STATE OF IOWA
1933

Courses of Study for High Schools

HEALTH AND PHYSICAL EDUCATION FOR BOYS

Issued by the Department of Public Instruction
AGNES SAMUELSON, *Superintendent*

Published by
THE STATE OF IOWA
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FOREWORD

This course of study is one of a series of curriculum publications to be presented the high schools of the state from time to time by the Department of Public Instruction. It has been prepared by a subject committee of the Iowa High School Course of Study Commission working under the immediate direction of an Executive Committee. If it is of concrete guidance to the teachers of the state in improving the outcomes of instruction, the major objective of all who have contributed to its construction will have been realized.

From the start the need of preparing working materials based upon cardinal objectives and adaptable to classroom situations was emphasized. The use of the course of study in the development of proper pupil attitudes, ideals, habits, and skills was the criterion for selecting and evaluating subject matter material. At the same time it was important to consider the relation of the single course of study unit to the variety of textbooks used in the high schools of the state. The problem before the committees was that of preparing suitable courses of study representing the best in educational theory, practice, and research, and organized in such a way as to guide the teachers in using the text book to greater advantage in reaching specified outcomes of instruction.

The selection of texts in this state is a function of the local school boards. The Department of Public Instruction and the committees do not recommend any particular text as essential to the working success of this course of study. The titles listed on the following pages are not to be interpreted as having official endorsement as against other and newer publications of value. They were found upon investigation to be in most common use in the high schools of the state at the time the units were being prepared; a follow-up survey might show changes.

Although many valuable studies have been made in the effort to determine what to teach and how to teach it, and to discover how children learn, these problems have not been solved with finality. For that reason and because no fixed curriculum can be responsive to changing needs, this course of study is to be considered as a report of progress. Its revision in accordance with the enriched content and improved procedures constantly being developed is a continuous program of the Department of Public Instruction. Your appraisal and evaluation of the material as the result of your experience with it are sincerely requested.

ACKNOWLEDGMENTS

The Department of Public Instruction takes this opportunity of thanking the many college specialists, school administrators, and classroom teachers who have helped with this program. Without the active coöperation of the educational forces of the state it could not have even been attempted. It has had that coöperation both in general and specific ways. The support given by the Iowa State Teachers' Association and High School Principals' Section has enabled the Executive Committee to meet and also to hold meetings with the Commission as a whole and with the chairman of subject committees.

Special acknowledgment is given the Executive Committee for its significant leadership in organizing the program and to Dr. T. J. Kirby for his valuable services in directing its development. Sincere gratitude is also expressed to the various committees for their faithful and skillful work in completing the subject matter reports assigned them and to Dr. C. L. Robbins for his careful and painstaking work in editing the manuscripts. The state is deeply indebted to the High School Course of Study Commission for its expert and gratuitous service in the enterprise. Credit is due the publishers for making their materials accessible to the committees and to all who served in advisory or appraisal capacities. Many of their names may not have been reported to us, but we acknowledge our appreciation to everyone who has shown an interest in this significant program. Special acknowledgment is given to Leslie Irwin for the free use of the material which comprised his thesis, The Construction of Twelve Units in Physical Education for Boys, University of Iowa, 1930.

In the following committee list, the positions held by members are given as of the school year 1928-29.

IOWA HIGH SCHOOL COURSE OF STUDY COMMISSION

Executive Committee

Thomas J. Kirby, Professor of Education, State University of Iowa, Iowa City, Executive Chairman
A. J. Burton, Principal, East High School, Des Moines
H. M. Gage, President, Coe College, Cedar Rapids
M. S. Hallman, Principal, Washington Senior High School, Cedar Rapids
O. R. Latham, President, Iowa State Teachers College, Cedar Falls
E. E. Menefee, Superintendent, Public Schools, Hawarden
Theodore Saam, Superintendent, Public Schools, Council Bluffs
F. H. Chandler, Superintendent, Public Schools, Sheldon

Health and Physical Education

M. G. Davis, Chairman, Superintendent, Public Schools, Ames
D. Q. Williams, Sub. Chairman, East High School, Des Moines

J. F. Edwards, M. D., Iowa State College, Ames
J. E. Irwin, Boone Public Schools, Boone
R. L. Reid, Superintendent, Public Schools, Keokuk
Belva Swalwell, Iowa State Teachers' College, Cedar Falls
J. S. Skien, University High School, Iowa City
Otto Wurl, Council Bluffs Public Schools, Council Bluffs

GENERAL INTRODUCTION

At the first general meeting of the various subject committees a suggestive pattern for the courses of study, embodying the fundamental needs for teaching, was projected. Four crucial factors that should be emphasized in any course of study to make it an instrument that would cause teachers to consult it for guidance in the performance of their daily work were set forth as follows: objectives, teacher procedures, pupil activities, and evidences of mastery.

Objectives—The meaning of objectives as here used is those concepts which are set up for pupils to achieve. As used in current practice, there is a hierarchy of objectives as shown by the fact that we have objectives of general education, objectives for various units of our educational system such as those proposed by the Committee on Cardinal Principles, objectives for subjects, objectives for a unit of instruction, and objectives for a single lesson. In each level of this hierarchy of objectives a constant element is expressed or implied in the form of knowledge, a habit, an attitude, or a skill which pupils are expected to acquire.

In the entire field of secondary education no greater problem confronts us than that of determining what these fundamental achievements are to be. What shall be the source of those objectives, is a problem of too great proportions for discussion here, but it is a problem that each committee must face in the construction of a course of study. A varying consideration of objectives by the various committees is evident in the courses of study they have prepared. The value of the courses varies in terms of the objectives that have been set up, according to the value of the objectives in social life, according to the type of mental techniques which they stimulate and exercise, and according to the objectivity of their statement.

Pupil Activities—In our educational science we are attaching increasing significance to self-activity on the part of the learner. Recognition is made of the fundamental principle that only through their own activity pupils learn and that the teacher's role is to stimulate and direct this activity. No more important problem faces the curriculum-maker than that of discovering those fundamental activities by which pupils learn. In a well-organized course of study, that series of activities, in doing which pupils will attain the objectives set up, must be provided. These activities must not be chosen in a random fashion, but care must be taken that appropriate activities for the attainment of each objective are provided.

Teacher Procedures—With the objectives determined and the activities by which pupils learn agreed upon, the function of the teacher in the pupil's learning process must be considered. In a course of study there should appear those teacher procedures of known value which make learning desirable, economical, and permanent. Here our educational science has much to offer. Where research has demonstrated with a high degree of certitude that a given technique is more effective in the learning process than others, this technique

should be included in a course of study. Common teaching errors with suggested procedures to replace them may be included. Pupil difficulties which have been discovered through research should be maintained and methods of proven value for meeting those difficulties should be included. Suggested ways of utilizing pupils' experiences should be made. And as important as any other feature is the problem of motivating learning. Whatever our educational research has revealed that stimulates the desires of pupils to learn should be made available in a course of study. Valuable types of testing should be incorporated as well as effective type assignment. The significance of verbal illustrations as evidence of comprehending the principle at issue should be featured as a procedure. Where there is a controlling procedure of recognized value such as is recognized in general science—bringing the pupil into direct contact with the phenomena studied—forceful effort for the operation of this procedure should be made.

Evidences of Mastery—What are to be the evidences of mastery of the objectives set up? There are all degrees of mastery from the memoriter repetition of meaningless terms up to a rationalized comprehension that shows both grasp of the controlling principles involved and the basic facts necessary to a clear presentation of the principles. These evidences of mastery may be in the form of dates to be *known*, formulae to be *able to use*, types of problems to be *able to solve*, quality of composition to *produce*, organization of materials to be *made*, floor talks to be *able to give*, papers to be *able to write*.

In no part of educational procedure is there need for more effort than in a clear determination of those evidences, by which a well-informed teaching staff can determine whether a pupil has a mastery of the fundamental objectives that comprise a given course. As we clarify our judgments as to what comprises the essential knowledge, habits, attitudes, and modes of thinking involved in a certain course, we can set forth with more confidence the evidences of mastery. Teachers are asking for the evidences of mastery that are expected of pupils, and courses of study should reveal them.

While these four elements constitute the basic pattern, the principle of continuity from objective to pupil activity, to teacher procedure, to evidence of mastery was stressed. The maker of a course of study must bear in mind that what is needed is an objective having accepted value; a pupil activity, in performing which, pupils gain a comprehension of the objective that is now being considered; that a teacher procedure is needed which evidence has shown is best adapted to stimulating pupils to acquire this objective for which they are striving; and that evidences of mastery must be incorporated into the course by which to test the degree of comprehension of the objective now being considered.

The courses of study vary in the degree to which these four fundamental features have been objectified and in the degree to which the principle of continuity from objective to evidence of mastery has been cared for. On the whole they will provide effective guides which teachers will use.

Realizing that these courses of study were prepared by school men and women doing full time work in their respective positions, one fully appreciates the professional zeal with which they worked and the splendid contribution to high school education which they made.

THOMAS J. KIRBY,
Chairman of the Executive Committee.

COURSE OF STUDY IN PHYSICAL EDUCATION AND HEALTH FOR BOYS

INTRODUCTION

Physical education is required by law in the State of Iowa for all public elementary and secondary schools. The stipulated program includes health supervision and instruction and modified courses for those pupils physically or mentally unable to take the courses provided for normal children. A minimum weekly allotment of fifty minutes is prescribed.

The value of any program of physical education will depend upon its method of presentation. The laws of learning which operate in all fields of education and equally applicable in education through physical education; interest is important if the department is to contribute to the life equipment of the individual. It cannot be too strongly urged that intelligent planning of physical education programs is most possible when adequate medical and physical examinations form the basis of activity and schedule arrangement. Consistent follow up of examinations will do much for the development of positive habits and attitudes of health.

Objective tests are being studied in this as in other fields of education and while such study is practically at its beginning, capacity, skill, and posture tests will aid in the more homogenous grouping of students.

There is also a widespread movement toward the use of the more natural activities and performance out of doors whenever possible, with emphasis upon activities that may carry over into leisure time after school.

Curriculum making and revision must be a continuous process. It is too much to expect that any course of study, no matter with what care and expert guidance it may be constructed, can embody all that has been learned about the subject and its method of presentation. The best course that can be constructed then will be imperfect, and as long as society is changing, and as long as the science of education is developing, adjustments and improvements will have to be made.

In developing this course it was found that there are many forms of physical education. Dr. Jesse F. Williams says: "It is not surprising therefore, to find in the modern world a great variety of forms of physical education. Many things have been proposed; numerous plans offered. There are today at least seven well-known national systems of gymnastics, innumerable varieties of dancing and games, and plays of all kinds. In addition to these more or less regular forms of physical education there are curious types of massage or treatment cures, special breathing methods, exercises to cure eye defects and various forms of bodily malfunctions."[1]

We have been making excuses and offering apologies for our physical edu-

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[1] Williams, J. F., *Principles of Physical Education*, p. 20.

cation program partly because we did not have a definite plan, and partly because we failed to use educational principles in drawing up the program we use. It is thus hoped that this course of study may help answer the present need of a course of study in physical education for Iowa. Dr. Thomas J. Kirby, chairman of the executive committee of the Iowa High School Course of Study Commission, says: "A course of study for Iowa High Schools is needed in all subjects. The need of a course of study in physical education is perhaps greater than for any other subject in the curriculum."

The organization of this course of study has followed the general plan of the Iowa High School courses of study. This plan consists of: (1) Objectives, those concepts which are set up for the pupil to achieve, (2) Teacher procedure, the method by which the pupil is to be guided in acquiring the objectives, (3) Pupil activities, those activities through which the pupil will attain the objectives set up, (4) Evidences of Mastery, which determine whether the pupil has a fundamental mastery of the objectives.

This course of study is not proposed with any sense of finality but rather as a guide for suggestions and material in planning physical education programs to fit local conditions. It is commended to teachers and school administrators in hope that its contents will be found helpful in the task of turning out young citizens who are full of the joy of living.

A complete school health program should include the following activities:

1. Sanitation of the School Plant

   The school buildings and their surroundings should be made as healthful as possible. Sanitary conditions should be maintained. Satisfactory heating and ventilation are indispensable to health. The open-window-gravity method or mechanical ventilation except in larger rooms where window space may be wanting is efficient. Adjustable or movable seats and desks should be suited to the pupils.

2. Control of Communicable Diseases in the School

   Exclusion from school of all children who have communicable diseases or have been especially exposed or who have signs pointing thereto is estial. Re-admission should be granted only after they are free of infection or after the suspicious signs have cleared up

3. Physical Examination and Correction of Remediable Defects or Health Impairments

   This is a most important part of school health work. Many children are so handicapped by physical defects that they are not able to get the most out of their school work. The object of physical examinations is to detect such defects and to correct those that are remediable. Yearly examination of all pupils is essential. Examine malnutrition cases at the time of weighing and measuring. When possible have full time physicians, dentists and nurses. This is practicable as yet only in the larger cities. In the smaller cities and towns, nurses and part time physicians are practicable. In rural districts the teacher can do much examination work of value, but the annual examination should be done by local physicians. The legislature has now authorized the formation of county health units, when organized, may be consulted in the school health program. The teacher should be able to recognize the more conspicuous defects, such as, defective vision and hearing, enlarged tonsils and adenoids and pronounced postural defects, dental defects, and malnutrition. When physi-

cal defects or health impairments are found, the parents or guardians should be notified and urged to take the child to their physician for correction. These cases should be followed up closely. If a nurse is available she can best do this by home visitation. If not the teacher should follow up by correspondence or by appointment of home visitors through a Parent-Teacher Association. In many places the local farm bureau may be called upon.

Keep records of each child through entire school life, including all physical examinations data, such as, date of vaccinations and of infectious diseases, corrective work, and health progress. Special effort should be made to find and help children who are markedly under-weight and who appear under-nourished.

4. Maintenance of High Health Standards of Teachers

   Teachers owe it to themselves and to their employers and their pupils to maintain themselves in good health. To this end a health examination each year is necessary, as are also proper conditions of living and facilities for recreation.

5. Health Instruction and Training in the Formation of Dependable Health Habits

   This point is covered quite fully in the outline of the course of study.

Health education in the high school grades must be given from a scientific angle. The average high school pupil wants a valid reason for the things taught and has the ability to separate the true from the false. Health chores, fairy tales, slogans, and time worn precepts no longer appeal. They want to be shown.

The health course which follows is organized into eight units, and is the same as that for girls. The other units are for boys alone.

M. G. Davis
D. Q. Williams
J. F. Edwards
Louis Hutto
J. E. Irwin
R. L. Reid
J. S. Skien
Otto Wurl

I. PERSONAL HABITS

Unit Objective

To realize the importance of and to acquire the knowledge for building individual health

Specific Objectives

1. To acquire scientific information concerning the structure, the function and the care of the various parts of the body, and to think about what to do for the body to maintain or improve health
2. To set up ideals of health for which to strive
3. To accept right attitudes toward health, both personal and community
4. To acquire certain definite habits which are conducive to healthful living

Teacher Procedure

1. Strive to present the work in hygiene in such a fashion that it will be connected with the lives of the pupils
2. Present only enough anatomy and physiology to give a background for the presentation of the care of the various parts of the body
3. Always remember that the object of the course is to enlighten the pupils on how to care for their bodies
4. Place the emphasis on prevention rather than on cure
5. Discuss with pupils the following groups of topics:
   a. Bathing: kinds of baths and value of each kind
   b. Care of skin, hair, nails
   c. Care of ears, eyes, nose, teeth, throat, feet
   d. Value of rest and sleep
   e. Important positions: lying, sitting, standing, walking, and how each should be maintained
   f. Value of good posture: social, economic, hygienic, spiritual
   g. Causes of bad posture: disease, clothing, attitude, seats, habit
   h. Value of rest and play
   i. Types of exercise for normal activities: work, play
   j. Value of rational exercise: increases circulation, respiration, elimination, metabolic changes, and neural activity
   k. Systems of the body: respiratory, circulatory, digestive, excretory, nervous
   l. Social aspects of life
   m. Importance of mental control
   n. Glands of internal secretions
   o. Relation of weight to health
   p. Value of health examinations
   q. Types of diseases: communicable diseases, diseases of nutrition,

acute poisons, chronic diseases of middle life, functional nervous diseases, local infections, cancers and tumors

r. Harm of patent medicines
s. Importance of establishing good health habits
t. Harm of narcotics and stimulants to the body

Pupil Activities

1. Weigh and find height and compare with chart to determine if they are in the normal weight group (one is considered in the normal weight group unless he is 20% above the average given on the chart or 10% below)
2. Keep a record of the activities indulged in during twenty-four hours and figure out the hours devoted to sleep, sitting, walking, light exercise, severe exercise and very severe exercise. Depict the findings by a graph or chart
3. Determine from a health standpoint why one should walk with his toes pointing straight ahead
4. Make a list of abnormal conditions of the feet which develop from wearing improper fitting shoes
5. Give the important things the doctor checks when giving a health examination
6. Collect advertisements purporting to cure certain ailments and tell what is stated that is not based upon facts

Evidences of Mastery

1. A fair knowledge of the structure of the various organs of the body
2. A good comprehension of the function of the various systems of the human body
3. A definite understanding of how the various parts of the body should be cared for in order that they may function properly and so help promote good health
4. A realization that the responsibility mainly rests with the student for his happiness, well-being and efficiency
5. A disposition to accept the social responsibility of always living at one's best
6. Habits of caring for the body established so that at least 80% could be made on any day after the course is finished on the following check up. Give one point to each item that can be answered by "yes" and no credit for those which cannot be
   a. I had a window opened in my bed-room last night
   b. I slept at least eight hours last night
   c. I slept without a pillow last night
   d. I changed my underclothing for night garments last night
   e. I brushed my teeth before I went to bed last night
   f. I have had my teeth cleaned and examined by a dentist within the last 6 months
   g. I have had my hair washed within the last four weeks
   h. I cleaned my finger nails within the last 12 hours

i. I have had a bath within the last 48 hours
j. I have had a change of clean underwear within a week
k. I have on shoes with heels not over 1¼ inches high
l. I walked at least 2 miles yesterday
m. I had at least 30 minutes of work yesterday which required big muscle activity
n. I am now sitting with my feet flat on the floor
o. I have had a bowel movement without the aid of medicine within the last 24 hours
p. I drank not less than 4 glasses of water yesterday
q. I did not eat meat more than once yesterday
r. I ate some fruit yesterday
s. I ate some fresh raw vegetables yesterday
t. I ate some bread that was not white yesterday
u. I did not eat between meals yesterday
v. I ate at least one warm meal yesterday
w. I ate breakfast yesterday morning
x. I have not been angry within the past 24 hours
y. I have had a medical examination within the past 12 months

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2. Blount, *Health*, Allyn and Bacon, Chicago, 1922
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4. McCarthy, *Health and Efficiency*, Henry Holt, New York City, 1921
5. Payne and McCarthy, *We and Our Health*, Book IV, The American Viewpoint Society, New York City, 1925
6. Walters, *Physiology and Hygiene*, D. C. Heath, Chicago, 1924
7. Williams, *Healthful Living*, Macmillan, New York City, 1919
8. Williams, *Personal Hygiene Applied*, Saunders, Philadelphia, Second Edition, 1926

Note: Some general science textbooks contain material on health of the human body.

II. FOOD

Unit Objective

To learn the main factors involved in selecting and using the foods that will best build up the body and meet its energy needs

Specific Objectives

1. To realize the important relationship which food bears to health
2. To learn the food needs of the body and the classes of food which will supply each need
3. To know what constitutes a balanced diet
4. To learn how to select, buy, prepare, and serve wholesome food
5. To know the sanitary measures which should be employed regarding foods
6. To establish food habits conducive to health

Teacher Procedure

The following topics should be presented to the class:

1. Classes of food: protein, fat, carbohydrates, water, minerals, vitamines, roughage
2. Use body makes of various kinds of food stuffs
3. Calories and their application to selecting a nutritious diet
4. Selection of an adequate nutritious diet for self and family
5. How to prepare simple, well balanced meals
6. How to preserve food: storing, refrigeration, canning, preserving, pickling, drying
7. Sanitary care of food in the home
8. Attributes of a clean, sanitary shop or store
9. Economical buying of food
10. Value of weight as an indication of health
11. Essential elements of digestion
12. Methods of avoiding common digestion disorders
13. Value of cheerfulness and pleasant conversation while eating
14. Hygienic method or manner of eating

Pupil Activities

1. Secure some white rats and experiment by feeding them various diets
2. Keep a list of all the different food you ingest in twenty-four hours and figure from a standard table the number of calories involved
3. Visit a bakery, butcher shop, grocery store, and a dairy or milk distributing station to observe sanitary measures employed
4. Look up the State and National Pure Food Laws to learn how your food is protected from adulteration

5. Pasteurize milk by using equipment found in an ordinary home
6. Think of all the uses the various parts of your body makes of the 4 to 6 glasses of water which you should drink daily
7. Make a list of foods that would be classified as roughage.
8. Make two lists (one vegetable and one animal) of fats which we include in our diet
9. Make a chart showing various foods high in each of the vitamines
10. Make a chart showing different foods high in protein, carbohydrates, and fats
11. Secure menu cards from various types of eating houses and write out orders for different meals which will be nutritious, well balanced, and not too expensive
12. Plan, cook, and serve at home, meals for a week for your family
13. Help prepare a few hot lunches or meals (not banquets) at school
14. Figure out what three articles of food you would buy for a lunch that would be clean, wholesome, and well balanced in regard to food requirements if you had to eat at an eating house that showed much evidence of lack of sanitation

Evidences of Mastery

1. A realization of the importance of buying food economically for self and for family and only in places where it is handled in a sanitary manner
2. A disposition to care for food in a sanitary fashion
3. The habit of eating a well balanced breakfast every morning, which contains a cereal (preferably unrefined)
4. The avoidance of excessive use of proteins and sugars
5. The selection of a nutritious and properly varied diet in any situation where they must make a choice of food
6. The ability to prepare or help prepare and serve well balanced, nutritious meals for own family
7. The avoidance of food that is rendered less digestible through preparation
8. Eating at least two kinds of vegetables daily besides potatoes (one green leafy vegetable)
9. Consuming a pint of milk a day through various means
10. Eating some fruit daily
11. Eating hard breads, or other food requiring vigorous mastication daily
12. Eating candy and sweets only in moderation and only after meals
13. Eating tissue-building foods more than once a day
14. Drinking 4 to 6 glasses of water daily, not all at meal time and never when there is a solid food in the mouth
15. Not drinking ice cold water or other iced drinks in excess and never at the beginning of a meal
16. Eating three meals daily according to regular schedule
17. Drinking no tea or coffee
18. Taking small bites and mouthfuls and eating slowly allowing time for meals
19. Washing hands before eating or handling food
20. Having an increased sense of responsibility and appreciation of the duties of citizenship in regard to coöperating in enforcement of public health regulations concerning food

21. Accepting increased responsibility for selecting own diet
22. Accepting increasing responsibility in helping to order, prepare, and select food in the home
23. Having a fully developed preference for simple prepared nutritious food in place of elaborate indigestible foods
24. Preferring to be strong, well developed and of the proper weight, rather than to be fashionably thin and underweight
25. Applying scientific knowledge to the problem of selecting a diet rather than selecting a diet merely on the basis of taste and whim
26. Self-control with regard to the kind, amount, and time of eating
27. A preference for eating in clean places with neat surroundings and where quietness prevails

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1. Boy Scouts of America, *Cooking*, Boy Scouts of America, New York City, 1924
2. Gotchell and Helbing, *Handbook for Menu Planning*, Smith and Hammond, Atlanta, Georgia, 1927
3. Harris and Lacey, *Every Day Food Facts*, Houghton Mifflin, Chicago, 1927
4. Kinney and Cooley, *Foods and Household Management*, Macmillan, New York City, 1923
5. Willard and Gillett, *Dietctics for High Schools*, Macmillan, New York City, 1928

Note: Consult health texts and science texts for chapters on food.

III. CLOTHING

Unit Objective

To learn how the wise choice of clothing aids in promoting the health, comfort and attractiveness of the body

Specific Objectives

1. To learn how the materials, fitting and manner of wearing clothing may affect health
2. To establish standards for buying suitable clothing, the wearing of clothes, and of keeping neat and clean
3. To develop an appreciation of being well dressed

Teacher Procedure

The following topics concerning clothing should be discussed with both boys and girls

1. Purpose of clothing
2. Suitable dress for various occasions
3. How to know and test materials
4. Power of materials to absorb moisture or to conserve or conduct heat
5. How to choose materials suitable for dresses and suits: cost, serviceability, healthfulness, ease of keeping clean, cleaning qualities
6. Selection of color and design
7. Dressing for indoor work
8. Outdoor dress: outer and under garments, hats, rubbers or galoshes, umbrellas
9. Danger of wearing damp clothing
10. Cause of shivering
11. Changing day clothing for night garments
12. Bed clothing: mattress, covers, pillow
13. Undergarments: amount, material, cleanliness
14. Desirability of loose fitting clothing: hats and caps, collars, corsets, belts, shirt bands, garters and supporters, stockings, shoes
15. Hose: material, cost, color, durability, size, cleanliness
16. Shoes: material, color, suitability, cost
17. Requirements of a good fitting shoe: length, width, inside line, flexible shank, low and broad heel
18. Value of wearing aprons, smocks, or coveralls
19. Economy in having clothing mended and remodeled
20. Care of clothing: removing spots, pressing, cleaning, mending, hanging
21. Methods of cleaning different fabrics and dangers of some cleaning processes
22. How to protect clothing from moths

Pupil Activities

1. Each one figure up the initial cost and upkeep of his clothing for one year
2. Make a class chart of materials for girls' dresses and boys' suits
3. Visit a laundry, a modern dry cleaning establishment, men's clothing store and women's ready to wear shop
4. Make a survey of the height of heels worn by observing the shoes worn by fifty women. Classify the heels noticed into two groups (high and low)
5. Make a foot and shoe drawing to determine if shoes being worn are good for health. Check drawing for the following points: height of heel, bottom surface of heel, straight inside line, width of shoe and transverse arch of foot, length of shoe in relation of toes, shape of foot and shoe
6. Each student prepares a talk or paper on the dress of the people of some country
7. Practice sewing on buttons, hooks and eyes, mending hose, mending a rent
8. Pack a bag for a journey
9. Demonstrate how dresses or suits should be hung or folded
10. Debate: Resolved that boys dress more healthfully than girls

Evidences of Mastery

1. Knowing the contribution which clothing has to offer to health
2. Selecting suitable clothing
3. Wearing suitable clothing
4. Knowing what factors should be considered in determining whether an individual is well dressed

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1. Andress-Aldinger-Goldberger, *Health Essentials*, Chs. 13, 18, Ginn, Chicago, 1928
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IV. HOME HYGIENE

Unit Objective

To learn the relationship of the home and its environment, to the health of the individual and the family

Specific Objectives

1. To learn how the home contributes to the health of the members of the family
2. To acquire an appreciation of the proper sanitary measures for the home
3. To learn the responsibility as one of the members of a family for the promotion of family well-being
4. To develop an appreciation of the home and worthy home membership

Teacher Procedure

Discuss the following topics applicable to the vacant house selected by the students for study

1. Location and site
2. Lawn: shade trees, vines, shrubbery, grass, walks, drainage
3. Windbreak: trees, buildings
4. Barns and other buildings (outside toilet)
5. Orchard and vegetable garden
6. Well: kind, location, covering
7. Water supply: source, amount, purity
8. Plumbing: cesspool or sewer
9. Garbage: container, disposal, kitchen slops
10. Attic, basement, porches, steps
11. Rooms: kitchen, living-room, bed-rooms, bath-room
12. Bath-room: tub, stool, lavatory
13. Bed-rooms: beds, mattresses, covers
14. Floors: material, coverings, care
15. Furniture: useful, comfortable
16. Windows: storm windows, shades, curtains
17. Lighting: natural, artificial
18. Heating systems
19. Cleaning: scrubbing, sweeping, dusting
20. Insects: flies, mosquitoes, bedbugs, roaches, ants

Pupil Activities

Locate a suitable vacant house in the neighborhood and secure permission of the owner for the class to inspect it for the purpose of studying it to determine how it could be made into a desirable home in which to live. Study the

house in relation to the various items listed under Teacher Procedure.

Evidences of Mastery

1. Sharing in more of the responsibilities of the home
2. Showing increased proficiency in certain skills involved in helping keep their homes and premises clean and neat
3. Realizing that a happy, cheerful home depends much upon the healthful conditions existing in the home and its immediate surroundings
4. Appreciating the fact that both responsibility and privilege are involved in making a home, and being a member of a home
5. Looking forward with dignity to assuming the responsibilities of making a home

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V. COMMUNITY HYGIENE AND SANITATION

Unit Objective

To learn how health may be promoted and protected by community measures and to learn that coöperating in such measures is a part of citizenship

Specific Objectives

1. To extend the scope of health responsibility beyond self and home
2. To acquire ability to recognize conditions in the environment which are detrimental to health
3. To learn ways to coöperate in improving bad environmental conditions

Teacher Procedure

The following should be discussed:

1. Water supply
2. Garbage and sewage disposal
3. Drainage of low land
4. Destroying flies and mosquitoes
5. Milk supply
6. Importance of testing cattle for tuberculosis
7. Lighting and cleaning of city streets
8. Duties of the local and state department of health
9. Play grounds, parks, amusement places
10. Police and fire protection

Pupil Activities

1. Visit city water works
2. Inspect the sanitary conditions at a dairy or milk distributing station, a butcher shop, grocery store, city market and city dumping grounds
3. Find out who the food inspector of your district is and what his duties are
4. On an outline map of Iowa indicate the counties which test cattle for the eradication of tuberculosis
5. Take a trip through a factory to learn how employees are guarded against accidents
6. Make a list of official and voluntary health agencies (local, state or national)
7. Designate fifty laws (either state or national) which aim to protect health or life
8. Visit a barber shop to learn what requirements must be met if the place is given a high rating by the state inspector

9. Visit the president of the local board of health to learn the duties of the board in protecting health in the community
10. Plan and conduct a Clean-Up Campaign in your district

Evidences of Mastery

1. Having knowledge of conditions in the community which are detrimental to health
2. Appreciating what is provided for health by local, state, and national agencies
3. Coöperating readily in any practical undertaking which would help to promote health

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VI. SAFETY FIRST AND FIRST AID

Unit Objective

To learn how accidents may be avoided, and what to do when accidents and other emergencies occur

Specific Objectives

1. To learn the safety first idea
2. To know how to relieve suffering, or possibly, to save a life where there is an occasion for such services to be rendered

Teacher Procedure

Teach symptoms, causes and treatment of the following

1. Insect stings, snake bite, and dog bite
2. Sunstroke, heat exhaustion, and frost bite
3. Croup, hiccough, and choking
4. Swallowed objects and poisons
5. Asthma, hay fever, hives, and poison from ivy
6. Broken bones, and dislocations
7. Sprains, bruises, and blows on the head
8. Splinters and thorns
9. Objects in ear or eye
10. Nose bleed, and internal bleeding
11. Teeth knocked out or broken
12. Sunburn, blister, burns, scalds
13. Wounds and cuts
14. Shocks due to accidents, live wires, and lightning
15. Fainting and fits
16. Suffocation by gas, water, dust

Pupil Activities

1. Learn the poisonous snakes and plants in your locality
2. Make a list of the ten most essential things for a first aid kit
3. Class make a safety first alphabet
4. After each student has prepared a list of safety first rules and slogans, have a committee sort them and classify under separate headings as water, traffic, fire, etc., and make into a Safety First Rule Book
5. Each pupil be responsible one morning for putting on the bulletin board something for safety first
6. Cut, date and paste in folders all newspaper accounts of deaths caused by carbon monoxide

7. Find out the make up of a chemical fire extinguisher and how to operate one
8. If a person has been bitten by a dog, and there are reasons to suspect it is mad, what should be done with the dog and with the person?
9. Practice the following:
   a. Artificial respiration
   b. Various methods of bandaging
   c. Carriers for the injured
   d. How to rescue one from an electrified wire
   e. How to revive one who has fainted
   f. How to make and apply a tourniquet

Evidences of Mastery

1. Avoiding chances if there is an element of danger involved
2. Acting quickly and intelligently in an emergency
3. Know how to treat and care for simple emergencies
4. Using the nine general principles which should always be borne in mind in dealing with emergency cases
   a. Keep cool
   b. Think clearly
   c. Get someone older or more skilled than you are to help you as soon as you can if you find that you cannot handle the case alone
   d. Send for a physician if no one else is there to do it unless you know the injury to be slight
   e. Do only that which is necessary for the safety and comfort of the patient until help comes
   f. Remember that an unconscious patient cannot swallow so do not try to give him anything to drink
   g. Study the injury carefully before treating it
   h. Treat the most severe injury first (a hemorrhage before a bruise)
   i. Administer first aid only when you are sure you know what should be done

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VII. CARE OF THE SICK AND OTHERS IN THE HOME

Unit Objective

To gain a knowledge of how to make the best of home conditions in caring for those needing attention during sickness and convalescence

Specific Objectives

1. To learn the ideals and attitudes for the conservation and promotion of health in the home
2. To gain a general knowledge as to cause of various ailments and the possibility of caring for some patients in the home
3. To learn how to recognize common abnormal conditions in individuals
4. To recognize the seriousness of certain physical conditions in individuals
5. To learn the proper and intelligent care of infants, young children, bed patients, and old people in the home
6. To know the importance of healthy fathers and mothers

Teacher Procedure

1. Keep constantly in mind the limitations of the course. Remember always that it is only an elementary knowledge of nursing which you are seeking to impart
2. The following topics should be presented:
   a. Indications of sickness, temperature, pulse, respiration, color, appetite, disturbed sleep, mental condition, pain
   b. Meaning of symptoms
   c. Importance of observation
   d. General appearance: skin, eyes, posture
   e. Possibilities of home care
   f. The attendant: personality, personal hygiene, responsibility, conservation of strength of self and of patient
   g. Daily care of patients: body, food, baths, bed and bedding, administering medicines, keeping records as advised by physician
   h. Daily care of room: cleaning, dusting, temperature, light
   i. Babies and young children: surroundings, clothing, habits, baths, regular schedule of food, sleep, exercise and elimination, normal growth and development, general care, responsibility of parents, prevention of communicable diseases, caring for remedial abnormal conditions
   j. Care of convalescents and the aged: cheerful atmosphere, bodily comforts, suitable daily care, entertainment

Pupil Activities

1. Application outside of school as much as possible of what has been learned in class

2. Demonstrations of simple nursing procedure such as the following:
   a. Give a baby a bath
   b. Dress a baby or young child
   c. Make an occupied or unoccupied bed hospital style
   d. Make hot and cold compresses
   e. Make mustard poultice
   f. Shake down clinical thermometer, take temperature, and sterilize thermometer
   g. Count pulse rate and respiratory rate
   h. Write menus for various meals for an old person, a sick adult, a school child, a baby
   i. Prepare a tray for a patient
   j. Use simple method of pasteurizing milk
3. Read the story of Florence Nightingale
4. Viisit a clinic or hospital if possible

Evidences of Mastery

1. Ability to:
   a. Select sick room in relation to bath-room, exposure, lighting, heating, furniture
   b. Ventilate room properly without exposure to patient
   c. Make bed neatly and quickly with conservation of energy of self and patient
   d. Move and lift patient, giving proper support
   e. Give sponge bath quickly, and prepare for and give a baby a bath
   f. Weigh baby correctly
   g. Prepare hot and cold applications, hot water bottle and ice cap
   h. Read thermometer and count respiration and pulse accurately
   i. Feed helpless patients
   j. Select, prepare, and serve attractively a suitable meal for a patient
2. Knowing:
   a. When to seek medical aid
   b. How to recognize dangerous symptoms
   c. Importance of following orders of physician
   d. Some of the contributions of science to disease prevention
   e. What precautions to take in applying heat and cold
   f. How to improvise equipment
   g. The common disinfection agents
   h. How to care for utensils, apparatus, and other things used in the sick room
   i. The meaning of liquid, soft and full diet
   j. How to choose and care for milk for baby
   k. How to arrange a feeding and living schedule for a child
   l. What constitutes a healthy body and healthful environment for a child
   m. Health needs of old people
   n. When patient should be isolated
   o. Rules and regulations of state and local boards of health regarding quarantine and placarding and what constitutes proper observance of same

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VIII. COMMUNICABLE DISEASES AND THEIR PREVENTION

Unit Objective

To learn the facts concerning communicable diseases, how to avoid these diseases and protect others from them.

Specific Objectives

To know that there are certain diseases which can be passed from one individual to another and they are quite detrimental to one's health and can be avoided if intelligent care is exercised

Teacher Procedure

1. To present the facts that there are tiny organisms called bacteria which influence health
   a. Size: microscopic
   b. Shape: round, rod shape and spiral
   c. Grouping: scattered, pairs, clusters, chains
   d. Use: harmful, beneficial
   e. Growth requirements: temperature, humidity, food
2. To outline the cycle of infection so that pupils will understand how communicable diseases get from one person to another
   a. Definition of communicable diseases
   b. Causes: animal, plant, unknown
   c. Sources: man who can be case or carrier, and animal
   d. Sites of diseases in body: part attacked depends upon disease
   e. Infectious discharges: blood, pus, saliva, sputum, feces, urine, tears
   f. Vectors of infection: fingers, insects, food droplets, fomites
   g. Portal of entry into body: respiratory tract, digestive tract, skin, mucous membrane
   h. How the body recovers from infection and establishes immunity
   i. Artificial methods of conferring immunity: vaccination
3. To indicate how it is possible to avoid having communicable diseases:
   a. Predisposing factors: environment, heredity, age, sex, habits
   b. Immunity: natural and artificial
   c. Disinfection of infected material: burning, boiling, exposure to sunshine and fresh air, chemicals, soap and water, common sense
   d. Avoid contact: isolation, quarantine

Pupil Activities

1. Make two lists of bacteria: one including those which are beneficial to man and the other those which are harmful

2. Work out the following experiment in class: Take two glasses and fill each half full of lukewarm water. Crumble into each a quarter of a cake of compressed yeast. Leave one glass with just the water and yeast in it, but into the other put one teaspoon of sugar and six heaping teaspoons of flour. Beat the contents of the second glass until well mixed. Place both glasses in a warm place and observe at intervals during the day. Decide what makes the material in the second glass behave as it does
3. Have a doctor, nurse, or science teacher help prepare five perti dishes with culture media. The class will get some idea of the presence, the size, the mode of transfer and the result of bacterial growth if the following experiment is carried out by using the five dishes. Let one remain with the cover on it so that nothing can get into it. Expose one to the air by removing the cover and leaving it off for an hour or two. Let someone who thinks he has clean hands remove the cover from one of the other dishes and gently press the balls of his finger tips on the material in the glass. Care should be taken that the finger nails do not come in contact with the material and that the cover is replaced on the dish as soon as possible. In the next dish quickly put in a fly which some one has secured for the purpose and let it walk around over the material for an hour or two before taking him out. Let someone in the class who has a cold hold the remaining dish close to his mouth and cough hard with his mouth close to the material several times. The cover should be replaced as soon as possible on all the dishes and left there. Place all of the dishes in a warm place and watch what happens in each of them in the next eight days
4 Write on the board the names of a number of diseases. After the list is made indicate which ones are communicable and which are not
5. Find out who Typhoid Mary is and why she has cost the United States so much money and why she can't be sent back to Russia
6. Make a list of ten communicable diseases and after each indicate its location in the human body. Notice the numbers which locate along the respiratory tract
7. Get a record of all absences at school due to sickness for a given period and classify as to cause. Determine the per cent due to communicable diseases
8. Get on the mailing list of the State Department of Health for "The Weekly Health Message" to learn the number of cases of each communicable disease reported for each week for the state. Check the number reported from your county against those from other counties
9. Make a survey of the class to determine what per cent have been vaccinated against smallpox. Determine why health workers call the vaccination scar a badge of intelligence
10. Secure from the State Department of Health data regarding the number of deaths and their cause in the state for the year just passed. Each make a graph showing the distribution of causes
11. Name the discharges of the body which might carry infection when one is ill and decide how each should be handled to prevent the spread of disease
12. Each think of five things in his environment which might make it easier

for him to contract a communicable disease. Discuss how these conditions could be remedied

13. Report on the life of someone who has tried to lesson the number of cases of communicable diseases; such as, Jenner, Pasteur, Koch, Trudeau, Reed, Lazear, Gorgas, Behring, Schick and Dick
14. Look up the account of why and how anti-toxin was carried to Nome, Alaska
15. From the dictionary find out what is meant by a plague, a pestilence, an epidemic, and a pandemic, and give an illustration from history of each
16. Figure out why one can give someone else a communicable disease before he knows that he has the disease
17. Send to the State Department of Health for a copy of the Communicable Disease Chart and study incubation period and isolation period of the diseases given
18. Secure a sample of each of the placards used by your local health officer to find out what is written on each
19. Make a list containing brief statements of twenty-five state laws which in some way aim to prevent the spread of communicable diseases
20. Find out why and how immigrants are inspected before they are allowed to land in the United States
21. Class make a booklet of health habits which will help keep one from contracting communicable diseases

Evidences of Mastery

1. Knowing which diseases are passed from one person to another and which may cause impairment of health and even death
2. Having so strong a determination not to acquire any communicable diseases, when it is possible to avoid them, that aritficial immunity is secured in the cases possible, and habits are established which will care for the body and the environment so that it will be impossible to contract such diseases
3. Having as an ideal of a good citizen one who never knowlingly exposes himself or others to a communicable disease and who will isolate himself or go into quarantine for the sake of others
4. Knowing the correct answer to each of the following questions:
   a. Which one of the following eye troubles is considered a communicable disease?
      myopia
      astigmatism
      zeropthalmia
      opthalmia neo natorium
   b. Vaccination will make one immune to which of the following?
      whooping cough
      typhoid fever
      small pox
      scarlet fever
   c. If one wakes up in the morning with a headache, a sore throat and is slightly nauseated which of the following had he best do?

go to the doctor's office
go to his usual work
lounge about the house
stay in bed

d. To determine if one has typhoid fever which should be given?
Schick test
Wassermann test
Widal test
Dick test

e. Rod shaped organisms called bacilli are the cause of?
tuberculosis
gonorrhea
syphilis
chickenpox

f. Which placard will the health officer place on the home where the doctor has reported a case of measles?
temporary
warning
carrier
quarantine

g. Scabies is a communicable disease which selects for its site the following part of the body?
skin
bones
blood stream
respiratory tract

h. Which vector of infection is most likely to transport malaria from one person to another?
milk
droplets
fingers
mosquitoes

i. The portal of entry through which a tetanus spore would be most likely to gain entrance into one's body is?
the nose
the mouth
the skin
the mucous membrane

j. The discharge which will be most likely to carry the disease from the body of a patient with mumps is?
feces
pus
tears
saliva

k. The mode of disinfection which one should use in destroying possible infection on the dishes of a patient suffering with scarlet fever is?
by boiling
by burning
by fumigation
by using chemicals

l. If one is suffering from diptheria which one of the following should be administered?
   toxin
   anti-toxin
   toxin-anti-toxin
   Schick test

m. If there were reasons to suspect that a dog had hydrophobia and all the following could be done which should it be?
   pen him up
   give him poison
   chase him away
   shoot him through the head

n. If one has gotten trichinosis it is most likely to have been contracted by:
   running a rusty nail in his foot
   eating pork that was not well done
   being in contact with someone who had it
   drinking water from a doubtful source

o. The people most immune to tuberculosis are:
   the Jews
   the Irish
   the Indians
   the Negroes

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Notes by Teacher

IX. GAMES AND SPORTS

Mass Games, Dual Sports, Team Games

Unit Objective

To develop a love for physical activity, and establish habits, which will carry over into leisure time periods of school days and of later years as well

Specific Objectives

Mass Games

1. To increase organic vigor
2. To develop out of school skills for out of school life
3. To develop wholesome social appreciations and relationships
4. To gain an appreciation of skillful performance
5. To know the rules of selected games
6. To be able to officiate in certain games efficiently
7. To develop ability to play with others
8. To increase knowledge about human nature
9. To satisfy the desire for the fundamental movements of play situations

Dual Sports

1. To develop skill and accuracy in sports where two or more are needed to participate
2. To develop individual aggressiveness and initiative

Teacher Procedure

Mass Games

1. Accumulate a varied repertoire of games and relays of the types listed in the references
2. Develop a technique of game presentation
3. Have available all necessary game material for the day's program
4. Divide the class into units of similar ability and equal numbers
5. Select group leaders
6. Make all games enjoyable
7. Teach the pupils the playing knowledge and rules of the game
8. Give all pupils practice in officiating

Dual Sports

1. Acquire a knowledge of the rules and fundamentals of a wide range of dual activities, and ability to participate well in several
2. Have the pupils select the dual activity in which they are interested
3. Conduct an achievement test for each pupil
4. Arrange an after school intramural program of dual sports
5. Supplement teaching with photos and motion picture films
6. Encourage out-of-school competition

Pupil Activities	Evidences of Mastery
Mass Games	**Mass Games**
1. Help select games and relays to be used	1. Showing keen enjoyment in game participation
2. Learn how to play the game	2. Knowing the rules and how to play many games
3. Participate in the game	3. Demonstrating good officiating ability
4. Discuss and learn the rules of the game	4. Showing ability to direct the class in the activities
5. Pick out evidences of fine conduct following the playing of the game	5. Demonstrating skill in his performance
6. Select leaders or captains for organizing the games	**Dual Sports**
7. Use games for play during out-of-school leisure time	1. Displaying good form in the selected activity
Dual Sports	2. Knowing the rules of the game
1. Select activities in which to participate	3. Showing ability to participate in one or more of the sports with satisfaction
2. Learn the rules of the sport selected	4. Showing a desire to continue participation outside of school
3. Practice the fundamentals of the sport selected	5. Exhibiting sportsmanlike conduct
4. Study the best form by observing others	6. Showing steady improvement in the achievement records
5. Take achievement tests to measure improvement	7. Demonstrating knowledge and ability in self defense
6. Set up specific conduct standards during class discussion	8. Showing ability to face physical pain and discomfort unflinchingly
7. Compete in an intramural and an out-of-school tournament	**Team Games**
Team Games	1. Passing tests in game skills similar to those
1. Select games to be played	
2. Participate in the game	
3. Practice the fundamental skills	
4. Learn the rules of the game and practice officiating	
5. Take skill tests in game fundamentals	

Specific Objectives	Teacher Procedure
3. To develop activities adapted to all types of pupils	Team Games
4. To gain ability in self defense	1. Determine a definite program of team games for the particular situation, such as: Football; basketball; volleyball; diamond ball; baseball; soccer, etc.
5. To gain sufficient ability to participate in one or more sports with satisfaction	2. Acquire some skill in each of the games selected
6. To learn to appreciate good performance	3. Allow pupils to help select games to be used
7. To form a desire to continue one or more sports as an adult recreational activity	4. Teach the individual skills as the need arises out of actual games situations
Team Games	5. Form special squads for work in fundamental skills in the games selected to play
1. To develop skill in team games	6. Test pupils on the skills of the games played
2. To develop a desire for team game activities in and out of school	7. Set up a system and technique for student officiating
3. To develop a proper attitude in victory and defeat	8. Hold class discussions regarding the desirable standards of conduct
4. To acquire group loyalty from certain situations	9. Arrange an intramural program of team games
5. To develop alertness and strategic judgment in response to game situations	
6. To develop leadership and followership	
7. To develop high standards of conduct under the stress of competition	
8. To develop a realization of the need for discipline and hard work in obtaining worthwhile ends	
9. To form attitudes of respect toward officials and opponents	
10. To develop stamina and courage	

Evidences of Mastery

set up by the national committee on physical achievement tests

2. Displaying fine conduct while participating
3. Showing respect for officials and opponents
4. Passing tests on rules and officiating
5. Showing a keen desire to continue participation

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X. NATURAL GYMNASTIC METHOD

Natural gymnastics is not a separate kind of activity in itself. It is taught in professional schools of physical education as a course in methods of teaching. In a high school program, natural gymnastics may play a prominent part of every activity.

When pupils endeavor to learn a new game, tumbling stunt, or other activity which requires considerable skill, they may run into difficulty because of the complexity of the fundamental movements. The expert teacher of physical education will help the pupils meet this need through the use of simpler activities, which in themselves are enjoyable and contain these necessary fundamental skills in less complex form. He will guide the pupils in a progressive development of activities so that they will increase in difficulty and gradually approach the desired game skill or tumbling stunt activity. Thus, through activities which the pupils enjoy and can successfully accomplish, they gradually master the fundamental skills leading up to the final objective activity.

This method of teaching is similar in many respects to the method used in coaching, where the game skill is broken down into units. The team members are drilled in these units which are then rebuilt into the whole game. The essential difference is that in a natural program these fundamental units are made parts of simpler activities which are in themselves enjoyable.

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XI. SELF-TESTING ACTIVITIES

Stunts and Tumbling, Apparatus, Combat

Unit Objective

To develop agility, poise, control, confidence, initiative, and pride in achievement, and to teach the use of timing, relaxation, and conservation of power.

Specific Objectives

1. To learn activities which satisfy inherent physical tendencies
2. To satisfy the play impulse with activities, which are on themselves pleasurable, and may need only be directed
3. To learn activities which may be used any place, any time, with any type or number of pupils, requiring little apparatus
4. To practice activities which permit one to achieve individual success and distinction
5. To learn safety by preparing to meet physical emergencies
6. To overcome weakness in muscles used in good body carriage

Teacher Procedure

1. Hold class discussions leading up to the desired objectives as stated
2. Select a few simple stunts of each type to be used by entire class as a test, to divide them into small squads of like ability
3. Assign each squad a leader and a place in the gymnasium for work, rotating them through the different activities
4. Add to and complete the list of activities suggested herein
5. Demonstrate, or have demonstrated, the activity to be taught
6. Demonstrate how mats or apparatus should be placed and have squad leader direct the obtaining and placing of same
7. Provide for free individual practice
8. Have each pupil try the activity several times until he has the feel of what he is trying to do, and then teach the group the various separate skills
9. Post a list of achievement standards to be reached
10. Hold squad competition for determining the best squad in the class and rate each squad according to their ability
11. Arrange for intramural competition
12. Try to arrange a dual stunt meet between schools
13. Prepare a group of the best pupils for exhibition purposes

Pupil Activities

1. Take an achievement test
2. Select stunts with which to work, based on record in achievement test
3. A partial list of various types of activities, progressively arranged is sug gested below

A. Individual Stunts
- a. Duck waddle
- b. Heel click
- c. Mule kick
- d. Wand serpentine
- e. Knee dip
- f. One-leg squat
- g. Juggling
- h. Top
- i. Hopping over leg
- j. Horizontal bar

B. Combat Stunts
- a. Hand tug
- b. Head push
- c. Cock fight
- d. Hand wrestling
- e. Hat knock
- f. Indian wrestle
- g. Stick twister
- h. Rough rider
- i. Catch-as-catch-can wrestling
- j. Boxing

C. Individual Mat Tumbling
- a. Forward roll
- b. Dive and roll
- c. Tip up
- d. Dead-man fall
- e. Head stand
- f. Cart wheel
- g. Kip up
- h. Hand spring
- i. Walk on hands
- j. Somersaults

D. Companion Mat Stunts
- a. Dog rolling
- b. Hand spring over another
- c. Hand stand on knees
- d. Barrel roll or Eskimo roll
- e. Knee Spring
- f. Long dive over companions
- g. One-leg forward somersault
- h. Shoulder mount and somersault off
- i. Hand to hand stand
- j. Pyramids

E. Miscellaneous Self-testing Activities
- a. Rope jumping
- b. Ball bounce into basket
- c. Target throwing
- d. Lassoing
- e. Ball kick for accuracy
- f. Medicine ball throw
- g. Chinning
- h. Bar vault
- i. Football forward pass
- j. Basketball goal throwing

F. Horiontal Bar
- a. Swing dismount
- b. Vaults
- c. Mounting
- d. Little drop
- e. Kip up

G. Horse and Buck
- a. All vaults
- b. Dives
- c. Rolls
- d. Head spring
- e. Hand stand

H. Parallel Bar
- a. Stunt mounts
- b. Rolls
- c. Cut offs
- d. Shoulder stand
- e. Dip and kip

I. Flying rings
- a. Pumping
- b. Cut off
- c. Inverted hang
- d. Skin the cat
- e. Fly away

J. Spring Board and Mats
- a. Leaps
- b. Turns
- c. Dives
- d. Used with obstacles
- e. Somersaults

K. Stall Bar
- a. Climbs
- b. Inverted work
- c. Body dips
- d. Serpentine
- e. Half and full lever

L. Traveling Rings
   a. Natural play

M. Pyramid Ladder
   a. Specialized according to interest and ability

Evidences of Mastery

1. Executing a few selected activities of each type in good form
2. Showing satisfaction and pleasure in doing those activities both in and out of school
3. Showing pride and ability to perform certain stunts
4. Showing a desire to improve techniques and acquire new stunts
5. Showing evidence of a well developed body with good body carriage
6. Showing ability to protect themselves in emergencies

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XII. FUNDAMENTAL AND UTILITY SKILLS

Unit Objective

To gain efficiency in the skills of daily living and to understand their underlying fundamental principles

Specific Objectives

1. To perfect the fundamental skills of daily living
2. To produce the greatest efficiency in performing physical movements
3. To understand the essential scientific principles of muscle leverage
4. To obtain a fine body carriage without conscious effort
5. To understand how to analyze work skills so as to perform most efficiently
6. To understand how to get the maximum muscle drive

Teacher Procedure

1. Obtain such knowledge of kinesiology as to be able to explain the principles of muscle leverage and neuro-muscular control
2. Explain the most efficient use of routine body skills
3. Explain the principles and values of fine body carriage expressed without conscious effort
4. Illustrate efficient work skills in typical situations
5. Arrange definite practice periods in these activities

Pupil Activities

1. Practice good form in types of daily living skills similar to the following: sitting, walking, lifting, standing, stair climbing, relaxing, running, etc.
2. Pupils assist each other in the mastery of these skills
3. Learn the principles of muscle leverage for maximum efficiency in the above skills
4. Learn principles of deriving the maximum muscle power
5. Learn the principles of relaxing and practice relaxing
6. Learn principles involved in good body carriage and develop muscles essential

Evidences of Mastery

1. Performing the skills of daily living efficiently
2. Understanding the principles of leverage, the power skills of work and daily living
3. Carrying themelves well without conscious effort
4. Knowing the principles of good body carriage

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XIII. SWIMMING ACTIVITIES

Unit Objective

To develop skill in, favorable attitudes toward, and enjoyment of, swimming

Specific Objective

1. To overcome the fear of the water by means of developing confidence
2. To learn how to swim and to progress to higher levels of swimming ability
3. To acquire through practice many skills that may save my own life as well as the lives of others
4. To acquire a desire for participation in water sports
5. To develop favorable attitudes for, and an appreciation of swimming, as a leisure time activity
6. To know the rules and techniques of water sports and games
7. To develop ideals of courage, self-sacrifice, and heroic service

Teacher Procedure

1. Divide all pupils into three groups of classes by giving achievement tests
   (a) Beginners
   (b) Intermediates
   (c) Advanced
2. Teach the beginners the following progressive steps using land drill where helpful:
   a. Confidence through games and activities in the shallow end of the pool
   b. Breath control and correct breathing in water
   c. Prone floating and regaining standing position
   d. Elementary crawl
   e. Back stroke and treading water
   f. Plain dive
   g. Rudiments of water safety
3. Teach the intermediate group the following steps:
   a. Secure good form in the various strokes and dives
   b. Simple water games and stunts
   c. General principles of water safety
   d. Resuscitation, simple breaks and rescues
4. Teach the advanced group the following steps:
   a. Skill in the racing strokes
   b. Advanced diving
   c. The remaining skills of life saving and water safety
   d. Have the class discuss the value of continued swimming program throughout life

Pupil Activities	Evidences of Mastery
1. All pupils take the achievements tests	1. Showing fearlessness, self-confidence, and pleasure in the water
2. Beginners should develop watermanship by: a. Playing games and doing stunts in the shallow end of the pool, such as jumping up and down, walking race and chain race b. Practice breath control by submerging the face opening the eyes and counting the fingers; under-water tag; and recovery of objects under the water c. Practice water breathing d. Practice floating and coming to the feet e. Learn the progressive steps of the elementary crawl; sculling; treading; the back stroke and the plain dive f. Learn how to meet such water emergencies as: sinking under water and returning; colliding with another; turning; and choking g. Discuss safety precautions, and how a non-swimmer can be most helpful in case of accident	2. Passing a test equivalent to the following in order to become an intermediate: a. Float or tread water for one minute b. Swim 40 yards by the elementary crawl or side stroke c. Swim 20 yards by sculling or using the elementary back stroke d. Execute a plain dive e. Show ability to recover self after a collision and sinking under water
3. The intermediate group should: a. Practice the racing crawl, the breast stroke and the trudgen crawl b. Practice racing starts and turns c. Practice the four required dives d. Participate in such games and stunts as: summersaults; rolling porpoise dive; wrestling; stunt races; tag; follow the leader; and tug of war e. Learn resuscitation f. Discuss rescue procedure and general principles of water safety g. Practice breaking holds and making rescues	3. Passing a test equivalent to the following in order to become an advanced swimmer a. Swim the crawl or trudgeon 100 yards b. Swim on back for 100 yards c. Swim on side for 100 yards d. Swim 440 yards in any style and execute three of the required dives e. Demonstrate releases from two types of holds with a 20-yard carry in any form f. Approximate an actual rescue g. Demonstrate resuscitation
4. The advanced group should: a. Develop the racing start and	4. Passing the following test

Notes by Teacher

Pupil Activities	Evidences of Mastery
racing strokes b. Practice for good form in all the racing strokes and dives c. Prepare to pass a standard life saving test d. Participate in team water sports and games e. Discuss the value of continuous participation in swimming throughout life	by the advanced group: a. Show good racing form in the crawl for 100 yards, the breast stroke for for 60 yards; the back stroke for 60 yards; do a racing turn; and execute all the dives b. Swim in any form for 440 yards in less than ten minutes c. Pass a standard life saving test equivalent to that of the Red Cross d. Pass a test showing knowledge of the rules and techniques of swimming

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XIV. RHYTHMICS

Free Marching, Clog Dancing

Unit Objective

To develop a muscular response which will be an expression of self, through rhythm, resulting in increased organic vigor and produce an appreciation and enjoyment of such activities

Specific Objectives

Free Marching

1. To establish a sense of marching rhythm
2. To learn the figures commonly used in maze marching
3. To learn the fundamental rhythmic steps
4. To produce a feeling of lift that will result in better carriage of the body

Clog Dancing

1. To develop vigorous rhythmic skills
2. To develop poise and bodily grace
3. To develop pride of achievement in rhythmic activity
4. To develop a medium of dramatic expression
5. To create a desire for continued development in clogging

Teacher Procedure

Free Marching

1. Familiarize the class with this type of activity and use according to the interest shown
2. Give practice in figure marching using catchy music and changing leaders often
3. Give practice in fundamental dance steps using music and changing the time frequently
4. Avoid formalizing procedures No. 2 and No. 3, by allowing pupils freedom in expression of rhythm
5. Have available a variety of appropriate music

Clog Dancing

1. Teach the fundamental steps by means of a simple progression of dances
2. Provide free practice periods
3. Give knowledge of balance and weight shifting
4. Allow the class some choice in selecting dances
5. Stimulate interest by allowing pupils to add new individual steps and movements

Pupil Activities	Evidences of Mastery
Free Marching	**Free Marching**
1. Participate in figure marching	1. Keeping time to the various types of rhythm
2. Pupils make up new figures and lead them	2. Demonstrating how to lead an interesting figure march
3. Learn to use different steps according to the type of music and try to devise new steps. For example: folk dance steps; steps used in social dancing; and stunt steps such as are used in athletic dancing	3. Demonstrating ability to execute a large variety of steps
	4. Showing ability to devise new figures and steps
	5. Showing some ability to give muscular expression to feelings aroused by music
Clog Dancing	**Clog Dancing**
1. Practice the technique of balance and weight shifting	1. Showing ability to execute fundamental clogging steps in good form
2. Practice the more difficult steps individually	2. Knowing and demonstrating the principles of balance and weight shifting
3. Help select dances to be used	3. Showing ability to coördinate the arms, body, and the feet
4. Work out original movements	4. Showing evident enjoyment and pride in dance participation
5. Advanced students prepare new original dances	5. Executing two or more, new dances each year
	6. Showing ability to respond to rhythm
	7. Desiring to learn new clogs

These types of dances are at present more or less used by the girls, where they have been developed into a prominent part of the program. Boys have not responded well to these types of dancing, after reaching high school age. However, a skilled instructor could well use some form of natural dancing with boys.

There are two types of folk dances which will appeal to boys and should be developed in so far as the ability of each instructor allows. One, the Indian dance, which is developing into a definite part of our folk dance group, and the other, the pioneer dances of the square dance and quadrille type. Both are new in the field of physical education and show considerable promise. The Indian dances should especially appeal to the boys. The technique is not well enough established, however, to be included here but should be studied by an instructor who is interested.

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XVI. INDIVIDUAL GYMNASTICS

Individual gymnastics is fundamentally a curative procedure. Dr. J. F. Williams says: "If the corrective exercises are to be used a clinic should be established and the children in need of correction should practice their prescriptions under the eye of the expert in the field."[1] In the college such work is being done with some success, but it seems impracticable for most high schools of this state to carry on such a program. If, however, a specialist in this field can be obtained and proper equipment for such work provided, much good can be accomplished. Since each pupil is a special problem, and a specialist should be required for the work, an outline of procedure is not needed here.

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[1] Dr. J. F. Williams, *Principles of Physical Education*, p. 249.

Unit Objective

To participate in large groups so efficiently so as to obtain maximum vigor of physical activity in limited time and space, acquire certain special physical skills, overcome certain physical weaknesses, and to attain discipline through pupil leadership

Specific Objectives

Marching: Command type

1. To help facilitate in the management of the class
2. To enjoy precision of body movement
3. To learn coöperation through class pride and class unity

Calisthenics

1. To take vigorius exercise where space and time are limited
2. To receive knowledge of a procedure whereby as adults they may be able to get a work-out

Teacher Procedure

Marching

1. Lead class discussion as to reasons for teaching marching
2. Set up a clear-cut system of marching in writing, which is non-military and uses fairly simple maneuvers
3. Master the technique of class marching and of marching leadership
4. Use frequent short periods for vigorous drill
5. Give pupils opportunity to teach and lead marching

Calisthenics

1. Outline a definite set of movements which exercise the essential trunk and leg muscles
2. Have the class discuss the values and limitations of calisthenics, for the present and adult life
3. Use this type of work only when cramped space and time make it advisable
4. Acquire skill in conducting an interesting type of calisthenic drill

Pupil Activities

Marching

1. Make a list of values to be gained through marching and formations: time saving; individual alertness; body control; skill in leadership; and coöperation
2. Participate in class discussions as to the best method of obtaining the values listed above
3. Practice marching skills
4. Practice teaching and giving commands

Calisthenics

1. Discuss the uses of calisthenics
2. Participate vigorously
3. Practice leading the class in the drill

Evidences of Mastery

Marching

1. Marching with smoothness and time saving in class manipulation
2. Showing pride in marching ability
3. Displaying a high grade of skill in marching formations through quick response to command
4. Showing individual responsibility for class discipline
5. Showing ability to teach and give commands

Calisthenics

1. Knowing the uses and limitations of calisthenics
2. Showing vigorous participation and interest
3. Showing knowledge of movements necessary for an adequate workout

Selected Bibliography

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XVIII. THE INTRAMURAL PROGRAM

Unit Objective

To develop a love for sports, by actively taking part in a sport program

Specific Objectives

1. To take part in an all-school sports program
2. To participate in the various sports and find the field in which to specialize, and continue participation after leaving school
3. To learn appreciation of the technique of varsity sports
4. to acquire ability in organizing and carrying through a sports program
5. To acquire desirable character and social traits through participation in intramural activities
6. To develop a well-rounded physique
7. To use the neuro-muscular skills learned in the regular class period program
8. To demonstrate ability to become a future varsity player

Teacher Procedure

1. Organize units for competition
2. Arrange for pupil management of the program under teacher guidance
3. Organize leagues on the basis of ability and small enough for round-robin competition if possible
4. Select a variety of activities; arrange and post schedules
5. Arrange for group recognition by suitable awards, based on a wide range of competition
6. Guide pupils in keeping records up to date and see that the standing of the teams is posted following the day's activities
7. Train and have available efficient pupil officials

Pupil Activities

1. Participate in a variety of sports such as the following
   - Cross country run
   - Soccer football
   - Touch football
   - Basketball
   - Volley ball
   - Indoor baseball
   - Efficiency contest or badge test
   - Swimming
   - Hand tennis
   - Deck tennis
   - Winter sports
   - Boxing
   - Wrestling
   - Diamondball or kittenball
   - Outdoor baseball
   - Horseshoe pitching
   - Golf
   - Tennis
   - Track (outdoor)
2. Officiate in some of the sports of the in-
3. Help organize competitive units and select activities
4. Keep records and post standings

Evidences of Mastery

1. Increasing interest on the part of pupils taking part in sports
2. Displaying good physical development
3. Learning to be varsity candidates
4. Conducting themselves as gentlemen under stress of competition
5. Showing ability to organize and officiate sports
6. Showing a wholesome appreciation of and loyalty to varsity teams by the student body

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XIX. THE INTERSCHOLASTIC ATHLETIC PROGRAM

Unit Objective

To find expression for physical ability through membership on school varsity athletic teams, developing good sportsmanship

Specific Objectives

1. To participate in sports where the level of competition is highly developed
2. To gain social status or prestige
3. To contribute to the traditions and the loyalty of the school
4. To develop a high degree of skill and a strong physique
5. To develop desirable social qualities and character traits, such as self control and self-confidence, coöperation, courtesy, and responsibility

Teacher Procedure

1. Learn thoroughly the technique of sports selected to be coached
2. Learn the principles of good teaching and apply them in the coaching
3. Obtain adequate equipment and take care of it
4. Teach the pupil how to train properly
5. Hold daily practice according to a prearranged seasonal plan
6. Develop an efficient organization for handling business procedures of the athletic program, such as: Arranging schedules, purchasing equipment, advertising contests, securing officials, preparing grounds, selling tickets, paying bills, and keeping accounts
7. Use assemblies and class periods for instruction of student body in sports appreciation and desirable conduct during contests

Pupil Activities

1. Try out for athletic teams
2. Practice regularly
3. Keep self in the best physical condition
4. Learn the rules of the sport in which competing
5. Learn the technique of the sport
6. Practice good sportsmanship
7. Be loyal to your coach and the team both on and off the field

Evidences of Mastery

1. Demonstrating knowledge of the rules and ability as a player
2. Showing pride in the team by the school
3. Encouraging gentlemanly behavior by players and spectators
4. Promoting community interest and pride in the school athletic program
5. Promoting a desire on the part of other schools to be included on your athletic schedules
6. Training properly a member of a team
7. Reporting for tryouts in increasing numbers
8. Displaying loyalty to the traditions and ideals of the school by players and other pupils

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