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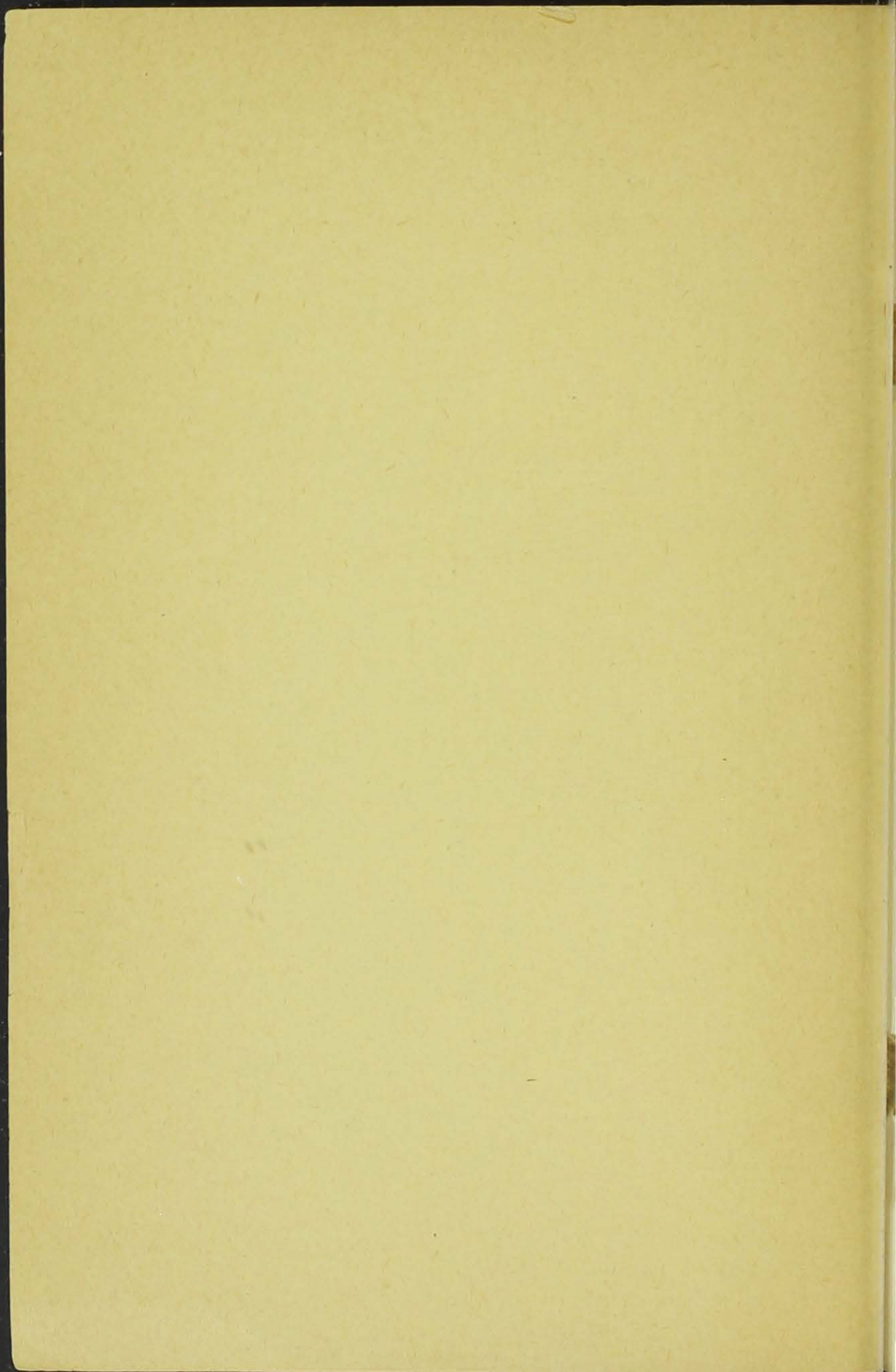
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State of Iowa
1946

Iowa Elementary Teachers' Handbook
VOLUME VII

A Plan of
HEALTH EDUCATION
for the Rural and Elementary Schools of Iowa

Published by
THE STATE OF IOWA
1946



Iowa Elementary Teachers' Handbook

VOLUME VII

A Plan of Health Education for the Rural and Elementary Schools of Iowa

Issued by the
Department of Public Instruction
JESSIE M. PARKER, *Superintendent*
Des Moines, Iowa

Published by
THE STATE OF IOWA

1946

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FOREWORD

During every second, every minute and every hour of the school day the teacher teaches health. At times she may conduct a somewhat formal type of health instruction but this covers at most only a fraction of the day. The remaining hours, however, are just as important in health education.

During these hours, by her own example, the teacher guides learning in health, in the living, positive, demonstrable facts of health. The book says to be neat and clean. Is the teacher neat and clean? It says that you should cover your mouth when you cough. Does the teacher remind Johnny to cover his mouth when he coughs? The book says there should be good light for studying. Does the teacher adjust the shades or have the children do so when the light is bad?

Health education and health practice are so close as to be practically synonymous. Rarely, if ever, is there one without the other, and the plan of health education presented here quite properly recognizes this fact.

There is a wealth of sound, practical information in this publication. The rural or elementary teacher who uses it well should see a change in her classroom in due time. We hope these teachers do use this curriculum wisely. Because of its close relationship to health practice, health education certainly merits the best the teacher can provide.

WALTER L. BIERRING, M.D.

Commissioner

Iowa State Department of Health

February 1946

A PLAN OF HEALTH EDUCATION FOR THE RURAL AND ELEMENTARY SCHOOLS OF IOWA

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1. The first part of the paper is devoted to a general
discussion of the problem. It is shown that the
problem is of great importance in the theory of
the differential equations of the second order.
2. In the second part the author considers the
case of a linear differential equation of the second
order. It is shown that the problem is solvable
if and only if the determinant of the system of
equations is not equal to zero.
3. In the third part the author considers the
case of a nonlinear differential equation of the second
order. It is shown that the problem is solvable
if and only if the determinant of the system of
equations is not equal to zero.
4. In the fourth part the author considers the
case of a system of differential equations of the second
order. It is shown that the problem is solvable
if and only if the determinant of the system of
equations is not equal to zero.
5. In the fifth part the author considers the
case of a system of differential equations of the second
order. It is shown that the problem is solvable
if and only if the determinant of the system of
equations is not equal to zero.

INTRODUCTION

As was true at the time of the first World War, we as a nation have become exceedingly health conscious. The rigors of war together with the rigid physical examinations in the armed forces and the great importance of high physical conditioning to withstand the hardships of combat all served to make the nation more conscious of the precious values of good health.

A study of the causes for rejection of men examined for induction into the armed forces reveals that most of the reasons are either directly or indirectly attributable to malnutrition and communicable diseases. The former is largely an education problem, and the latter to a great extent can be controlled through a vigorous program of health instruction.

The large number of rejections in selective service because of poor health standards might well cause a backward glance at our health education program in the public schools during the years between the World wars. What evidence do we have to indicate that the youth of that generation were getting a vital health education program that was functioning in their daily living? A study of the content of courses during that time reveals little to indicate that any emphasis was placed on the teaching of functional health. The youth of that generation were getting much drill on the skeleton, muscles and tendons, with some stress on major bodily functions, but little indeed on the influence of balanced diet, control of communicable diseases, the values of regular and systematic rest and relaxation, the need for regular health examinations, the importance of personal cleanliness, or the community aspects of a health education program.

The present course is so organized as to give particular stress to these vital aspects of health training. Furthermore the authors of the course have given much emphasis in its organization to the treatment of health problems with which

children are confronted every day. Consequently, instead of close adherence to a page-by-page study of the text, the text and references will be used as sources of information in helping to solve the everyday health problems of children at the time they are actually confronted with the problem.

The content of the course is included in a series of five health charts, supplemented with a series of fifteen illustrative units, in addition to a section dealing with information designed to be helpful to teachers and parents in dealing with health problems. The course of study then, as is true of the text, is not intended to be followed in the sequence in which it is presented, but to be drawn upon as an aid in solving immediate problems, using those portions that aid in the solution of the problem regardless of sequence.

While using the course for the purposes suggested above, it will also serve as a valuable guide in determining the ultimate over-all content of the elementary health program. It is conceivable that all of the charts will be worked with by all grades in a given year, but each at a different level of maturity, working with progressively difficult materials and on problems of greater complexity as the grade level advances.

Originally two separate committees were appointed for dealing with the Health Course of Study and the Physical Education Course of Study. Later the two committees were combined with the following personnel: Dr. J. W. Kistler, formerly associated with the University of Iowa, and now with the University of Louisiana; Dr. Paul Bender, Iowa State Teachers College, Cedar Falls, Iowa; Dr. N. O. Schneider, formerly with the Training High School at Iowa State Teachers College, Cedar Falls, and now with the State Department, New York State; Mr. Kenneth Nicholson, formerly county superintendent of schools, Polk County, now with the armed forces; Superintendent R. A. Vanderwal of Montezuma; Superintendent Louis Ortale of Guttenberg, now in the service; Miss Jane Harris, Physical Education Instructor, Sioux City; Dr. Earl Rath, Iowa State Teachers College, Cedar Falls, Dr.

Monica Wild, Department of Physical Education for Women, Iowa State Teachers College, Cedar Falls; Miss Doris E. White, Department of Physical Education for Women, Iowa State Teachers College, Cedar Falls.

The committee membership listed above met and discussed the organization and content of the course, the actual production of which was effected by Dr. Wild and Miss White. After a preliminary draft the course was modified to some extent to conform with suggestions made by the Central Committee.

Many valued and helpful suggestions made by the State Department of Health have been incorporated in the manuscript. Dr. Bierring has prepared the Foreword, and Miss Marjorie Lyford and Miss Marie Neuschaefer of that department have contributed with the article, "Community Health Resources," page 112. In addition, they have made several constructive suggestions at various points in the manuscript which have been incorporated by the authors.

Dr. Ralph H. Ojemann, Child Welfare Station, State University of Iowa, has also gone over certain portions of the manuscript at the request of the committee. He has given helpful and constructive suggestions, highly valued by the committee, all of which have gone into the manuscript.

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A STATEMENT OF BELIEFS BASIC TO THE HEALTH EDUCATION PROGRAM WITH AN EXPLANATION OF THE HEALTH CHARTS AND THEIR USE

The program of health education for the elementary schools of Iowa, as herein set forth, is based upon a number of fundamental beliefs stated in italics below. These beliefs conform to those expressed in the writings of modern authorities on health education and in the recent reports of several important committees made up of experts in the field of the school health program.

We believe that health is not merely an end in itself but also that good health is the means whereby we gain the ability to do with greater efficiency all those worth-while things we most want to do. If health then is more largely a means instead of an end, and you, the teacher, are striving to interest your pupils in being as well as possible, you will first want to be sure that they are interested in doing a wide variety of things that require health for the doing.¹ This means that your pupils must want to be in school, for then they will try to keep well in order to be accepted there.

Your part then is first, to interest the children in the school's program by giving them satisfying experiences while there, and second, to establish the practice of excluding children with acute illness from school. Your third responsibility is to develop in the children an interest in many strenuous activities which the school is sponsoring, for these will demand robust health if the children are to participate in them successfully. This responsibility will include the provision of a modified program of activities suitably challenging to those who have been found unable to participate in the normal program.

These practices will quickly build up in the minds of the children a connection between good health and doing interesting things and will avoid their considering health only as a means of staving off misery and suffering or perchance

¹Strang, Ruth M., and Smiley, Dean F. *The Role of the Teacher in Health Education*, pp. 11-12. MacMillan Co., New York, 1941.

finding that ill health brings more recognition and attention than good health.

Health education is a doing process—it is living healthfully and not just talking about living healthfully. Having learned will therefore be measured in terms of changed habits which will imply changed attitudes, and not by paper and pencil tests alone.

Growing children learn more readily if they can follow the example of adults and others of their own age. Therefore you will want to make it your responsibility to see that the patterns set for and by your children are in keeping with their discussions and readings.

This program of health education offers you a series of charts which represent accepted standards for health procedures. The one that applies most specifically to yourself is Chart A on page 18. You will want to look through this chart and check yourself before you begin to help the children with their own habits.

Because your health program is going to consist in helping the children learn about health through their own experiences and because *you the teacher are first concerned with the health aspects of those experiences over which you have control*, you will want to find and help the children find how well your school experiences and facilities lend themselves to healthful living. You can do this best we think by helping them to check their living at your school by Health Chart B, page 20.

When you find that you have some conditions that do not measure up to the standards set in Health Chart B, you and the children will want to do everything you can to change these conditions. You may find that you will need to call upon the parents and your superintendent to help you reach some of the standards. Do not become impatient because everything cannot be changed at once. If you try hard though you will find that eventually, with everyone helping, you can accomplish most of the desired standards. On pages 65 to 87 you will find examples of how some schools have succeeded in reaching some of these standards.

If health is to be considered as a means of helping the child do the worth-while things he most wants to do, then we must be interested in his social and emotional life as well as his physical life. For if the child is not able to play successfully,

is not accepted by his schoolmates because he has a bad temper, is selfish or stubborn, these then become health problems just as truly as any physical handicaps.

On page 31 you will find Health Chart C which deals with social and emotional health standards. You will want to help your children check their own practices by those given in this chart. When these have been studied we hope the children with your guidance can find ways of improving any of their practices which may not conform with these standards. Sometimes the problem will be one the whole school will need to work on and sometimes it will be a problem for only one or two children.

If the school is to help each child develop as much as possible, you and his parents must know his physical status and needs. You can get this knowledge, first, through a thorough health examination by a physician, and, second, by your constant observations and inspections during the school day for signs of normal health and growth as well as for signs of illness and contagion.

A strong working interest in personal and community health may be stimulated among pupils and parents not only by the general health examination given to each pupil in school but also by an extensive vaccination and immunization program, especially if these events are preceded and followed by study and discussion of the various procedures of which they are composed and of the reasons why they are important. The children and parents may also learn that attention to the condition of their health is a civic responsibility. You may wish to use Health Chart D on page 34 as a means of stimulating interest in health examinations and protection from communicable diseases.

We believe that it is impossible for one teacher in a graded school to accomplish maximum results in health education unless the rest of the school in which she is teaching is subscribing to the same philosophy of health education and is attempting to accomplish the same results that she is.

A health education program will likewise fall short of full success unless the home and the community are backing the school's program and are also furnishing healthful experiences which serve as examples to and an education for the children when they are associated with these places.

If the child is educated by the way he lives you will be interested in all of his experiences whether at home, in the community or at school. You will want to contact the parents in order that you may find what kind of experiences your children are having when with them and in order to acquaint the parents with your health program. The home alone can furnish practices for many of the most important health habits such as sleeping, bathing, eating, etc.; therefore you will want to make certain that you and the parents have similar standards of accomplishment in these.

Your contacts with parents may be made by personal home visits, through parent-teacher meetings and by the use of Health Chart E on page 43. Health Chart E has been made with the thought of giving you a quick and authoritative method of presenting to the parents the standards for many health practices to be carried on in the home. Your part in this plan will be to supplement the work done with the children in the home by furnishing reading materials and discussions at school. This cooperation will avoid the confusion which often comes to children when the school teaches one thing while the home practices another. Read carefully ways of working with parents found on page 43.

We hope that this list of charts will suggest to you and the children and the parents a number of problems which need to be solved and that you may by working together find ways of solving them.

It must be kept constantly in mind that not all children can contribute the same amount to the solution of the problems due to the differences in ages and abilities. Also not all will be satisfied with the same kind of solution. For the youngest children doing the activities because they are being done will satisfy as a solution, but for the older ones there will be a need for scientific sanction for the practices proposed. All children, however, should make some contribution and should read the health books on their own levels in justifying the practices.

It is better to furnish your children with many different sources of reading materials rather than to supply all with a copy of the same text, for in this way you can reach the different abilities and also bring in many different authorities.

In schools where the youngest children are in rooms by themselves practices will be set up through discussions only, but

it is hoped that in no age group will the project stop with study and discussion but will always lead into practices which will form habits of conduct and establish attitudes for health behavior.

As mentioned above, the health charts will suggest problems to you and your children which you will try to solve. A second use to be made of the charts is to serve as standards when unexpected problems arise calling for immediate solution or when a problem is recognized to exist without having been called up by the use of the charts. For example, the children may be eating candy at the morning recess. You will not tell them that this practice is wrong but will ask them if they think it is the best thing to do. They may consult the charts and their health readers for their solution.

A third use of the health charts is to serve as a check on accomplishment. At the end of the month, at midyear, or at the end of the year you and the children and the parents may go over the charts to find how many of the standards you have been able to reach as evidenced by consistent practice.

Following the charts you will find some brief units which represent examples of problem solving that have been developed by various teachers.

The committee hopes that when you have found a way of solving some of your health problems you will report these to the State Department of Public Instruction so that they may be shared with other teachers in subsequent revisions of this bulletin.

References

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST, p. 133, where publishers and prices are given.

Reference 1

Reference 35

Reference 15

Reference 36

Reference 16

Reference 24

HEALTH CHART A

Personal Health Conduct of the Teacher

Teacher Only Responsible

- I. Do I practice the personal health and safety habits which I try to establish with my pupils especially as to diet, exercise, rest, cleanliness and elimination?
- II. Am I careful in such matters of personal appearance as:
 - a. Clean, neat, attractive clothing?
 - b. Hair, hands, nails cared for?
 - c. Freedom from perspiration odor?
 - d. Easy, buoyant, confident use of body?
- III. Do I have a well modulated voice and distinct enunciation?
- IV. Do I show respect for the personality of each pupil by extending to him the same courtesy I expect from him?
- V. Do I budget my school day for myself and the children to conserve energy and vitality?
- VI. Am I encouraging, kind and understanding, while at the same time being firm?
- VII. Do I frequently play with my children?
- VIII. Do I definitely develop in myself the social traits I try to develop in the children?
- IX. Do I keep myself emotionally stable, looking for humorous situations to share with the children?
- X. Do I take the attitude of a learner sharing problems with the children?
- XI. Am I examined periodically by a physician?
- XII. Have I had a dentist examine my teeth and gums within the last six months?
- XIII. Have I fulfilled so far as possible the recommendations made by my physician and dentist?

..... XIV. Have I been tested for immunity against small-pox and diphtheria within the recommended period?

..... XV. Have I been given the tuberculin test?

References

Materials in this pamphlet:

A Statement of Beliefs, p. 13

Community Health Resources, p. 112

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST, p. 133, where publishers and prices are given.

Reference 1, pp. 72, 138, 273

Reference 15, pp. 72 to 74

Reference 24, pp. 296 to 297

Reference 35, pp. 286 to 288

Reference 40, r

Reference 41, e

Reference 42, b

Reference 48

HEALTH CHART B

Health Factors of Plant, Equipment and Program Arrangement

Teacher, Pupils and Administration Cooperating

Note: The "Rating Card for Standard Rural Schools" designates many standards for grounds and buildings for which the board of education and community are responsible, rather than the teacher and pupils. Teacher and pupils might study this rating card and work to bring their school up to the standards suggested. The chart given here includes those items of the physical environment which pupils and teachers can usually do something about. With items such as sanitation, care of grounds, use of light and washing facilities, the problem is to get best care and usage of available equipment. In other cases such as glaring walls, screening of toilets, and securing a good place for handwashing, the project may mean actually improving existing conditions by some cooperative effort. Perhaps proper shades cannot be secured at once but they can be adjusted to give as much light as possible, and perhaps new shades can be secured later. The walls can be made more attractive, the grounds can be put in shape, the desks placed to best advantage if the pupils would like to help. (See Illustrative Unit of Activities O, p. 87 where an actual example of such a project is given.)

I. Coming to school safely and on time

..... A. Do we use the safest ways of walking, bicycling or taking the bus to school?

..... B. How can we make our going to and from school as safe as possible for each one of us? (Illustrative Unit of Activities A, p. 65, shows one way of finding a solution to this problem.)

II. Seating

A. Are we seated comfortably; that is—

..... 1. Does the height of the seat make it possible

of our feet to rest heavily upon the floor, knees at right angles, no pressure under the thighs along the front edge of the chair?

2. Are the chair and desk close enough together so that leaning forward is not necessary while writing, and yet there is enough space to enter and leave easily?
3. Is the height of the desk such that the forearm may rest on it while writing without causing that shoulder to be high?

B. How can we help solve our seating problems so that we meet the above standards?

III. Lighting the classroom

A. Is our schoolroom well lighted; that is—

1. Do we have double shades in the middle adjustable at the top and bottom of the windows, or if the ordinary single type is still in use are they rolled entirely to the top of the window when the sun is not on that side so that the light will carry to the far side of the room?
2. If there are windows on both sides of the room are the shades pulled to cover the windows on the right side and adjusted for proper lighting on the left side according to Item 1?
3. Are our shades translucent with buff or tan color, and wide enough to exclude sun streaks? And are sunstreaks excluded between the rollers of double shades?
4. Are our windows kept clean?
5. Do we have a minimum of 15 foot-candles of light, artificial or daylight, on all working surfaces?
6. Are all of our desks placed so that the light comes from the left or left and rear causing no objectionable shadows?

-
7. Are walls light buff or ivory and the ceiling white or light?
-
8. Is there an absence of direct or reflected glare on working surfaces from sunlight or from artificial light? (Working surfaces include desks, tables, blackboards and materials.)
-
9. Are there no sun streaks and no bright reflecting objects?
-
10. Are we seated during study and recitation so that no one will be forced to look directly into the light?

This means—

- a. If children are seated in a semicircle for recitation the open side should face toward the dark corner of the room, and semicircle be small enough so that no child faces the light.
- b. If tables are used children should sit on one side only with light coming over the left shoulder.
- c. Teacher should not stand at the windows at any time and especially when conducting recitations.
-
11. Do we keep flowers and plants on a shelf or table below the window sill and sash curtains and decorations off the window so that we will get all the light possible?
-
12. Are those of us with defective vision sitting near the front of the room and in the best light?
-
13. Are left-handed children seated so that they need not write with a shadow?
- B. How can we help to solve the lighting problem in our room and share in the duties concerned with them?

IV. Temperature and ventilation

- A. Do the temperature and ventilation of our

classroom make us comfortable and wide-awake so that we can do our best work; that is—

1. Is the temperature 68 to 72 degrees with no drafts?
2. Are thermometers kept at desk height both near the source of heat and at the desk farthest from it?
3. Is provision made for intake of fresh air and outflow of foul air?
4. If artificial heat comes from stoves are they adequately jacketed?
5. Is some provision made to keep the air moist in winter?
6. Do we open windows when we play hard in the school room?

B. How can we help to solve the heating and ventilation problems and share in the duties concerned with them?

V. Housekeeping

A. Is our room kept clean and orderly; that is—

1. Do we use sweeping compounds and treated dust cloths?
2. Are the seats movable so that floors may be easily cleaned daily?
3. Do we keep all materials neatly put away except those we are using?
4. Does each of us clean up his materials immediately after construction work or after lunch?
5. Do we have receptacles of sufficient size for refuse?
6. Do we clean blackboards thoroughly at least once a week and wipe them with a damp cloth daily?

..... 7. Do we keep erasers and chalk trays clean and dust-free?

..... 8. Do we have mats for cleaning our shoes and do we all use them before entering the schoolroom?

..... 9. Do we burn all garbage from our lunches in the winter and bury it or carry it home in fall and spring?

..... 10. Do we have definite places, preferably enclosed, for wraps, dinner pails, drinking cups, cooking utensils, books, instructional materials, etc.?

..... 11. Are there screens on doors and windows so that flies may be kept out of our rural school?

..... 12. Do we plan ways of making the room attractive in appearance?

B. How can we share with the teacher in the cleaning program and how can we help solve the cleaning problems? Can we encourage cleanliness and tidiness through teacher-pupil-parent cooperative planning so that the necessary facilities mentioned above are provided?

VI. Toilet facilities

A. Are our toilets clean and sanitary; that is—

..... 1. Do our committees take turns in scrubbing floors and benches, and seeing that toilet paper is always present?

..... 2. If ours are outdoor toilets are the vaults flytight and do we cooperate in keeping them so by remembering to close the bench covers after use?

..... 3. Are odors reduced in outdoor toilets by frequent applications of lime?

B. How can we cooperate with the teacher in

keeping our toilets in such a condition that we can be proud of them when we have guests.

VII. Personal cleanliness

A. Do we keep ourselves neat and clean; that is—

1. Do we have adequate handwashing facilities as follows—

a. Is there plenty of water, preferably warm and flowing, but so arranged that each pupil may wash his hands independently?

b. Is there soap, preferably liquid, and are we able to make our own liquid soap?

c. Do we have individual towels, preferably paper?

2. Is adequate time for handwashing given, and are facilities handy for use at the following times—

a. After the toilet?

b. Before preparing food?

c. Before eating?

d. After play?

e. After handling materials which soil the hands such as paste, paint, clay, etc.?

f. After blowing the nose if hands are to be joined in a circle?

3. Are there mirrors of sufficient size and so placed that we can judge and improve our appearance upon arriving at school and after play?

4. Does each person have his own comb and keep it in a handy individual compartment?

5. Does each person have some means of cleaning his finger nails?

- B. How can we help to solve our personal neatness and cleanliness problems by making plans and furnishing materials?

VIII. Water supply

- A. Do we have adequate and safe water for drinking, handwashing and cleaning purposes; that is—

.....
1. Has the drinking water been certified as safe by the State Department of Health?

.....
2. Is there a bubbler type drinking fountain with a slanting jet and orifice protected from the lips of the drinker? (See State Department of Health publications on drinking fountains in reference list, p. 133.)

.....
3. If there is no fountain, are individual cups and water containers thoroughly cleaned every week?

.....
4. Are the cups protected from dust and flies?

.....
5. Is there an adequate amount of water at school to furnish each of us with 3 or 4 cups of certified water daily as well as an ample amount for handwashing and cleaning?

.....
6. If the source of water is a well are the well coverings so sealed that there is no seepage back into the well from pumped water or surface drainage?

.....
7. If water has not yet been certified as pure or has been found by tests to be unfit for drinking have we treated it with chlorine tablets so that it is safe for hand and dish washing?

- B. How can we cooperate with the teacher and the community in securing an adequate and safe water supply for our school?

IX. Lunch period activities

A. Is our lunch period a healthful experience; that is—

1. Is it an enjoyable occasion in an attractive place with interesting and happy conversation and sufficient time to eat?
2. Do we have a committee of children guided by the teacher prepare a hot dish when needed to supplement our lunch brought from home? (For problems concerned with improving school lunches see Chart E, page 43.)
3. Do we find our lunches clean and cool and free from flies because we brought them into the school building when we first arrived and placed them in a clean place?
4. Do we have a way of keeping the milk which we have brought to school cool and fresh by one of the following methods—
 - a. Using a thermos bottle?
 - b. Placing the milk in a refrigerator at school?
 - c. Making an iceless refrigerator by placing a small amount of water in a pan and wrapping a wet cloth about the milk container and allowing the ends of the cloth to reach into the water?
5. Do we throw away food which has fallen to the floor?
6. Do we stop using any utensil such as spoon, fork or knife that has fallen on the floor?
7. Do we eat slowly, chew our food thoroughly and quietly, and take small portions of food at one time?
8. Do we rest, tell stories, plan or play quiet games for a while after eating?

B. How can we cooperate with our teacher and

our classmates in making our lunch period healthful and happy for everyone present?

X. School grounds

A. Are our school grounds kept neat and well cared for and possibilities of accidents reduced; that is—

..... 1. Do we with the aid of our teacher regularly test and care for our play apparatus and put our equipment away when not in use?

..... 2. Do we keep our play areas smooth, free from boards, cinders, nails, glass, tin cans, sticks and stones?

..... 3. Do we ask our directors to cut the grass short enough so that we will not trip when playing?

..... 4. Do we have our broad and high jumping pits filled with sand?

..... 5. Do we have adequate first aid kits supplied with a disinfectant, bandaids, bandages, adhesive tape, scissors, burn ointment, etc.?

..... 6. Are the provisions for play and physical activities indicated in the Iowa Plan of Physical Education carried out? (See reference 18 in this bulletin for Iowa Plan.)

B. How can we cooperate with our teacher and our community in trying to reduce accidents in our play while at the same time we regularly participate in vigorous activities? (See Health Chart C II, III, p. 31.)

XI. School program arrangement

A. Is the school program so arranged that it helps us to live healthfully; that is—

..... 1. Do we have balanced periods of physical and mental activity?

- 2. Do we have the opportunity to move about the room to attend to our needs as freely as we would in our homes and still not disturb others who are wishing to study?
- 3. Do we try to give everyone an opportunity to succeed at something each day and try to help those who are less successful?
- 4. Do we avoid having long periods of inactivity, close work or holding a special position?
- 5. Do we have some short periods of rest and relaxation according to our ages, the younger ones getting more rest?
- 6. Have we learned how to completely relax because we are furnished rest periods in which this can be learned?
- 7. Do we try to play out of doors every day?
- 8. Do we wear our wraps when we play out of doors in cold weather and remove all heavy clothes and overshoes when in the schoolroom?
- 9. Are we careful to cool off gradually after getting hot from exercise by putting on wraps, keeping out of drafts or continuing mild activity?
- 10. Do we make a practice of reading and doing fine work in good light?
- 11. Are we stimulating our improvement in health habits by each one keeping his own health record chart?

B. How can we cooperate with our teacher in making our school day a healthful and happy one?

References

(Materials for pupil use marked by asterisk *)

Materials in this pamphlet:

A Statement of Beliefs, p. 13

**Health Chart A*, p. 18

**Health Chart C*, p. 31

**Health Chart E*, p. 43

**Illustrative Units of Activities A, B, C, D, E, F, O*, pages 65, 69, 70, 71, 72, 73, 87, respectively

Use of and Criteria for Evaluating Instructional Materials, p. 93,
for health standards in editing children's books

Community Health Resources, p. 112

Safety and First Aid, p. 120

Physical Education, p. 123

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on p. 133, where publishers and prices are given.

Reference 1, Chap. XII

*Reference 4

*Reference 13

*Reference 14

*Reference 15

Reference 16

Reference 17

Reference 18

Reference 24, Chapters VI, IX

Reference 36

Reference 39, a, d 2

Reference 41, f

Reference 42, a, b

*GRADED BOOK SERIES list, I to VII, inclusive, p. 138

HEALTH CHART C

General Social Health Factors of the Group

Teacher and Pupils Share Responsibility

- I. Are we friendly and helpful to each other while at play and at work; that is—
 - A. Are we kind and cordial to new pupils?
 - B. Are we considerate and helpful to pupils who are handicapped?
 - C. Are we friendly and fair to our opponents in games?
 - D. Are we hospitable to our guests?
 - E. Are we encouraging and helpful to those who have made mistakes?
- II. Are we as a group developing the ability to plan and organize our own work and play activities satisfactorily and solve our own work and play problems; that is—
 - A. Have we planned a play unit under the Iowa Plan of Physical Education?
 - B. Have we divided ourselves into small self-managed play groups according to our age and ability?
 - 1. In the rural school are we divided into the younger play group and the older play group?
 - 2. In the grade school are we divided with the help of the teacher and according to some fair and kind way into groups in which each pupil will be happy?
 - C. Have we organized ourselves into groups for the purpose of helping the teacher with the housekeeping duties such as cleaning, caring for the furnace, getting water, etc.?
- III. Are we growing in our ability to cooperate and share with others in work and play; that is—

- A. Do we abide by the decisions of the majority in choosing play activities?
- B. Do we recognize the suggestions and rights of the minority?
- C. Do we do our own share in caring for equipment?
- D. Do we do our part in keeping the schoolroom clean and neat?
- E. Do we help keep the play space safe? See Chart B X, p. 11.
- F. Do we cheerfully plan together how we can carry out all of the suggestions given in Chart B whereby our school will be a more healthful place in which to live?
- G. When the activity allows for choosing, do we make an effort to see that each one gets a turn?
- H. Do we see that each one has an opportunity to do some leading?
- I. Do we do our share by doing our best in any job?
- IV. Do we encourage those who are trying new things or expressing original ideas?
- V. Do we give kindly praise to all who have tried hard and have done well?
- VI. Are we able to discuss problems freely but kindly without giving or taking offense?
- VII. Are we as a group proud of our school, and do we show our loyalty to it in our care of its property and our responsibility for its welfare?

References

(Materials for pupil use marked by asterisk *)
Materials in this pamphlet:

A Statement of Beliefs, p. 13

Health Chart A, p. 18

**Health Chart E*, VIII, p. 43

**Illustrative Units of Activities*, C, E, and F, pp. 70, 72, and 73, respectively

Physical Education, p. 123

Postures of School Children, p. 126

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on p. 133, where publishers and prices are given.

Reference 1, Chap. VII

*Reference 18

Reference 24, Chaps. III, IV, p. 44

*GRADED BOOK SERIES list, I to VII, inclusive, p. 138.

HEALTH CHART D

Health Examination, Inspections, Observations and Control of Communicable Disease

Teacher, Superintendent of Schools, Parents, Community and Children Work Together

Note: Suggestions for ways of working with parents may be found on p. 43.

I. Health Examination

A. For the teacher

- 1. Have you contacted the parents in an effort to get an adequate health examination for all of the children in your school? See p. 98.
- 2. Have you and the parents contacted the school board and the community health agencies in an effort to secure their cooperation in the giving of health examinations to your school children? See p. 98.
- 3. Did you discuss the various parts of the examination as problems with the children in advance and prepare them emotionally and mentally for this experience through references and demonstrations? See pp. 235-238, *Health Education*, A.M.A. and N.E.A.¹; and p. 60 of this pamphlet.
- 4. Did you discuss the examination with the parents in advance in a way that made them realize that the problem was a joint one and necessitated their being present when their children were being examined?
- 5. Are you skilled in giving preliminary vision and hearing tests and in weighing and measuring? See pp. 104-106 for helps.
- 6. Do you weigh your children carefully every

¹Joint Committee Report, N.E.A. and A.M.A., *Health Education*, N.E.A., Washington, D. C., 1941.

month and measure their height accurately twice a year?

7. Do you have on file cumulative record cards on which are recorded the results of all health examinations and inspections with needed corrections indicated? See Form 52 P.H.N., p. 566.
8. Have you recorded on this card what and when corrections have been made?
9. Have you invited your superintendent to study these cards?
10. Have you informed the parents of the results of the inspections and health examinations of their own children and discussed with them the need for medical attention or improvements of habits?
11. Have you carried out the essentials of inspection of the Iowa Plan of Dental Health? See page 109.
12. Have you helped the children to feel that doctors, dentists and nurses are their friends?
13. Have you adjusted the physical activity program to the physical status of each child and encouraged all possible corrections needed to make vigorous play safe for most children?

B. For the superintendent, school board and parents

1. Are you helping solve the problem of securing health examinations for the pupils of your school? See page 98.
2. Have you helped the teacher to secure the cooperation of the health agencies in your community in relation to the physical examinations and all other personal and community health problems? See p. 98.

-
3. Have you made it possible for the teacher to secure cumulative health record cards for the recording of the results of health examinations and inspections including space for health history, immunizations and health habits? See Iowa State Department of Health Forms 52 P.H.N., 53 P.H.N., and 53A P.H.N., pp. 100, 101, 102.
-
4. Have you provided the school with adequate facilities for testing vision and hearing and weighing and measuring? See pp. 103-108.
-
5. Have you provided the teacher with a first-aid kit? See p. 121.
-
6. Have you sponsored open meetings where the relationship of a physician to family and school life has been discussed?
-
7. Have you studied the results of observations, inspections and health examinations, and have you tried to get the needed corrections made which are indicated on the card?
-
8. Have you tried to help the community health agencies realize that by assisting the school in solving its health service problems they are improving the community health in a vital way?

C. For the children

-
1. Do you go willingly and without fear to the physician, dentist or nurse for your health check up or when sick or needing first aid?
-
2. Have you learned simple first-aid procedures yourself according to your ability, and do you apply them when needed?
-
3. Are you keeping your own growth record by being weighed or by weighing yourself each month and measuring your height at

the beginning of the school year, again in January, and then in May?

- 4. Have you discussed in your school how health examinations are given?
- 5. Have you of the intermediate and upper grades studied the meaning of the different parts of the health examination and the reasons why health histories are important?
- 6. Have you had a health examination recently enough so that you know if you can enter safely into vigorous work and play activities?

II. Inspections, Observations and Communicable Disease Control

A. For the teacher

- 1. Are you on the lookout when the children first enter the room and throughout the school day for unusual appearances or behavior which might indicate illness? Those symptoms for which he should be sent home are:
 - a. Evidence of rise in body temperature as shown by:
 - (1) Body warm to touch
 - (2) Face flushed
 - (3) Child drowsy
 - b. Cough, especially one that increases
 - c. Discharge from ears
 - d. Discharge from eyes
 - e. Nausea or vomiting
 - f. Sore or inflamed throat
 - g. Abnormal skin conditions
 - Any unusual redness, roughness, rash or sores

h. Beginning cold shown by:

Sneezing, watery eyes or nasal discharge. This is most important as (1) colds are most contagious first 24-48 hours, and (2) symptoms of cold are also beginning symptoms of many other communicable diseases.

2. When it is necessary to exclude a child from school, do you—
 - a. Get in touch with a parent?
 - b. If possible, have parent come for child?
 - c. Suggest medical care?
3. Do you make a careful check as to the cause for absence before a child is readmitted to school?
4. Do you make a careful inspection of a pupil who has been absent because of illness before he is readmitted to school and inquire as to the symptoms and health of the rest of the family?
5. Do you send home or isolate the child who during the school day shows signs of illness?
6. Do you take the following steps when a child who is absent is reported to have a certain communicable disease:
 - a. Consult your records to find out which of the other children in your school have had the disease or have been immunized for it?
 - b. Find out where and when the sick child was exposed?
 - c. See if other children were similarly exposed?
 - d. If this is a short incubation period disease, send all susceptibles home at once?
 - e. If the incubation period is long, send home only those individuals involved in first exposure?

- f. Report all facts to the parents and tell them the period of incubation shown in the "Rules and Regulations of the Iowa State Department of Health Relating to Communicable Disease"?
 - g. Inform parents as to how long children who have not had the disease may come to school and how long they must stay out if the disease is not contracted?
7. Are you helping your children to become increasingly able to recognize without emotion the symptoms of disease in themselves so that they may practice in time the proper protective measures in respect to others?
 8. If yours is a room in a graded school, do you report absences to the school nurse, the superintendent's office, or someone else as the physical education teacher who is responsible for coordinating the school health program?
 9. Do you help children by kindly reminders to use their handkerchiefs when sneezing and coughing?
 10. Are you helping children to feel that they should stay away from school, Sunday school, church, picture shows, parties or any other public gathering when they show signs of or are suspected of coming down with a communicable disease including a cold?
 11. Are you helping children to feel that in doing the items listed, under 9, they are performing a community service expected of every good citizen?
 12. Are you helping the children to keep hands, pencils and other objects away from the mouth?
 13. Do you encourage parents in keeping their children home when they show signs of illness before leaving for school?

..... 14. Do you cooperate with the parents and the community health agencies in helping each pupil to become immune to diphtheria and smallpox and to receive a tuberculin test? (See page 111.)

..... 15. Do you help the children feel that it is a part of good citizenship to become vaccinated and immunized?

..... 16. Did you prepare the children for immunization by readings and unemotional discussions concerning the need for them?

B. For the superintendent, school board and parents

1. Have you helped the teacher keep down infection and communicable disease in your school by—

..... a. Supplying the school with safe water which is tested frequently?

..... b. Insuring safe sewage disposal?

..... c. Supplying paper towels and soap?

..... d. Refraining from overemphasis on perfect school attendance?

..... e. Insisting upon a safe milk supply in your community?

..... f. Keeping children home when they show signs of illness?

..... g. Planning with the community medical associations for thorough immunization and vaccination programs including pre-school as well as school children?

..... h. Furnishing a rest room where a child who becomes ill at school may be isolated from the other children?

..... i. Furnishing a means of transporting children to their homes when they become ill at school?

- j. Furnishing flytight toilets at school and at home?
- k. Screening homes and schools so that flies and mosquitoes may be kept out?
- l. Making sure that all cases of communicable disease are reported to the proper authorities?

C. For the children

- 1. Are you helping the teacher keep down infections and communicable disease by reporting to her when you have sores, rashes, headaches or colds?
- 2. Are you staying away from school when you are sick or when you have been exposed to a communicable disease until you have seen a physician?
- 3. Do you use your handkerchief when you cough or sneeze?
- 4. Do you keep hands, pencils and all other objects except food away from your mouth?
- 5. Do you wash your hands before you eat and after you go to the toilet?
- 6. Have you been immunized against diphtheria?
- 7. Have you been vaccinated for smallpox?
- 8. Have you had a tuberculin test?
- 9. Have you in the upper grades learned some things about the origin of vaccines and antitoxins and their value in preventing and treating some communicable diseases?
- 10. Do you know the purpose of the Schick, Dick and tuberculin tests?

References

(Materials for pupil use marked by asterisk *)

Material in this pamphlet:

A Statement of Beliefs, p. 13

**Illustrative Units of Activities*, D, J, K, O, P, pp. 71, 78, 80, 87, 92, respectively

Communicable Disease Control, p. 110

Community Health Resources, p. 112

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on p. 133, where publishers and prices are given.

Reference 24, Chapter I, pp. 41-44, 108-113, 233-242, 275-277

Reference 39, b, d 2), 3), 4)

*Reference 40, b, f, g, i, l, o

*Reference 41, b

*Reference 42, c, d

*Reference 48

*GRADED BOOK SERIES list I to VII, inclusive, p. 138.

HEALTH CHART E

Factors Involving Health Practices Which Must Be Primarily Carried on at Home, the School Cooperating

Parents, Pupils and Teacher Work Together

Health Chart E deals with parental attitudes and practices. It is quite clear that if the home does not work in the same direction as the school by setting an example and providing opportunities for the practice of healthful procedures, much of the work of the school may be undone at home. Copies of Health Chart E, therefore, might well be provided for parents.

However, work with parents requires understanding and skill. The teacher cannot hand a chart to the pupil, tell him to take it home for his parents to check, and expect by such a procedure to secure parental cooperation. Projects involving the home cannot be carried out effectively until the parents understand why they are asked to do what is requested, until they have found a motive for cooperating, and until they have had an opportunity to help adapt the project to their local conditions.

For these reasons no chart should be sent home with the pupil or sent to the parents until it has been discussed with the parents and until they have worked with the school to adapt the chart to local conditions.

In getting in touch with the parent, the teacher need not do all the work herself, such as calling a meeting, serving as chairman of the meeting, etc. In many communities there are various parent associations, and in such cases the teacher can get in touch with the leaders. In some school systems there are adult education programs which work with parents. In such cases the teacher can work through those in charge of the adult education program. If the community has no organization of parents, the teacher can get help from some of the leaders in the community or from nearby communities, or she can call on the district presidents of the P.T.A., or similar organizations who can give suggestions from their experience relative to ways of working with parents and who can give suggestions from their experience relative to ways of working together, and give help in guiding the discussion.

None of the material for parents which appears in this section or elsewhere in this suggested course of study is to be used until it has been discussed either individually or in groups with the parents who are to cooperate and until the parents have had an opportunity to take part in adapting the material to their special conditions. All of the charts are to be considered suggestive; that is, the teacher and parents working together use them only as starting points for making charts which fit their conditions and needs. All of the work is to be done in a democratic way; that is, the parent is to be considered as a person, he is to have the opportunity to have the project explained to him and to make suggestions as his part in the planning.

I. Sleep, rest and relaxation

A. 1. Do we as parents help our children get sufficient daily rest and grow in independence in relation to their sleep and rest habits; that is—

- a. Do they go to bed when told and early enough so that they will have ten to twelve hours of sleep according to age? Standards in general: Kindergarten through third grade—11½ to 12 hours; fourth through sixth grade—11 to 11½ hours; seventh through ninth grade—10 to 11 hours.¹
- b. Do they get up early enough so that they can eat breakfast leisurely and get to school on time without hurry?
- c. Do they go to bed and get up at a regular time?
- d. Do they change to night clothes when they go to bed?
- e. Do they sleep alone when possible?
- f. Do they use a low pillow and light, warm bed covers?

¹Wood, Thomas D. and Lerrigo, Marion O. *Health Behavior*, Public School Publishing Co., Bloomington, Illinois. 1927.

- g. Do they sleep with windows open when weather permits and with lights out?
 - h. Do they avoid eating heavily, playing exciting games or attending too exciting movies just before going to bed?
 - i. Do they rest during the day by frequent relaxation periods, as before and after meals and when tired, and especially when not feeling well or after having been sick?
2. Do I as the teacher help my children get sufficient daily rest and relaxation; that is—
- a. Do they rest during the school day at such times as suggested above under I A 1. i. in this chart?
 - b. Do they have opportunity to carry out the practices suggested in Chart B, Section XI, Items 1, 2, 4, 5 and 6?
 - c. Do they find that they can do their school work better and play well because they have had sufficient sleep and rest?

B. How can parents, teacher and children plan together so that they may get sufficient sleep, rest and relaxation?

II. Food and eating

- A. 1. Do we as parents help our children get the right kinds and amounts of food every day and to develop other helpful eating habits; that is—
- a. Do they eat leisurely a good breakfast of at least whole-grain cereal, fruit and milk?
 - b. Does their diet include at least the following foods or their equivalent each day unless otherwise prescribed by a physician—

- 1) milk, at least one full glass at each meal, preferably pasteurized?
 - 2) egg?
 - 3) meat or fish?
 - 4) some other vegetables besides potatoes (especially green and yellow ones), one of which should be raw?
 - 5) orange or tomato and other fruit?
 - 6) butter?
 - 7) whole-grain cereal or whole wheat or reinforced bread?
 - c. Do they eat nothing between meals that will destroy the appetite for good plain food at mealtime?
 - d. Do they eat and enjoy plain foods not highly seasoned or sweetened?
 - e. Do they choose to eat what sweets they have only at mealtime?
 - f. Do they eat meals at regular times?
 - g. Do they help to make the mealtime calm and happy by being courteous, unselfish, cooperative and neat?
 - h. Do they help to choose a well-balanced school lunch?
2. Do I as the teacher supplement the parents' efforts to help the children choose to eat a well-rounded diet; that is—
- a. Do we read and discuss together what a good diet is?
 - b. Do we work out good school lunch menus?
 - c. Do I privately commend children who eat good lunches?
 - d. Do I suggest privately to some children

or preferably directly to their parents how their lunches can be improved?

e. If the children have had an early breakfast and wish to eat part of their lunch at the morning recess, do I encourage them to choose their milk, fruit, raw vegetables or a sandwich and leave the cake and cookies until after all of their other food has been eaten?

f. Do I with the help of the parents and children plan the hot dish prepared at school so that it will supplement the lunches brought from home?

B. How can parents, teacher and children plan together so that they may get the right kinds and amounts of food each day?

III. Cleanliness

A. 1. Do we as parents help our children to form habits of personal cleanliness; that is—

a. Do they take a cleansing bath at least once a week and more frequently if facilities are at hand?

b. Do they wash hands, face, arms and feet (when going barefoot) thoroughly before going to bed?

c. Do they clean up for breakfast and school in the morning?

d. Do they have a shampoo at least every two weeks and more often when exposed to unusual dust and dirt?

e. Do they clean and trim finger and toenails frequently?

f. Do they wash hands with soap before eating and after visiting the toilet?

g. Do they brush the teeth or rinse the mouth regularly after food has been eaten and keep toothbrush clean?

- h. Are they learning to comb their hair and to keep their brush and comb clean?
- i. Do they change to clean underwear at least once a week and to clean hose frequently?
- j. Do they have a regular bowel movement without the use of cathartics?
- k. Do they know the proper terms for the processes of elimination and use them naturally when occasion demands?
- l. Do they keep toilet and washing facilities neat, clean and ready for the next person to use?
- m. Do they put play things and all personal belongings away into provided places after use and help keep the house in order?
- n. Do they clean their shoes before entering the house?
- o. Are they growing in the ability to accept responsibility for the above practices?
- 2. Do I as the teacher supplement the parents' efforts in helping the children form habits of personal cleanliness by encouraging the practices involved in the following items found in Health Chart B?

V. Housekeeping: Items 3, 4, 8, 10.

VI. Toilet facilities: Items 1, 2, 3.

VII. Personal cleanliness: Items 1, 2, 3, 4, 5.

XI. School program arrangement: Item 2.

- B. How can parents, teacher and children work together so that they may be consistent in their habits of personal cleanliness at home and at school?

IV. Clothing

A. 1. Do we as parents make it possible for our children to wear proper clothing at all times; that is—

- a. Do they wear clean and washable under and outer clothing?
- b. Do they wear clothing and shoes which are in good repair and do they help in keeping them in good repair, as for example, sewing on buttons, mending holes and polishing shoes?
- c. When a child is required to wear clothing which is outgrown by another member of the family, are these clothes made over to fit the child so that he will in no way lose his self-respect and self-confidence?
- d. Do they wear light washable outer and under clothing in summer and winter, adding only warmer outer wraps in winter which can and should be removed when coming indoors unless the room is less than 68 degrees in temperature?
- e. Do they remove rubbers indoors?
- f. Do they put wraps and clothing neatly in their places?
- g. Do they have clothes suitable for vigorous play, especially the girls, so that they may take part in all the activities as well as the boys?
- h. Do they promptly remove or dry wet clothing?
- i. Is care taken when shoes are purchased to see that they fit well, and if shoes are outgrown before they are worn out, are they discarded?
- j. Is equal care taken with the fit of stockings as with the fit of shoes?

k. Are children permitted to share in the selection of their clothing in order to learn important facts concerning clothes selection?

2. Do I as the teacher supplement the parents' efforts in helping children to wear proper clothing; that is—

- a. Do I encourage the practice in school of items d, e, f, g, and h under A. 1 above?
- b. When problems arise in school concerning the items in A. 1 over which the child has no control do I confer directly with the parent and offer my cooperation by lending encouragement through carrying on studies in school?

B. How can parents, teacher and children work together so that the children may grow in their ability to care for and select their own clothing?

V. Eye conservation

A. 1. Do we as parents plan to conserve the eyesight of our children; that is—

- a. Are they provided with a minimum of 15 foot-candles of light necessary for easy vision?
- b. Have they had a health examination by a physician?
- c. Are they provided with glasses according to the examining physician's recommendation?
- d. Are they encouraged to find places to read and work where light will not cast a shadow over the book or material?
- e. Are they encouraged to avoid glare or facing into the light?
- f. Are they encouraged to assume reading and work positions so that their ma-

materials are at right angles to the line of vision and about 12 to 14 inches from the eyes?

2. Do I as the teacher fully support the school eye conservation program; that is—

- a. Do I with the children carry out the items included in Health Chart B. II, "Lighting the Classroom"?
- b. Do I do my best to promote the health examination and necessary corrections according to Health Chart D. I, "Health Examination," A. "For the teacher."
- c. Am I always on the lookout for evidences of eye troubles in my children? (See p. 103.)
- d. Do I encourage the use of books which are edited in accordance with good eye hygiene? (See p. 93.)

B. How can parents, teacher and children work together in conserving eyesight?

VI. Play

A. 1. Do we as parents plan that our children engage in much vigorous play preferably out of doors every day; that is—

- a. Are they helped to plan their time so that they can spend several hours of each day in health and growth producing play and also have time to fully cooperate in doing the family work?
- b. Do we show by our attitudes that we appreciate the progress they make in physical strength and skills both in work and in play as well as in their mental accomplishments?
- c. Do we help them in making and procuring simple play equipment which will be conducive to the learning of physical

skills and the attitudes of persistence and courage which accompany them?

- d. Do we encourage our girls as well as our boys to learn good bodily skills as throwing, climbing, horseback riding, swimming, etc.?
 - e. Do we help them plan occasions when both sexes and all ages can play together, and encourage them in learning activities suitable for such occasions?
 - f. Do we appreciate that cautious attitudes and skillful handling of the body in hazardous situations constitute the most adequate way of preparing our children to meet many emergencies?
 - g. Do we guide our children into refraining from strenuous activity during or following illness, including a cold?
 - h. Do we help plan as rich a play program as possible for our children who are handicapped?
2. Do I as the teacher provide a play program at school which will carry over into the out-of-school play time; that is—
- a. Am I helping my children become self-reliant in planning and executing their play activities in small play groups so that they will be able to continue playing them at home?
 - b. Do I help them to choose a variety of activities that will help them to meet all their play needs?
 - c. Do I help them to select, organize and manage their games so that each child gets as much activity as possible?
 - d. Do I help them gain proficiency in many motor skills knowing that good form

in many activities means good postures and the safe way of doing things?

-
- e. If there are handicapped children in my school do I help them modify play activities so that they can participate in them?

- B. How can parents, teacher and children work together to make their play life contribute to a rich and satisfying physical and social development? Refer to "Physical Education," page 123, where the "Iowa Plan of Physical Education for Use in the Elementary Schools" is described. Also see "Safety and First Aid," pages 120-121. "Postures of School Children," page 126.

VII. Health examinations and control of communicable disease

- A. 1. Do we as parents support the school and community health program outlined in Health Chart D, p. 34: "Health Examination, Inspections, Observations and Control of Communicable Disease"; that is—

-
- a. Do we make it possible for our children to have a physical check-up by a physician at least once a year and by a dentist twice a year or more often if he advises it?

-
- b. Do we make it possible for our children to avoid certain diseases because they have been protected from them by vaccination and immunization?

-
- c. Do we give our children the best chance for success with other children by having all handicapping defects corrected?

-
- d. Do we encourage our children in showing consideration for others when suffering from any infection including a cold by keeping away from all gather-

ings and covering the mouth and nose with a handkerchief when coughing and sneezing?

2. Note: For the teacher's and pupils' part see Health Chart D II, p. 37

B. How can parents, teacher and pupils pool their efforts to secure a health examination and immunization program in home and school? See Health Chart D, page 34; "Health Examinations and Inspections," page 98; "Communicable Disease Control," page 110.

VIII. Emotional and social health

A. 1. Do we as parents help our children grow into emotionally stable, self-reliant and socially competent individuals; that is—

- a. Do they help themselves in accordance with their level of growth, as for example, do they dress themselves, decide what they will wear to school, etc.?
- b. Do they try to work out their own problems, but feel free to ask for help, knowing it will be freely given?
- c. Do they complete the jobs they start?
- d. Are they given a share in all family planning and executing?
- e. Are they encouraged to help by being permitted to express their ideas and by being listened to?
- f. Are they helped to see their mistakes and permitted to share in determining the standards for subsequent conduct?
- g. Are they dealt with by calm, consistent, logical, just and firm procedures?
- h. Are they encouraged in creative expression?

- i. Are they helped to work and play together cooperatively and for each one's welfare?
 - j. Is each child given his full place in the family group?
 - k. Do all members of the family play often together under many circumstances?
 - l. Are the children led to accept and respect the school because of our cooperative activities with and our positive attitudes toward the school, the superintendent and the teacher?
 - m. Do we endeavor to give new experiences to our children which broaden their social horizon, free them from family domination and enrich their background? Examples are—1) permitting children's parties in the home; 2) allowing the children to go places with other children, such as to organized camps; 3) taking them to places of interest.
 - n. Do we give encouraging approval for earnest efforts and direct all undertakings toward some degree of successful accomplishment, attempting to avoid too many failures?
 - o. Do we encourage our handicapped children to use all of their normal faculties and to participate to the fullest extent possible in every home and community activity?
2. Do I as the teacher help my children grow into emotionally stable, self-reliant and socially competent individuals; that is—
- a. Do I also try to carry out the items in A. 1 above which apply to living at school?
 - b. Do I work conscientiously on the items in Health Chart C?

B. How can parents and teacher work together so that children will feel and know that the parents are behind the school and its program and that the school approves of the home and its program?

References

(Materials for pupil use marked by asterisk *)

Materials in this pamphlet:

A Statement of Beliefs, p. 13

**Health Chart A*, p. 18

**Health Chart B*, II, IV, VI, VIII, X, p. 20

**Health Chart C*, p. 31

**Health Chart D*, p. 34

**Illustrative Units of Activities A through P inclusive*. See Table of Contents for page references

Health Examinations and Inspections, p. 98

Communicable Disease Control, p. 110

Community Health Resources, p. 112

Stimulants and Narcotics, p. 118

Safety and First Aid, p. 120

Physical Education, p. 123

Postures of School Children, p. 126

Sex Education, p. 130

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on page 133, where publishers and prices are given.

Reference 1, Chap. VII

*Reference 4

*Reference 13

*Reference 14

*Reference 15

Reference 16

*Reference 18

Reference 21

Reference 24, Chap. I, IV,
VI, VII, XI

*Reference 33

Reference 35, Chap. IV

Reference 36

*Reference 37

Reference 39, d, 2, 3

Reference 40, *a, *b, *e,
f through o

Reference 41, c

Reference 42, a, c, d, e

Reference 43, b, c

*Reference 48

*GRADED BOOK SERIES list, I to VII, inclusive, p. 138.

SUGGESTED LEARNING SITUATIONS FOR HEALTH EDUCATION WITH ILLUSTRATIVE UNITS OF TEACHER-PUPIL-PARENT ACTIVITIES

Health education is living healthfully. "Health instruction is guidance in health practices. . . . School health education can provide direct guidance only in those experiences which constitute living at school."¹ It is necessary then in planning learning experiences in health education for you the teacher to study your school day as you and your pupils live it. You will thus become aware of the following types of situations which offer rich opportunities for living healthfully and for guidance or instruction in this living.

The Entire School Day Is One Continuous Experience in Healthful Living

Many aspects of hygiene present themselves at all times as shown by the Health Charts. By your vigilance over the health practices of the entire school day you perform your first responsibility in health instruction. But the children can and must help you in seeking for and remedying any unhealthful condition that may be existing in your school. Read again what has been said about the use of the Health Charts on pages 1-4 of this pamphlet and re-read the charts themselves. Other ways of getting at your health problems which may be associated with the Health Charts are suggested by the following statements which are elaborated below.

- I. Each event in the school day is an opportunity for health teaching.
- II. Each area of hygiene may be studied and applied to all experiences of the day.
- III. Special events create significant learning situations for health education.
- IV. Many learning situations arise unexpectedly and should be utilized.
- V. Most problems in health education are naturally a part

¹Joint Committee Report, N.E.A. and A.M.A., *Health Education*, p. 206, Washington, D. C., 1941.

of the content or involve the skills of some other subject or subjects in the curriculum.

VI. Some health topics may become for a time the center of study in all subjects of the curriculum and in all the activities of the school.

I. *Each event in the school day is an opportunity for health teaching.*

Successive events in the daily living together of you and your pupils are learning situations of signal importance. The main events of your daily school life are:

1. Coming to school safely and on time
See Health Chart B I, p. 20, and Illustrative Unit of Activities A, p. 65.
2. Arriving at school and putting away books and lunch boxes
See Health Chart B IX 3, p. 27.
3. Playing before school
See Health Charts A VII, X; Health Chart B X; Health Chart C; Health Chart E VI and Illustrative Unit C, p. 70.
4. Entering the school and preparing for the school day
See Health Chart B V, VII; Health Chart D II; and Illustrative Unit of Activities D.
5. Getting the room ready for study; that is, sharing in responsibilities concerned with heating, lighting, ventilation and seating
See Health Chart B; Health Chart C; Health Chart E III, IV, V and Illustrative Unit of Activities E p. 72.
6. Studying and reciting
See Health Chart A III, IV, V, VI, VIII, IX, X; Health Chart B II, III, IV, V, XI; Health Chart C.
7. Taking part in physical education
Refer to same references as given under Playing Before School.
8. Having relief period games during school hours
9. Participating in school lunch activities
10. Using the noon period after lunch is over

11. Having recess
12. Attending to bodily needs during the day, as drinking water, attending to toilet, keeping clean
13. Using the rest period
14. Sharing in cleaning up the school room and toilets at end of the school day
15. Engaging in after-school activities
16. Going home safely

As you and your pupils undertake to improve through study any one main event of the day, as for example, the school lunch period, you will find the unique advantage of this approach to lie in the fact that the total situation involves many different health practices which must be studied for improvement. How some children have solved some of the various problems of the noon lunch period is shown on p. 73 under Illustrative Unit of Teacher-Pupil-Parent Activities F. Likewise on pages 65-75, inclusive, Illustrative Units of Teacher-Pupil-Parent Activities A to G offer you other examples illustrating how children have solved health problems which center in a number of the events listed above. These examples may be used by you and your pupils to get at your own ways of living during these particular parts of the day. Your children who can read will want to read them to the group, and all will be interested to turn to the associated Health Charts and to graded reference reading to help them live most healthfully at these times. They will also want to work out the best way of living during those other parts of the school day not illustrated.

II. *Each area of hygiene may be studied and applied to all experiences of the day.*

As you study your school day from the viewpoint of its health implications you will not only become aware of the specific events of your daily school life but you will also become very conscious of the kind of place in which this living goes on and the physical features of this place, such as toilets, windows, pump or fountain, playground and so forth. You will recognize at once that each of these features is associated with significant areas of hygienic living, such as elimination, lighting, cleanliness, safe water supply, physical exercise, and so forth. You have already noted that the Health Charts are

based on these and other main areas of school, home and community hygiene. As was suggested earlier in explaining the Health Charts, you and your pupils will use these charts as check charts and will find thereby some unfavorable conditions existing in school and some unhealthful practices going on. These will call for solution, as for example handwashing facilities and practices, or facilities and practices to secure good lighting. Handwashing is one of the necessary practices related to many events of the school day. Efforts to secure good lighting need to be continuously applied during the school day. This means that as you and your pupils undertake to improve a phase of school hygiene your solutions are likely to find either continuous or frequent application throughout the entire school day. Illustrative Units of Teacher-Pupil-Parent Activities G, H, O and P on pages 75, 77, 87, and 92, show how problems can develop from a study of the Health Charts, especially Charts B, C and E through which children become aware of their weaknesses in certain areas of hygiene. A few other problems similarly arrived at are suggested here.

How may we arrange our seats and desks so that each pupil is comfortably and healthfully seated? See Health Chart B, II.

Why and how shall we provide enough moisture in the air of the schoolroom in the winter time? See Health Chart B, IV A. 5.

What are our most common accidents here at school; how can we avoid them; what shall we put into our first-aid kit; what skills shall we practice so that we will be able to help when an accident occurs? See Health Chart B, X 5; see *Safety and First Aid*, pp. 120-121, in this pamphlet.

How can we plan our day so that we can play vigorously in the fresh air and sunshine for a considerable time every day? See Health Chart B, X 6; XI 7; Chart C, II A, B; Chart E VI.

As we plan our play, our studies and our housekeeping work, what things shall we put into the plans so that we will give each person a chance to do some leading? See Health Chart B, VI A. 1, IX, 2; Health Chart C, II B, C; III H.

III. *Special events create significant learning situations for health education.*

Certain special events of the year in which the children

will participate are directly associated with school health and are therefore opportunities of the first order in respect to health teaching. These are:

Health examination

Vaccination and immunization program

How preparing the children for either of these events proves to be rich in learning experiences is illustrated on page 78-80 by Illustrative Units of Teacher-Pupil-Parent Activities J and K.

You will find that any special event invites health study and practice in both preparation and participation. Examples are:

School party

School program

School picnic (See Illustrative Unit of Activities N, p. 86.)

Preparing for a holiday

Monthly birthday day

School clean-up

See Illustrative Unit of Activities O and P, p. 87-92.

IV. *Many learning situations arise unexpectedly and should be utilized.*

In the case of an unexpected event which takes place at school you will want to first size it up for its health implications, and if it seems worth while proceed promptly to a full utilization of it as a learning situation. An excellent example is Illustrative Unit of Activities L found on page 82. Another illustration of an unexpected problem is Illustrative Unit of Activities M, page 83.

Local events outside of the school often bring into the school unexpected health problems which require immediate attention, as for example the experience of one school which had to boil all the drinking water because of the contamination of the community water supply by a flood. This situation stimulated much interest in many study topics on all levels and permeated for a time the whole school program of the elementary grades.

Likewise happenings in the world at large and matters of public interest often bring into the school health problems which merit immediate study if the children are interested. Examples are: floods in other localities, earthquakes, air raids, sugar rationing, canning of fruits and vegetables, starving nations.

V. Most problems in health education are naturally a part of the content or involve the skills of some other subject or subjects in the curriculum.

You will ask the question: "Should there be a period for health education in the daily schedule?" And you would answer your question yourself by saying that since it takes time to teach anything to be learned health education calls for time. You will note of course that since guidance in healthful living is your main responsibility to health education this must go on all through the day and therefore demands some time. You will also be aware of the fact that definite time is needed for the necessary discussion, reading, observation and experimentation which will be required by each health problem calling for improvement of living conditions and practices. Every day should allow for a discussion period where the problems of the school day, many of which are problems of living well and healthfully, receive full and democratic discussion. These discussion periods may care for many lesser problems and will often suffice in helping younger children. But the older children who should develop year by year greater self-direction in healthful living through greater knowledge and understanding need more time for thorough study by the problem solving method. Other subjects in the curriculum therefore which furnish the skills and content for the solving of these problems should be used freely.

No consistent effort has been made throughout this plan of health education to point out all the possible correlations between health education and other subjects. Yet it should be obvious that where a solution of the health problem requires reading or the meaning and spelling of new words, or discussion with children or adults, or the writing of a composition, letter or play to crystalize knowledge and express it to others, there is without question a strong correlation with the language arts regardless of the time of day or name of the subject involved in the work. Or where the solution requires

mathematical skills, there is correlation with arithmetic; where there is construction work, making of charts, etc., there is correlation with art and industrial arts. It is also equally obvious that science, the social studies, physical education and safety education naturally embrace large areas of health knowledge, physical, emotional and social, which is needed to sanction and fortify the practices which make for healthful living.

Consequently besides the continuous guidance throughout the day and the daily discussion period, the solving of current and vital health problems during a science, social studies or physical education period, or time taken for reference reading or writing in the language arts period may frequently occur, enriching each subject in so doing. You might well remember that if no problem exists no discussion period is necessary; likewise if no correlation exists none should be forced. Needs should be first recognized, then worked out in their natural setting.

The greatest and most frequent contribution which any of the school subjects can make to health is that their class periods be healthful experiences. This coordination of all parts of the school day is to be expected in any event.

VI. *Some health topics may become for the time the center of study in all subjects of the curriculum in all activities of the school.*

Health topics or topics which have strong health implications have been used successfully by teachers as the center of interest to be developed by every subject in the curriculum. Illustrative Unit of Activities N on page 86 is an example for the third grade. Many a health topic reaches naturally into many areas of study for solution and when the children are strongly interested it rapidly spreads into the language arts, arithmetic, science, the social studies, industrial arts, safety education and physical education.

The philosophy of instruction which is demonstrated throughout this course of study is further made evident in the characteristics of the Illustrative Units of Teacher-Pupil-Parent Activities which follow. These characteristics are:

Health teaching aims at improvement of living, not alone mastery of facts. The teacher's first concern is improvement of living *at school*.

Children must aim at this improvement. They must set their own goals. And they must show growth in the self-direction of their own health behavior.

Improved behavior will be more certain to result when the method of health teaching has been through problem solving.

Problem solving with the help of sound reference material (p. 93) makes self-direction scientific and open to change when newer knowledge becomes available.

Health teaching, based as it is upon immediate need and experience, cannot be circumscribed by a set course of study nor limited to a single textbook assigned chapter by chapter.

Health education is a part of every phase of the child's experience, in school and out. Teacher and parent must work together.

As you study the following illustrative units of activities to secure help in planning with your children the day by day health work of your school, try to keep these basic principles in mind.

References

Materials in this pamphlet:

A Statement of Beliefs, p. 13

Health Charts A, B, C, D, E, pp. 18 to 43, inclusive

Illustrative Units of Activities, pp. 65 to 92, inclusive

Helpful Information for Teachers, Superintendents and Parents, pp. 98 to 130, inclusive

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on p. 133, where publishers and prices are given.

Reference 1, pp. 59-72, Chapters V, VI

Reference 15

Reference 16

Reference 24, Chapter IX

ILLUSTRATIVE UNITS OF TEACHER-PUPIL-PARENT ACTIVITIES

You will find that the actual problems to be attacked will depend entirely upon conditions in your own school. Each problem should be planned by you and the pupils according to your own situation after you have selected it together as a problem which needs your attention. A number of learning situations are presented here as units of activity to illustrate how different groups of children have proceeded when the use of Health Charts and a survey of the school day made the problems apparent to them. It is true of some units of activity, as for example Illustrative Unit G, that no one group of children has carried out all the activities listed; for they found, as will you, that some of the problems did not apply to their school. You would need to select the most important or timely ones, or, as has been done, combine several problems into one bigger more comprehensive study, assigning sub-topics to children according to their ability. The first few units should be simple and fairly easy of accomplishment; then their difficulty should be increased.

Plans made for an actual school situation will usually give more detail than can be included here, and may refer to specific books or pamphlets for information according to what is available in the school. In the rural school each problem can be a project for the whole school which should result in improved practice for all. The study and contribution will be on each individual pupil's level. Refer to Graded Book Series list on page 138 in this plan for children's references for use in solving problems. Each series provides factual sources for each grade level. Illustrative Unit Activities A below furnishes an example of graded references so used. Each school will use the graded series of health books it has at hand. It is advisable to have several different series.

See reference number 24—Chapters IX, X, XI in general bibliography, p. 133, for teacher helps and further illustrations of problem solving. Other appropriate materials may be found in this bibliography.

I. Units of Teacher-Pupil-Parent Activities illustrating the use of *events in the school day* as learning situations for health education.

A. COMING TO SCHOOL SAFELY AND ON TIME

In reading check chart B we found the item "Coming to school safely and on time." Our teacher asked us what we thought it meant to come to school safely. We all had some ideas to contribute. Our teacher said that maybe we would like to read in our health books to see if authorities agreed with our ideas. Because we were a rural school each pupil read out of the book that suited his reading ability. Our teacher wrote the following questions on the board for us to try to find the answers to.

1. What does starting on time have to do with safety?
2. Which side of the road should we walk on and why?
3. Does it make any difference which side of the sidewalk we walk on?
4. Which way should we look when we start across a street? Which way do we look when we are half way across?
5. What kind of bicycle is meant in the song "Bicycle Built for Two"? Are our bicycles built that way?
6. What is a safety patrol? Is this ever needed in a rural school?
7. Is it better to be brought to school in a car, or should we walk or bike?
8. What can we do about coming to school safely and on time?

After we had made our reports our teacher asked us what we thought we should and could do about this problem of coming to school safely and on time and did we think it was an important problem. Because of the things we had learned we decided to do the following:

1. We would start early enough so that we would have time to walk single file on the left hand side of the road and get off the road when cars approached.

2. We would walk or ride bicycles whenever we could since this gives us such good exercise.
3. We would stop and look both ways before crossing the intersection. The older boys and girls would help the younger ones to get across safely.
4. We would not play tag or play with balls while walking on the highway nor would we tease the drivers of the cars by standing close to the road while the car passed.

References that may be used by other schools:

First Grade

Charters, Smiley and Strang—The MacMillan Co.—
Book 1, *All Through the Day*, pp. 1-15.

Andress, Goldberger and Dolch—Ginn and Co.—
Book 1, *Spick and Span: Unit II, To School We Go*.

Towse and Gray—Scott Foresman and Co.—Book 1
Health Stories: *Crossing the Street*, p. 116.

Second Grade

Towse and Gray—Scott Foresman and Co.—Book 2,
Health Stories: Part 5 Safety—*The Traffic Policeman*, pp. 121-124.

Third Grade

Charters, Smiley and Strang—The MacMillan Co.—
Book 3 Health Secrets:

Walking to School Safely, p. 177

Safety on Country Roads, p. 181

Riding a Bicycle Safely, pp. 181-186.

Andress, Goldberger and Dolch—Growing Big and
Strong: Unit X, *Safety Always*.

Fowlkes, Jackson and Jackson—The John C. Win-
ston Co.—Healthy Growing: Chapter V, *Safety
in Traffic and at School*.

Wood, Phelon, Lerrigo, Lamkin and Rice—Thomas
Nelson and Sons—*Now We Are Growing: The
Safety Squad*, pp. 120-131.

Burkard, Chambers and Maroney—Lyons and Carnahan—*Health Stories and Practice*, pp. 187-191.

Fourth Grade

Charters, Smiley and Strang—MacMillan Co.—*Healthful Ways: Safety on Street and Road*, pp. 194-200.

Fowlkes, Jackson and Jackson—The John C. Winston Co.—*Healthy Bodies: Safety First and First Aid*, pp. 182-185.

Burkard, Chambers and Maroney—Lyons and Carnahan—*Health by Doing*, pp. 119-121, 296-303.

Fifth Grade

Charters, Smiley and Strang—MacMillan Co.—*Rules for Bicycle Riders*, p. 206

Andress, Goldberger and Dolch—Ginn and Co.—*Doing Our Best for Health: Unit IX, On the Lookout, Safety on Streets and Highways*, p. 218

Fowlkes, Jackson and Jackson—The John Winston Co.—*Keeping Well: Chapter XII, Safety*, pp. 196-202

Burkard, Chambers and Maroney—Lyons and Carnahan—*Building for Health*, pp. 274-281.

Sixth Grade

Charters, Smiley and Strang—MacMillan Co.—*Habits Healthful and Safe*, pp. 197-204.

Andress, Goldberger and Dolch—Ginn and Co.—*Building Good Health: Unit X, The Secret of Safety*, pp. 233-238.

Fowlkes, Jackson and Jackson—The John Winston Co.—*Success Through Health: Chapter V, Taking Care*.

Wood, Phelon, Lerrigo, Lamkin and Rice—*Adventure in Living: Blazing the Trail—A Life Saving Trail*, Chapter II, pp. 23-46.

Burkard, Chambers and Maroney—Lyons and Carnahan—*The Body Health*, pp. 109-110, 116-118, 272-278.

Seventh Grade

Charters, Smiley and Strang—MacMillan Co.—*Growing Up Healthfully: Safety at Play and on Highways*, pp. 234-252.

Andress, Goldberger and Dolch—Ginn and Co.—*Helping the Body in Its Work: Unit XI, Safety in Going Places*, pp. 270-278.

Brownell and Williams—American Book Co.—*Living and Doing: Safety as You Travel*, pp. 137-144

Eighth Grade

Charters, Smiley and Strang—*A Sound Body: Unit V, Safety*, pp. 149-156.

Fowlkes, Jackson and Jackson—The John Winston Co.—*Making Life Healthful: Chapter XIII, Safety and First Aid*, pp. 351-357.

Instructional Units in Safety for Elementary Grades and Junior High Schools, Department of Public Instruction—State of Iowa—Unit I, Walking Safely to School, pp. 15-24; Unit VIII, Safety on Wheels, pp. 85-95.

Teacher should refer to *Safety and First Aid*, page 120, of this pamphlet.

B. ARRIVING AT SCHOOL AND PUTTING AWAY BOOKS AND LUNCH BOXES (Health Chart B IX, 3)

We tried to think of all the reasons why we should take our lunch boxes into the schoolhouse as soon as we arrived. Mary remembered when the dog ate most of her lunch, and we all had seen ants and flies around our lunch boxes when they were on the ground.

We built a lunch cupboard for our boxes and put screen on it.

We decided that our books would be cleaner and our playground safer if we put our books in our desks before we started to play.

Suggestions and references for other schools: Teacher and pupils should analyze their own situations for their own problems and needed activities, and may refer to reference number 15, p. 30. See General Reference List, p. 133. Pupils may find readings in the books from the GRADED BOOK SERIES list, p. 138.

C. PLAYING BEFORE SCHOOL

We learned many games during our physical education period that we could play on the playground before school. We learned some that we could play all alone if one of us arrived first. We learned some quiet ones to play on hot days or if we had been ill, and some strenuous ones to play when it was cold.

We like to play together after more children have come so we learned some group games.

We listed all of the things we would need to plan for if our play would be safe. These are some we thought of.

1. We tag safely and do not push a running player nor grab his clothes.
2. We spread out and give lots of room if we play a game that requires turning quickly and running in a new direction.
3. We never throw our bats after batting.
4. We stay away from the person who is batting.
5. We watch the ball all the time and do not throw a ball to a player who is not looking.
6. If we play on the apparatus we stay back away from anyone who is swinging. We do not touch or annoy a child who is trying a difficult stunt on the apparatus but stand close enough if we are large and strong so that we may help him if he should make a mistake.

We are trying to play less strenuously when we know the play period is nearly over.

We decided that we had a happier time playing if we

1. all tried to follow the correct rules.
2. had an official and obeyed him.

3. tried to help the less skillful children and never laughed at them or tried to hurry them.
4. accepted defeat and victory as we would like to have our opponents do it.
5. tried to play our best and to improve in our skills by much practice and yet not take things too seriously.
6. tried to learn how to start games quickly and organize and officiate some of the time.

Our play before school gives us a chance to see how well we can carry out alone what we have learned in our physical education class.

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart A VII, X; Health Chart B X; Health Chart C; Health Chart E VI; and to reference number 15, p. 31 and pp. 49-50; also to reference numbers 18 and 37. See GENERAL REFERENCE LIST, p. 133.

Teacher should refer to *Safety and First Aid*, p. 120, and *Physical Education*, p. 123, in this pamphlet and to reference numbers 17 and 24, pp. 67-70, pp. 135-138; pp. 211-215. Reference numbers 19, 20, and 30 will also be helpful. See GENERAL REFERENCE LIST, p. 133.

Pupils may refer to references 19, 20, and 30 if possible, and should find readings from books in the GRADED BOOK SERIES list, p. 138.

D. ENTERING THE SCHOOL AND PREPARING FOR THE SCHOOL DAY

Our teacher called school five minutes early so that we could have time to—

1. Put our play equipment into its special place
2. Clean our shoes on the door mat
3. Remove our rubbers and hang our wraps in the cloakroom
4. Wash our hands

5. Smooth down our hair
6. Get a drink
7. Inspect ourselves in the mirror
8. Let the teacher look at us before we went to our seats

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart B, V, VII, and Health Chart D, II; and to reference number 15, pp. 29-30.

Teacher should refer to Daily Health Inspections, page 109, of this pamphlet; also to reference number 24, pp. 101-103; 109-110; 153-154; and reference number 25.

See GENERAL REFERENCE LIST, p. 133.

Pupils should find readings from books in the GRADED BOOK SERIES list, p. 138.

E. GETTING THE ROOM READY FOR OUR STUDY

We had committees at our school that took turns doing certain things for a week. Even the smallest children helped with the things they were able to do. These were some of the committees we had. The first two were responsible for getting our room ready for study.

1. Light and seating
2. Temperature and ventilation
3. Cleaning and decorating
4. Toilets
5. Water
6. Lunch period
7. School grounds

Each committee referred to Health Chart B for some suggestions as to their duties.

Our county superintendent brought a light meter one day and helped us check our light.

We have asked our Director for glass window ventilators so that we can have fresh air without drafts.

The older children have printed a newspaper telling what our committees are doing and what things we still need in order to have our room the way the health charts and our health readers say it should be.

We sent the newspaper to the board members and took it home to our parents.

When there were extra seats our teacher let us move to another seat if we needed to. In our readers we had found that there were times when we should change our position in the room.

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart B; Health Chart C; and Health Chart E—III, IV, V; and to reference number 15—pp. 33-38.

Teacher should refer to reference numbers: 24—pp. 97-107, 131-135, 267-269; 42-b; 43-a, b, c; and 48.

See GENERAL REFERENCE LIST, p. 133.

Pupils should find readings from books in the GRADED BOOK SERIES list, p. 138.

F. PARTICIPATING IN SCHOOL LUNCH ACTIVITIES

Elementary school

Our lunch period committee directs our lunch activities for a week.

If it is hot we plan to eat cool things, but if it is cold we like one hot dish.

Our teacher had us read in our different health readers all of the things we could find out about lunch periods. These are some of the things we read:

1. You must wash your hands before you handle food.
2. Your food must be clean. Fruit must be washed, bread and cake or cookies wrapped in waxed paper. A clean paper napkin should be

spread on the table or desk to lay your lunch out on.

3. You need a napkin in your lap to catch crumbs and to wipe your hands on.
4. You should not talk or drink with food in your mouth.
5. You should have some quiet but happy conversation while you eat, and you should eat slowly.
6. You must gather up all the crumbs and refuse after you eat.
7. You should play some quiet games or tell stories for a few minutes after you have finished eating.
8. You should eat no food that drops to the floor.
9. You should put your left-over materials back into your lunch boxes and take them home or burn or bury them.

Each one of us made a chart of these things and checked ourselves each day until we could remember them easily.

When it was cold our lunch committee put water on to heat at eleven o'clock. Part of this was used to make hot soup, vegetable chowder or something else they had read about in our recipe book. The rest of the water we could use for washing our hands. Because we were all washing at one time we poured it on each other's hands.

When we started to eat, the committee put on some more water to heat for washing the dishes.

We read in our books about what foods we should have for our lunches at school. Milk was mentioned first in almost every book. We discussed how we could keep our milk cool. The older children found out why we needed to keep milk cool and helped the teacher make a place for this purpose.

In language class we wrote notes to our parents telling them what we had found a good lunch to be.

We compiled one note from the best things in all of the notes and took copies to our parents. We invited them to come and have lunch with us so that we could show them all of the things we were learning about food and how to eat it.

We waited to eat our lunches until all of the children were ready.

We ate our dessert after we had eaten all of our other food.

Junior high school

We have a cafeteria and on Monday the dietician sends us the menus for the week and we discuss these to learn how to choose a well balanced meal each day. We make copies of these and take them home so that our mothers can plan our other meals to supplement them.

We have taken our soft drink and candy stand out of our hallway and are spending our money for milk or fruit juice at the cafeteria.

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart B IX; Health Chart C—II c; III—F; Health Chart E—II A 2, B; reference number 15—pp. 50-63.

Teacher should refer to reference numbers: 21 and 23; reference 24—pp. 52-67, 113-122, 238-240, 251-257, 273-275; references 41—c; and 48.

Pupils should refer to reference number 40-a, and should find readings from books in the GRADED BOOK SERIES list, p. 138.

See GENERAL REFERENCE LIST, p. 133, for references referred to above by number.

- II. Units of Teacher-Pupil-Parent Activities illustrating how certain *areas of hygiene* concerned with the living conditions in the school arise as problems for study and improvement from a survey of the Health Charts, especially Charts B, C, and E.

G. WHAT SOME SCHOOLS HAVE DONE IN TRYING TO SOLVE THEIR WATER PROBLEMS

We sent a sample of our water to the State Department

of Health to be tested to see if it was safe to drink and wash with.

Our County Superintendent is trying to have a well on every school ground in the county. She said that water is too important a thing in living healthfully to depend on just what we and the teacher can carry to the school. She had us list all of the times that we need water for drinking, washing and cleaning, and we were surprised to find how much water it would take for just one day.

We read that we could sterilize our water for washing by adding three drops of iodine to each quart or two drops of chlorine for each gallon. In the winter-time we can boil it three minutes. Water treated this way is safe to drink too but we would rather have our drinking water certified if we can.

When it was nice weather we placed a wash basin, some soap, a dipper and some paper towels near our toilets so that we could easily wash our hands. We scattered the used water over the grass after we had washed. We placed the paper towels in a box and burned them at the end of the day.

We made some charts in art class which read "We wash our hands after the toilet, before we eat and after we have played or worked with things that soil them."

We read in our health readers how much of our body is water and how much we must drink every day to keep up the water supply. We learned why our men in the hayfields take some salt each time they take a drink of water.

We had a hard time in our toilet room at school in keeping the paper towels off the floor. Our teacher asked us what we could do to improve these conditions.

We decided that our wastebasket was too small so we asked the superintendent for a larger one.

Our parents bought us a tank and a lavatory for washing our hands. We fastened the tank on the wall above the lavatory. We poured water into the tank so that

we could turn the faucet to wash our hands. This made it so that we could wash our hands all alone and yet have running water. The waste water went into a bucket.

We screwed hooks into a board six feet long and six inches wide and hung our drinking cups on it. We liked this better than our square board because no cup could drip onto a cup below as was true of our old board.

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart B—VII, VIII; Health Chart D—II B; Health Chart E—III A 2; and to reference number 15—pp. 41-48; and to reference numbers 4, 13, 14, 33, 39-a, 41-a.

Teacher should refer to *Community Health Resources* p. 112 in this pamphlet; and to reference number 24—pp. 101-103, 106, 269-273; reference numbers 39-a, 41-f; 42-b; 48.

Pupils should find readings from books in the GRADED BOOK SERIES list, p. 138.

See GENERAL REFERENCE LIST, p. 133, for references referred to above by number.

H. SLEEP AND REST

In the kindergarten we put rugs on the floor and rest just before our lunch period.

In the lower grades we lay our heads on our desks and rest for a few minutes several times a day.

After we have sat still for an hour we do something that permits us to move around the room.

In our rural school our teacher and the older children made a play nook in the corner of our room for the youngest children. They made a screen covered with wrapping paper and a settee and chair out of orange crates and upholstered them with some cotton pads covered with cretonne. The little children could go here to read, look at pictures or play with their blocks, dolls or other toys.

We have learned several games in our physical educa-

tion period which we can play in the schoolroom to rest ourselves after sitting for a time. We have timed these games and find that some of them take less than a minute to play, but they give us lots of activity and are lots of fun. We feel more like studying after we play these.

Our teacher wrote notes to our parents asking at what time we go to bed and what time we get up. She asked if we had trouble getting to bed regularly. She said that we were going to read about sleep and rest in our health readers and she wondered if our parents would like to know what these readers give as the number of hours we should sleep according to our ages.

Our parents discussed sleep habits and their relation to fatigue and grades in school at their parent-teacher meeting.

Our books said we needed both rest and exercise to overcome fatigue and to help us grow.

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart B—IX, 8; XI; Health Chart E—I; and to reference number 15—pp. 13-15, 48, 49; references 18; 37; 40—e.

Teacher should refer to reference number 24, pp. 244-247; and to reference 42—e.

Pupils should find readings from books in the GRADED BOOK SERIES list, p. 138.

See GENERAL REFERENCE LIST, p. 133, for references referred to above by number.

III. Units of Teacher-Pupil-Parent Activities illustrating how *special events* create significant learning situations

J. THE HEALTH EXAMINATION AS AN EDUCATIONAL EXPERIENCE

Primary Level

The doctor came to our room and talked and laughed with us. He showed us his stethoscope and let us listen to our own hearts. When we had the little things in our ears the doctor's voice sounded very loud.

Our class visited the doctor's office to see all the things he was going to use to examine us. He explained some of these to us.

We invited the nurse to come and have lunch with us one day. She explained about the health examination that we were to have the next week and told all of the things that we would do then.

Julius had had a health examination before so he told us about that.

Our parents went with us when we had our health examination and helped us answer some of the questions the doctor wanted to know.

Intermediate level

We read in our books and some magazines why we need to have a health examination. We looked over some unused cards to see what things the doctor was going to want to know about us. We learned that we would need to undress if the doctor were to have a good chance to find how well we were.

We wrote to our parents inviting them to come to the examination.

We learned to weigh and measure each other and kept a chart of our growth changes.

Junior high school

We found out all we could about the health examinations our brothers were taking in the army. We learned what defects were found most frequently and which ones were most important in keeping men from entering the kind of work they wanted to do.

We studied how these defects could have been prevented had those men had health examinations and had they been given help in preventing and correcting the defects earlier in their lives. We learned that some defects couldn't be corrected but that if they were known the person having them could choose to do something which would be least affected by that kind of trouble.

We learned what a tuberculin test is for and how it is given and how many people in the United States have tuberculosis. We learned that people our age are very susceptible to it. We read about things that we might do in order to prevent having it.

After the health examination we wrote a description of the test and its value in our English class.

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart D—I A, C; Health Chart E—VII A 2, B.

Teacher should refer to *Health Examinations and Inspections*, p. 98, and to *Community Health Resources*, p. 112, in this pamphlet, and to reference number I—Chap. III; reference number 24, pp. 119, 235-237, 238, 240-241, 275-77; and references 25; 31; 36; 40; 42—c, d; 48.

Pupils should find readings from books in the GRADED BOOK SERIES list p. 138.

See GENERAL REFERENCE LIST, p. 133, for references referred to by the above numbers.

K. THE VACCINATION AND IMMUNIZATION PROGRAM AS A HEALTH EXPERIENCE

Parents

Our Parent-Teacher association studied the problem of sponsoring an immunization program for all of the children whether of school age or younger.

We had physicians of the city talk to us on the meaning of "toxoid," "antitoxin," and the "Schick test" and tell us the history of vaccination and immunization.

A committee from the Parent-Teacher association made some blanks for parents to sign if they wanted their children vaccinated. Members of the association called on all of the parents whose children had not been vaccinated and who had not attended their meetings. They discussed with these parents the things the doctors had said and the studies the Parent-Teacher group had made. They asked these

parents to sign the consent blank if they wanted their children vaccinated.

The school offered some rooms where the vaccination program could be held and the county medical association did the vaccinating.

Primary level

Our teacher and our nurse told us what it meant to be vaccinated. All the children who had been vaccinated stood up and described what the doctor did when they were vaccinated if it was done when they were old enough to remember.

We played doctor and the nurse helped us get our arms ready for vaccination so we would know how to do it when the real doctor came. She told us it might hurt but that she knew we could be brave.

Intermediate and junior high school level

We read about communicable diseases in our health and hygiene books. We learned what "incubation period" means and who quarantines us if we have a disease that is "catching."

We learned what diseases we can be protected against and how it is done.

We studied the lives of men who have made great contributions toward controlling communicable diseases by finding out how they are spread or by developing a way of protecting us against them.

We asked a doctor to talk to our assembly on communicable diseases and their control.

We saw some moving pictures showing what we need to do if we are exposed to or come down with a communicable disease.

We signed slips if we wanted to be vaccinated or immunized.

Suggestions and references for other schools: Teacher and pupils should refer to Health Chart D—II A, B, C; Health Chart E—VII; also to reference number 15—pp. 63-69; references 4; 33 and 41-b.

Teacher should refer to Communicable Disease Control, p. 110, and *Community Health Resources*, p. 112, in this pamphlet, and to reference number 1—Chap. IX, X; reference number 24—pp. 104-113, 237-238; and references 25; 36; 40—h, 1; 42—a.

Children should find readings from books in the GRADED BOOK SERIES list, p. 138.

See *GENERAL REFERENCE LIST*, p. 133, for references referred to above by number.

IV. Units of Teacher-Pupil-Parent Activities illustrating how health problems arising from *unexpected events* are solved

L. THE BIRTHDAY CAKE

It was Frances's birthday. Frances's mother made a big angelfood cake for her to take to the kindergarten to share with the other boys and girls. She also brought some animal crackers of which she was very fond.

Miss Munson, the kindergarten teacher, was very happy that Frances, who was an only child, had wanted to give to others on her birthday instead of expecting gifts from others, but she also knew that rich angelfood cake eaten in mid-morning would destroy the children's appetites for some of the more mildly flavored foods that should be eaten at mealtime.

Miss Munson thanked Frances for bringing the cake and then asked, "When do we eat cake?" The answers came back: "After we have eaten our other food." "For dessert."

Miss Munson then said, "We haven't any other food to eat here, have we? How could we plan so that we could have our cake to eat after our meal?" After some discussion someone suggested that they might cut it up and each one take a piece home and eat it after the noon meal.

This brought up the questions of how to cut it, who would cut it, how could they carry it home without getting it dirty?

It was finally decided that a committee would visit Miss Hanson, the home economics teacher, and ask her for a knife and for some waxed paper to wrap the pieces of cake in.

All agreed that Frances should cut the cake since it was her gift. But Frances first washed her hands as did the teacher and the rest of the children.

The teacher helped each child wrap and tie his piece of cake securely. When a bit of cake would fall upon the floor Miss Munson suggested that someone pick it up and place it in the waste basket since food that falls on the floor is never eaten.

After the pieces of cake were placed in the cupboard ready to be taken home Miss Munson asked if there was anything that Frances had brought that they might eat there at school with their mid-morning lunch of milk? It was agreed that the animal crackers were not so sweet and were smaller so would not take their appetite away for their noon meal.

The learnings from this project were:

1. Dessert comes after other foods have been eaten.
2. Hands must be washed before food is handled.
3. Food that is to be carried should be securely wrapped to protect it from dirt.
4. Food that falls on the floor is thrown away.
5. When we do not have equipment we need we may borrow some from others if we ask for it politely and return it promptly.
6. We may eat between meals if we choose food that will not take away our appetite for those other foods which we need to make us grow.
7. Common problems can be solved by discussion and group cooperation.

M. THE SIXTH GRADE SOLVES ITS CANDY PROBLEM

Miss Anderson was greatly disturbed when she saw that most of the pupils in her sixth grade room had

"all day suckers" in their mouths during recess.

When looking into their desks she saw that other "suckers" were tucked away there awaiting the next free minutes for their consumption. She remembered that there had been complaints of this same kind about these children the year before. She decided that she would not punish nor scold them but would put the responsibility for solving the problem on them.

She said, "I wonder if it is a good thing to be constantly licking at suckers. Are they a good kind of candy? Would you like to study this problem to see what conclusions you can come to concerning it? Will you ask your parents what they think about it? Will you ask the home economics teacher, the health director, the school doctor or anyone you feel is an authority on diet and health?"

They accepted the challenge and asked many people.

When they made their reports the evidence was heavily stacked against them. But Miss Anderson did not feel that they were entirely convinced so she got references for them to read. The most interesting one proved to be the story of how Theodore Roosevelt made himself into a strong man after being a sickly boy.

They were asked to tell what things they considered as signs of health in people or animals. They were asked what they did for an animal if their father gave them a "runt" pig or calf and told them to make the most of it that they could—what, how and when did they feed it? A government film was secured and run just for them. It was a study of diet and showed experiments with rats after they had eaten various diets, and it showed a family eating a good diet.

One girl who was a good reader read the captions aloud so that the slower readers would be sure to understand all that was said.

Finally a test was given covering the main points of the film to make sure all had understood it. Then Miss Anderson asked them what they thought about the "suckers" between meals. They were all convinced that it was better to take them home and eat

them immediately after their meal instead of having them at school.

Miss Anderson asked them to study again the problem of the best kinds of sweets to eat. It was drawing near to Christmas time. Maybe they could make some sweets for their Christmas party if they could find a good recipe. All evidence pointed to fruits both fresh and dry as being the best and most easily digested sweets and a kind that supplies minerals and vitamins as well as energy. In the Christmas number of a home magazine they found a recipe for dried fruit candy. It said to mix different dried fruits and coconut or nuts and run them through the grinder and mould or cut them into various shapes. They secured the permission of the home economics teacher to make the candy in her kitchen and were delighted with the flavor of their new candy.

The solution of this problem included the following learnings:

1. How to get information by interviews, by reading, from movie films and through discussions
2. How to bring facts together toward the solution of a problem
3. What effects various diets have on growth and health of animals that need diets similar to those of humans
4. How to associate two situations and recognize similar elements in both
5. That sweets should be eaten after meals instead of between meals
6. That some sweets have more value than others
7. That a good food is one that contributes more than one element to the diet

VI. Unit of Teacher-Pupil-Parent Activities illustrating how a health situation may become for a time *the center of study in all subjects and activities* of the school day

N. THE THIRD GRADE SOLVES THE HEALTH PROBLEMS ASSOCIATED WITH A PICNIC PROJECT

The third grade had concluded a study of transportation by making wooden ships, barges, etc. They wanted water to float them in. A trip to Springs Park was suggested since there was a stream there. This park was more than two miles away from the school. Could they take some food so that they could have more time to try out their water toys? If they took lunch, where and how could they get it? They would ask their parents to help them. But their parents were busy people with lunches to get at home for the rest of the family, and food was expensive and scarce.

But possibly they could find some foods that would be wholesome and yet easy to prepare and cheap.

Committees were formed to solve the problem. One committee attended to getting a school bus for transportation. Another set about interviewing the home economics teacher, the health director and their parents for suggestions for wholesome, cheap, easily prepared and good tasting food. The children explained their problem clearly and asked their questions simply but to the point. One girl acted as secretary and tried to take down the answers as they were given. She needed frequent help from the rest on how to spell some words and to check on her information.

All help was kindly given and gratefully received.

While interviewing the health director it was brought out that since there was to be whittling, cooking over the fire, and playing near water there might be some accidents, so maybe they would need some first-aid material. What materials would they need? Who would be in charge of the first-aid kit? How could the person to be in charge be selected? How could he get sufficient instruction to administer the first-aid treatments? Materials were selected for the kit from the school's supply and simple instructions were given in how the youthful first aider could help the teacher in applying any needed treatment in an emergency.

The menu was finally decided upon. The parents co-

operated in furnishing the food. The picnic excursion was held with no casualties but the learnings were many. Some of them were:

1. What are some wholesome but inexpensive foods?
2. What is the best combination of these foods for one meal?
3. How much labor is involved in preparing a meal?
4. How do we build a fire in the open?
5. How do we cook over an open fire safely?
6. How do we play with water toys along a stream safely?
7. How do we get on and off a bus safely?
8. How do we formulate questions that will express what we want and get the needed information?
9. What is a good selection of first-aid equipment to take on group picnics?
10. How do we figure the cost of food?
11. How can we make toys from wood with a knife and a coping saw?
12. How can we float these in an open stream without losing them?
13. How can we plan and work together and share responsibilities?

The learnings cut across the fields of science, manual arts, social studies, oral and written language, spelling, first aid, safety first, home economics, arithmetic and physical education.

O. EVERYBODY HELPS TO IMPROVE THE HEALTH CONDITIONS AT LAKE SCHOOL

I. Plans are made

A. P.T.A. meeting held in fall of year

1. Attended by parents of the 5 families in school, pupils, teacher, director, county superintendent, and 2 or 3 other families.

2. Discussions and plans are made on how to improve the schoolhouse and grounds.

"Labor is scarce in wartime," replied Mr. Jones, the director, in answer to Mrs. Lee when she asked, "When could we start this work?"

"I'll be willing to do some of the work," began Mrs. Lee, "if the other mothers and ladies will help."

"I can't paint but I can wash woodwork," offered Mrs. Simms.

"If someone else will do the climbing and ladder work, I will help," said Mrs. Watters.

"Will the school board buy the paint and also lumber for a storage cupboard to set the sink in if we can get a carpenter?" asked Mrs. Lee again. Mr. Jones agreed that they would.

"Do we have enough money in the P.T.A. treasury to buy a sink?" asked Mr. Simms.

"We have an old sink we will donate if someone will pick it up in a car," said Mrs. Watters.

"I think I can pick up some used pipe," decided Mr. Watters.

"I can contact the State Health Department to test the water," offered Mr. Manner, the county superintendent.

3. Work and ideas seem quite well formulated.

They would begin as soon as paint and lumber were secured by those appointed to secure them. Most work would begin at 4:00 p.m. on various evenings.

B. The "For Iowa Club" holds a meeting.

1. Pupils discuss what they can do to help improve their school.

"There is sanding to be done as soon as the wainscoating is washed," declared Allen.

"Everyone can help do that," said Mary Jane. "Let's divide it so each of us will have the same amount to sand." All agreed to sand a portion of the wall.

"Heavy objects will need to be moved to the center of the floor before our mothers can begin the washing," said Jim.

"We older boys can do that," said Tom.

"Could we dig the drainage ditch?" asked Bob.

"Yes," answered Allen, "I'll go to ask Mr. Green to put a string up marking the place to be dug."

"We can bring our spades from home," said Allen.

2. The discussion next turned to the school-yard.

"Now that the men have cut the brush in preparation to building the fence, don't you think we might do more to improve our schoolyard?" asked Miss Brown, the teacher.

"We could pile the brush," said Allen.

"We can pick up sticks and papers," suggested the little folks almost all at once.

"The fourth and fifth grades can put glass, cans and wire in a box to be hauled away," said Mary Jane.

"When shall we burn our brush?" asked Linda. "Don't you think we will have to wait for a day when the wind isn't blowing?"

"We must all get busy so we shall be

ready for our bonfire when a quiet day comes," declared Bob.

"What do you think of the water holes and mud under the swings?" asked Miss Brown.

"I can carry some ashes while Bob and Jim level them off," offered Tom.

"That will make our ash pile smaller, too," said Linda.

"Two of us can see that the coal house is orderly and free from trash so it will be ready for the new building to be placed on the foundation when they bring it," said Allen.

3. These things constituted the main plans and all were eager to begin.

II. Work begins.

A. The mothers carry out their plans. Slowly things get under way. Materials and time are scarce during war. Mothers do a hard but thorough and excellent job of cleaning and painting. Trim is added as borders for attractiveness. Linoleum is cemented to the top of cupboards and around the sink. Venetian blinds are taken home by Mrs. Lee, washed, dried and put back up.

B. Children complete their planned tasks.

"Mary Jane, you and I can put the P.T.A. dishes and supplies on this side of our cupboard," said Judy.

"Let's help," said the boys.

"I'll put in the paper towels and toilet tissue," declared Jim. "You two can break up all those empty cardboard boxes."

"Doesn't the cupboard look neat?" asked Judy.

"It certainly is gratifying to have the sup-

plies neatly in a cupboard instead of in boxes scattered about the room," smiled Miss Brown.

C. Fathers add their services.

1. The next P.T.A. notices were sent out with an added note to fathers, saying, "Bring hammers and saws with you."

"I was beginning to wish my wife wasn't always at the schoolhouse when it was time for supper," said Mr. Lee.

"So was I," answered Mr. Simms, "until I stopped the other evening. It looks so much better that I'm glad we can help, too."

"Yes, I'm sure we can help by adjusting those seats and desks," assented Mr. Lee.

"With the children here to see if they fit it shouldn't take long."

"We can shorten the lengths of the 2"x4"s so the rows will be less heavy to move about," decided Mr. Watters. "Let's also arrange them in oblique lines to be more distant from the stove in the center of the room."

"I've brought the primary table," exclaimed Mr. Jones. "I was lucky to get it.

This was the last oak table they had."

III. More plans are being made.

A. A representative of the P.T.A. met with the school board.

1. Together plans were made for a new floor if carpenters can be secured.
2. Hopes are held to get a cement platform for the well and cement pits for the toilets so they can be fly-proofed and moved closer to the schoolhouse.
3. Water, lighting and toilets were checked by

the State Health Department. A report on the water is to be submitted to the director.

4. An effort will be made to pasture the now fenced yard in summer to prevent the sharp and dangerous stubble that results from tall weeds being cut in the fall.

B. Teacher plans greater efficiency in physical education program made possible by improved school yard and increased indoor space as well as widened knowledge of activities to be learned at a health work shop she plans to attend at a state college.

P. THE SCHOOL LEARNS TO USE ITS COMMUNITY FACILITIES IN SOLVING A SPECIFIC HEALTH PROBLEM

In getting acquainted with her new pupils in the fall a teacher noticed one little seven year old girl, Mary Jones, who did not play well with the other children.

She stood aside from the group and often failed to answer questions asked her by both the teacher and children. Also she did not talk very plainly. After several weeks Mary did not show progress in her school work.

The teacher remembered that at the fall school teachers' meeting the district public health nurse had explained that similar behaviors are suggestions of a hearing defect. Wishing to talk with the children's parents as soon as possible, the teacher was happy when Mrs. Jones came for Mary one night after school.

She had a five year old daughter, Nancy, with her. A friendly visit between teacher and mother brought out the following facts:

Two years ago both children had scarlet fever which was complicated by ear infection. Nancy spoke only a few words. The doctor who had cared for them had asked the mother to bring both children to him for a check-up but the mother, a busy farm wife, had been unable to do so.

The teacher explained that Mary did not have a fair

chance at school if she was handicapped by poor hearing and it would be wise to return to the doctor for care and advice. She also suggested that Nancy could be taken to the doctor at this time. A week or two later Mrs. Jones reported that the doctor had arranged for an audiometer test. Both girls showed severe hearing loss and the doctor advised that they should go to a special school such as the School for the Deaf at Council Bluffs. Mrs. Jones was very upset at the thought of having her two small children away from home.

The teacher talked the matter over with the county superintendent of schools. He suggested that the special agent from the School for the Deaf would be interested in describing this special school plan to the children's parents. Mrs. Jones was told about the expected visit from this worker, who was able to give a satisfactory explanation of the school to the parents. After necessary arrangements had been made through the local welfare office, Mary was enrolled in the School for the Deaf at Council Bluffs.

When the teacher returned the next fall she called at the Jones' home. She found Mary ready to return to Council Bluffs and she had learned to talk much more plainly. She had also grown very friendly, in fact had a very pleasing personality. Nancy was returning to the school with her and Mrs. Jones seemed happy that the children were able to have this special opportunity.

In the above illustration, the teacher was able to bring help to a handicapped child by wise use of her own efforts, sound guidance of parent's interest and use of community and state facilities, the family physician, county superintendent of schools, special workers for state school and state school itself.

USE OF AND CRITERIA FOR EVALUATING INSTRUCTIONAL MATERIALS FOR HEALTH EDUCATION

After books and materials have been used for health education purposes the best evidence of their value is that improved total behavior has emerged from their use; that is, the individual and the group as a whole are better mentally,

emotionally, socially as well as physically, because they have had contact with such materials.

Also we would expect that if the book or the materials were of value they would make the individual or group using them have a desire to go on into further healthful practices and seek more health knowledge. It would bring about the cooperation of the parents, the school and the community.

The best way of using instructional material for health education is to find references from many reliable sources which will give the knowledge necessary for solving a health problem and for motivating the practice which it should start.

In judging BOOKS, PAMPHLETS and MAGAZINES before they have been used we might set up the following standards:

Is the information found in books, pamphlets and magazines scientifically accurate and based on the results of research or on those principles which are accepted by authorities in light of their best present knowledge?

Is the method of presentation used in these materials pedagogically sound; that is, are the children allowed to acquire their knowledge through real experiences or by stories of the real experiences of others? Are the statements made in simple, well-described steps which lead to a clearly stated conclusion?

Does the method safeguard the child's right to deal with clear ideas by avoiding the presentation of facts through dreams, fantasy or personifications? Examples:

1. Poor A story of Mary dreaming that all of her teeth have decayed because she did not drink milk and upon awakening resolved to drink it.

Good A story of Mary visiting the dentist, the dentist finding many cavities in her teeth and instructing her in the value of eating a well-rounded diet including milk and in the methods of tooth-brushing.

2. Milk is brought by the health fairy or brownie instead of the milk man.

3. Carrie Carrot speaks to Johnnie about how important she is.

Does the vocabulary of the material agree with the standards for a given age? Are the new or unusual words pronounced and defined in a glossary?

Is the structure of the book, pamphlet or magazine set up in such a way as to make its use a healthful experience; that is,—

Is the book printed in not less than 12 point type for the intermediate grades and not less than 14 point type for the primary grades?

Is 14 point leading used with the 12 point type, and 16 point leading with the 14 point type?

Are the lines short, corresponding to the normal eye sweep of $3\frac{1}{2}$ inches for the intermediate grades?

Are the illustrations simple and clear, emphasizing good health conditions rather than ill health? Are they so placed that they do not cut into lines of printing?

Is the paper dull in finish, buff in color, and thick enough so that type does not show through?

Is the book of a size that it can be easily held 12 to 14 inches from the eyes?

Are the sentences short and simple in structure and do they deal in concrete ideas for the younger children?

Does the material appeal to many interests of the children, their desire to have new experiences, to serve others, to be accepted by the group and cooperate with them rather than the desire for contest and competition only?

Does the material deal with health as a means and not as an end in itself?

Does it give equal emphasis to mental, emotional, social and physical health?

Does it lead the child into no false notions of what consequences follow what acts, that is, does the material emphasize good health behavior as a means of doing good things better rather than as a means of receiving an extraneous reward such as gold stars, praise or privileges which when removed may cause the activity to cease?

Suggestions for the use of POSTERS, CHARTS, MOVIES and RADIO follow.

Posters will be used only as a means of emphasizing a single thought or as a reminder of a practice already decided upon by the individual or group. The use of posters as such as a way of teaching or changing behavior is questionable.

Charts may have value if they show the outcome or progress of an activity which is being or has been carried on. They must be clear and simple. A growth chart and a skill improvement chart are good examples. A small chart kept by the individual himself is probably of more value and avoids undesirable emotional consequences.

Movies are valuable if they are prepared for in advance by discussion and readings and are followed by further discussion or questions concerning the main purposes of the picture. Frequent repetition of the same picture is often necessary before all of its implications are observed.

This means of teaching health is most valuable when accompanying or preceding practice. Most of the standards given above for judging the content of books, pamphlets, and magazines apply also to movies.

Radio is proving to be a strong means of health misinformation as it is used in advertising. It can be equally strong in teaching health if the learners are prepared for the program by the same means as for movies mentioned in the preceding paragraph.

It may be said concerning any teaching device in health education that it must be so closely related to life situations as to be really significant or it will have little effect in changing behavior. No device can take the place of the teacher.

Reference: No. 24, Chapter X, pp. 229-233.

USE OF AND CRITERIA FOR JUDGING INCENTIVES WHICH WILL BE USED IN AN EFFORT TO CHANGE BEHAVIOR IN HEALTH TEACHING

Sometimes the incentives used in attempting to bring about healthful living are quite as unhealthful as the habits that we are trying to change. That is, if we pit one child against an-

other or embarrass some child who has poor eating or cleanliness habits the changing of which are beyond his control we may have created a situation which is less desirable from the mental health standpoint than the uncorrected physical practice. For this reason it is well for us to set up some criteria by which we can judge our incentives if we wish our teaching of health to be truly healthful and permanent.

1. Is the incentive such that any child who makes an honest effort can attain it? (If an award is given to the healthiest child in the room, school, state or nation this criterion is being violated.)
2. Is the incentive one which helps the child to keep on practicing the desired activity? (If a chart posted in the room with stars or checks after the names of the children who are reaching the requirements is the method, the chances are that when the chart is removed the practice will stop.)
3. Is the incentive such that it encourages the formation of a worse habit than the one we are attempting to change? (If checks or stars are being given at school for sleeping, eating or tooth brushing at home there is a strong possibility that deception will be encouraged.)
4. Does the incentive give consistency and integrity to the health teaching? (If the child sees those he admires living as he is told to live, he is apt to feel that such living is important and not just something to talk about or read about in a textbook.)
5. Is the incentive associated with the activity itself and does it give a true picture of what consequences follow what acts? (If the teacher tries to make the right action easier than the wrong and justifies such actions by facts the activity is more likely to continue.)

HELPFUL INFORMATION FOR TEACHERS, SUPERINTENDENTS AND PARENTS

I. HEALTH EXAMINATIONS AND INSPECTIONS

A. Organized Health Examinations

An important part of any health education program is the health examination as is indicated by Health Chart D, page 34. This part of the program should be gotten under-way as soon as possible.

Probably the best way to have health examinations given and one which will result in the formation of permanent habits of lasting value is for each child with his parents to go to the office of a physician and of a dentist (preferably the family physician and dentist) and receive a thorough check-up on his physical condition. In this way he will learn early in life that the doctor and dentist are his friends and are persons to whom he should go even before sickness befalls him. The school would receive a copy of the results of the examination in a form that would be most useful to it. The same physician then would be able to consult with the parents concerning all corrections that were found to be needed and would make the corrections at the request of the parents. Such an examination would be required for all pupils entering the school for the first time.

Some authorities advocate a re-examination every three years. This would mean that each year the first, fourth, seventh, tenth and twelfth grades would be examined. To these would be added the children of all other grades who are entering school for the first time or whose health condition is seriously questioned.

Another method of carrying on health examinations of all school children would be for the local medical and dental association to appoint a rotating school examination committee whose function it would be to administer a health examination either at the school or at some central place within the town or city. This committee would cooperate closely with the school administration in an effort to learn what information is most necessary for the school to have in order to give the child the greatest opportunity to live healthfully and carry on his work most satisfactorily while at school.

In either of the above methods of carrying on health examinations it would first be necessary to arouse the interest of all the parents through the Parent-Teacher association and its study groups and obtain the full support of the school board. These two groups could then contact the medical and dental associations and the county or school nurse to obtain their help and advice. It would be wise also to consult and seek the aid of the local health agencies such as the Christmas Seal committee, the Red Cross Chapter or the health committee of local organizations for help in securing funds for financing the examination and for needed follow-up treatment of children whose parents are unable to bear the expense themselves.

See *Community Health Resources*, p. 112.

Health examination record cards may be obtained from the Iowa State Department of Health, Form 52 P.H.N., a sample of which is found on p. 98, or from the Iowa Tuberculosis Association through the local Christmas Seals committee. It may be that the examining physicians and school administrator of a community may wish to construct a health examination record card of their own by the help of such authorities as the American Association of School Administrators through their book "Health in Schools," Chapter III.¹

¹American Association of School Administrators, *Health in Schools*, 1201 16th St. N. W., Washington, D. C., 1942.

SCHOOL HEALTH SERVICE
Teacher-Nurse Observations
Iowa State Department of Health

[illegible]

OBSERVATIONS

Explain Checked Items on Reverse Side

OBSERVATIONS						Date
Explain Checked Items on Reverse Side						
Eyes	1. Styes or crusted lids					
	2. Inflamed eyes					
	3. Crossed eyes					
	4. Frequent headaches					
	5. Squints at book or board					
Ears	6. Discharge from ear					
	7. Earaches					
	8. Failure to hear questions					
Nose and Throat	9. Persistent mouth breathing					
	10. Frequent sore throats					
	11. Recurrent colds					
Teeth	12. Cleanliness					
	13. Cavities and missing teeth					
	14. Gums—swelling, redness					
General Condition and Appearance	15. Very thin or very fat					
	16. Does not appear well					
	17. Tires easily					
	18. Uses toilet frequently					
	19. Poor muscle coordination					
	20. Bad posture					
Behavior	21. Unsatisfactory progress in school					
	22. Speech defects					
	23. Bites nails					
	24. Unduly restless and irritable					
	25. Excitable					
	26. Daydreams—inattentive					
	27. Shy					
	28. Twitching movements					
	29. No. days absent because of illness					

[illegible]

Family Physician.....
(Write in pencil)

[illegible]

COMMUNICABLE DISEASE INFORMATION

Form 53
P.H.N.

Name of child.....Grade.....Name of School.....
Address of parent or guardian.....
Date of child's birth.....Sex.....Color.....
Place of birth.....
Name of Physician usually employed.....
Physician's address

In making our survey of school children in the county it is necessary for us to secure the information from the parents concerning the history of the children. May we ask your cooperation in furnishing the needed information?

Parent or guardian: Please give age in years when child had:

MeaslesScarlet fever.....German measles.....
Chicken poxDiphtheriaPneumonia
Whooping cough.....SmallpoxRheumatism
MumpsPoliomyelitisTyphoid fever

Operations: Kind.....

Has child been exposed to tuberculosis?.....By whom?.....

Has child had a tuberculin test?.....Chest X-Ray (if indicated)?.....

Please give age in years when child was given preventive treatments for:

DiphtheriaSmallpoxWhooping cough.....
Other

Signature of parent or guardian.....

IOWA STATE DEPARTMENT OF HEALTH

DISTRICT HEALTH SERVICE Supplementary School Health Report

Form 53A
P.H.N.

To Parents or Guardians:

In order to bring the individual school health record up-to-date, this form should be filled out promptly and returned to the teacher.

Name of child.....Age.....

Name of School.....

Was your child sick during the summer or past school year, if so, please state the type of illness

Operations during past year.....

New glasses or lenses.....Name of Doctor.....

Did child visit the dentist this year.....Name of Dentist.....

Date.....Signature of Parent.....

IOWA STATE DEPARTMENT OF HEALTH

If the above methods of carrying on the health examinations cannot be accomplished it may be necessary to obtain the services of some one physician to come to the school to examine the children or if yours is a rural school to transport the children to the offices of a doctor and dentist in a nearby town with the aid of the parents and the consent of the school board and county superintendent.

A pre-school examination sponsored by the Iowa Congress of Parents and Teachers and the State Department of Health and known as the "Summer Round Up" is carried on extensively in many Iowa communities. It is usually planned and conducted by the parents with the aid of local doctors at some central place. Full information may be secured from the State Department of Health in Des Moines, or from the local or state Parent-Teacher association.

B. Health Inspections

When it is not possible to arrange for the health examinations by a physician and dentist an inspection may be carried on by the classroom teacher under the guidance of a public health nurse or a physical education teacher who is well trained in health education.

The teacher when making a definite physical inspection should include the observation of most of the items listed on the physical record card, Form 52 P.H.N., of the Iowa State Department of Health (cost 3 cents each), or that of the Iowa Tuberculosis Association. For help in carrying on such inspection see "What Every Teacher Should Know About the Physical Condition of Her Pupils" by J. F. Rogers and "Health Inspection of School Children" by the Joint Committee on School Health Problems.

But at all times whether the child has been examined by

¹Rogers, J. F., *What Every Teacher Should Know About the Physical Condition of Her Pupils*, Bulletin No. 69, Bureau of Education, Dept. of Interior, Washington, D. C.

²National Education Association and American Medical Association, Joint Committee on Health Problems in Education, *Health Inspection of School Children*. National Education Association, Washington, D. C., 1933.

the doctor or inspected by the teacher he should be under the constant observation of his teacher and parents for abnormal appearance or behavior which may indicate a change in his physical condition or may lend evidence to the existence of some long standing difficulty.

Even when health examinations are made by physicians and dentists the teacher should see that frequent retests of vision and hearing and regular weighing and measuring are carried on. Symptoms showing need for testing of vision and hearing and methods of carrying on tests follow:

1. Vision

a. Symptoms of eyestrain are:

- (1) Unsatisfactory test with Symbol E or letter chart
- (2) Holding the head in a peculiar position while reading, as in some cases of astigmatism
- (3) Inability on the part of the child to study a long period of time without suffering indefinite eyestrain or definite eyestrain as sore or watering eyes
- (4) History of headaches and sore eyes regardless of the ability to see
- (5) History of blurring of vision, confusion in recognizing words, loss of line in reading
- (6) Frequent styes, crusted lids, inflamed eyes

b. Symptoms of eye disease:

- (1) Any redness or swelling of the eyeball or the inside of the eyelids or the edges of the eyelids
- (2) Any scaling of the lid edges or loss of lashes
- (3) Any discharge from the regions of the eye
- (4) Any little lumps inside the eyelids as in granular lids
- (5) Any whitish or grayish areas apparently in the eyeball
- (6) Any variation of the black spot (pupil) in center of the eyeball

c. Testing

The Snellen symbol E or letter chart or the telebinocular instrument should be used. The Snellen charts, window cards and testing instructions, can be obtained from the State Department of Public Instruction.

- (1) If the Snellen charts are used, testing should be done in a room, the length of which is a little more than twenty feet. A distance of twenty feet should be accurately measured and marked.

The chart should be hung in a good light with the twenty-foot line of symbols approximately on a level with the child's eyes.

The child should be placed in a good light, but so that the light does not shine from front or side directly into his eyes. He should stand or sit so that his eye is exactly twenty feet from the chart.

If the child wears glasses, these should be removed and a test made first without glasses, followed by a test with glasses. Record the test with glasses on the record card, indicating that the test has been made with glasses. Record the test taken without glasses also.

If the child is able to cooperate, have him hold a clean piece of paper over the eye which is not being tested, being careful that the eye is open and that the paper is not pressing against the eye. Test one eye at a time. It is well to standardize the technique by always beginning with the right eye.

Have the child read with the uncovered eye.

Begin the test at one of the lines of the large symbols or letters and run rapidly down to the child's easy limit. Thence carefully seek identification of each character. Expose each letter separately by the use of a window card, which is a piece of paper the size of the chart with holes of various sizes cut in it.

Making more than two errors to a line indicates inability to read that line. Record the measurements as follows: 20/20, 20/30, 20/40, etc. Use as the first number the distance from the chart and as the second number the number of feet at which the normal eye should read the line (the number on the chart at the line read).

For the child of the kindergarten age a reading of 20/30 seems acceptable as normal to the majority of ophthalmologists. For children above this grade level a test of 20/30 indicates that attention is needed. If any child shows symptoms of eyestrain, he is not normal and should be referred to an oculist for careful examination.

2. Hearing

a. Symptoms of deafness and ear disease

The Joint Committee report on health education¹ lists the following:

- (1) Failure to answer, misunderstanding and incorrect answers to questions, or saying "what"
- (2) Turning the head to one side when spoken to
- (3) Apparent inattention when the person speaking cannot be seen by the child
- (4) Facial expression indicating that the child is not aware of all that is going on about him
- (5) Failure to associate naturally with other children
- (6) Discharge or odor from the ear
- (7) Earache
- (8) Picking at the ear
- (9) Defective speech, improper forming of sound elements, or unnatural pitch of voice; high, low or monotonous tone

¹N.E.A. and A.M.A. Joint Committee on Health Problems, *Health Education*, National Education Association, Washington, D. C., p. 141, p. 234.

b. Testing

The hearing of all children should be inspected at least once a year by the spoken or whispered voice, by the watch test or by the audiometer.

(1) If the first is used, the child should stand twenty feet away from the inspector, facing sideways and with one ear covered. (Testing should be done under quiet conditions.) The inspector whispers words with no pressure behind them. (This is done by exhaling before whispering.) The child is asked to repeat the words. Whispered commands may also be used which involve action from the child such as "stand up," "turn right," "walk forward." These cannot be used if there is a physical inability. If the spoken voice is used, the inspector may talk in low tones to the child, who has his eyes closed so that he cannot read the tester's lips. These methods will detect those defects which are somewhat advanced.

(2) In the watch test the child sits on a chair with his back to the inspector and with his eyes closed. The inspector holds both hands, in one of which a watch is held, at arm's length on each side of the child's head in line with his ears and slowly brings them toward the ears. The child has previously been instructed to point to the side where he hears the ticking of the watch just as soon as he hears it. After several trials, shifting the watch from side to side irregularly, record the distance in inches.

Helps

- (a) The child should point to the side on which he hears the watch with the hand that is on that side. The inspector should carefully observe the hand which is on the side of the watch, for any movement of it indicates that the child hears it but is not sure of himself.
- (b) The same watch should always be used. By many testings it can be standardized.

(c) The watch should be changed from side to side behind the back of the inspector as he gives the instruction, "Try it again."

(3) The directions for using the audiometer will be found with the instrument.

During the everyday routine of work the teacher can often detect faults of hearing which can then be tested more carefully.

3. Weighing and measuring

Weighing and measuring are good teaching devices.

They act as an objective evidence of growth in which children are always interested. It must be remembered that gains in weight and height vary with the individual and with the season, with increases in summer and fall.

They cannot be used alone as adequate indexes of nutritional state. However, if no gain is shown over a period of three months the child should be referred to the family physician.

All weighing should be done carefully and accurately at the same time of day each month¹, the same type of clothes should be worn, and the bowels and bladder should be empty.² The scales and wall measures must be accurate; non-spring scales are best, but bathroom scales or an ice scale hung from the top of the door may be used.

A good device for measuring is a tape or yard stick fastened to the wall starting at a height of three feet from the floor. A chalk box or any device which makes a right angle with the wall should be used to mark the height. The child should stand as tall as possible with feet together and head against the tape; the chalk box is then placed against the wall and on top of his head.

This measuring should be done semi-annually.

¹Grout, Ruth, *Handbook of Health Ed.*, p. 53, Odyssey Press, New York, 1936.

²American Association of School Administrators, *Health in Schools*, p. 41, 1201 Sixteenth St., N. W., Washington, D. C., 1942.

C. Daily Health Inspections

"An important source of information is the result of keen daily observation by the teacher. It is usual for the room teacher to make a daily inspection of each child. The first objective of this inspection is to detect signs of beginning disease such as colds, red eyes, high color, sniffles, infected throat, rashes; abnormal attitudes disclosed by facial expressions of weariness; complaints of headache and stomach-ache and irritability. The teacher's daily inspection, noting changes in appearance and behavior, is invaluable in recognizing early signs of communicable disease and in observing the personal hygiene of the child."³ See Health Chart D II, pp. 37-41.

D. Follow-up

As important as it is for every child to have a thorough health examination in order that teachers and parents may more fully understand the child it must be remembered that just the examination alone can do little to improve the health of the child unless the results of the examination are thoroughly studied and used to improve his health.

Corrections must be made as indicated and constant vigilance must be exercised by teachers and parents to guide and guard the health conditions from day to day and in each activity of the day. Planned parent-teacher interviews are necessary.

E. Dental Inspection

The "Iowa Plan of Dental Health Education" has been in operation for several years. It is sponsored by the Bureau of Dental Hygiene of the State University of Iowa, Iowa City. Full information as to procedures in dental inspection is given there. This plan can well function as a part of the type of organized health examination mentioned first under I A, p. 98. In any event the plan works best when it begins with organized groups of parents who are made acquainted with its values by the teacher or by some outside authority. The school then acts as an educational medium for the children but the parents take the responsibility for getting the children to the dentist and for having

³Ibid., p. 41.

remedial work done. No stress should be laid on a 100 per cent accomplishment.

References

(Materials for pupil use marked by asterisk *)

Materials in this pamphlet:

Health Chart D, I, p. 34, II, p. 37

Health Chart E, VII, p. 53

Illustrative Unit of Activities J, p. 78

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on p. 133, where publishers and prices are given.

Reference 1, Chap. III

Reference 24, Chap. V, pp. 235-238

Reference 35

GRADED BOOK SERIES list, I to VII, inclusive, p. 138.

Reference 36

Reference 40, b, g, i

Reference 42, c, d

II. COMMUNICABLE DISEASE CONTROL

A. General Control procedures

The control of communicable disease depends upon the co-operation given by the home and school and the health authorities in observing public health regulations. It also depends upon the constant vigilance of the parent and the teacher in—

1. Learning when a certain disease is in the community
2. Knowing the most evident symptoms of the most common communicable diseases. See reference 33.
3. Being aware of contacts of children with others suffering from the disease
4. Looking for and recognizing atypical appearances or actions of the child
5. Excluding the child at once from other children when such signs are recognized
6. Keeping children away from unsupervised public gatherings during epidemics

Study and free discussion of causes and controls of communicable diseases by parent-teacher groups as well as developing certain health habits and health attitudes at

home and at school will go far in keeping down the spread of communicable diseases.

Some of these habits are washing the hands, using a handkerchief when coughing and sneezing, keeping pencils out of the mouth, keeping away from others when suffering from a cold, not sharing food with others, scalding dishes used by an ailing person, using individual towels and drinking cups or using the fountain properly. The attitudes of consideration for others and for community well-being can be taught no place better than in relation to keeping down contagion. If children are kept at home when they show signs of illness and are excluded from school when ill and if all absences are checked on and returning absentees inspected before being readmitted to school much can be done in controlling the spread of disease.

See Health Chart D II A, page 37, for a procedure the teacher may use in helping to control communicable disease.

B. Immunization and Vaccination

The procedures in carrying out a group program of immunization and vaccination are much the same as described under organized Health Examinations. The request for such a program should come from the parents and be administered by the local medical society. The school's part is primarily one of educating parents and children and helping in organization. See Health Chart D II B and C, page 40-41.

This can best be done through the parent-teacher group and in preparing the children for the experience. See Illustrative Unit K, p. 80.

For information in how to proceed in starting an immunization program consult your local medical society or write to the State Department of Health, Des Moines, Iowa.

References

(Materials for pupil use marked by asterisk *)

Materials in this pamphlet:

Health Chart D, II, p. 37

Health Chart E, VII, p. 53

Illustrative Unit of Activities, p. 65

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST, p. 133, where publishers and prices are given.

Reference 1, Chap. IX, X

Reference 24, pp. 104-113

Reference 26

Reference 33

Reference 36

Reference 39b

Reference 40, h, l

*GRADED BOOK SERIES list, I to VII, inclusive, p. 138

III. COMMUNITY HEALTH RESOURCES

Health services are provided by many different agencies in community, county and state areas. It is not intended in this section to give a comprehensive listing and description of all such agencies, but only those that can be used most helpfully and frequently by the teacher in aiding her school and the families which it represents in solving specific health problems will be enumerated.

A.

The Iowa State Department of Health is the official agency.

It functions under the direction of the State Board of Health. The work of the department is directed toward preventing disease, both communicable and non-communicable, and promoting positive health through health education and direct service programs. This organization acts in an advisory way to the local community health officials.

For the purpose of better serving the public the State Department of Health maintains ten district health offices.

Every county in the state is a part of one of these districts and is entitled to counsel from the personnel of the district health department. See map, page 114, to find out the district to which your county belongs and where the district health office is located.

While it may seem obvious that the teacher and other school personnel will request help of the county superintendent of schools on all problems pertaining to the school, it is important to emphasize here that this officer is the logical immediate guide in relation to specific health problems in the school. Any teacher who is not certain about community or state resources available on a given health

problem should seek the assistance of the county superintendent of schools.

But it is also possible for the teacher and other community people to secure service from the district health office by contacting the county public health nurse usually located in the county courthouse. If the county does not employ a public health nurse, guidance or help may be requested directly from district health personnel listed below.

1. District medical director

The medical director represents the State Department of Health to aid in control of preventable diseases and the dissemination of health education in his district.

2. Public health advisory nurse

The advisory nurse supervises the county public health nurses and acts in an advisory way to all public health nurses in her district and to lay people and organizations in regard to nursing and health problems.

3. Public health engineer

The public health engineer aims to cooperate with local authorities and to render service in all matters pertaining to community sanitation, including water supply, sewage disposal, lighting, heating and ventilation.

B. Some of the resources that can be found in most counties are:

1. County Tuberculosis Association

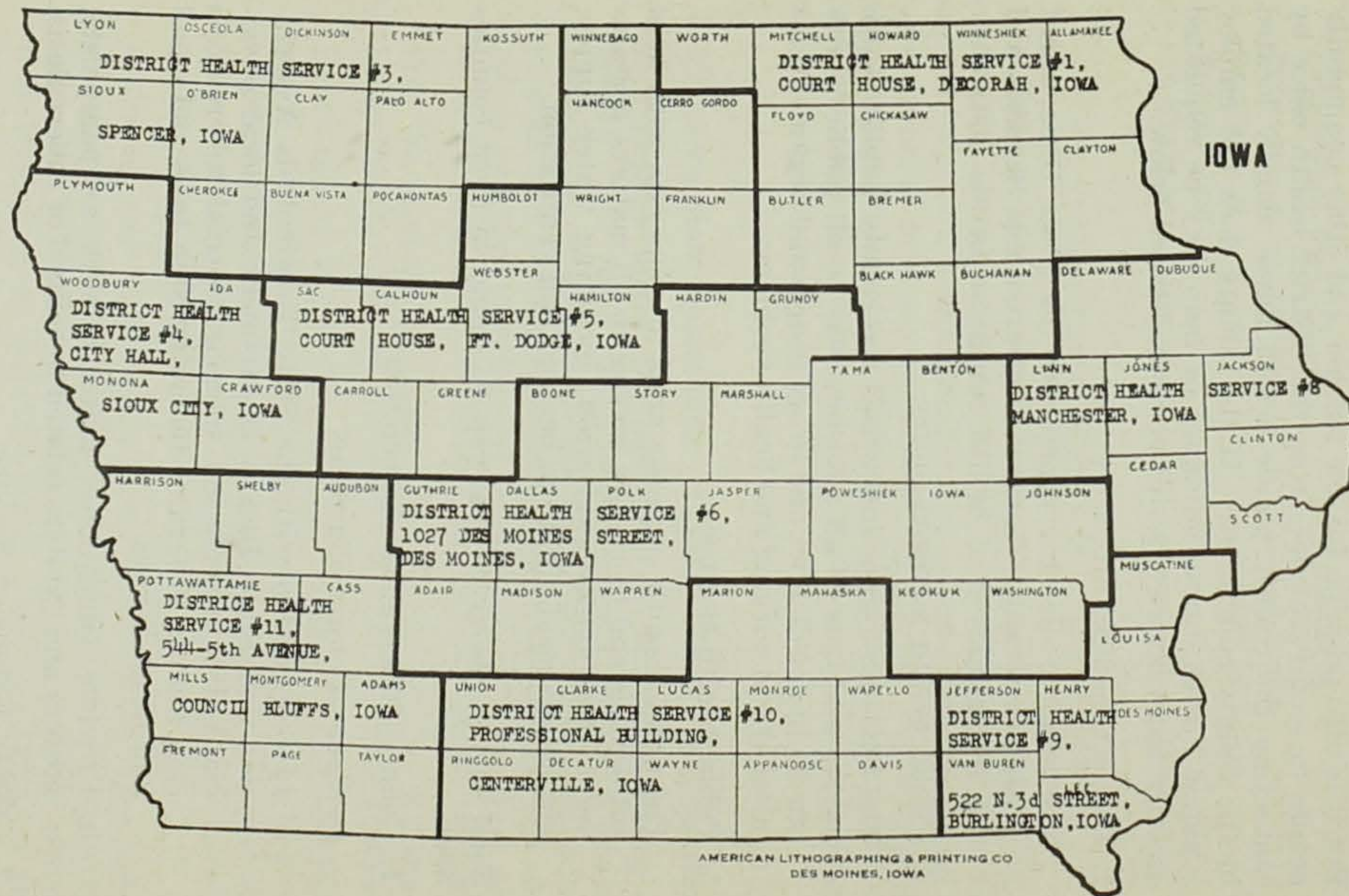
Contact—County chairman

- a. In cooperation with the State Tuberculosis Association and State Health Department and local physicians, this association sponsors special tuberculosis case finding programs including skin tests and small and large X-rays.

- b. Provides educational material such as pamphlets, posters and exhibits related to control of tuberculosis.

2. County Extension Service

Contact—County Home Economist or Extension Director



DISTRICT HEALTH SERVICES OF THE IOWA STATE DEPARTMENT OF HEALTH

- a. This organization has health committees, county and township. Chairmen of these committees, while not giving any direct service, will be interested in helping with health projects, such as an immunization program.

3. County Chapter of American Red Cross

Contact—County Chairman

- a. There are several divisions of work in this organization, such as War Fund, Production, Disaster Relief and First Aid, and Water Safety. The Home Service division is probably one that will be used most frequently. Through this division contact is made between service men and their families; also, help in any emergency where no other welfare agency is functioning. In some counties a fund is provided for tonsillectomies, medical care, hospitalization, immunization, and glasses.

4. American Legion Auxillary

Contact—Health Chairman

- a. Will give aid to veterans and their families only.

5. County Welfare Service

Contact—Social Welfare Director

- a. County relief measures

- (1) The official agency for giving general relief, such as fuel, rent and clothing to those in need
- (2) Also arranges for medical care for those in need, either through county medical society or Iowa University Hospitals
- (3) Supervises applications for and the sending of patients to state institutions

- b. Administers state welfare program, old age assistance, aid to the blind, aid to dependent children

6. Child Welfare Service

Contact—Director, Division of Child Welfare, Iowa Building, Des Moines

- a. Through the Division of Child Welfare of the State

Board of Social Welfare, provision is made for special services on behalf of socially maladjusted children. Some counties have a full-time worker providing this service; other counties are served by district workers. For the services of the district child welfare worker write the director listed above.

7. County Medical Society

Contact—President

- a. May be interested in planning immunization and health examination program

C. Following are other state facilities that are available to all individuals in the state:

1. State Department of Public Instruction

Contact—Local superintendent of schools, or county superintendent of schools. The education of the physically handicapped child, as of every other, is the express duty of the local public school district. State aid in developing a special program is administered by this department.

- a. For education of the physically handicapped, there are three forms of special service consisting of—

- (1) Transportation to and from school
- (2) The extension of classroom instruction to the home-bound by means of two-way electrical teaching equipment
- (3) Home instruction by a duly certificated visiting teacher

2. Iowa University Hospitals—Iowa City

Contact—County Nurse if available, or patient's family physician; county social welfare director, or county superintendent of schools.

- a. Crippled children's service

Children under twenty-one with orthopedic, plastic, diabetic, or cardiac crippling may be referred by their physicians to the clinic at the University Hospital, or to a county clinic.

b. Hospitalization

For those unable to pay for medical or surgical care, or unable to secure it locally.

c. Speech clinics

d. Outpatient clinic of the Psychopathic Hospital will take cases within the state or outside the state for both psychiatric and psychological testing.

3. State School for the Blind, Vinton; and

4. State School for the Deaf, Council Bluffs

Contact—County superintendent of schools, county nurse, if available, and/or state agent for the blind and deaf (Mrs. E. C. Evans, 845 Euclid, Des Moines)

a. The state law of Iowa provides that all blind and deaf persons shall be entitled to an education in the state schools established for such purposes. All blind and deaf children between the ages of 5 and 19 who are of suitable capacity must be in special schools. They are educated in the state's institutions at the expense of the state.

5. Iowa Society for Crippled Children and the Disabled

Contact—Executive Secretary of the society, or any of the following: Local doctor, town school superintendent, county superintendent of schools, social welfare director, or county public health nurse.

a. Provides material assistance and service to physically handicapped persons regardless of age; cooperates with all state and private agencies without duplicating their efforts; encourages legislation and programs designed to improve the lot of the disabled; furnishes information about speech correction, vocational counsel, the spastic, and craft for the home-bound; loans toys for spastic children

6. Iowa Congress of Parents and Teachers

Contact—Executive office, 317 Shops Building, Des Moines

Encourages, through local Parent-Teacher Associations, progress in school health, including the "Summer Round Up." Distributes the "Summer Round Up" forms to the local P.T.A. health chairman.

IV. STIMULANTS AND NARCOTICS

Section 4259 of the State Code of Iowa states that all teachers shall be required to give instruction which shall include "the effects upon the human system of alcoholic stimulants, narcotics and poisonous substances" and that "instruction in this branch shall of its kind be as direct and specific as that given in any other specific branches."

The most common "stimulants, narcotics and poisonous substances" which should be considered are: alcohol, tobacco, coffee, tea, opium and its derivatives, cocaine and its derivatives, hashish or marihuana and veronal with its derivatives.

With these there would need to be a consideration of patent medicines, especially headache powders and "painkillers" in general. Alcohol is of course a narcotic instead of a stimulant.

If we believe that *health education* is *living* healthfully and not just *talking about living* healthfully then the discussion of alcohol and tobacco will not be among the first things taken up in the average elementary school in Iowa because these things are not as a rule problems among the children of this age within their school day.

There has been considerable evidence to support the premise that drunkenness results in a large degree from the fact that some people are dissatisfied with life as they must live it and are therefore trying to compensate for this fact by an attempt to blot out the real conditions through the use of alcohol or other narcotics. If this is true our school program can do much to remove one cause of drunkenness by helping children to get many satisfying experiences while they are at school, to develop wide interests and good skills in many types of experiences, and build up a pride in good accomplishments.

If some of these experiences require a fine skillful body with quick reaction time, rapid and accurate forming of judgments, much strength and endurance, then the possibility of their resorting to the use of any drug which would interfere with these processes is quite unlikely. Research has shown that

alcohol interferes with successful motor reactions as in driving a car, and impairs all forms of motor coordination.

A desire for new and exciting experience may lead the individual into his first contact with narcotics and stimulants. Realizing that new experience is one of the universal desires of all people, especially during youth, the school and the community can do much toward the wholesome satisfying of this drive by offering many opportunities for adventure and discovery. Such programs are now being sponsored in many communities by girls and boys clubs and by school activities programs and church organizations.

Another possible reason why young people start the use of alcohol and other narcotics is because this behavior is to them a form of defiance to over-rigid and seemingly unreasonable restraint from dominating circumstances. The school may help in averting such an outcome by allowing children to participate in making decisions especially in relation to their own conduct. The teacher can act in the capacity of a guide or counselor instead of a dictator. The parents would need to do their share in giving the child a feeling of security and self reliance by taking him into their confidence and giving him freedom to make suggestions which are appreciated by them. He should be allowed to feel and face the consequences of his own acts. He should be helped to take hard knocks, endure hardships, and assume just blame without building up resentments or practicing physical or mental evasion.

The habit of constantly appeasing the appetites by the excessive eating of candy, drinking soft or hard drinks, or strong coffee, overeating or continuous smoking are all examples of self-indulgence which indicates a lack of forthrightness in meeting life as it is.

Helping children to feel satisfied with simple wholesome and well-balanced diets, to keep up the liquid content of the body by the use of water, milk and soups, to choose extra liquids from non-alcoholic fruit juices will do much toward preventing the problem of excessive use of narcotics and stimulants.

The direct teaching that is done in respect to narcotics and stimulants should be guided in an unemotional way toward the information that has been gained as a result of careful research and should allow the reader to form his own con-

clusions as to his choice of conduct without incriminating anyone else who may have chosen otherwise.

References

(Material for pupil use marked with an asterisk *)

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on page 133 where publishers and prices are given.

- | | |
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| Reference 1, pp. 80-81 | Reference 24, pp. 70-73; 151-166 |
| *Reference 3 | *Reference 26 |
| *Reference 9 | *Reference 32 |
| Reference 12, pp. 101-106 | Reference 44 |
| Reference 15, pp. 39-41 | *Reference 17 |
| *GRADED BOOK SERIES list, I to VII, inclusive, p. 138. | |

V. SAFETY AND FIRST AID

A. Safety Education

The *best first aid is safety first!* We do not try to avoid accidents by refraining from doing all dangerous things but by learning gradually the skills that are necessary in order to do dangerous things safely. Also one must learn through trial and discussion which dangers can be faced and which ones must be avoided. The school experiences are rich in opportunities for forming safety habits through actual practice. The child may learn through the guidance of the teacher the habit of caution which guides into safe performance and avoid the attitude of fear which blocks action.

The teacher will help the children to analyze their experiences for the safety elements in them, and give them opportunities to plan and carry out safely the activities they have analyzed.

Some of the situations in which safety elements occur often are:

Coming to and from school on the highway, on foot and by bicycle

Getting on and off of buses and cars

Keeping the playground and schoolroom floors free from obstructions when running games are to be played.

Learning to climb ladders, poles, trees carefully and skillfully

Learning to avoid collisions in running and tagging games by quick and accurate movements and by passing an oncoming player or by going to the right.

Handling knives, hammers, saws, etc., in a skillful and careful manner

Developing a general unemotional attitude in the face of danger by planning ways of meeting it

See suggestions in Health Chart B, I and X, pages 20-28, and Health Chart E, VI A. 1—c, d, f; 2—d; pages 51-52, and Illustrative Units of Activities A and C (page 65; page 70) of this bulletin. See also Health and Safety Associates in the *Iowa Plan of Physical Education*.

Especial attention is directed to the bulletin called *Instructional Units in Safety Education for Elementary Grades and Junior High Schools*, Iowa Department of Public Instruction.

B. First Aid

Every child should learn first aid through practical experiences. The older children should learn how to apply the simpler bandages and splints. They should learn the pressure points for severe bleeding, care for burns and to do artificial respiration. Smaller children can learn to care for small wounds and the other simpler procedures. If possible one instruction book on first aid should be secured from the American Red Cross. See reference 2 in bibliography.

The children enjoy the practical work in first aid and need little motivation for that phase. Whenever accidents occur at school they should provide a good lesson in first aid.

If serious and due to carelessness, a safety lesson should be included.

Most of the first aid in the elementary school should be limited to things the children can actually do and could use if occasion should arise. They can make a first-aid box or cabinet and fill it with materials secured from home or at slight expense. Making, painting, and installing the

cabinet is a good handicraft project. Or the kit may be a small tin box with handle which can be carried along on school picnics or nature hikes. The following articles are desirable for the kit:

Individually wrapped ready-made sterile dressing on adhesive tape, in $\frac{1}{2}$ " or 1" widths	Splints—large and small Adhesive tape, 2" width Safety pins
Triangular bandages—several	Tweezers or forceps
A disinfectant such as tincture of merthiolate	Scissors
Tannic acid ointment for burns	Absorbent cotton
Compresses or sterile pads for wounds	Swab sticks or toothpicks
Sterile roller bandage, 1" and 2" widths	Aromatic spirits of ammonia Paper cups Rubbing alcohol

References

(Materials for pupils use marked by asterisk *)

Materials in this pamphlet:

- **Health Chart B*, I and IX, pp. 20 and 27
- **Health Chart C*, III, E, p. 31
- **Health Chart D*, I, A 13, C 6, pp. 34-36
- **Health Chart E*, VI, VIII, pp. 51-54
- **Illustrative Units of Activities*, A, C, N, pp. 65, 70, 86, respectively
- Physical Education*, p. 123

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST, p. 133, where publishers and prices are given.

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| Reference, 1, p. 86, Chapter XI | *Reference 2 |
| *Reference 15, pp. 23-28, 31-32, 33, 49-50 | *Reference 17 |
| Reference 24, pp. 89-92, 143-151 | *Reference 18 |
| Reference 40-c, d | *Reference 50 |
| *GRADED BOOK SERIES List, I to VII, inclusive, p. 138. | |

VI. PHYSICAL EDUCATION

Health education and physical education are closely allied and as parts of the school curriculum are often combined for purposes of administration and because in many respects they cannot be separated. But they are not the same. When we speak of health education we mean "the sum of experiences in school and elsewhere which favorably influence habits, attitudes and knowledge pertaining to individual, community and racial health."¹

Physical education represents but one type of such experiences. "When we speak of physical education for our children we mean those motor experiences in and out of school which use the big muscles of the body in play forms and which are so constituted that they contribute largely to the education of the whole child."²

Research has pointed to the significant fact that for full functioning of a developing body the school-age child needs and takes if not restrained four to five hours of big muscle activity daily. The school must recognize this as his minimum need by its daily program arrangement (see Health Chart B XI.), and by a comprehensive plan for physical education.³

It is further important to recognize that the natural, spontaneous joyous activities which comprise the physical education program offer the child a concrete understanding of health as a condition necessary for doing those worth-while things he most wants to do. He desires to be well and strong so that he can play with the other children, take his place on the team in tomorrow's match game, swim the expected 50 yards, jump the standard height for his age and size, be in on his Scout troop's overnight camping trip. These are matters of vital importance to every normal child and they make good food and plenty of sleep real and clearly understood parts of his daily life as he himself helps to plan it.

Physical activity of the play type is by its very nature a health practice and is included as such in the Health Charts.

¹N.E.A. and A.M.A., *Joint Committee Report on Health Problems in Education*, N.E.A., Washington, D. C., 1931, p. 7.

²*Iowa Plan of Physical Education for Use in the Elementary Schools*, State Department of Public Instruction, Des Moines, Iowa, 1941, p. 8.

³*Ibid.*

See Health Chart A, I; Health Chart B X, A XI, A 1 and 7; Health Chart C II, A and B; Health Chart E VI. Vigorous play is productive of health in all of its phases—physical, intellectual, emotional and social. It offers opportunity for the practice of those movements of the body which stimulate bodily growth in size, strength, endurance and skill. It calls for repeated and rapid judgments and decisions to move accurately and purposefully, and it thus develops work, play and safety-first efficiency and resourcefulness. It produces great satisfactions and joys which are not only deep-seated physically with accompanying significant re-creating qualities, but also important personal and social relationships. It finally requires balanced growth in self-assertive and cooperative ways of behaving, making of each play time a laboratory period for practice in democratic living. Big muscle play activity is therefore a health practice of prime importance, for under able and conscientious leadership its possibilities of producing social health among young citizens in a democracy are far-reaching.

Big muscle activity, itself a health practice, naturally carries along with it in the same experience a number of other inseparable health and safety practices. Health Chart B IV, V, IX, X, XI; Health Chart C; Health Chart D I A 13, C 6; Health Chart E I, III, IV, VI, VIII, also Illustrative units of Activities C, D, F, H and N indicate many health factors concerned with clothing, cleanliness, temperature and ventilation, rest, nutrition and safety, which will always remain undivorced from any play situation.

Big muscle activity can give its full contribution to the development of each child only when his particular needs are known. The physical education program must therefor rely upon the health education program and its health examination and health inspections.

The "Iowa Plan of Physical Education for Use in the Elementary Schools" presents a set of procedures and activities so arranged that all the health implications above referred to can be realized if the teachers of Iowa intelligently and conscientiously make use of the plan. Its characteristics are as follows:

1. It aims by its procedures and activities to stimulate large amounts (4 to 5 hours)of participation in big muscle activity outside of school; that is, at recess, at noon, after school, at home.

2. It attempts to tie together the out-of-school and the in-school play life of the child and to give direction to both.
3. It organizes in-school play on the basis of the common out-of-school play group which is small and self-managed.
4. It provides opportunity whereby children choose co-operatively the activities they will learn according to their ability to choose, what they like to play, what their play needs are, what they can accomplish, and what suits the individual child.
5. It emphasizes the fact that physical education is a skills program and must encourage carefully planned instruction in progressive skills beginning at the primary level. The skills to be learned are not only motor skills, but intellectual, social, safety and health skills as well.
6. It encourages adequate provision of space and play equipment and the utilization of small play groups so that as much practice and progress in the above mentioned skills may be obtained as is possible in a given time.
7. It organizes the way children will work in their small play groups so that they will grow in their ability to manage their play more and more self-reliantly and democratically. Its procedures for this purpose are:
 - a. Children are helped to cooperatively choose the activities to be learned according to item 4 above.
 - b. Children are helped to cooperatively work out new activities according to their ability, and solve their own play problems, both group and individual.
 - c. Children are helped to practice equal sharing of all the benefits and responsibilities which play affords and to work for the good of each and all.
 - d. Children are helped to set their own standards of good work, of healthful living and of social conduct.

The Iowa Plan of Physical Education is therefore a program of activities and procedures which can insure a full measure of the benefits of play activities in terms of child growth into a healthy, sturdy, skillful, alert and socially efficient human being; which can provide consistent practice in democratic self-management; and which can develop recreational re-

sourcefulness before the child leaves school. Thus his physical, his recreational, his social resources can be built toward wholesome and effective living.

References

(Materials for pupils use marked by asterisk *)

Materials in this pamphlet:

Health Chart A, I, VII

**Health Chart B*, X

**Health Chart C*, II, III

**Health Chart D*, I A 13, C 6

**Health Chart E*, VI, VIII A1-i, k, m

**Illustrative Units of Activities*, C, F, H, N, pp. 70, 73, 77, 86, respectively

Safety and First Aid, p. 120

Postures of School Children, p. 126

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE List on p. 133, where publishers and prices are given.

Reference 1, Chapter VI

*Reference 15, pp. 31-33, 49-50

*Reference 18

*Reference 19

*Reference 20

*Reference 30

Reference 26, pp. 67-70, 135-139, 211

*Reference 37

*GRADED BOOK SERIES list, I to VII, inclusive, p. 138.

VII. POSTURES OF SCHOOL CHILDREN

Our clearer understanding of ourselves as organisms which react as a whole has changed our idea of what "posture" is as well as what place posture education has in the education of the child. Even if we should under some circumstances still regard posture as meaning merely the position the body is in when sitting, standing, and walking we do no longer consider it as a static causal condition, but rather a dynamic expression, an outward sign of the individual's state of well-being. Upon whatever level of efficiency the child is living at the moment, physiologically, intellectually, emotionally or neuromuscularly, that level is expressed in what he is doing. We observe his

reactions, how he comes up the road to school, how he works at his desk, at the blackboard or at his bench in the shop, how he plays on the playground, how he helps perform the school chores, how he carries, lifts, pushes; and we are impressed by how he uses his body or, more likely, the way he looks using it. And in the past we have often made the mistake of singling out the way he looks, calling it poor posture, and of applying treatment to improve it as an isolated entity. We have so often forgotten to consider what kind of a home the child is coming to school from, what food and rest, what peace and security, he has or had not enjoyed before leaving home. We forget to consider what successes and satisfactions, or what failures and frustrations he is experiencing while he works at his desk, at the blackboard or in the shop. And we often give least consideration to the social successes the child enjoys or misses on the playground, and what degree of motor accomplishment he has or has not attained in the activities which are so meaningful to him both in terms of his own self-realization and in respect to his finding his contributory place in his group.

When, however, we pause long enough to make some of the considerations just suggested we realize that posture education merges completely with the whole health education program, for it must of necessity be a "combination of all the available means which bring the individual to a state of fitness for living joyfully and effectively."¹

Therefore when we prescribe for a child with so-called poor posture good wholesome food, plenty of rest, avoidance of infection and illness, much free joyous play activity in the open air, freedom from worries or fear, and some opportunities to succeed, our objective is not posture improvement but improvement in the child's general state of well-being of which good posture is a by-product, an outward expression of that state of well-being.

If we are willing to accept posture as something dynamic we must then realize that as the body engages in activity its posture must change or adjust to needs called for by the activity. This is why we often speak now of postures instead

¹N.E.A. and A.M.A. Joint Committee Report on Health Problems. *Health Education*, National Education Association, Washington, D. C., 1941, p. 142.

of posture. We ask the question—is the body in a good position to start the activity, be it work or play; and does it keep changing its position as it should so that the best work can be done as the activity continues?

The problem is one of good body mechanics. Children must be helped to learn the best way of doing all things. Good form involves first of all how the feet are placed and shifted and how the body weight is held; that is, what position the body is in over the feet at the beginning of and during the work to be done. Efficient ways of sitting, standing and walking of course are among the things to be learned. So also are efficient ways of throwing, batting, running, dodging, lifting, pushing, pulling, climbing, kicking, skating, swimming, etc. We recognize now that we can no longer give attention to the correction of a girl's poor standing posture and forget her poor form in lifting, pushing, or throwing a ball. We must give careful instruction to all children alike in the good form or best way of doing each important work or play skill. Good postures then may be defined as good form in all motor acts. This phase of learning of course belongs to the physical education program previously described as closely related to the general health program of the school.

Good form in sitting takes into account the fact that sitting is meant to give rest to some muscle groups. In order to do so first the feet must rest heavily on the floor with knees at right angles, and the hips and thighs must take the body weight, with little pressure on the thighs, made possible by a seat of the right height; and second, the body must be well back on the seat so that the lower part of the spine and hips may lean against and get support from the lower part of the seat back, made possible by the presence of a seat back which does not bulge to the rear. It is then possible for the trunk, shoulders and head to be well balanced over the hips and to move freely and in good form from the hips for holding books, writing or various types of handwork, provided the desk is no higher than the right-angled forearm with elbow at side of body and the desk is close enough so that its edge just overlaps the edge of the seat, and provided the book is not too heavy, its type is large enough, school room lighting is correct and sufficient, eyesight is normal or corrected by glasses, and the child's body is not fatigued from too long sitting, and insufficient exercise, sleep and good food. The above clearly indicates the inter-relatedness of all health factors to good body mechanics.

Good form in the erect or standing position is one of easy, free and ready balance of all body segments directly over the whole of both feet, a position which gives without strain the greatest height to the body and which allows easy and ready movement into any direction of all three dimensions. The stance of the feet adjusts to the activity to be engaged in. This is a functional description of the standing position and is one which does not yield readily to standardization. In fact much research has helped us to see that any one specific pattern of standing or walking posture is not common, for many individual differences due to heredity have been found to exist. Consequently a functional rather than a standardized concept of posture must still govern our judgment of what good standing posture is. The standing position above described is the body position used when walking and is capable of ready adjustment into any other body posture needed by any of the many activities which are combined with locomotion, as for example, pulling or pushing.

The teacher of the rural or elementary school who conscientiously attends to the school health practices and works with the parents in respect to the home health practices as outlined under the Health Charts of this plan and who carries out with her children the Iowa Plan of Physical Education should find good body carriage and easy confident poise one of the objective evidences that the education going on in her schoolroom is developing sturdy, healthy happy boys and girls.

References

Materials in this pamphlet:

Health Chart A, p. 18

Health Chart B, II, III, X, XI, pp. 20, 21, 28

Health Chart D, p. 34

Health Chart E, I, II, IV, V, VI, VII, VIII, pp. 43-54

Health Examinations and Inspections, p. 34

References are indicated here by their number as found in the alphabetized GENERAL REFERENCE LIST on p. 133, where publishers and prices are given.

Reference 1, pp. 125-126

Reference 26, pp. 139-143

*Reference 15, pp. 38-39

Reference 41, d

*Reference 18

*GRADED BOOK SERIES LIST, I to VII, inclusive, p. 138.

VIII. SEX EDUCATION

It is generally agreed that sex education can and should begin with the very young child before he is of school age. It is equally well decided that the home can be one of the best media for such education to take place. However, there is always an opportunity and a responsibility for everyone who comes in contact with children to carry on sound sex education.

Children learn about and form attitudes toward sex largely in relation to the attitudes of those adults with whom they associate. If the teacher has a wholesome attitude toward boys and girls playing and working together and plans ways in which they can associate freely together in a matter of fact way she is helping to build a wholesome attitude in relation to sex.

In the rural districts children are constantly confronted with animals of different sex, with the birth of young and with the care of mothers for their young. Intelligent and simple discussion of these matters on the level of the child's ability to understand and his desire to know will contribute much toward making children feel that sex and reproduction are natural, wholesome and sacred processes in all life and must be conserved and not degraded.

Group discussion carried on among children of different ages and interests is often not as productive as individual conferences where the child asks the question and the adult answers it. If the child has built up misconceptions and perverted attitudes toward sex by the time the teacher sees him, he may hesitate to ask questions. If the teacher can build a feeling of confidence between herself and the pupils she can often help change such attitudes.

When the younger children are in rooms by themselves many questions may arise naturally, especially when pets are taken care of or families of young animals are born and reared in the schoolroom.

Teachers who work with Parent-Teacher associations might well suggest the formation of study groups on sex education where some of the reading materials appearing in the bibliography of this bulletin may be read and discussed.

The question of masturbation confronts most teachers and therefore brings to them the responsibility of handling the

problem wisely. The consensus of expert opinion seems to point to the following facts concerning this subject:

1. It of itself does not have any harmful effects but rather indicates a condition which may need attention. That is, the behavior may be continuing because the child does not have enough challenging interests especially of the kind that demand the use of the hands, or the security which results from sympathetic adult understanding and affection.
2. The behavior has different causes depending upon the age of the child, and may pass away as he makes satisfactory adjustment to life.
3. Physical restraint, bribes, threats and punishment may do more harm than good, and yet a mild and consistent disapproval may be necessary while an effort is being made to turn the child's interest into more constructive channels. When the practice persists the teacher should suggest that the parents discuss the matter with the family physician.
4. Self-consciousness, shame and fear which may be brought on by injudicious handling of the problem are serious psychological conditions to be avoided. It should be remembered that these are not the result of the practice but may be the cause of it or may be the result of the unwise treatment given the problem by well-meaning adults.

The best sex education for the elementary grades then is probably the straightforward and wholesome attitude of the parent and teacher in answering the child's questions and the providing of many opportunities for interesting active and constructive associations of both sexes in work and play.

References

(See GENERAL REFERENCE LIST, p. 133, for publishers and annotations)

The references listed here may prove helpful in stimulating wholesome physical activity. Also see Health Charts B, X and XI, p. 28; Health Chart C, p. 31; and Health Chart E, p. 43, where suggested standards for physical activity are set up.

References for children's use:

To stimulate wholesome physical activity:

- Reference 18. *Iowa Plan of Physical Education for Use in the Elementary Schools*. See also p. 123 of this volume.
- Reference 19. La Salle, Dorothy, *Rhythms and Dances for Elementary Schools*
- Reference 20. Mason and Mitchell, *Social Games for Recreation*
- Reference 30. Rogers, Martin, *A Handbook of Stunts*
- Reference 37. Wild and White, *Physical Education for Elementary Schools*

To develop attitudes:

- Reference 8. De Schweinitz, Karl, *Growing Up*
- Reference 34. Strain, Frances B., *Being Born* (for junior and senior high school)

References for teachers' use:

- Reference 1. American Association of School Administrators, *Health in Schools*, pp. 83-85
- Reference 24. National Education Association and American Medical Association, *Health Education*, pp. 154-157
- Reference 29. Rice, Thurman B., *How Shall Sex Be Taught in the Schools*
- Reference 38. Wood, Lerrigo and Rice, *Sex Education*

References for Help in Solving Problems and for Sanction of Practices in the Various Fields of Health

Items with asterisk (*) are suitable for pupil use

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3. *Bogen, Emil, and Hisey, L. W. S. *What About Alcohol?* Los Angeles, Calif.: Angelus Press, 1934. 112 pp. \$1.50.
4. *Broadhurst and Lerrigo. *Health Horizons*. New York: Silver Burdett Co., 1931. 516 pp. \$3.00. A source book for teachers and pupils of upper elementary and secondary schools which gives authoritative material, much of which is based on research. Its wide range of topics gives an excellent source of material for solving problems.
5. Byrd, Oliver E. *Health Instruction Year Book, 1943*. Stanford University Press, Stanford University, Calif., 1943. \$3.00. Review of research and studies in health. Can be used as stated under reference 4.
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8. *DeSchweinitz, Karl. *Growing Up*. Second edition. New York: Macmillan Co., 1935. 95 pp. \$1.75. Can be used with children in elementary grades, ages 10 to 12.
9. *Emerson, Haven. *Alcohol—Its Effects on Man*. New York: D. Appleton-Century Co., 1934. 114 pp. \$1.00.
10. Feagre, Marion L. *Understanding Ourselves*. St. Paul, Minnesota, Minnesota State Department of Health. Price 50c.
11. Feagre, Marion L. *Your Own Story*. St. Paul, Minnesota, Minnesota State Department of Health. Price 50c.
12. Grout, Ruth E. *Handbook of Health Education, A Guide for Teachers in Rural Schools*. Odyssey Press, New York. 1936.
13. *Hallock, G. T. *After the Rain*. Cleanliness Institute. 1927. Interestingly describes in stories of bathing and cleanliness customs in many lands. Correlates geography with health for grades 3, 4 and 5.

14. *Hallock, G. T. *A Tale of Soap and Water*. Cleanliness Institute. 1927. Interestingly describes historical progress of cleanliness; correlates history, geography and health for grades 6, 7, 8 and 9. One copy furnished free to each teacher who writes for it.
15. **Healthful Living Through the School Day and in Home and Community*. The State Department of Public Health, Santa Fe, New Mexico. 1940. 103 pp. 25c.
16. Hussey, Marguerite M. *Teaching for Health*. New York: Prentice-Hall, Inc. 1939.
17. **Instructional Units in Safety for Elementary Grades and Junior High Schools*. Department of Public Instruction, State of Iowa.
18. **Iowa Plan of Physical Education for Use in Elementary Schools*. Department of Public Instruction, State of Iowa.
19. *LaSalle, Dorothy. *Rhythm and Dances for Elementary Schools* (Grades 1 to 8). New York: A. S. Barnes and Co. \$3.00.
20. *Mason and Mitchell. *Social Games for Recreation*. New York: A. S. Barnes and Co., 1935. 421 pp. \$2.50.
21. *Menus and Recipes for Lunches at School*. Publication No. 246, U. S. Department of Agriculture, 1936.
22. Morton, D. J. *Oh, Doctor! My Feet!* New York: D. Appleton Century Co., 1939.
23. National Dairy Council. *Health Education Materials*. Current publication list. Chicago: the Council. 32 pp. Free. Source list of posters, booklets, and activities useful in teaching health and nutrition at the different grade levels. Available free or at small cost.
24. National Education Association and American Medical Association. Joint Committee on Health Problems. *Health Education*. National Education Association, Washington, D. C., 1941. 368 pp. \$1.50.
25. National Education Association and American Medical Association. Joint Committee on Health Problems in Education. *Health Inspection of Children*. National Education Association, Washington, D. C. 23 pp. 10c.
26. *National Forum. *The Alcohol Problem Visualized*. Second edition. Chicago: the Forum. 1940. 96 pp. 75c.
27. *Physical Fitness Through Health Education*. Victory Corps Series, Pamphlet No. 3. Federal Security Agency, U. S. Office of Education. 1943. For sale by the Superintendent of Documents, Washington, D. C. 20c.
28. Price, Weston A. *Nutrition and Physical Degeneration*. Paul B. Hoeber, Inc. Medical Book Department of Harper Brothers, New York. 1942.
29. Rice, Thurman B. *How Shall Sex Be Taught in the Schools*. Chicago: American Medical Association, 1938. 12 pp. Free. Mimeographed address given at the Symposium on Health Problems in Education, 1938.

30. *Rodgers, Martin. *A Handbook of Stunts*. New York: Macmillan Co., 1928. 515 pp. \$3.00.
31. Rodgers, J. F. *What Every Teacher Should Know About the Physical Condition of Her Pupils*. Pamphlet No. 68. Superintendent of Documents. Washington, D. C. 5c.
32. *Steinhaus, Arthur H., and Grunderman, Florence M. *Tobacco and Health. Some Facts About Smoking*. New York: Association Press, 347 Madison Avenue. 1942. 48 pp. 35c.
33. *Stimson, A. M. *The Communicable Diseases*. U. S. Public Health Service. Miscellaneous Publication No. 30. Washington, D. C.: Government Printing Office, 1939. 111 pp. 25c. Order from Superintendent of Documents. A source book of dependable information, and can be used in high schools and teacher education.
34. *Strain, Frances B. *Being Born*. New York: D. Appleton-Century Co., 1936. 144 pp. \$1.50. Designed for use in junior and senior high schools.
35. Strang, Ruth M. and Smiley, Dean F. *The Role of the Teacher in Health Education*. New York: The Macmillan Co., 1941. 359 pp.
36. White House Conference on Child Health and Protection. *The School Health Program*. Report of the Committee on the School Child, Thomas D. Wood, M.D., chairman. New York: D. Appleton-Century Co., 1932. 400 pp. \$2.75. These high points in the findings, opinions, and recommendations from twenty-four detailed subcommittee reports present an overview of the many phases of the school health program, revealing scope, interrelatedness, and basic considerations.
37. *Wild, Monica R. and White, Doris E. *Physical Education for Elementary Schools*. Cedar Falls, Iowa: Iowa State Teachers College, 1942. \$1.60.
38. Wood, Thomas D. and Lerrigo, M. O. and Rice, T. B. *Sex Education*. New York: Thomas Nelson and Sons, 1937. 41 pp. 25c. Concrete guide for sex instruction in home and school.
39. Publications of the Iowa State Department of Health, Des Moines, Iowa. Free.
 - a. *School Sanitation Manual*, joint publication by State Department of Public Instruction and State Department of Health:
 - Part I. *Rural Schoolhouse Lighting*
 - Part II. *Heating and Ventilating Requirements for Rural Schools*
 - Part III. *Sanitary Standards for School Water Supplies*
 - b. Public Health Bulletins on communicable diseases:

Communicable Disease Chart—Wall size; also small size.

<i>A Story of Smallpox</i>	<i>Mumps</i>
<i>Infantile Paralysis</i>	<i>Typhoid Fever</i>
<i>Scarlet Fever</i>	<i>Protect All People Against Diphtheria</i>
<i>Chickenpox</i>	<i>Rabies, 1941</i>

- c. Other Public Health Bulletins:
 - 1) *Engineering in Public Health*, 1939
 - 2) *Human Carriers of Disease*, 1941
 - 3) *The Public Milk Supply and Public Health*, 1941
 - 4) *Home Care of the Sick*, 1942
 - 5) *Elementary Lessons in Cancer*, 1942
- d. Publications of the Division of Public Health Nursing:
 - 1) *Child Health in the Rural School*, mimeograph
 - 2) *School Health Inventory*, mimeograph
 - 3) *Home Visit in Relation to the Health of the School Child*
 - 4) Form 52 P.H.N. Observation Record Card
- 40. Publications by John Hancock Life Insurance Company, Boston. Free.
 Those starred are for older children; the rest are for parents.
 - a. *Blood, Alice F. *What to Eat and Why*. 1939
 - b. **Healthy Teeth*
 - c. **Safe at Home*
 - d. **When the Unexpected Happens* (First Aid)
 - e. **Sleep, the Restorer*
 - f. Kingston, Willis S. *Healthy Eyes*
 - g. Tickle, Thomas G. *Ears That Hear*
 - h. Smillie, Wilson G. *That Mean Cold*
 - i. *The Healthy School Child*
 - j. Doll, Edgar A. *Your Child Grows Up*
 - k. *Caring for the Sick in the Home*. 1942
 - l. *Home Care of Communicable Diseases*. 1936
 - m. *Diversions for the Sick*
 - n. Grulee, Clifford. *Your Baby's Care*. 1940
 - o. Smith, Richard. *Between Two Years and Six*
 - p. *Concerning the Better Half of Life* (Health after Forty)
 - q. *Making the Most of Maturity*
 - r. Bauer, W. W. *Waistlines*
- 41. Publications of the Metropolitan Life Insurance Co., New York. Free.
 - a. *Hallock, Grace. *Health Through the Ages*. 1933
 - b. **Health Hero Series*. This series contains brief biographical sketches of the following: Edward Trudeau; Edward Jenner; Louis Pasteur; Walter Reed; Madame Curie; Florence Nightingale and Robert Koch
 - c. *Three Meals a Day*. 1940. Single copy free
 - d. *Posture from the Ground Up*. One copy to each teacher on request
 - e. *The Teacher's Health: What Some Communities Are Doing to Conserve It*. School Health Monograph No. 4. 1934
 - f. *Handwashing Facilities in School*
- 42. Publications of the National Tuberculosis Association. Procurable from the State Association, Des Moines, Iowa.
 - a. *Air and Sunshine*
 - b. *Healthful School Living*

- c. *Physically Below Par Child*
- d. *Weighing School Children and Nutritional Status Measurement*
- e. *Why Sleep*

School Health Supplies

School Health Record Card, Form 101, size 8 x 5. A complete record of each child, 1c each. \$1.00 per 100.

Communicable Disease Information Card, Form 103, size 3 x 5. 50c per 100.

Child Health Inspection Card, Form 100, size 3 x 5. To notify parents of results of inspections. 60c per 100.

Child Health Consultation Card, Form 102, size 3 x 5. Inviting parents to come for consultation. 60c per 100.

Linen Eye Chart (letter or symbol). 35c each.

Cover cards for eye chart. 15c per set.

Tongue depressors. 500 in box. 95c. Junior size, 90c.

Applicators, 6 inches. 72 dozen in box. 20c.

Clinical thermometers. 75c each.

- 43. Publications of the National Society for the Prevention of Blindness.
 - a. Phelan, Anette M. *Daylighting the Schoolroom*. 1937. 4 pp. 5c.
 - b. Tinker, Miles A. *Illumination Intensities for Reading*. 1936. 8 pp. Free.
 - c. Hathaway, Winifred. *The Well-Lighted School-House*. 1936. 8 pp. 5c.

PERIODICALS

- 44. **Allied Youth*
Allied Youth, Inc., 1201 Sixteenth Street, N. W., Washington, D. C.
11 issues a year. \$1.00.
- 45. *American Journal of Public Health and the Nation's Health*
American Public Health Association, 374 Broadway, Albany 7, New York. \$5.00.
- 46. **Consumer's Guide*
Published by Department of Agriculture, Washington, D. C. Free.
- 47. *Health Bulletin for Teachers*
Metropolitan Life Insurance Co., 1 Madison Ave., New York, New York. Free. Authoritative subject matter for teacher use.
- 48. **Hygeia, the Health Magazine*
American Medical Association, 535 N. Dearborn Street, Chicago, Illinois. Published monthly, single copy 25c. Subscription \$2.50. Back issues when available: current and preceding calendar year, 25c each; earlier issues, 50c each. Many libraries maintain permanent files of Hygeia, the Health Magazine.
- 49. *Journal of Health and Physical Education*
American Association for Health, Physical Education and Recreation, 1201 Sixteenth Street, Washington, D. C. \$2.50.
- 50. **Junior Red Cross*, Washington, D. C. 9 issues. \$1.00.
- 51. *Science News Letter*
Science Service, Inc., 1719 N Street, N. W., Washington 6, D. C. \$5.00.

*GRADED BOOK SERIES CONTAINING INFORMATION ABOUT HEALTH TOPICS

- I. Charters, Smiley and Strang. The New Health and Growth Series, Macmillan Co., New York. 1941.

<i>All Through the Day</i>	First Grade
<i>Through the Year</i>	Second Grade
<i>Health Secrets</i>	Third Grade
<i>Healthful Ways</i>	Fourth Grade
<i>Let's Be Healthy</i>	Fifth Grade
<i>Habits Healthful and Safe</i>	Sixth Grade
<i>Growing Up Healthfully</i>	Seventh Grade
<i>A Sound Body</i>	Eighth Grade

- II. Wood, Phelan, Lerrigo, Lamkin, Rice. Adventures in Living, Thomas Nelson and Sons, New York. 1940.

<i>Now We Are Growing</i>	Third and Fourth Grades
<i>Many Ways of Living</i>	Third and Fourth Grades
<i>Keeping Fit</i>	Fifth Grade
<i>Blazing the Trail</i>	Sixth Grade
<i>How We Live</i>	Seventh Grade
<i>New Ways for Old</i>	Eighth Grade

- III. Towse and Gray. Health Stories. Scott, Foresman and Co., Chicago. 1939.

<i>Health Stories—Book One</i>	First Grade
<i>Health Stories—Book Two</i>	Second Grade
<i>Health Stories—Book Three</i>	Third Grade

- IV. Andress, Goldberger, Dolch. Safe and Health Living. Ginn and Co., Chicago. 1939.

Primary Series

1. *Spick and Span*
2. *The Health Parade*

Middle and Upper Grade Series

1. *Growing Big and Strong*
2. *Safety Every Day*
3. *Doing Your Best for Health*
4. *Building Good Health*
5. *The Healthy Home and Community*

- V. Fowlkes, Jackson, Jackson. The Healthy Life Series. The John C. Winston Co., Philadelphia. 1940.

<i>Healthy Bodies</i>	Third Grade
<i>Healthy Growing</i>	Fourth Grade
<i>Keeping Well</i>	Fifth Grade
<i>Healthy Living</i>	Sixth Grade
<i>Success Through Health</i>	Seventh Grade
<i>Making Life Healthful</i>	Eighth Grade

- VI. Brownell and Williams. Health of Our Nation. Grades I to XII, inclusive. American Book Company, New York. 1942.

<i>Well and Happy</i>	First Grade
<i>Clean and Strong</i>	Second Grade
<i>Fit and Ready</i>	Third Grade
<i>Safe and Sound</i>	Fourth Grade
<i>Hale and Hearty</i>	Fifth Grade
<i>Active and Alert</i>	Sixth Grade
<i>Living and Doing</i>	Seventh Grade
<i>Training for Living</i>	Eighth Grade
<i>Being Alive</i>	} High School
<i>Adventures in Growing Up</i>	

- VII. Burkard, Chambers, Maroney. The New Health-Happiness-Success Series. Lyons and Carnahan, Chicago. 1936.

<i>Health Stories and Practice</i>	Third Grade
<i>Health by Doing</i>	Fourth Grade
<i>Building for Health</i>	Fifth Grade
<i>The Body Health</i>	Sixth Grade
<i>Personal and Public Health</i>	Seventh Grade
<i>Personal and Public Health</i>	Eighth Grade

ADDRESSES OF SOME NATIONAL AGENCIES, PUBLISHERS AND COMMERCIAL FIRMS

- Allied Youth, Inc., 1201 Sixteenth Street, N. W., Washington, D. C. A source of educational aids on the subject of alcohol and its use.
- American Association for Health, Physical Education, and Recreation, a department of the National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. Source of bibliographies and reprints on all phases of school health education. Write for lists.
- American Book Company, 88 Lexington Avenue, New York, New York.
- American Home Economics Association, 617 Mills Building, Washington, D. C., conducts various activities connected with health education, especially in nutrition, school lunch work, and home management. Publishes bibliographical material on these subjects, also articles in its *Journal of Home Economics*. Many of these are available as reprints, list on request.
- American Medical Association, 535 North Dearborn Street, Chicago, Illinois. Send for list of Health Education Publications.
- American Public Health Association, 1790 Broadway, New York, New York. Send for list of publications.
- American Red Cross, 1709 Washington Avenue, St. Louis, Missouri. Source of material relating to first aid, home hygiene, care of the sick, food and nutrition, swimming and life saving.
- Boy Scouts of America, 2 Park Avenue, New York, New York. Has publications dealing with health and safety. Write for information.
- Camp Fire Girls, 88 Lexington Avenue, New York, New York.
- Cleanliness Institute, American Association of American Soap and Glycerine Products, Inc., 381 Fourth Avenue, New York, New York. Has several free readers and teacher guides designed for use in Grades III-IX. Write for information stating grade you are teaching.
- Extension Service. Iowa State College, Ames, Iowa.
- Ginn and Co., Chicago, Illinois.
- Girl Scouts, Inc., 155 E. 44th Street, New York, New York. Publications concerned with health, safety and first aid. Write for information.
- Iowa Congress of Parents and Teachers, 317 Shops Building, Des Moines, Iowa.
- Iowa State Department of Health, Des Moines, Iowa.
- Iowa Tuberculosis Association, 610 Flynn Building, Des Moines, Iowa. Source of many health leaflets.
- John Hancock Mutual Life Insurance Co., Life Conservation Service, Boston, Massachusetts. Has free material covering many aspects of health protection and promotion.

Lyons and Carnahan, Chicago, Illinois.

Macmillan Co., 66 Fifth Avenue, New York, New York.

Metropolitan Life Insurance Company, 1 Madison Avenue, New York, New York. Maintains a School Health Bureau and has material relating to many phases of health education. Send for publication list.

National Congress of Parents and Teachers, 600 South Michigan Boulevard, Chicago, Illinois. Publishes materials for use in parent-teacher groups studying child health and development.

National Dairy Council, 307 N. Michigan Avenue, Chicago, Illinois. Publishes a wide variety of teaching aids, chiefly relating to use of milk in the diet.

National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. Send for special folder listing Health Education Publications.

National Society for the Prevention of Blindness, Inc., 1790 Broadway, New York, New York. Source of assistance to teachers in the promotion of eye health in the school program.

Scott, Foresman and Company, Chicago, Illinois.

Thomas Nelson and Sons, 385 Madison Avenue, New York, New York.

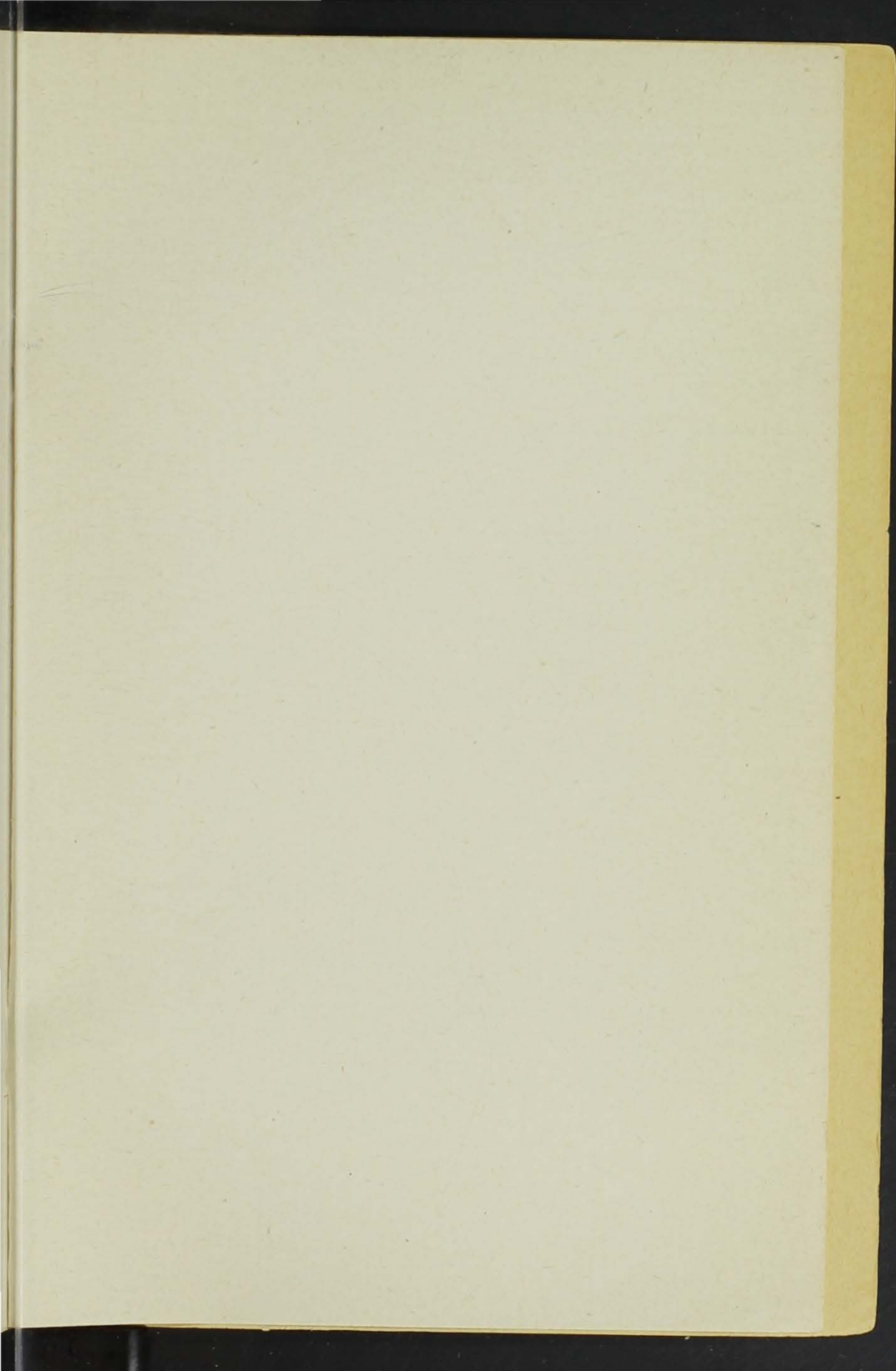
U. S. Bureau of Home Economics, Department of Agriculture, Washington, D. C. Bulletins and charts in the field of nutrition and family life.

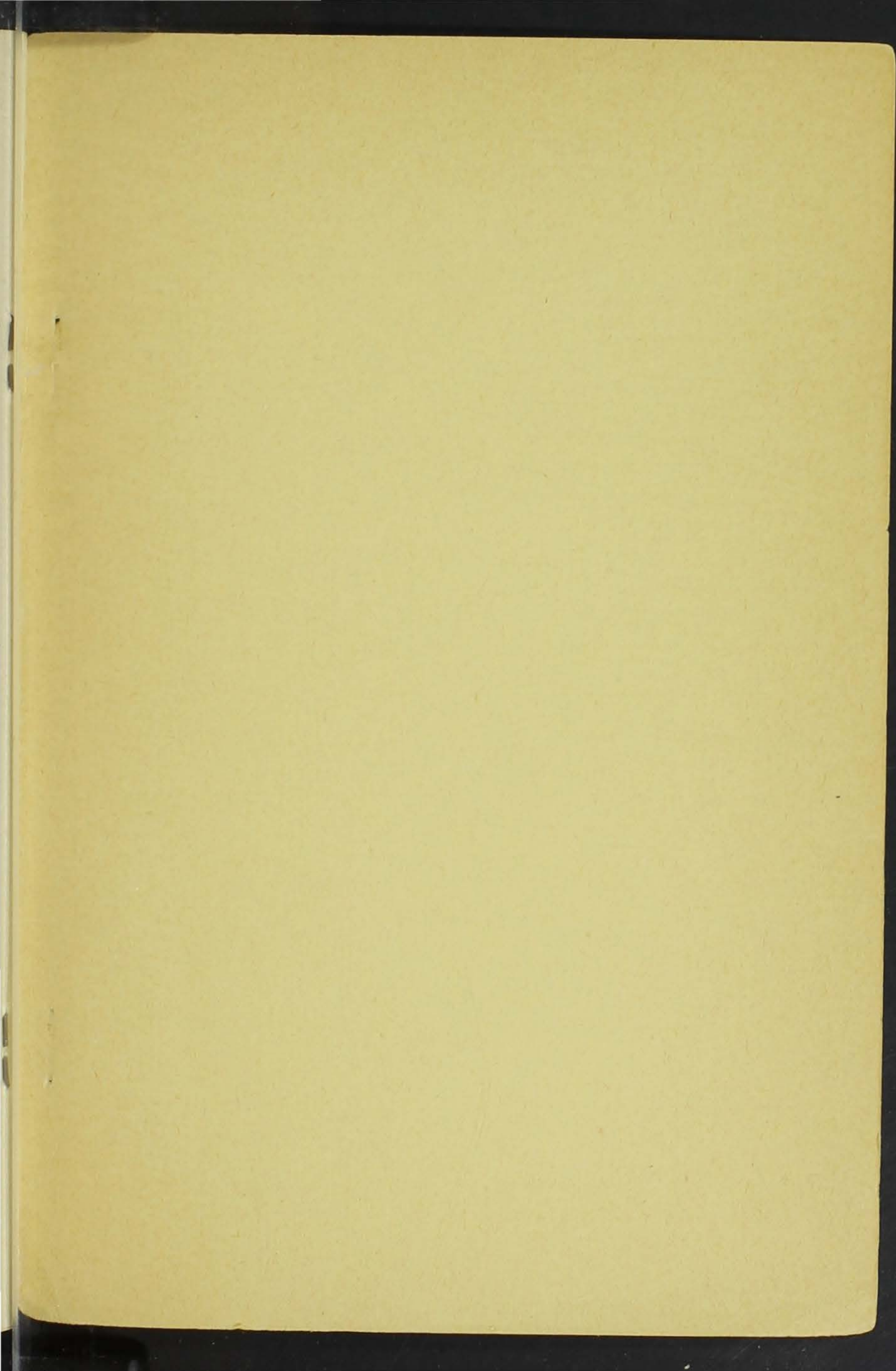
U. S. Children's Bureau, Department of Labor, Washington, D. C. Source of facts about children and educational bulletins on child care and training.

U. S. Office of Education, Federal Security Agency, Washington, D. C. Source of information and stimulation on all phases of school health education. Prepares and publishes pamphlets, bibliographies and lists.

U. S. Public Health Service. Federal Security Agency, Washington, D. C. Publishes information on various aspects of public health problems, conducts studies and issues reports on these and research studies.

Winston, John C. and Company, 1006-16 Arch Street, Philadelphia, Pennsylvania.





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