothing destroys mats faster than dragging them on the floor. Mats should be swept at least once a week and washed at least once a month. Mats without covers can first be vacuumed and then scrubbed with a light solution of soap and water. A small area at a time should be scrubbed and immediately wiped dry. Removable mat covers should be removed as soon as they become soiled and sent to the laundry. The best precaution to take with nets is to relieve the tension after they have been used. Nets that are used out-of-doors should be brought inside in inclement weather and stored in a dry place. Tarred nets should be used in damp climates. At the first sign of wear, nets should be repaired to prolong their usefulness. Bindings and canvas tops which receive the hardest use can be replaced.

Metal Equipment. To prevent rusting on metal, equipment should be checked periodically for chips in the paint and the spots touched up. A thin layer of oil can be applied to such items as steel tape measures, starting pistols, shot puts, discuses, turnbuckles and the like as a rust preventative. The use of steel wool on chinning bars and horizontal bars is sometimes effective.

Rubber Goods. The essential materials for keeping rubber goods clean is soap and water. Oil and grease deteriorate rubber goods and should not be used. For the same reason cleaning fluids are not recommended. Excessive exposure to heat should be avoided.

The director of physical education should make it a vital part of the classroom teaching to instruct the students in the proper uses and handling of physical education paraphernalia. Students must be instilled with a healthy respect for the school's equipment. It must be further pointed out to pupils that money spent to replace lost or stolen equipment cannot be used to buy extra equipment for their use and pleasure. Therefore, the most important care must come from the students themselves and this can be accomplished only by careful planning in teaching them the "know how" of equipment care.

CHAPTER IV

ADMINISTRATION OF A PHYSICAL EDUCATION PROGRAM

The chief function of administration is to coordinate the program of physical education, its organization, management, supervision, and teaching. Administration furnishes the means whereby specialized functions may take place. It designates responsibilities and sets up the machinery through which provision is made for buildings, grounds, equipment, and other facilities. Its chief function is to develop more effective teaching and learning.

The greater the concept one has of the purposes of administration, as stated above, the more important the program becomes. If physical education is thought of as a way of developing and educating the total individual, it will motivate the administrator, or physical education director to promote and present an excellent program.

Compulsory physical education became a law for the schools of Montana in the year 1949. The law states that on and after September, 1941, instruction in health, physical education and recreation shall be established and made a part of the course of instruction and training in the public elementary and secondary schools of the state. Administration then becomes the total process and takes on an all-inclusive aspect. It ties together the whole program of physical education by establishing definite objectives and policies.

The problem of administration must be thought of as a means to an end and not as an end in itself. Administration must not become so complicated that it loses sight of the pupils who should benefit from the program.

The up-to-date physical education program of activities necessitates not only adequate facilities but also proper allocation of pupil time. Through the efforts of the administrator the necessary equipment and the allocation of pupil time may be secured.

There are a great many factors which serve to disintegrate a good program of physical education. Some of them are listed as follows:

1. The lack of sound legislation and supervision;
2. The inability of some communities to equalize opportunities in a program for all children;
3. The lack of equalization costs;
4. Dual administration of a single function;
5. The administrator of health and physical education must, too frequently, devote all of his time to teaching with very little time left for administration;
6. The failure of some administrators to adequately understand the problems of health and physical education;
7. The fact that athletics are often over-emphasized.

There should be no substitution for physical education as it is now required by law. ~~Hygiene~~, physiology, walking or any other activity, valuable as these may be, cannot be justified as a substitute for physical education. Physical education is physical activity, adequately supervised and instructed, and

requires the pupil's presence in class. The one exception to this rule, however, may have to be made for pupils with special defects. Such defects need to be diagnosed and cared for outside of the general class.

I. PHYSICAL EXAMINATION

A thorough physical examination should be given to every student enrolled in physical education. This examination will give the director of physical education an opportunity to classify his students at the beginning of the school year into appropriate groups for instructional purposes.

The physical education director should derive two distinct values from medical examinations. First, pupils with serious defects of such a nature as to make vigorous exercise harmful to them are discovered and placed in classes where activities are restricted to individual capacities and geared to meet individual needs. Secondly, the medical examination becomes a safe-guard for the individual and a guide for the physical director.

In planning a physical education program, it is immediately apparent that not all students will have the same characteristics or needs. Many students will not be able to profit from the normal program due to variations in physical fitness, either temporary or permanent in nature. It then becomes apparent that each student should be given a medical examination at the beginning of each fall term of school. The main purpose of the medical examination is to discover the pathological

defects, so interpret their histories and thus decide what type of classification or grouping is to be made. Pupils should be classified into unrestricted, restricted, and remedial groups, so that maximum efficiency in teaching can be done. Another benefit that is derived from the physical examination is the possibility that a student may also use the information gained from the physical examinations to apply for proper insurance.

Much has been said and written relative to athletic benefit and protection plans and the role they are playing in athletic safety. Their development is undoubtedly in keeping with the philosophy of the times that group provisions should be made for the mishaps and eventual infirmities of individuals. These plans represent an intelligent approach to, and an attempt at a solution of the injury problem that is always present in athletic contests. In nearly every plan now devised, the inclusion of physical education can be found. In order to provide the most possible protection all students should be enrolled in such a benefit plan. Montana is one of the fortunate states to have such a plan and a student can be enrolled for as little as one dollar and fifty cents. The physical education director should be responsible for putting the plan into effect.

Nixon and Cozens¹ have the following to say about the selection of a program for physical education:

¹Nixon, Eugene W., and Cozens, Frederick W., An Introduction to Physical Education. Philadelphia: W. B. Saunders Co. 1948.

Vigorous muscular activities constitute the most conspicuous features of physical education program. But in addition they are its very heart and essence, because they represent directly the muscular responses out of which must come the desired physical modifications of the individual and because they are accompanied by mental and emotional responses which are significant for character, personality, and intelligence. It is not desirable that teachers or administrators become so engrossed in the purely muscular aspects of the program that they lose sight of other important considerations; it is essential that they be duly concerned with the selection of such activities as are specifically appropriate to needs of the individual and the group.

In planning a physical education program for the high school student, it must be taken into consideration that individuals have a variety of characteristics at this state of development, which may include the following:

1. The slowing of growth.
2. A great development of speed, strength, endurance and coordination is noted.
3. The awkward age is outgrown. There is better control of body.
4. Greater powers of attention and reasoning are prominent.
5. The marked development of self-confidence is apparent.
6. There is much better control of emotions.
7. There is marked degree of loyalty.
8. Love of excitement and adventure is noticeable.
9. Competitive spirit becomes highly developed.
10. Hero worship is still a strong influence.
11. A desire to belong is tempered by personal interests.
12. The narrowing of interests and trend toward specialization is noticeable.
13. Developing life interests and ambitions is obvious.

It is during this period that the development of skills

and interests in highly organized team games and sports is the most prominent and should be capitalized upon. A strong intramural program for all boys should come in for a great deal of attention, as well as gymnastics and combative activities. Boys at this age are interested in the competition that the strenuous forms of sports and athletics offer.

Inasmuch as a large number of high school boys never reach college, it is essential that the necessary skills that are needed and learned during this period be given in such amounts that students will not be handicapped in their later efforts to attain them. Students during this period are highly susceptible to influences determining social and moral attitudes. A good program for carry over leisure time skills should be developed during this period.

II. PHYSICAL EDUCATION PROGRAM

The following suggested physical education program should be set up and "geared" to the needs of adolescents.

Grouping of activities. The grouping of activities may be as follows: (1) gymnastics; (2) rhythmical activities; (3) teams in game activities; (4) individual games; (5) defense activities; and (6) individual gymnastics; (7) aquatics.

Per cent of time allotment for various activities. Having classified the activities into groups, the question of the amount of time to be allotted to a given activity presents itself.

Probably no one could answer this question absolutely; however, it is possible to divide the school year into per cent of total time for each activity, which is the method intended here. Allocation on a percentage basis must be considered a relative distribution, but such a plan does lend itself to orientation and will materially aid in balancing the instructional time.

Per Cent of Time Allotment For Various Activities

<u>Type of Activity</u>	<u>Per Cent of Time</u>	<u>Example</u>
Team Games	30 Per cent	Touch Football, Softball, Speedball, Volley Ball, Basketball
Individual Games	25 Per cent	Badminton, Tennis, Hand Ball, Track, Golf
Gymnastics	15 Per cent	Free exercises, Tumbling Apparatus
Defense Activities	10 Per cent	Wrestling, Boxing, Fencing
Rhythmical Activities	10 Per cent	Square dancing, Social and Folk dancing
Aquatics	10 Per cent	Water Safety

Monthly program for one year for boys. There are two viewpoints regarding instruction that are commonly held: First, that instruction should cover comparatively few activities and that mastery of those should be secured from grade to grade; or, second, that a great variety of activities should be offered so that students may find their interests and develop new ones from being introduced to new activities. Mastery would then be secured. Which of these two views will

be subscribed to will definitely modify any physical education program. The latter viewpoint and the examples given here of monthly and weekly programs, for the secondary school, have been set up from that standpoint.

Monthly Program For One Year

September

First Week

Second Week

Third Week

Examination
Classification

Class Organization
Free Exercises
Touch Football

Free Exercises
Touch Football

October

First Week

Second Week

Third Week

Fourth Week

Free Exercises
Touch Football

Free Exercises
Touch Football

Free Exercises
Touch Football

Class Room
lecture on
Health
Problems

November

First Week

Second Week

Third Week

Fourth Week

Volley Ball
Wrestling

Volley Ball
Wrestling

Volley Ball
Wrestling

Relays and
Contests

December

<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Volley Ball Wrestling	Class Room Lectures on Health Problems	Basketball Boxing	Basketball Boxing

January

<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Team Exercises Basketball	Team Exercises Basketball	Marching Basketball	Marching Basketball

February

<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Class Room Lecture on Hygiene	Tumbling Apparatus	Tumbling Apparatus	Tumbling Apparatus

March

<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Square Dancing	Square Dancing	Square Dancing	Square Dancing

April

<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Softball Badminton	Softball Badminton	Softball Track and Field	Softball Track and Field

May

<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Softball Track and Field	Soccer Track and Field	Soccer Relays and contests	Clean Up and repair of equipment

Weekly Program For One Year

September

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Adminis- trative (Physical Examina- tions. Classifica- tion)				
Class Organization		Fall In Right Dress Roll Call Counting Off Open ranks		

September (continued)

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Free Exercises		Catching Ball Stance of Positions Rules	Passing Running with ball	
Touch Football Team Play		Fundamental positions	Fundamental positions Arm Movements	

October

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Free Exercises	Repeat Head bending rotating Trunk Bending Forward and Downward	Trunk Bending Leg Bending and Stretching	Deep Knee Bends Trunk Rotation	
Lecture				Class room Lecture on Health Problems
Touch Football Team Play	Blocking Kicking Team Play	Dodging and Sidestep Laterals	Fundamental Plays Team Play	

November

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Volley Ball	Handling Ball Rules Team Play	Underhand Serve Scoring Team Play	Passing Ball Rotation Spiking Team Play	Recovery from net Position play
Wrestling	Rules Holds	Falls Takedowns	Breakdowns Rides	
Relays and Contests				Skin Snake Relay Goal Throwing Relay Indian Wrestle

December

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Volley Ball	Team Play Competition			
Lecture		Classroom Lecture on Health Problems		
Basketball			Catching Ball Push Pass	Push or Chest Shot
Wrestling	Competition Reverses			
Boxing			Stance Advance and Retreat	Blocking

January

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Team Exercises	Boat rowing Fireman's carry	Hand Wrestle Wrestler's bridge		
Marching			Attention Facings	Close Order Drill Flank Movements
Basketball	One Hand Push Shot Hook Shot Dribbling Relays	Pivoting Passing Breaking	Defense Offense	Team Play

February

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Lecture	Classroom Lecture on Health			
Tumbling		Forward Roll Backward Roll	Headstand	Headstand Round Off Cartwheel
Apparatus a. Parallels b. Horse		Approach Mounts	Front Vault Flank Vault	Rear Vault Straddle Vault

March

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Tumbling	Handstand			
Apparatus				
a. Parallel Bars	Repeat Vaults			
b. Horse				
Square Dancing		Theory Sets Calls	Calling Movements Promenade	Group Dancing

April

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Softball	Rules Throwing Catching Hitting	Fielding Flies Fielding Ground balls	Playing bases Running bases Pitching Team Play	Bunting Sliding Team Play
Badminton	Grips Receiving Stance Rules Rallying	Forehand Drive Service Backhand Volleys Tactics		
Track and Field			Conditioning Exercises Starting Hurdling	Warmup Repeat Starting Form Form Sprinting Finish

May

<u>Activity</u>	<u>First Week</u>	<u>Second Week</u>	<u>Third Week</u>	<u>Fourth Week</u>
Softball	Team Play	Team Play	Team Play	
Track and Field	High Jumping Broad Jumping Shot Put	Relay Baton Exchange Pole Vault	Competition	
Miscellane- ous				Clean and store equip- ment for the following year

The conditions as they exist in Montana have been taken into account and a well balanced program to fit these needs has been made.

Intramurals

Trusler² has given the following for a definition for intramural sports for a high school physical education program.

Intramural sports may be defined as organized competitive activities between the various organizations of a given school. By this we mean that competition is not only offered all the pupils of a given school, but that all are encouraged to take part in one or more of these competitive activities.

Intramural sports can serve as an aid in the development of sportsmanship, cooperation, a spirit of friendliness, and many other attitudes that are desirable. If intramurals are to serve most and accomplish the greatest results there must be supervision, good equipment, and good facilities with which to do the work. The intramural program should never be thought of as a feeder for the varsity teams but rather as a plan to further the expressions of the things learned in class. If the intramural program is to be successful, varsity competition must not be allowed to interfere. The program should be designed for those who are not good enough to make the varsity, or who are prevented by lack of time or interest. Even in the intramural program, classification into A and B divisions is desirable for it is the purpose of intramurals to offer competition to as many as possible on an equal basis.

²Trusler V. T., Principles of Physical Education.
Minneapolis, Minnesota: Burgess Publishing Company, 1947,
156 P.

The following selection of games for an intramural program would lend themselves best for seasonal competition:

<u>Fall</u>	<u>Winter</u>	<u>Spring</u>
Archery	Basketball	Archery
Touch Football	Badminton	Baseball
Golf	Bowling	Golf
Horseshoes	Foul Shooting	Horseshoes
Soccer	Handball	Tennis
	Gymnastics	Track and Field

The greatest drawback to be encountered in organizing an efficient intramural program is the problem of finance. A set policy for financing the program should be set up and adhered to. It would seem justifiable to expect the school board to appropriate sufficient money for the purpose of promoting the health and betterment of the students under their jurisdiction, and certainly intramurals contribute greatly to the health and development of those who participate.

The control of the intramural program should reside in the faculty. Students should, however, be given representation and should have a voice in the organization. It would be a mistake to turn over the entire control or the running of the program to the students, for the usual errors common to any organization which has inexperienced and immature individuals at its head disintegration and unsportsmanlike conduct is likely to occur.

The intramural program will further offer an opportunity to develop student leadership by having capable students assist in running the events. The leaders may act as umpires, referees, scorekeepers, judges, timers, and if supervised, should develop qualities of sportsmanship and leadership as a result of practical experience. For an added incentive to motivate the students to participate, an honor board could be placed in a conspicuous place for all to see. A suggested board upon which the names of intramural winners may be displayed for motivation purposes is presented below.

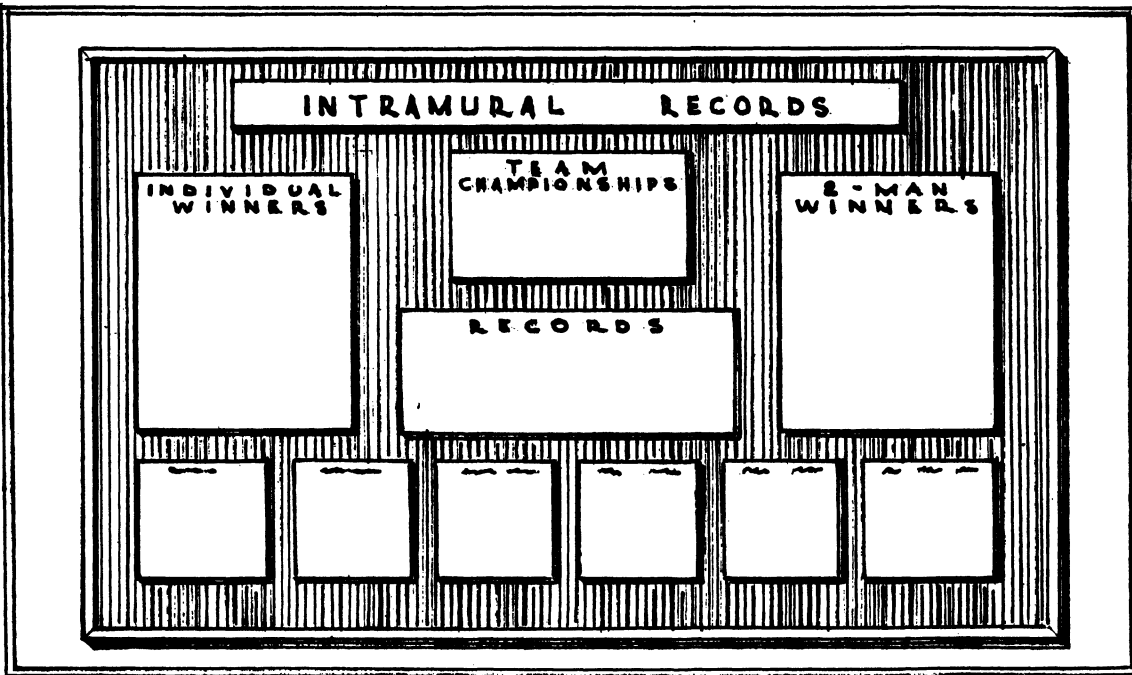


Figure 14

Intramural Honor Board

The success of an intramural program depends upon complete cooperation, adequate supervision, intelligent motivation, and understanding administration.

CHAPTER V CONCLUSIONS

The provisions of facilities and the suggested program as presented in this paper have significant implications for health and physical education. Full utilization of such a well planned structure makes mandatory a deep, creative, instructional program. Although it is not within the purpose and scope of this present study to develop characteristics of such an instructional program, it is the purpose of the present chapter to indicate, by a few suggestions, the general approach to the instructional program as a basis for a future study.

Any instructional program that has depth in meeting youth needs will tax the planning and creative nature of the instructor in determining the need in meeting them. The most productive approach in determining needs is through a diagnostic testing program given at the beginning of the school year. A series of locally devised and standardized tests whose purpose is to reveal the individual's status in coordination, strength, health habits and attitudes, agility, balance, speed and reaction, should reveal both individual and group needs.

Once needs are determined, the real depth of the program will depend upon the degree to which the instructor is able to create a student consciousness of needs and a desire to improve. This must be followed by grouping those with similar needs into squads and creating appropriate unit activities.

The classroom is visualized as a place in which part of each period is devoted to this program of creating student consciousness of need and the remaining part to larger group activities. Progress in individual development will determine the amount of time necessary for this phase of the work. The degree to which consciousness of individual development is maintained in other group activities will depend entirely upon the real leadership of the instructor.

Developing leadership among students is also an important objective. Squad activities based on pupil needs offer many opportunities for leadership of two types. In large classes, with numerous squads and a different activity for each squad, the very adept individuals can be utilized by the instructor as assistants. Another type of leadership opportunity is available within the squad where squad leadership is alternated to give all students an opportunity for leadership development. With numerous squads in action at one time, such squad leaders are essential in the functioning of activities such as tumbling, rope climbing, apparatus, and marching. Both types of leadership make it necessary for the instructor to hold leadership training sessions to realize maximum development. Continuous self-evaluation of progress by the pupil is essential. Planned class activities should provide for this.

Although individual needs are important in giving each person self-satisfaction, the development of group habits, skills, and attitudes is of equal importance especially since

intramural and sports programs occupy such a vital part in youth activities.

Health attitudes and practices are of great significance. Every opportunity possible should be utilized to use health tests, health surveys, and class discussions at periodic and appropriate times to create an awareness of desirable attitudes and practices. The highly motivating game situations offer unusual opportunities for this development. Posture consciousness through discussions, mirrors and self-evaluations is a particular phase of health which deserves careful planning. Attitudes toward self and others will be much improved through utilization of possibilities of locker room inspections for cleanliness, the foot bath inspections for cleanliness, and the like. A similarly planned program of "sportsmanship" should improve the mental attitude. Adequate planned activities for the development of game skills is highly essential.

This program of maximum development, habits, skills, and attitudes will call upon creativeness on the part of the instructor as to types of activity, methods used, and ways of motivation. The bulletin board will be one of the important motivating factors appropriately tied in at all times with squad work, group activities, and sports events.

The entire program, in order to give maximum satisfaction, must keep in view at all times the following ob-

jectives:

1. Consciousness of the individual concerning his needs and how to meet them, and his capacities and how to utilize them.
2. Devices in the program which allow for self-analysis, goal setting, and self-improvement toward the goal.
3. General improvement for body building.
4. The development of skills of the individual as they are applied to the individual and group activity in game activity.
5. Leadership and personality development.

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