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FLORIDA'S SCHOOL HEALTH PROGRAM

FLORIDA PROGRAM FOR IMPROVEMENT OF SCHOOLS

BULLETIN NO. 4

Revised Edition 1943

Published jointly by

FLORIDA STATE DEPARTMENT OF EDUCATION

TALLAHASSEE, FLORIDA

and

FLORIDA STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

Acknowledged

FLORIDA'S SCHOOL HEALTH PROGRAM

Prepared in Collaboration with

THE CHILD HEALTH COMMITTEE

of the

FLORIDA MEDICAL ASSOCIATION

and Other Interested Agencies

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THE PURPOSES OF THIS BULLETIN

1. To set forth the responsibility of the school for the improvement of the health of the pupils and ultimately of health conditions in the state.

2. To outline the scope of the school health program in order that every school may advance in a balanced way toward the solution of Florida's health problems.

3. To give guidance to teachers in their methods of planning for daily school living, for the improvement of health status of pupils, and for more effective health instruction programs.

4. To relate more adequately the school health program to the health programs and health activities of the local health unit and other organizations.

FOREWORD

It is almost platitudinous to say that health is of fundamental importance to all society and to each individual in it, and that all private and public agencies should work cooperatively toward achieving that goal. Yet all too frequently the first is not realized and the second is not done.

Our State should be particularly prideful that such cooperation in developing a plan for the school health program has been attained. Some features perhaps are not in agreement with what any one individual might like and all phases will undoubtedly be improved as work under the plan progresses. The significant factor is that we now have a plan upon which we have agreed and that, knowing the extent of our responsibilities, as well as the places where we encroach upon the responsibilities and work of others, we are all in a position to make our utmost contribution to the program in the place where that contribution will be most effective.

COLIN ENGLISH
State Superintendent of Public Instruction

If we are to have a population composed of individuals who understand the basic facts about health and disease so clearly that they will continue throughout life to protect their own health and the health of the community, we must begin health instruction in the primary grades and continue it throughout the entire school course.

The publication of the first edition of "Plans for Florida's School Health Program" was a noteworthy achievement. The application of the program in our schools, our local health departments and local communities has proceeded steadily since the publication of the bulletin. This second edition outlines certain revisions and improvements which have developed from the practical application of the school program plan.

I recommend this bulletin to all health officers and their staff as a practical guide in planning their school health service program in cooperation with the school authorities.

HENRY HANSON, M. D.
Florida State Health Officer

PREFACE TO FIRST EDITION

In order that all who are interested in an improved health program for Florida schools might have an opportunity to assist in planning that program, State Superintendent of Public Instruction Colin English called a special two weeks' conference beginning on August 14, 1939, for the purpose of developing the program. A general invitation was issued to all, and a special invitation was sent to the chairmen of all organized groups having a special interest in the program. The announcement was made far enough in advance to allow study of special materials which were prepared in advance for the purpose of giving direction to the conference.

The response to the invitations indicated extreme interest on the part of all, and a thoroughly representative group assembled for the first two days of the conference. During this time all aspects of the problem were discussed, and many suggestions were made for inclusion in the written plans. Using these suggestions as a background, a sub-committee continued the work thus begun and put into definite written form the principles established in the discussions. The actual time consumed in this writing was nine days, and at the end of this period the large group reassembled to discuss what had been written and to make suggestions for changes. The product of all these interchanges of ideas is this bulletin, which is the first step in a concerted attempt to improve the health program in the schools.

It should be thoroughly understood that it is only the first step. The plan must be translated into action while it is being, at the same time, continually improved. Supplementary bulletins amplifying various aspects of the program, particularly that dealing with health instruction, must be developed. With a continuous united effort on a program which all understand, however, great advancement will be made.

Acknowledgements are due to all who have had a part in developing the plan or who may assist in its interpretation. To those who participated in the conference and gave freely of their time, energy, and ideas, special appreciation is due. Those who were present for all or the greater part of the conference were: Miss Fannie Shaw of the Georgia State Department of Health and member of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association; Dr. G. F. Amyot, Administrative Associate of the American Public Health Association; Miss Ruth E. Hen-

derson, Educational Assistant to the National Director of American Junior Red Cross; Miss Alice Miller, Lecturer, University of Texas; Dr. Garland Weidner, Assistant City Health Officer of Atlanta, Georgia; Mrs. Elizabeth Bohnenberger, Director of Health Education, Florida State Board of Health; Miss Katherine Montgomery, Director of Health and Physical Education, and Miss Grace Fox, Instructor in Health and Physical Education, Florida State College for Women; Dr. E. Benton Salt, Director of Health and Physical Education, University of Florida; Mr. B. K. Stevens, Instructor of Physical Education, P. K. Yonge School; Mr. J. L. Graham, Director of School Plant Planning Service, State Department of Education; Mr. G. F. Catlett, Director of Engineering, Florida State Board of Health; Mr. Joe Hall, Conference Director, Consultant in Health and Physical Education, State Department of Education.

Those who participated during the first two and last days of the conference were: Dr. A. B. McCreary, State Health Officer, Jacksonville; Mr. Colin English, State Superintendent of Public Instruction; Dr. Luther W. Holloway, Representative of the Florida Medical Association; Mrs. May Pynchon, Executive Secretary of the Florida Tuberculosis and Health Association; Mrs. Inez Nelson, R.N., President of the Florida State Nurses Association; Mrs. Malcolm McClellan, President of the Florida Congress of Parents and Teachers; Mr. John P. Ingle, Sr., Chairman of the State-Wide Public Health Committee; Miss Sara Ferguson, Chairman of the Classroom Teachers Association; Mr. Lafayette Golden, Secretary of the Florida High School Athletic Association; Dr. J. C. Dickenson, Dr. John Norton Moore, and Dr. J. Maxey Dell, Jr., Representatives of the Florida Radiological Society; Mr. J. S. Rickards, Executive Secretary of the Florida Education Association; Mr. Nash Higgins, Director of Health and Physical Education, University of Tampa; Dr. Jay Pearson, Secretary, University of Miami; Mrs. J. Ralston Wells, President of the Florida Federation of Women's Clubs; Mr. M. W. Carothers, Director of Instruction, State Department of Education; Dr. Lloyd N. Harlow, Director of the Bureau of Dental Health and Representative of the Florida Dental Society; Dr. Dan N. Cone, Director of Epidemiology, State Board of Health; Dr. F. V. Chappell, Director of Maternal and Child Health, State Board of Health; Miss Ruth E. Mettinger, R.N., Director of Public Health Nursing, State Board of Health; Miss Jean Henderson, Director of Public Relations, State Board of Health; Mrs. Gordon Ira, State Health Chairman of the Florida Federation of Women's Clubs; Mrs. R. C. Williamson, Chairman of the Alachua County Health Council; Mr. M. K. Adams, Instructor in Health and Physical Education, University of Tampa; Miss Ruth Mof-

fatt, Instructor in Health and Physical Education, University of Tampa; Dr. D. H. Turner, Field Director, Dental Department, State Board of Health; Miss Lalla Mary Goggans, R.N., State Consultant for County Health Departments, State Board of Health; Dr. A. J. Logie, Director of Division of Tuberculosis Control, State Board of Health; Mr. Fred Gehan, Chairman, Elementary Principals' Association; Mrs. Howard Dial, Seventh Vice-President and Health Director of the Florida Congress of Parents and Teachers; Miss Anna Mae Sikes, Extension Nutritionist, Florida State College for Women; Mrs. Dora Skipper, Member of the State Courses of Study Committee, Florida State College for Women; Dr. Ruth Connor, Acting Supervisor of Home Economics Education, State Department of Education; Miss Ella Faye Price, Secretary.

Special acknowledgement is given to the Florida Tuberculosis and Health Association, whose financial contributions made the conference possible, and to Mr. James Edward Rogers, Secretary of the National Society of Directors of Health and Physical Education, who was of great assistance in developing the original idea and outline.

JOE HALL

Conference Director, Consultant in Health and Physical Education, State Department of Health

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PREFACE TO SECOND EDITION

By May, 1942, the 5,000 copies of the original bulletin had been distributed, and demand for additional copies made a new printing necessary. Changed conditions in national life brought on by the war and changed ideas of the ways in which the health program can best function made it desirable to alter certain portions of the bulletin before making the reprint. Consequently, during the spring and summer of 1942 a group of health education leaders gave special attention to writing the revised edition.

None of the changes in the revised edition are revolutionary in nature. Instead they are the natural improvement in practice which evaluated experience brings. Minor revisions are made all the way through the bulletin, but chief major alterations are in the recommended plan for health instruction given in Chapter V.

In the preparation of the revised bulletin, individuals spent a great deal of time in preparing their respective parts. One entire week, August 3-8, 1942, was spent at the Florida State College for Women, Tallahassee, in exchanging ideas. Those participating in the conference and in the actual writing of the bulletin were: Katherine Montgomery, Director of Physical Education, Fannie B. Shaw, Associate Professor of Health Education, and Grace Fox, Instructor in Health and Physical Education, Florida State College for Women, Tallahassee; Mrs. Elizabeth Fretwell, Director of Health Education, Mrs. Elsie Withey, Consultant in Health Education, and Dr. E. F. Hoffman, Acting Director of the Bureau of Epidemiology, State Board of Health, Jacksonville; John Permenter, Consultant in Narcotics and Health Education, and Joe Hall, Consultant in Physical and Health Education, State Department of Education, Tallahassee. Subsequent to this conference much individual work was done, particularly by Miss Shaw and Mrs. Withey.

After the original materials had been completed, they were mimeographed in tentative form and sent to all those who participated in the preparation of the first edition of the bulletin, to all members of the Florida Defense Council Physical Fitness Advisory Committee, to all county health officials, and to other selected individuals. They were requested to submit their suggestions for correction. Alterations were made in line with the suggestions received, and the bulletin was printed.

JOE HALL

Consultant in Physical and Health Education
State Department of Education
Tallahassee, Florida

ELIZABETH FRETWELL

Director of Health Education
State Board of Health
Jacksonville, Florida

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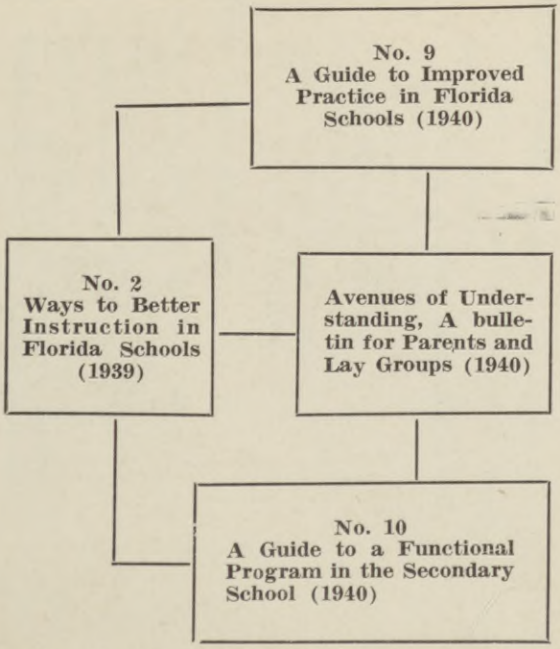
CONTINUING PRODUCTION OF CURRICULUM BULLETINS
FLORIDA PROGRAM FOR IMPROVEMENT OF SCHOOLS

Series Beginning 1938



*Now out of Print.

Source Materials Elementary

No. 4	Florida's School Health Program (1943, Revised)
No. 21	Source Materials for Physical Education in Elementary Schools (1941)
No. 22K	Teaching Actions and Effects of Alcohol and other Narcotics (1941)
No. 26	Arithmetic in the Elementary School (1942)
No. 27	State-Adopted Library Books for Florida Schools (1942)

Source Materials Secondary

No. 1	Guide to Exploratory Work (1938)*
No. 4	Florida's School Health Program (1943, Revised)
No. 5	Source Materials for Physical Education in Secondary Schools (1942, Revised)
No. 11	Business Education (1940)
No. 12	Industrial Arts (1940)
No. 22K	Teaching Actions and Effects of Alcohol and Other Narcotics (1941)
No. 25	Home Economics Books and Other Source Materials (1941)
No. 27	State-Adopted Library Books for Florida Schools (1942)
No. 28	Social Studies in the Secondary School (1942)
No. 29	Everyday Living, Grades 7 and 8 (1942)
No. 40	Mathematics Essentials (12th Grade Pupil Text) (1942)
No. 41	Background Material in War Mathematics (for Teachers) (1942)
No. 42	Teacher's Manual for War Emergency Physics Course

Technology Series:

Book 1	General Mechanics (1940)
Book 2	Engines (1942)
Book 3	Aeronautics (1942)

THE PRODUCTION OF CURRICULUM BULLETINS IN THE FLORIDA PROGRAM FOR IMPROVEMENT OF SCHOOLS

AN EXPLANATION OF THE DIAGRAM

The diagram on the preceding page has been designed to aid teachers in seeing the continuity and relationship existing among the various instructional bulletins which have been produced in the Florida Program for Improvement of Schools during the past several years. It is important to note the fact that the program has been one of continuous development and that considerable effort has been exercised in order to maintain consistency. The importance of *Ways to Better Instruction in Florida Schools,* which contains the basic principles for the development of the series of bulletins, should not be overlooked. The two basic bulletins for elementary and secondary schools are essential to any intelligent application or use of the many source materials bulletins which are to follow. The importance of *Avenues of Understanding,* a bulletin for parents and lay groups, will be evident to all those interested in improving education in the state. It will be noted that in some cases the bulletins containing source materials are equally applicable to the elementary and secondary school. In such cases, the titles have been duplicated in the diagram. The reader should give attention to the footnotes which are included with the diagram, since they give important information concerning whether or not the materials are now available. Additional materials are being planned in both the elementary and secondary field, but definite announcement concerning them cannot be made at this time.

THE RELATIONSHIP OF THIS BULLETIN TO OTHERS IN THE SERIES

This bulletin contains material other than that which would be strictly called curriculum material. Chapter V, however, has definite bearing on the program of studies. The other chapters are administrative in nature, but all deal with the experiences the child should receive in the school. Through a careful study of the contents, the administrator can fit the health program properly into the total school program.

PHILOSOPHY AND PRINCIPLES

CHAPTER ONE

PHILOSOPHY AND PRINCIPLES

INTRODUCTORY STATEMENT

In recent years "Health Education" has assumed a much broader significance than its original interpretation implied. It embraces all the activities directed toward the attainment and maintenance of an optimum state of health from the pre-natal stage through adulthood. It is known that one's state of health varies in accordance with inheritance; immunity or susceptibility to disease; home, school, and community environment; and daily regimen of living. The school is faced with the responsibility of taking the child as he is at the age of six and inculcating in him desirable health practices, giving such knowledge as will rationalize everyday healthful living and creating favorable attitudes which will eventually lead the individual to assume responsibility for the well-being of himself and others—to make one self-directing in health activities which will enrich, rather than deteriorate life. With the expansion of the concept of the health program there appear today several very definite basic understandings:

1. Health education is a way of living, as well as a subject to be taught, and is, therefore, concerned with the interaction of the individual and his environment from the beginning to the end of his life.

2. Health education is essentially a program of activity in which progress is expressed in terms of desirable reactions and practices in health situations.

3. Health education is concerned with the development of the whole child, physically, mentally, socially, and emotionally.

4. Health education is a sharing program in which the school, home and community have definite responsibilities for establishing and maintaining coordination.

5. Health education must be compatible with and contribute to the aims of general education.

6. Health education must recognize and provide for individual differences.

7. School health education, through a program based on child felt needs and interests and achieved through purposeful activities, aims to develop concepts and practices in better living.

8. Health experiences must give satisfaction to the individual to be of practical and lasting value.

9. Since health is an integrative process, every teacher is responsible for presenting favorable health concepts in respect to:
   (a) Her personal appearance, manner, voice, and personality.
   (b) The emotional tone of her classroom and her handling of each daily health situation that arises.

10. School health education aims to guide the child to meet reality squarely and wisely to the end that he faces the important factors in his adjustment situations, such as:
   (a) Facing adverse situations.
   (b) Seeing all sides of his problems.
   (c) Questioning "why" in the quest for truth.

11. Health education aims to guide the child in becoming increasingly self-directing as he adjusts to new and unpredictable health situations and develops values which enable him to place "first things first."

12. The school health education program should be flexible and should cooperate with and aid in guiding community health activities.

13. Health education must permeate the entire school structure to provide for the healthful school living of all individuals concerned through:
   (a) A wholesome physical environment.
   (b) The organization of a healthful school day.
   (c) The establishment of teacher-pupil relationships which insure a favorable social and emotional tone in classroom situations.

14. The health service program should serve as the basis for the educational guidance of the child and should function in:
   (a) Determining the health status of the child.
   (b) Enlisting the cooperation of the child in health protection and maintenance.
   (c) Notifying parents concerning the health status of the child.
   (d) Controlling the spread of disease.
   (e) Securing the correction of remediable defects.
   (f) Promoting community responsibilities in respect to health services.

15. The health education program should provide experiences which aid the individual to evaluate community health services to the end that he will select effectively his own medical service.

16. The health instruction program aims to provide sound knowledge, develop desirable attitudes, and establish effective practices through providing the child with learning experiences based upon the child's needs, as determined by:
    (a) A study of the physical, mental, social, and emotional needs common to all children as related to the individual child.
    (b) A study of the child's health status.
    (c) State and community health problems.
    (d) Community environmental problems as indicated by vital statistics.
    (e) Social and economic factors.
    (f) The interests of the child.
    (g) The vocational possibilities of the child.

17. The sum effect of the coordinated health education program, all factors working together, results in an individual able to correlate his experiences to the end that his personality is effectively integrated.

FLORIDA'S HEALTH PROBLEMS

Latest statistics (1941) indicate that at least one-third of the deaths occurring among Florida people resulted from diseases or conditions either wholly or partially preventable. Many thousands more were ill from various preventable causes, creating an economic burden on the citizens of every county because of inability to earn a living for themselves or their families. Any and all measures taken to improve this situation will react favorably upon economic as well as health conditions in Florida.

Any program of health instruction in the school should be planned on a basis of the definite needs as indicated by the vital statistics records concerning specific locations. Listed below are some of Florida's major health problems.

Hookworm. Approximately 35% of the rural white population of Florida is infested with hookworm and in some counties this infestation is as high as 70%. The disease is particularly prevalent among pre-school and school children.

Malaria. Malaria is an economic disease in many areas of Florida. It is present to a degree of economic import in practically all counties west of the Suwannee River and all counties bordering the Gulf of Mexico as far south as Hillsborough. Depending upon the period of the cycle of the disease, and malaria is cyclic in its appearance, mortality rates in Florida from malaria have varied during the last ten years from 28.1 per 100,000 to 0.5 and actual deaths from 445 in 1934 to 85 in 1941. It is dangerous to estimate the numbers of persons considered to be sick with the disease by computing these from the numbers of deaths annually, but it can be stated that the rate for sickness is many, many times that for death.

Malaria is characterized as a debilitating disease and this is a truth. Death may be its end result, but incapacity to conduct normal life and perform normal duties is the price it exacts from those suffering with it.

Syphilis and Gonorrhea. The rate of prevalence of the venereal diseases in Florida is among the highest in the United States. Three-fourths of these infections occur in persons under 30 years of age, and one-fourth in persons under 20 years of age. It was found that 15.9% of the men examined for selective service through August, 1941, in Florida were found positive for syphilis; 40.6% of the Negroes examined were positive, while the percentage was 5.3% for the white men. Education of young people as to the dangers of these diseases is particularly important for this reason.

Gonorrhea and other venereal diseases are also important causes of disability and economic loss. Gonorrhea is known to occur many times more frequently than syphilis. The use of modern drugs makes the cure of gonorrhea relatively easy as compared to older methods of treatment.

Tuberculosis. In 1941, 927 persons died of tuberculosis in Florida. In this same year it is estimated that there were at least 7,000 cases of this disease, many of which were unknown or unrecognized. If every case of pulmonary tuberculosis could be detected in the minimal stage, there probably would be less than 100 deaths a year.

Pneumonia. In 1941, 900 Florida people died of pneumonia. The disease is particularly prevalent among children in the age group 5 to 14 years and in Florida it is the fifth leading cause of death in this school age group. By diagnosing pneumonia early and starting treatment with sulfanilamides, the death rate from pneumonia would be dramatically decreased.

Infant Mortality. In Florida 1,812 infants, one year of age and under died during the year 1941. Most of these deaths were due to causes which are preventable.

Maternal Mortality. For a number of years the death rate of mothers dying from childbirth was higher in Florida than in any other state in the union. In 1940 the Florida maternal death rate was second from highest among the forty-eight states. At least 40% of these lives could have been saved by the application of known public health principles.

Diarrhea and Enteritis. In 1941, diarrhea and enteritis were responsible for 273 deaths, of which 145 were children under two years of age. Diarrhea and enteritis are definitely preventable diseases.

Pellagra. This is a disease associated with inadequate and unbalanced diet and more commonly found among the indigent and low-income groups. In Florida pellagra accounted for 59 deaths in 1941.

Typhoid. Twenty-four persons died in Florida from typhoid in 1941. Typhoid is a definitely preventable disease.

Typhus Fever. There were 14 deaths and 196 cases of typhus reported in Florida for the year 1941.

Accidents (all kinds). Florida citizens numbering 1,733 died from accidental causes in 1941.

Dental Diseases. Of the men in Florida between the ages of 21-36 examined by Selective Service, 27% were rejected because of dental defects. This number was far greater than for any other cause of rejection. A survey of the Florida school children showed 76%, or over 304,000 to have dental caries, which if not given early attention will eventually result in infection and the loss of the teeth. The loss of these teeth can be prevented.

Each of these diseases and conditions is largely preventable through the application of known public health and medical principles. There are many other health problems requiring consideration and study, such as care in the pre-natal and maternal periods, the infant and pre-school child, preventive dentistry, nutrition, milk and food supervision, sewage disposal and housing. The study of such problems in Florida schools will be of utmost importance in their eventual solution.

POINT OF VIEW IN HEALTH EDUCATION

Health education, to be effective in providing for the growth and development of the individual child, must be compatible with and must contribute to the program of general education. Bonser states: "It is my philosophy that the purpose of life, health, and education are one. The end and aim of all are growth and enrichment of human experience."

The method in health, as in education, is learning through experience. Interest plays a large part. The needs of children form the basis for the curriculum. The school may be thought of as a community in which children must have facilities to live adequately during the school hours—individual lives, yet lives which are harmoniously adjusted to the group with which they associate. The curriculum is conceived, not in terms of subject-matter only, but as experiences making up the life process—a succession of experiences built around real situations and motivated by the purposes of those being taught.

This point of view necessitates cooperative and careful plan-

SCOPE OF THE SCHOOL HEALTH EDUCATION PROGRAM

The chart here given is designated to picture all the aspects of the school program. The meanings of the terms used and the way in which various parts of the program are carried out are indicated in other parts of the bulletin.

HEALTHFUL SCHOOL LIVING

A. Physical Environment of the School

1. Site adequate and free from health hazards
2. Building hygienically constructed and equipped with regard to health functions such as:
   a. Heating and ventilation
   b. Water supply
   c. Sewage disposal
   d. Toilet rooms
   e. Lighting
   f. Seating
   g. Lunchrooms
   h. Facilities for play
   i. Teachers' rest rooms
   j. Special health rooms
3. Maintenance of sanitary school grounds and building: Operations for sweeping, dusting, scrubbing, cleaning

B. Organization of a Healthful School Day

1. Safe and comfortable transportation
2. Length of school day and class periods
3. Mental and physical activities alternated
4. Supervised study at school — minimum home study

C. Pupil-Teacher Relationships

1. Social and emotional tone of the classroom
2. Avoidance of strain, noise, and excitement
3. Provision for success and the avoidance of failure
4. Provisions for individual differences
5. Wholesome personality of teachers contributes to healthful living.

HEALTH SERVICE

A. Prevention and Control of Communicable Disease

1. Daily observations by parent
2. Daily observations by bus driver
3. Daily observations by teacher
4. Teacher services in:
   a. Isolation and transportation of sick children
   b. Knowledge of communicable disease in the area
   c. Avoidance of infection through proper use of facilities and sound school regulations
5. Immunizations

B. Health Examinations

1. For teachers and employees
2. For school children
   Preliminary procedures:
   a. Arranging for examinations
   b. Preparing the child
   c. Inviting parents
   d. Preparing records
   e. Recording preliminary information
   f. Preliminary testing
   g. Providing an examination room

   The health examination
   a. General procedures
   b. Dental examinations
   c. Other examinations: re-examinations, major athletes, pre-school and transfer students' examinations

C. Correction of Defects

1. Parents' presence at examination
2. Home visits by the nurse
3. Health instruction based on examination findings
4. Teacher conferences
5. Use of community resources

D. Guidance of Handicapped Children

E. First Aid for School Accidents

HEALTH INSTRUCTION

A. Determining What To Teach, based on:

1. Health examination findings
2. Children's health practices
3. Home health practices
4. Characteristics of children at specific age levels
5. Local school health conditions
6. Previous health learnings
7. Student interests
8. Leads from other subjects
9. Health and safety hazards in the local community
10. State health problems
11. Current health events
12. Basic physiological needs

B. Suggestions Concerning Gradation

1. Grades 1-3: emphasis on practices and attitudes based on daily experiences of children
2. Grades 4-6: emphasis on the reasons for health practices
3. Grades 7-8: emphasis on the problems of everyday living, personal adjustments to school and home
4. Grades 9-10: emphasis on biological aspects of healthful living
5. Grades 11-12: emphasis on community, state, and national health problems, personal health problems of social, vocational, and civic life

C. Choice and Use of Methods and Materials

1. Criteria for selecting and conducting pupil activities
2. Types of pupil activities

D. Areas of Health Subject Matter for Teachers: Defining health, Living healthfully at school, Having a health examination, Correcting defects, Developing physical fitness, Eating effectively, Eliminating wastes, Controlling communicable disease, Understanding the human body, Protecting the sense organs, Developing effective personality, Improving personal appearance, Playing happily, Using leisure time constructively, Budgeting time and energy, Avoiding fatigue, Understanding alcohol and other narcotics, Living safely, Choosing professional health services wisely, Becoming employable, Working cooperatively with others, Educating for parenthood, Improving home living, Improving community health conditions, Using community health resources, Understanding Florida's health problems.

E. Teaching Materials:
State-Adopted Textbooks.

SOME HEALTH EDUCATION TERMS DEFINED*

Health is that quality of life that enables one to live most and serve best. The concept of health needs enrichment. Too often health is considered to be merely the absence of disease.

Health Education is the sum of experiences which favorably influence habits, attitudes, and knowledge relating to individual, community, and racial health. Health Education is not to be thought of merely as a subject to be taught. It includes the many activities which make up the total health program, not only in the school, but in the home and the community.

Healthful School Living is a term that designates the provision of a wholesome environment, the organization of a healthful school day, and the establishment of sound teacher-pupil relationships, all of which insure a safe and hygienic school situation favorable to the best development and living of pupils and teachers. Children learn through living healthfully at school each day. The physical environment, a schedule without tensions, and a classroom with favorable social and emotional tone are all important factors in the health education program.

Health Service comprises all those procedures designed to determine the health status of the child, to enlist his cooperation in health protection and maintenance, to inform parents of defects that may be present, to prevent diseases, and to correct remediable defects. Every phase of the health service program should be rendered in such an educationally sound manner that parents and children will become self-directing in the improvement and maintenance of their own health.

Health Examination is that phase of health service which seeks, through examination and personal conference by physicians, dentists, and other qualified specialists, to determine the physical, mental, and emotional health of an individual.

Health Instruction is that organization of learning experiences directed toward the development of favorable health knowledge, attitudes and practices. Health Instruction is the function of the classroom teacher in the elementary school and the teacher of health in the secondary school.

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* Adapted from the Terminology Committee Report, Health Education Section, American Physical Education Association, **Journal of Health and Physical Education**, December, 1934.

ning by school, home, and community. Only as the **health needs** of children become evident to parents, school administrators, and teachers and are related to all facilities in the community will the school health program function as a primary objective of education.

The teacher is the strategic person in the guidance of the children in healthful living throughout school life and in the maintenance of healthful conditions in the school environment. It is essential that teachers exemplify healthful practices in daily living. A broad knowledge of scientific facts underlying personal and community health is imperative. In developing a functional school program it is necessary for the teacher to be thoroughly familiar with: (1) the health problems existing in the school, in the home, and in the community; and (2) the health assets and facilities existing in the home, school, and community which may be used in solving the problems.

In planning local school health education programs, the following considerations should be observed:

1. In every community many groups are interested in child health—parents, private physicians, dentists, departments of public health, voluntary health organizations, welfare and social agencies, teachers, parent-teacher groups, women's clubs, and other civic organizations.
2. Health education is a sharing program. No single professional or special group can claim a monopoly of interest or responsibility for the health of the children of the state. Improved child health and improved health conditions in the state will result, not from the program of one group or one organization, but will come from the harmonious planning and working together of all groups in Florida.
3. There is a decided trend toward breaking down the line of demarcation between school health education and public health education. Each is dependent upon the other. The school program is hampered unless the public health program has functioned in its maternal and child hygiene, dental and communicable disease control programs. On the other hand, the success of the public health program is greatly augmented if the public school turns out pupils who are prepared, through definite health education programs, to take their places of leadership in home and community.
4. Health has been a primary objective of education for many years. To realize this objective, Florida schools have a definite responsibility in planning for the coordination of health experiences in the home, school, and community in such a way as to influence favorably practices, attitudes, and knowledge.

SPECIAL ADMINISTRATIVE CONSIDERATIONS

CHAPTER TWO

SPECIAL ADMINISTRATIVE CONSIDERATIONS

This chapter is addressed especially to administrators, whether they be school principals, county superintendents, county health officers, or lay persons insofar as school work is concerned, who are interested in the school health program. In order that the program may function efficiently, it is necessary that these individuals understand it thoroughly and realize fully exactly where special responsibilities lie. In the development of this total school health program a number of administrative guides, instructional materials, and other aids have been provided. A discussion of how these are to be used brings out most of the aspects of the program.

MATERIALS FOR INTERPRETING THE SCHOOL HEALTH PROGRAM

The basic administrative guide is a pamphlet, "Florida's Physical Fitness Guide"[1], prepared by numerous state-wide organizations under the auspices of the Florida Defense Council and published jointly by the State Department of Education and the State Board of Health. This pamphlet presents eight points which are essential to the health of the individual and makes numerous suggestions as to how each of these points may be carried out. In its brief pages, however, suggestions could not be sufficiently detailed to give adequate help to the individual attempting to conduct the program. Consequently, supplementary aids for each of the eight points were necessary.

In presenting these eight points essential to health, it is understood that they are applicable both to in-school and out-of-school persons. It is fully realized, however, that in the administration of the program the techniques for the in-school and out-of-school groups necessarily vary a great deal. The State Defense Council recognized this when it appointed separate physical fitness directors for each of these groups. The following pages give the plan which is being followed in carrying out the in-school health and physical fitness program.

Three of the points—health examinations, correction of defects, and control of communicable diseases—are grouped to-

gether under the general heading, "Health Service," and are given more complete discussion in Chapter Four of this bulletin. By reading this chapter carefully, the administrator will be in a position to organize school health service so that it will operate effectively. School officials and health officials have a definite responsibility for meeting together and planning for the most effective way to administer health examinations. They must bear in mind that the examinations should be as thorough as possible and should be so conducted as to develop favorable attitudes and whole hearted cooperation on the part of the child. This means that the school administrator and the teacher should prepare the pupils psychologically to receive the health examinations and the follow-up teaching should insure that the experience has been emotionally and educationally satisfactory. The importance of health examinations of school personnel cannot be overestimated. Procedures are given in Chapter Four. Two other points — good environmental conditions and mental and emotional preparedness—are given fuller attention in Chapter III, "Healthful School Living". Nutrition is discussed in a number of sections in this bulletin in order to emphasize its importance in a complete health program (pages 32, 34, 61, 73, 94-95, 120, 132). Administrators should give particular attention to nutrition as it is related to the school lunch program. Health examinations should include a physician's diagnosis of nutritional status. Definite nutrition instruction should be provided for all pupils, both boys and girls, in every grade. It is recommended that time-allotment equivalent to at least one regular class period per week should be devoted to nutrition instruction in each grade. This provision should preferably take the form of a six weeks' unit on nutrition each year. Home economics teachers, whenever possible, should be consulted in the planning for the nutrition instruction program.

The physical activity program is given full treatment in two bulletins—one for the elementary school and the other for the secondary school. The elementary bulletin of 365 pages is entitled "Source Materials for Physical Education in Elementary Schools"; the secondary bulletin of 415 pages is entitled "Source Materials for Physical Education in Secondary Schools." Chapter II in each of these bulletins is entitled "Administrative Standards and Policies". A complete discussion of the best organization of the school for an adequate physical education program and the way in which the administrator functions in the operation of this program is given.

Health Instruction, the eighth point in the complete program for health and physical fitness, is discussed in Chapter Five of this bulletin. It is readily recognized, however, that many supplementary aids are necessary for a complete presentation of

the health instruction program. Chapter Five lists the textbooks which should be provided, supplementary materials which should go into the classroom, plans for organizing and scheduling classes, and other points which are helpful to the administrator in the organization of his program of studies.

The diagram on page 17 summarizes the foregoing pages and shows where detailed suggestions may be received for carrying out each phase of the total health and physical fitness program.

OTHER AIDS

In addition to the written materials available, other types of aids will be of great help if properly utilized. Visual aids from the General Extension Division of the University of Florida, and from the Florida State Board of Health, regular health courses at institutions of higher learning, and the special health education laboratory being developed at the Florida State College for Women will be most valuable.

RELATIONSHIP OF SCHOOL AND COMMUNITY HEALTH PROGRAMS

All who understand the full significance of health are in complete agreement that the school health program is only a part of the total health program which must be concerned with the community as a whole. Important as immunization of school children is, for example, infant and pre-school immunizations are far more important. Likewise, many other health procedures assume greater significance for the pre-natal, infant, and pre-school child than for the school child himself.

The school as an agency for community development, therefore, will wish to give its assistance first to providing for a total community health program, and second to establishing its proper relationship as a part of that total program. One important step in the development of the community health program is securing adequate public health services. This may take the form of establishing a full-time county health unit for the county, or, where population does not justify this procedure, combining two or more counties to form a health unit, or even of organizing a considerable number of counties into a district under the direction of the State Board of Health. This public agency will be able to meet the needs of school health services (see Chapter Four), and should bridge the gap between un-

recognized need of medical attention on the part of the individual and the help which the private physician and the dentist may give to him. With public health services established, the greatest responsibility of the school, insofar as professional health service is concerned, will be to make it possible for this agency to function effectively in the school program. There are, however, certain aspects of health service which are school responsibilities regardless of the method by which professional health services are rendered.

Health units which are established will not fulfill the purpose for which they are created unless trained and capable personnel are employed. The school should lend its influence to insist that this be done. The school and the health unit should constantly keep in mind the idea that one of the chief objects of the work of the health unit is to assist in developing an interest in and an understanding of the health benefits which may be obtained from a capable family physician.

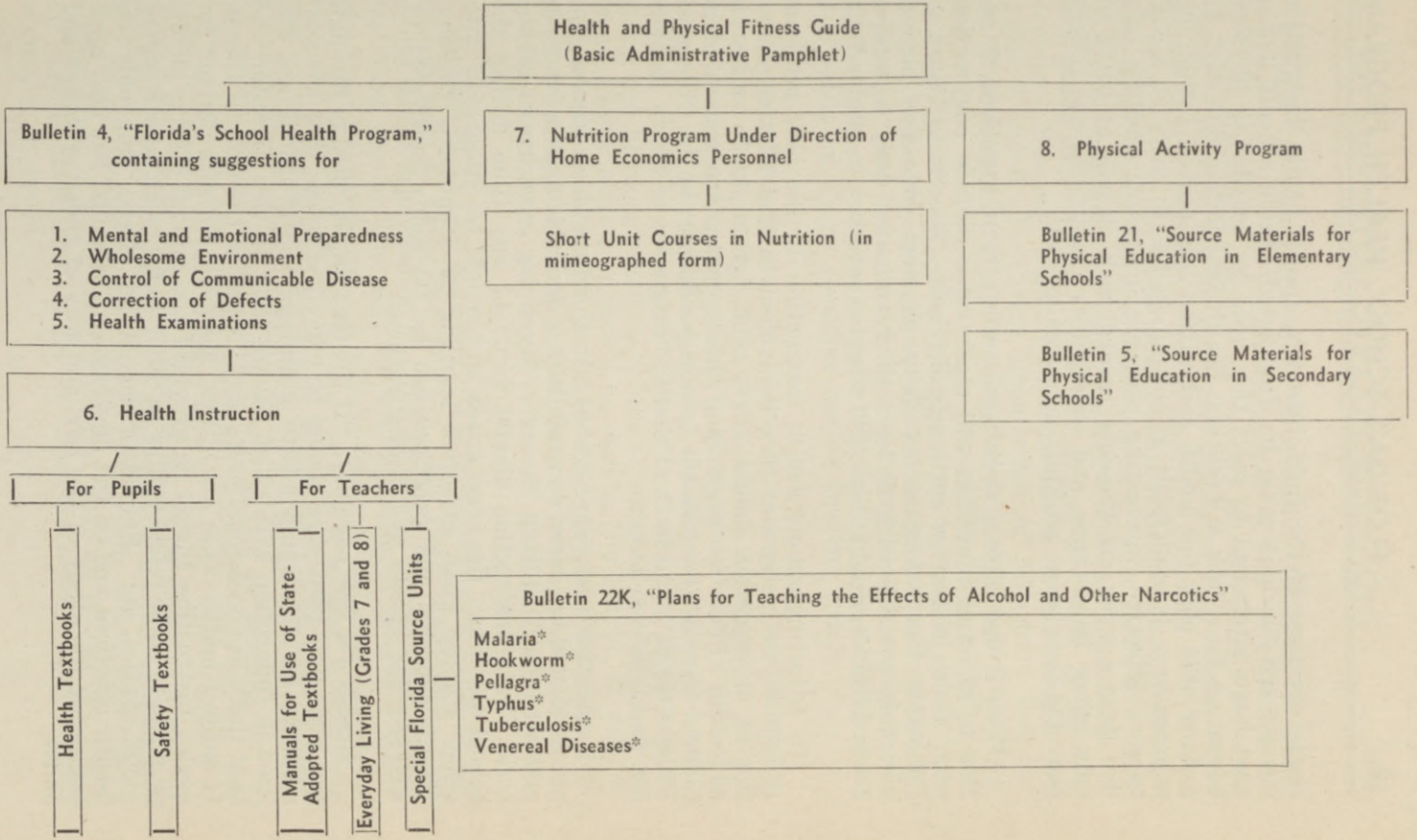
The principles stated in this section apply to both dental and medical services. For full information on procedures to be followed in establishing local health units and concerning the services which they can render, write to the State Board of Health, Jacksonville, Florida.

ORGANIZING THE SCHOOL CURRICULUM FOR PROPER ATTENTION TO HEALTH INSTRUCTION

(See Appendix pages 138, *Section* 231.09(1).*)* The organization of the program of studies so that proper attention may be given to health instruction presents a special problem to school principals. "Some educators feel that health instruction in secondary schools can be presented entirely through the integration of health material with science courses, with home economics, with physical education and other subjects in the curriculum. It is the consensus of many, however, that such presentations have not proved satisfactory because of the divided responsibility, because many important topics may be omitted with this type of arrangement, and because at times teachers have been asked to teach health material when inadequately prepared for such work".[2]

One reason for difficulties is found in the confusion of the terms "health instruction" and "physical education." Some health instruction may rightfully be done in physical education classes, just as it may be done in other classes. In order to insure ade-

AVAILABLE MATERIALS FOR FLORIDA'S SCHOOL HEALTH PROGRAM



*In process of development

quate coverage of the field, however, special health instruction classes and teachers must be designated. Some schools in the past have attempted to meet this need by scheduling physical education four days a week and health instruction one day. In general this plan for health instruction has proved rather unsatisfactory. It is difficult, if not impossible, to carry on a continuous effective, interesting program in classes meeting only one time a week, as students regard such classes as being of only minor importance, and satisfactory classrooms are seldom provided for classes meeting only once a week.

Even if one class a week were satisfactory, increased attention to physical education will make scheduling in conjunction with health education extremely difficult. The State Board of Education has recommended daily physical education classes wherever possible with at least thirty minutes daily in grades 1-6 and has required at least 180 minutes per week in grades 7-12.

In adjusting school health instruction to the new program of studies, an amount of time equivalent to that allotted under the old organization should be set aside for emphasis on health education. Plans for organizing this program are presented in Chapter Five of this bulletin (see pages 83-88), in the "Physical Fitness Guide", and in the bulletin, "Programs of Study in Florida Secondary Schools".

Grades 1-3 (see pages 84-85). In the first three grades emphasis should be placed on establishing desirable health practices and attitudes, utilizing the everyday living experiences of the child. Such instruction should occur at any time during the school day when the need arises and should be integrated with other studies when effective learning is stimulated thereby. Health concepts and practices can be favorably motivated by well-selected stories and dramatizations.

Grades 4-6 (see page 85). "If the teaching method is through the large unit plan, care should be exercised to see that the possibilities for developing health meanings and attitudes are utilized in connection with units having leads in this direction and that there are occasional units with health as the central theme. If subject matter lines are drawn, however, definite periods for health instruction should be provided and special efforts should be made to show relationships to other fields, such as science, or social studies, etc. Emphasis should be placed, not only on health practices and on the development of skills, but also upon beginning the study of the how and why of these practices and skills.

Grades 7-8 (see page 86). "It is highly desirable in these grades to combine the health instruction with a modification of the home economics and science courses usually taught in these grades to provide for all boys and girls two full year courses devoted to science, health, and home living problems. The teachers in each of these areas should collaborate in planning the essential and related learning experiences in these fields to insure the richer treatment of basic problems and the elimination of inadvisable duplication".[3] The "Programs of Study in Florida Secondary Schools" bulletin recommends a unified course for grades 7 and 8. The State Department of Education Bulletin 29, "Everyday Living", gives detailed suggestions for teaching this course. "When this plan is impossible, 70-90 periods (one semester or the equivalent during the two years) should be devoted to health instruction. When the program is organized in this way, one full semester course during the two years, meeting five times a week, is preferable to a course meeting once each week for every semester during the two years.

Grades 9-10 (see page 86. "Health instruction should occupy the center of emphasis for the equivalent of one semester (70-90 periods) during the two years. If all students take biology, this course can be reorganized so that it includes biology and health. If some students take general science instead of biology, that course can be reorganized to include science and health. In either event, health texts . . . should be used in the course. If neither of these plans is feasible, a full semester course during the two years, meeting five times a week, is preferable to a course meeting once each week for every semester during the two years.

Grades 11-12 (see page 88). "There should be the same allocation of time as in grades 9-10 . . . The most satisfactory plan would be the organization of a full semester, one-half unit course for these grades. The plan of approach should involve a study of human relationships and social problems, including the structure and function of the human body as it relates to economic and social efficiency. Emphasis should be placed upon a more detailed study of the importance of health in solving problems of general social significance. Credit should be granted on the same basis as any other classroom subject; that is, the one semester should carry one-half unit of credit. The Standard or Junior Red Cross First Aid course should be given as a part of this work. If it is impossible to organize the one-half unit course, the subject matter content should be carefully distributed among such courses as social studies, science, physical education. Regular health textbooks should be used wherever health subject matter is assigned."[4]

College Courses. There is also need for the inclusion of health instruction as a part of the regular college program for all students. Courses which are offered for this purpose will naturally deal with health problems which are of special interest to students of college age. A two semester hour course in personal health problems and a two semester hour course in community health problems will be adequate only if the general training provided by the high school program has been adequate. Many colleges may wish to combine these two courses to make one four semester hour course.

Teacher Education. In addition to the courses in personal and community health which all college students should take, those who are going into education work should have additional preparation in the use of material adapted to the age level of the group of students which they plan to teach. In the elementary school this may be a two semester hour course in health education in the elementary school.

The health teaching in the secondary school should be done by those who have had the preparation required for certification in health education (12 semester hours). These hours could well include the three courses described above and in addition a course in health education in the secondary school, a course in the administration of health education, and a course in physical education. It should be understood that those devoting their full time to this work should wish to secure far more training than this minimum suggestion.

ALLOCATION OF RESPONSIBILITIES

(See Appendix pages 137-139, *Sections* 230.23 (10) ; 230.33 (8) (15) ; 231.40; 232.03). The school administrator is responsible for planning all phases of the school program so that the school may make the greatest possible contribution to health. He is also responsible for supervising to the end that all plans are fully carried out. This responsibility includes the relationship of the school to public health agencies, as well as all details of the program within the school. The points which should receive attention are clearly indicated in this bulletin. The administrator should be thoroughly familiar with its contents. He will find it helpful to utilize individuals and committees from his faculty in meeting these responsibilities. The training of the administrator should be at least equivalent to that of the elementary school teacher indicated in the preceding section of this chapter.

The Classroom Teacher: A general principle to be observed by the classroom teacher is that he should assume his share of the responsibility for all phases of the school health program in addition to health instruction. The training necessary for this is indicated in the preceding section of this chapter.

The survey of the American Public Health Association states: "The teacher should play a definite part in the school health program and should be trained and encouraged to undertake health services, such as rendering first aid, teaching first aid, testing eyesight and hearing, and observing children for signs of communicable disease and other conditions affecting health. The teacher should also be sufficiently interested in the health of the pupils to study their health records and to present to the health authorities any problems which may be related to health".[5]

Health Teachers and Health Supervisors: In addition to the health training which all teachers have, the health teacher and health supervisor should have a college major in the field of health education. The duties of this teacher and supervisor will be to teach the special health subjects in the curriculum and to assist the administrator in organizing and coordinating the total school health program.

The Health Officer From the Local Health Unit: "A full-time, thoroughly trained, and otherwise well-qualified health officer can assist in organizing school health services and take an active part in the health examination of children" . . . He together . . . "with his modern health organization . . . the public health nurse and sanitarians . . . can assist in communicable disease control, environmental sanitation, and the supervision of the health of the children".[6]

The Public Health Nurse from the Local Health Unit: "The public health nurse is not a certified teacher and should not be expected to teach in the schools, nor should she spend too much of her time in the schools. She is the most important link between the school, the home, and the community. It is a waste of taxpayers' money and an imposition on an already over-crowded health service to require public health nurses to remain in the schools waiting to give first aid. It may be necessary for public health nurses to instruct teachers in first aid who, in turn, should teach this as a subject to the pupils, utilizing the opportunities of rendering first aid as a demonstration. To conduct independent school health nursing service is not in conformity with modern public health thought and principles".[7]

". . . Health conditions of school children reflect the conditions of the home and community as a whole. A school child with bad teeth, with hookworm, who is malnourished, or who shows other defects and health deficiencies, is merely a sample from a home where those conditions are likely to exist in some or all of the other children".[8]

It is the duty of the public health nurse to act as health counselor in all situations of this kind. In maintaining this relationship and advising the parents regarding corrections of conditions in the home and in giving professional guidance to teachers, she will find her chief work.

The Sanitary Officer from the Local Health Unit: The sanitary officer provided in all local health units is trained in the principles and practices of environmental sanitation. Like the nurse, he is not a teacher and should not be expected to teach. He should be used for advice and consultation with the principal in regard to school sanitation and essential rules of conduct necessary to be observed by pupils for proper use of sanitary facilities. He should also act as consultant and advisor to janitors and other school employees entrusted with the operation and maintenance of the school plant.

Other Personnel *(see Appendix, page* 141, *Section* 234.02): Janitors, bus drivers, school secretaries, lunchroom directors, and other school personnel occupy a most important place in the complete health program. Special health training of the type most essential for their respective work should be provided and required. Since the employment of these individuals is almost entirely subject to regulation of county boards of public instruction, these boards should assume the initiative in establishing health training and other requirements for these personnel.

HOME, SCHOOL, AND COMMUNITY COOPERATION

(See Appendix pages 138, 140, *Sections* 230.33(15); 232.31; 232.32): The planning and functioning of the school health program depend upon the coordination of all health facilities in home, school, and community and the cooperative efforts of all available health personnel.

The classification of children as pre-natal, infant, pre-school, or school children is merely convenient terminology. Obviously it is the same child moving imperceptibly, to himself at least, through those various stages. The child's life is a continuous process and cannot be divided into isolated compartments. Likewise, the child is not divided into compartments to receive the

services which various organizations may give to him. The child needs a coordinated health program, regardless of whether the elements come from one or a dozen different sources. It is essential, therefore, that all agencies and individuals functioning in the health program have the same concepts and understandings of that program.

Parents, of course, have the greatest interest in seeing their children grow into strong men and women. They have first responsibility in furnishing a home, food, clothing, medical care, and for habit formation. They do not always know the health needs of children, nor are they always financially able to provide essential needs, but fundamentally they are interested, and they need the help of professionally trained personnel such as doctors and dentists who are interested in preventing disease and correcting defects of children.

The State Board of Health and the local health units are interested in providing for children communicable disease control measures, pure food and water, sewage disposal and other environmental safeguards.

Voluntary health organizations, community welfare and other social agencies are interested in child health activities because they see the relationship between good health and one's ability to live fully. They know that sickness and poverty go hand in hand.

Teachers are interested in the well-being of their pupils because health contributes largely to learning. They accept the responsibility for providing a healthful place to live in school, for certain health services, and for developing habits, attitudes, and knowledge which prepare children to assume responsibility for their own health.

Civic clubs, women's clubs, and parent-teacher groups are interested in and contribute definitely to programs for improving the health of children. Any services which they undertake should be developed with the idea that they will become a part of the work of official agencies as soon as the community realizes the need. Special contributions which they make will result in the most practical good if they are made directly to an official agency or if the service rendered is under the guidance of the official agency.

Progressive groups of this kind welcome opportunity to participate in a program of improved community health and are anxious to be utilized in this endeavor. Those who are charged with the responsibilities for the health program are remiss in their duties if they fail to acquaint these organizations with the most effective ways in which they can contribute to the program.

1When this pamphlet is reprinted it will be called "Florida's Health and Physical Fitness Guide."

2"Joint Report on Suggested School Policies" by the American Medical Association and National Education Association.

3"Physical Fitness Guide", State Department of Education and State Board of Health, May, 1942, page 18.

4Ibid., page 19.

5"The Health Situation in Florida", Report of the American Public Health Association, 1939, page 53.

6Ibid., pages 52-53.

7Ibid., page 53.

8Ibid., page 52.

HEALTHFUL SCHOOL LIVING

CHAPTER THREE

HEALTHFUL SCHOOL LIVING

DEFINITION

Healthful School Living is a term that designates the provision of a wholesome environment, the organization of a healthful school day, and the establishment of such teacher-pupil relationships as give a safe and sanitary school favorable to the best development and living of pupils and teachers.

PHYSICAL ENVIRONMENT

The ideals of every person are influenced by lawns, trees and beautiful buildings. The public school plant is the people's investment for the future. It, therefore, should be made an example for home improvement. It should be developed so that it will be artistic and esthetic. School children represent a cross-section of community home life and of the health problems existing in the community. The construction of the school building, insofar as environmental sanitation has to do with the transmission of disease is, therefore, of utmost importance from the standpoint of public health. **The school administration is responsible for providing a hygienic physical environment, while classroom teachers are responsible for the best educational use of the environment.**

SITE

(See Appendix pages 138, 141, 142, 143, *Section* 230.23 (11b) ; 232.36; 232.37; 235.20; 235.21; 235.22)

Before acquiring a school site, the county board should determine the location of elementary, junior high, and senior high schools for the county, as prescribed in Chapter IX, Article 2, Sections 916 and 917 of the Florida School Code. Each school site should contain a minimum of two acres for a one-teacher school. At least one acre should be added to this minimum size of the site for every fifty pupils enrolled in the school after the first fifty pupils, and until the enrollment reaches five hundred pupils.

Each site should be well drained, reasonably free from mud, and the soil adapted to landscaping as well as to playground purposes. Insofar as practicable, the school site should not adjoin the right of way of any railway, or through highway, and should not be adjacent to any factory or other property from which noises, odors, or other disturbances would be likely to interfere with the school program.

The site should be accessible from every direction and to all parts of the area to be served. Attention should be given to any special services for which provision has been made in the building, and which may be intended for those living beyond the limits of the local attendance area.

Sites should be located with due regard to traffic, the the availability of bus lines, paved roads, as developed at the time of the selection, as well as the possibility of future traffic problems. It is important from a public health standpoint in selecting a site that locations be avoided where the drainage is such that disease carrying mosquitoes would be a problem, or in the vicinity of slum sections or where the surrounding sanitation is below the best standards existing in the community. Where a public sewerage system is not available, the site should be selected with a view to the proper disposal of waste materials.

BUILDING

(See Appendix pages 137, 141, 142, 143, *Sections* 230.23 (11); 232.36; 232.37; 235.13; 235.14; 235.24; 235.06(2))

Insofar as possible in erecting one story schools, materials should be used which are available and adaptable to that particular section. In the erection of school buildings of two stories, fire resistive materials should be used in the construction of stairways and halls. Due regard should be given to the size of corridors, and stairways should be provided in conformity with the recommendations of the National Board of Fire Underwriters. Buildings of three or more stories should be entirely fire proof in order to prevent the danger of panics. In buildings already erected of two or more stories, well constructed fire escapes should be provided where the number of stairways does not meet the standards as prescribed by the National Board of Fire Underwriters.

The principals, teachers, and janitors should, in conformance with state laws and regulations, at the beginning of each school year agree on rules which should govern the fire drills, and

these drills should take place at least once a month at a different period of the day in each case.

Fire extinguishers should be provided in schools according to the provisions of the School Code, and the operation of an extinguisher should be demonstrated at the beginning of school terms as part of the fire drill instruction. All exit doors should be hung so as to swing out and should be provided with hardware which may be opened by pressure from the inside at all times.

Heating and Ventilating: The condition of school room air, particularly its temperature, has a direct bearing upon learning and upon the incidence of certain diseases. There must be a circulation of air, and for the classroom the temperature of this air should not be less than 68 degrees or more than 72 degrees. The most suitable method of ventilation under Florida conditions is the window inlet ceiling exhaust system. Windows should be of such a type that at least 50% of their area may be opened at one time. Standard classrooms should be provided with two window deflectors to protect pupils from currents of cold air.

For small schools where central heating plants are not feasible, the jacketed stove furnishes the best means of providing heat and ventilation. This consists of a stove that is enclosed in a metal cylinder opened at the top and bottom. A fresh air duct runs from the outside of the building and is terminated beneath the jacket. Cold air is drawn up between the jacket and the stove, is warmed, and is discharged above to go out into the room. Some of the room air which has become cold and fallen to floor level is also drawn into the jacket and rewarmed. Air change is insured by means of an exhaust duct with an opening at floor level. The exhaust duct connects with the chimney, or better still encloses the chimney. The chimney keeps the temperature of the exhausted air sufficiently high so that a good upward draft is insured. Dampers should be provided in both the inlet and exhaust ducts so that the amount of air entering the school can be regulated. For a schoolroom 22′ x 30′ with a ceiling of 12′ the jacketed stove used should have a fire pot diameter of at least 18″ at the low end of the stove door.

Water Supply: The drinking water used in schools is of the very greatest importance from a health standpoint. Where a public water supply is available, schools must always connect with this. There should be no other source of supply available to the children. The safety of public water supply is insured by state and municipal regulations.

A most important problem is presented where no public water supply is available. If it is necessary to develop a private water supply for the school, it should be from a drilled well, sunk so that the water is derived from deep seated sources and surface and ground water prevented from entrance into the well. Such wells should be constructed in accordance with the regulations of the State Board of Health. School water supplied from private sources should have periodic bacteriological laboratory examinations. This examination may be made by application to the local health officer, or if there is no local health officer, to the State Board of Health. In connection with the distribution of water, the use of common drinking cups is unlawful and most dangerous as disease may be spread in this way. Where running water is available in the school, sanitary drinking fountains should be installed in the ratio of one to every 100 pupils, but not less than two to each school.

Sewage Disposal: The most satisfactory method of disposing of school

sewage is by connection with a municipal sewerage system, and such connection should always be made where possible.

Where there is no municipal system, special facilities must be arranged. A septic tank must be provided for water flush toilet systems. Except in very large schools, the septic tank effluent can be disposed of by a tile pipe drainage field laid in trenches of crushed stone or cinders. The difficulty is in getting septic tanks properly designed and adequate in capacity and in getting sufficient drain tile properly installed. For this reason, such installations cease to function in a short time, and sewage bubbles up from the ground and stands on the surface. This makes a very dangerous condition. The specifications given in State Board of Health Bulletin, "Sewage Disposal for the Home", may be used for the small school, not exceeding 200 pupils. This bulletin also explains the fundamental principles involved. For larger schools the State Board of Health will send a representative for investigation and will furnish specific plans for any school.

In very small rural schools where water under pressure is not available it will be necessary to construct sanitary privies. The State Board of Health Bulletin, "The Sanitary Pit Privy", covers specifications for privy sanitation very completely. Special designs for larger multiple privies to meet the need of schools can be furnished. Where a privy must be used, it is most important that it be so constructed that excreta will not contaminate the soil, will not be accessible to animals, that it will be absolutely fly-tight, and that it be well vented so as not to produce odors.

Toilet Rooms: Wherever possible indoor flush toilets should be provided for public schools. At least one toilet room for each sex should be required on each floor, and entrances to them should be well separated. They should be easily accessible from playgrounds and classrooms. Wherever possible, cross ventilation should be provided in these rooms, and as many of them as possible located on sides which will receive direct sunlight some time during the day. The floors of toilet rooms should be of some non-absorbent material; tile should be used whenever possible. The walls should be of a material which will enable the custodians to take soap and water and wash them at least as high as six feet from the floor. The toilet room should be provided with a drain, and the floor shaped so that the custodian may take a hose and flush the toilet floor. Toilet rooms should not be located in basements and should be provided with 20% window glazing as compared with the floor area. Toilets should be so located and screened that the inside is not visible from a corridor when pupils are passing in and out of the room. Doors should be provided for toilet stalls which will stand open when not in use.

TOILET FIXTURES SHOULD BE PROVIDED AS FOLLOWS:

Elementary School

Boys' Toilet Seats	One for each 40 boys
Boys' Urinals	One for each 30 boys
Girls' Toilet Seats	One for each 25 girls

High School

Boys' Toilet Seats	One for each 50 boys
Boys' Urinals	One for each 40 boys
Girls' Toilet Seats	One for each 30 girls

For primary children the height of the toilet seats should not be over 10"; for the elementary school children, the height should be 12"; and for high school children, 14". Separate toilet rooms are desirable features for the kindergarten and primary children. Pedestal type urinals are highly satisfactory for use in the public schools and urinal troughs should not be used.

Handwashing facilities are very essential in any school. There should be one lavatory for every eighty pupils and at least two for each school. Ample soap and paper towel facilities and mirrors are also essential. Lavatories for elementary grades should not be over 25" in height and not over 30" for high school children.

Lighting: The natural and artificial lighting of classrooms plays an important part in the health of school children. The intense use of the eyes in school work demands that illumination be adequate at all times. Most school authorities, doctors, and illumination engineers have agreed that about ten-foot candles of illumination are adequate for most school purposes. A classroom of approximately 20'x30'x12' can be naturally lighted if the glazing in the room amounts to 20 per cent of the floor area and the glazing is properly placed. The windows should be within six inches of the ceiling, placed on one side of the room so that light is received over the pupil's left shoulder, and should be approximately 42" above the floor. The preferred fenestration is east and west. Such a facing enables a classroom to receive the benefit of the sun's rays during a part of the day, and from experiments it has been proved that such facing of the windows has the least amount of desk interference from the sun during the course of the school day. If movable seats are used, care should be exercised to see that no pupil faces the light for an extended period.

Shades are necessary to control the light which varies during the day. The double-hung shade hung in the middle of the window enables the teacher to lower or raise shades readily, and in this manner she can effectively control desk interference from the sunshine. They should be of enough density to avoid glare on working surfaces. Care should be taken to see that objects outside of the school, such as trees and tall buildings, do not affect the amount of light in the building. The interior finish of the classroom materially affects the illumination. It is necessary that a paint schedule be worked out carefully. As a usual thing, walls of buff, or light green with the ceiling white, or very light cream and dadoes of darker color, as a dark tan, have coefficients of reflection which will help to control the light so that there will be no glare. Ceilings should be painted with a material which gives 75 to 80 per cent reflection, upper walls about 50 to 60 per cent, and dadoes not more than 30 per cent.

Artificial lighting is essential not only for night work, but to insure sufficient illumination during winter months. Lighting units should be placed to eliminate shadows. As a rule, six outlets about 18" from the ceiling with semi-indirect equipment will light a classroom satisfactorily. It is necessary to keep in mind that fixtures should be cleaned at regular intervals, and the classroom painted at regular intervals or the number of foot candles of light furnished will vary considerably. Foot candle meters can be secured through the Florida Power and Light Company to be used in measuring the intensity and distribution of light.

Seating: From a health standpoint, one of the most important single pieces of school furniture is the school seat. Seats may be classified in three general classes. The fixed seat and desk is most commonly used, but it is probably the least desirable. Movable seats are excellent for modern teaching techniques, but may be as injurious to the children's posture as the fixed type. The table and chair arrangement for primary grades offers a very nice working situation and is being used more extensively in the higher grades.

In general movable furnishings are more desirable than fixed ones in the school room, because with such furniture the room may be used as a play room, or the chairs may readily be removed and made accessible in other areas. Some of the common faults of school seating are: seats are too high and deep for the pupils; desks are too close or too far away from the pupils; desks and seats, though adjustable, are not often adjusted to pupils' needs. Some standards for seating are: the seat is too high if

there is pressure on the thighs and the feet are not resting on the floor, and too deep if it does not permit the pupil to sit back in the seat.

Practically all standards can be met by use of the adjustable seat. Interest and skill, however, are necessary to secure the proper adjustments. The following sizes of desks are recommended by Dr. H. E. Bennett in his book, "School Posture and Seating."*

	SEAT NUMBER					
GRADE	6	5	4	3	2	1
I	90%	10%				
II	50	50				
III	25	50	25%			
IV		35	40	10%		
V		10	40	25		
VI			40	50		
VII			25	50	25%	
VIII			10	40	50	
High School				25	40	35%

Lunchrooms: A lunchroom is essential to every public school. It should be located where it can receive a maximum of sunlight and air and at the same time must be easily accessible to all. It should be so located as to eliminate the spread of cooking odors. About ten square feet should be provided per pupil exclusive of service space. A homelike appearance should be sought and every effort should be utilized in securing a minimum amount of noise. The lunch counter should be of sufficient length to enable rapid service. The facilities provided will depend on the financial ability of the community and on the size of the school. For large schools, the following items should be provided: counter, steam table, ice cream packer, bread and sandwich table, tray and silver rack, cashier stand, cocoa urn, milk and cream cooler, water cooler, guide rail or partitions, dish trucks, soiled dish trays, kitchen, storage space and main dining room. Battleship linoleum affords an excellent floor surface. Tables should be provided that can be washed and should be about 74" long and 30" wide.

Teachers' Rest Rooms: In the larger schools, comfortable rest rooms should be provided for the teaching staff. Teachers' rest rooms should be as attractively furnished as possible and should be well lighted, heated, and ventilated. Handwashing and toilet facilities and supplies should be provided and maintained. A mirror, comfortable chairs, a bed or cot with a pillow and blanket, several small desks or tables, lamps and other needed furnishings should insure comfort and restfulness of the rooms.

Special Health Rooms: Every school should be interested in good health standards and, in order to make the highest accomplishments possible, it should provide every available health facility. The health room should be located adjacent to the administration unit and should be provided with artificial and natural lighting, nurses' room, medical clinic, waiting room, first aid equipment, and an isolation room for ill pupils waiting transportation home. Fresh linens should be supplied for each occupant of the beds in these rooms.

* Bennett, H. E., **School Posture and Seating,** Ginn and Company, Atlanta, 1928.

MAINTENANCE OF A SANITARY ENVIRONMENT

(See Appendix page 138, Section 230.23(11) (c))

The duties of the custodian should be to keep the building clean and sanitary. He should do all sweeping, washing, dusting, cleaning rooms, and watering grass. When necessary he should keep the grounds in good condition and do other custodial work as specified from time to time. Administrators should set up work schedules to be performed by the custodian, determine standards of service, and the volume of work which a custodian should be given. A complete list of the duties and activities of the custodial staff should be outlined and the teachers and custodians should have copies of these duties, so that they may effectively co-operate with one another in the discharge of their duties.

If a person has an appreciation of cleanliness, and has also the ability to impart this to others, it will manifest itself in clean, well kept, comfortable, sanitary school buildings. Well kept, sanitary buildings require more manpower than those in which little work is done and which are allowed to remain dirty and insanitary. The time has come when the responsibility for a sanitary school building cannot be entrusted to ignorant, untrained personnel. Housekeeping no longer means the wielding of a corn broom and a feather duster and slopping soap suds on dirty floors. Intelligence in the proper direction is necessary if the building is to be sanitary. A custodian needs to possess traits which would tend to classify him as a paragon. He should be economical with supplies and utilities and should be a good sanitarian. He must keep the school building, fixtures, furniture and equipment in such a state of cleanliness as to avoid the possibility of illness among the children housed in the building.

Administrators must not expect custodians to do the impossible. They must see that they are properly provided with good equipment, and must furnish proper directions for maintenance of the school plant. The following is a suggested list of the frequency of the cleaning operations that should be performed by the custodian in a school building.

OPERATION	IDEAL
Sweeping:	
Classrooms and other rooms	Daily
Corridors and stairs	Twice daily
Under radiators	Weekly
Dusting:	
Furniture	Daily
Woodwork	Weekly
Walls and Ceiling	3 times per year
Wall pictures and window shades	3 times per year
Radiator tops	Weekly
Between radiator sections	Yearly
Scrubbing and Mopping:	
Classrooms	3 times per year
Rest rooms	3 times per year
Corridors	3 times per year
Stairs	Weekly
Domestic Science Rooms	Weekly
Entrances	Weekly
Offices and kindergartens	Weekly
Cleaning:	
Furniture and woodwork	3 times per year
Windows (outside)	3 times per year
Windows (inside)	Weekly
Inside door glass	Twice weekly
Cupboard glass	Twice weekly
Toilet room floors	Twice daily
Toilet bowls	Daily
Urinals	Daily
Blackboards	Daily
Erasers	Weekly
Removal of sawdust and shavings	Daily
Removal of garbage	Daily
Hand rails and door knobs	Daily

ORGANIZATION OF A HEALTHFUL SCHOOL DAY

(See Appendix pages 137, 141, *Sections* 227.121 (18) ;230.23 (10) ; 234.02)

The responsibility of the school for the health of the child begins when the school bus picks him up in the morning. This hour of leaving for school should not be early enough to interfere with a wholesome, warm breakfast. The bus should not be overcrowded, and pupils with communicable diseases should not be allowed to enter the bus. The bus driver should be selected on the basis of good moral character, good vision, and hearing; he should be able-bodied, free from communicable disease, mentally alert, and not a user of alcoholic beverages or narcotics. The condition of the bus should insure a safe and comfortable ride to school.

Pupils who arrive at school early or are obliged to wait for a late bus should be comfortably sheltered and supervised by members of the teaching staff.

The length of the school day is definitely specified in the **Florida School Code,** Section 227.12(18), page 137. As is shown there, the length of the school day varies to meet the needs of children at different stages of physiological and psychological development and should be organized to prevent undue fatigue. A balance between work and play and rest should be maintained. The daily schedule should allow time for recess, relaxation and play, and lunch periods. Care should be taken that curricular or extra-curricular activities be assigned according to the strength and energy of pupils. Regular physical education periods should be observed in accordance with plans indicated in the State Department of Education bulletin on physical education. The activities at this time should be so planned and organized that every child has a desire and an opportunity for safe, vigorous and educational play suited to his age and physical status.

Definite and adequate time should be allotted to the lunch period. This plan will vary according to the situation. A longer period will be required when pupils go home to lunch. A school lunchroom where hot, nutritious food is prepared and served under the supervision of the school authorities is essential for the health of the pupils. Special provision should be made for those children who bring their lunches to eat healthfully at school. The school lunchroom is a laboratory where children learn what to eat and how to eat. No carbonated drinks, tea, or coffe should be served in the school lunchroom. Pasteurized milk should be served when at all possible. No candy should be served or sold in the school or on the school premises. The school has the same responsibility to educate appetites as minds.

Rest and relaxation periods should be interspersed in the daily schedule when the pupils need relief from sustained effort. Windows should be opened and pupils allowed to participate in relaxation activities chosen according to their immediate needs. Change of work results in relaxation and avoidance of strain. Social activities which serve to amuse and relieve the monotony are desirable.

In order that a maximum amount of work may be done with the accumulation of a minimum amount of fatigue, it is recommended that school subjects requiring close mental work should alternate, when possible, with subjects requiring motor activity.

There is a definite trend today to spend more time on assignment and preparation of lessons and less time on formal recitations. Guidance of children in establishing effective study techniques requires supervised study periods.

No home work should be assigned in the elementary grades. A limited amount, and such work as can be accomplished with satisfaction at home, may be assigned in the secondary grades. The danger of cumulative fatigue, interference with sleep and play, eye strain, and posture has been recognized as a menace to health. Suggestions regarding budgeting time and effective home study may encourage high school students to improve or make the best possible use of study conditions in the home.

A minimum amount of after-school activities should be planned by the school. Evening school activities should be rare and so planned that there will be no interference with sleep. It is recognized today that parents and children need more family association. Home duties and responsibilities are desirable and educationally worthwhile for children.

PUPIL-TEACHER RELATIONSHIPS

If the school accepts the responsibility for the development of the whole child, the classroom environment in which he lives must be conducive to his physical, mental, social, and emotional growth. Wrong habits and improper emotional reactions formed early in school life condition present and future achievement. Environment includes more than the physical plant and sanitary features of the school building. It goes further than arranging a daily schedule. The social and emotional tone of the classroom provide atmosphere for mental, social and emotional, as well as physical well-being. The classroom experience should be so guided as to eliminate fears in children and to develop in them self confidence, self respect, and self direction. Fear is frequently responsible for numerous types of abnormal behavior, such as jealousy, types of delinquency, lying and cheating.

Success and failure establish certain attitudes in children that largely determine future success. Continual failure leads to despair, continual success without effort to over-confidence. The teacher should plan for experiences which give opportunities in which every child may experience genuine success reasonably often. Likewise he should plan work which will challenge the ability of brighter students to the level of their capacity. Knowledge of success favors learning. The mental effect of failure tends to destroy self confidence. The well-informed teacher will be able to plan for the personality development of all his pupils.

Classroom discipline promotes or retards personality development. It should be remembered that faulty vision, defective hearing, imperfect elimination, lack of nourishing food, illness, insanitary surroundings and unfavorable conditions at home affect the behavior of children. Punishment that fails to recognize all such factors violates all principles of child development. Corporal punishment, depriving the child of necessary recreation, standing him in the corner, using fear or sarcasm as a motive for actions, are methods of discipline which often result in personality problems of a very serious and long standing nature. Harsh disciplinary measures undoubtedly produce a non-cooperative attitude in children. On the other hand, indulgence and a lack of control often develop an anti-social outlook. Between these extremes, an understanding teacher working with his class may set up standards of behavior which lead to self direction and control in maintaining acceptable group and individual behavior.

The rush and tensions of modern life are being felt even in the classroom. Overcrowded programs and faulty work habits lead to unplanned and purposeless living. Fatigue and strain may be observed in the average group of pupils. Restlessness is often mistaken for surplus energy and children are permitted, if not forced, to extend themselves beyond their ability. The understanding teacher plans for democratic experiences based on the interests and abilities of his group. Working together on mutually interesting problems often takes care of unruly behavior and makes possible wholesome, stimulating effort of the entire group. Even the non-cooperative child is susceptible to group approval.

Children are no more alike in mental ability than in physical appearance. They vary in strength, endurance, resistance to disease, likes and dislikes, visual and auditory acuity, intelligence, memory power, educability. The well-trained teacher will understand this and plan his classroom experiences according to the principles of individual differences. Only through such a procedure can the health of children be adequately protected.

Informal instruction adjusts itself well to the principle of individual differences. One child excels in one line of work; another can make an equally satisfying contribution in another activity. A low I.Q. does not always indicate failure, nor does a high I.Q. insure success. When tasks are assigned on the basis of interest and ability, rather than the next chapter, children will begin to live and learn functionally at school.

Parents often hold pupils to a standard of high grades above their ability. The teacher grades rigidly and children frequently cheat or become emotionally upset in facing such situations. Rewards, honor rolls, and prizes for achievement and attendance may give satisfaction to a few outstanding children, but many more suffer as a result of such faulty educational procedures.

The teacher is the key person in the health program in the classroom. He should personify health in personal appearance and daily living. Children are his imitators. They reflect his enthusiasm, his health practices, his voice, his philosophy of living, as well as his neatness of appearance. The teacher's responsibility is great. He largely molds the lives of his pupils.

HEALTH SERVICE

CHAPTER FOUR

HEALTH SERVICE

DEFINITION

Health Service comprises all those procedures designed to determine the health status of the child, to enlist his cooperation in health protections and maintenance, to inform parents of defects that may be present, to prevent disease, and to correct remediable defects. All school health services are included in the program primarily because of their educational value. Every service should be rendered in a way that parents and children become self-directing in accepting the responsibility for maintaining their own health.

INTRODUCTORY STATEMENT

Children should be as fit physically, mentally, and emotionally as possible if they are to profit by their school experiences. We no longer think of the child as being sent to school for the purpose of merely learning subject matter. He is sent to school to learn how to live, and school experiences today are designed to teach or demonstrate the best standards of everyday living.

In the life struggle for self betterment it is the expressed or unexpressed desire of any parent that his children learn to live fuller, richer, healthier, and happier lives than he was able to live. With this inherent desire our forebears established the institutions of learning, hoping that their children, their children's children, and the children of the less informed and economically handicapped might learn better how to live.

It is as true today as then that ignorance or economic insufficiency results in a lack of interest in the early training and care of the infant and pre-school child, so that children enter school unable to adjust themselves to the ever increasing physical, social and economic demands set up by our modern school standards. Because of this, many children enter school with definite problems, many of which continue throughout their school life, and many of which need more attention than is given them in the home.

Today the school health service, set up as a part of the general community health service, is initiated and provided as part

of an educational demonstration in healthful living. It is closely related to the program of health instruction and to the maintenance of healthful school environment. It should be so related to the school curriculum that health is practiced in the everyday living of boys and girls both at home and at school.

The object of health service is not only to perform a needed service but to impress on the child the necessity of forming certain practices and attitudes that he can retain throughout life to protect health. There must be real understanding and sincere cooperation between the personnel of both school and health department services. The health department should not be asked to perform services in the schools that should be undertaken by the educational personnel. The weighing and measuring of children, the testing of hearing and sight, the rendering of first aid, morning observations and any other routine needs are within the capabilities of a teacher. These activities should be used as demonstrations to supplement the teaching of health in the schools.

The school health service is the combined responsibility of the school authorities, the family physician, the parent-teacher association, and the health authorities. This responsibility includes not only the school child, but progressively the pre-natal, natal, post-natal, infant and pre-school care of the child.

PREVENTION AND CONTROL OF COMMUNICABLE DISEASES

(See Appendix pages 140, 141, *Sections* 232.33-.34-.35)

Children are compelled by law to attend school; therefore it is imperative that the school and health authorities insure a healthful school environment. Communicable diseases, i.e., diseases which can be spread from one person to another, are frequently brought into the schools and transmitted to other school children. Therefore, measures which prevent children in the early stages of communicable diseases from entering school are an important part of communicable disease control. School preventive measures include:

1. **Daily observation of the child by the parents** before he leaves for school in the morning. Any child showing symptoms of the common cold, such as sneezing, coughing, running nose, flushed face, and headache, should be kept at home. A child who suddenly develops a headache, chill, a vomiting spell, or any other signs of illness should be kept at home. *Average daily attendance should not be stressed to the extent that the health of children is endangered.*

2. **Observation of children by the bus driver** as they enter the bus each morning. Bus drivers should know the early, obvious signs of communicable diseases and should observe the children carefully as they board the bus in the morning. Any child exhibiting such symptoms should be encouraged to return home immediately.

3. **Observation of the children by the teacher** on arrival at school. The teacher should observe every child carefully for signs of communicable disease on arrival at school. Playground supervisors who conduct before-school programs can by similar observations frequently prevent ill children from entering the classroom in the morning.

4. **Teacher services in:**

   a. **ISOLATION OF SICK PUPILS:** Any child thought by the teacher to be ill should be isolated—placed apart from all other children—until arrangements can be made to send him home. The sick child's parents, who are responsible for taking care of him, should be notified immediately. The teacher should not take the responsibility of calling the family physician unless he has definite authority from the parents. The teacher should make the child comfortable and report to his principal for instructions concerning the removal of the sick child from school.

   b. **TRANSPORTATION OF SICK CHILDREN:** Provisions should be made in every school for the transportation of sick children to their homes. Parents should take this responsibility, but if they cannot be reached or have no means of transportation, some other arrangement must be made. A transportation committee of the parent-teacher association or other interested local organizations can be utilized. The person who transports an ill child should not be one who has small children at home to whom the disease might be transmitted. Health unit personnel should not be expected to take children home, nor to a physician, unless all other means have been exhausted.

   c. **KNOWLEDGE OF COMMUNICABLE DISEASE IN THE AREA:** Every teacher should know, and be informed by health unit personnel, of the presence of communicable diseases in the area. He should familiarize himself with the signs and symptoms of these diseases so that he can make skillful morning observations of the children. Current information relative to communicable diseases should be furnished the teacher by the local health unit.

   d. **AVOIDANCE OF INFECTION:** There are many opportunities in the school for preventing the spread of infections from undetected early cases or carriers of communicable disease. The teacher should study the health practices in the school as they relate to the spread of communicable disease. He should establish preventive practices in the school and should incorporate them into his teaching. The following points will aid in preventing the spread of infection:

      Frequent hand-washing, particularly before eating and after using the toilet. A child should be taught to keep his finger-

nails trimmed and his fingers clean, and to keep his fingers and other objects out of his mouth and nose. The school should provide water, soap, and individual paper towels. In small schools these facilities can be provided if the ingenuity of both teacher and pupils is used. Time should be allotted and definite plans made for handwashing before lunch.

Proper use of clean handkerchiefs. Every child should carry a clean handkerchief, or tissue, and should be taught to cover his mouth and nose when he coughs or sneezes in order to protect other children.

Sanitary drinking fountains or individual cups. The common cup should not be used under any circumstances. Where sanitary drinking fountains are not available, individual paper drinking cups should be used. Specifications for the approved sanitary drinking fountain can be obtained from the local health unit or from the State Board of Health. Children should be carefully guided in the proper use of drinking facilities.

Communicable disease chart. A communicable disease chart, containing a list and description of signs and symptoms of communicable diseases is published by the State Board of Health and can be obtained in any quantities from the local health unit or the State Board of Health. The chart should be placed on the wall of every classroom at a height convenient for both teacher and pupils. It should be studied frequently and referred to whenever a communicable disease is prevalent in the community.

Readmission after illness from communicable disease. A child who has been absent from school because of a communicable disease should be readmitted only after obtaining a certificate from the health unit or family physician recommending that the child be readmitted.

Cleanliness of the school. The school should be clean at all times, but especially when a communicable disease is prevalent in the community. Soap and water, properly used, are the generally recognized means of removing micro-organisms which may have been deposited by carriers of communicable disease on desks and other school equipment.

5. **Immunizations:** All children, before they reach the age of one year, should be immunized against certain communicable diseases by the family physician. Immunizations should be those of vaccination against smallpox, injections of diphtheria toxoid against diphtheria, and—if and where necessary—immunization against typhoid fever. Where these immunizations have not been done, for economic or other reasons, public health authorities and the local medical society should be consulted concerning an immunization program for all school children. Even when definite immunization programs are not in progress, teachers and county nurses should be active in conducting conferences with parents concerning the immunization of individual children. The following are the recommended immunization policies:

a. **Vaccination against small pox:** Should be obtained normally at any time between 3 to 12 months of age, and at any age during an epidemic. It should be repeated before entrance into school and repeated thereafter every five to seven years.

b. **Immunization against diphtheria:** Should occur first at 9 months of age, again from 4 to 6 weeks later, and again before entering school. If the family wishes, a Schick test may be requested before the toxoid is administered.

c. **Immunization against typhoid fever:** Should be obtained at any age during an epidemic or catastrophe, or when the individual has contact with a known carrier. It should be obtained routinely after two years of age in areas in which typhoid is prevalent, or sanitation facilities are so poor as to be conducive to typhoid. The State Board of Health recommends that 3 initial injections be given, to be followed annually by 1 injection of the vaccine.

HEALTH EXAMINATIONS

(See Appendix pages 137, 140, 141, 142, *Sections* 230.23(8)(f); 232.29; 232.30; 232.31; 232.32; 234.05; 234.02*)*

1. **Health examinations for teachers and all school employees.** Teachers and all school personnel, including clerks, janitors, bus drivers, cafeteria workers and others who are in any way in contact with the school children should be thoroughly examined at least annually. Every member who is now in the school system who has not had a chest X-ray within the last year, and all newly entering personnel, should be X-rayed before entering a new term of service. All school personnel should then have periodic chest X-rays as deemed feasible by the local School Board. A special record form (see page 46) should be kept for each member of the personnel. The examination may be performed by private physicians, provided the official record form is used. Records of personnel examinations should be confidential, filed in the health department, and available only to the school authorities when teachers or others have failed or refused to comply with instructions and are endangering the health of the pupils. On the completion of the examination the teacher should be given a certificate by the health unit showing the completion of the examination and the filing of the form with the full-time health unit. This certificate should be tendered to the school authorities by the teacher. In counties without full-time health service, personnel examination records should be sent to the State Board of Health which will issue certificates.

FLORIDA STATE BOARD OF HEALTH
FLORIDA STATE DEPARTMENT OF EDUCATION

RECOMMENDED

SCHOOL EMPLOYEES' PHYSICAL EXAMINATION FORM

This record is to be completed and sent with X-ray and all laboratory reports to

....., ...
(county health department) (address)

PART I

Name..... Sex..... Race.....
Place of birth..... Age.....
Permanent address .....
County in which examinee will be employed.....

HISTORY

Contagious diseases:
Scarlet fever.....Diphtheria.....Pertussis.....
Measles.....Smallpox.....Poliomyelitis.....
Typhoid Fever.....Venereal disease.....
Other serious illness.....
Immunization history: Smallpox: Date..... Result.....Typhoid: Date.....
Diphtheria: Date..... Schick test: Date.... Result....

PHYSICAL EXAMINATION

General appearance .....
Head: Ears: Hearing Rt...../20 L...../20
Eyes: Vision Rt 20/..... L 20/.....With glasses Rt 20/.... L20/....
Nose:.....
Mouth: Teeth..... Gums.....
Tonsils..... Pharynx.....
Neck: Thyroid..... Lymph nodes.....
Chest: Heart location..... Rhythm..... Sounds.....
Blood pressure Systolic..... Diastolic.....
Abdomen: Herniae..... Tumors..... Appendix.....
Extremities .....
Nervous system: Reflexes—Superficial..... Deep.....
Cranial nerves.....
.....
Remarks on defects not sufficiently described above: Mental aberrations, etc. .....

LABORATORY*

Kahn .....
Other: Stool, urinalysis, hbg., etc. (if indicated).....
*Laboratory report including Kahn MUST be attached and forwarded with this record.

PART 1 (Continued)

CHEST

History of chest diseases (Asthma, Bronchitis, Emphysema, etc.).....

.....

Tuberculosis

Family history.....

.....

.....

Personal history.....

.....

.....

Physical examination

.....

.....

Physical signs.....

Clinical manifestations.....

Do you recommend acceptance with minor physical defects?.....

Are defects being treated?.....If rejection is recommended specify cause .....

....M. D.

(date) (examining physician)

.....

(address)

PART 2

X-RAY*

Film: Date taken.....Place.....

Interpretation.....

.....

.....

.....

.....

....

(date) (roengenologist)

I certify that the X-ray film submitted herewith is the X-ray of the chest of the examinee named on this physical examination form and was taken on.....

(date)

....M. D.

(date) (examining physician)

.....M. D.

(health officer)

.....

(county health dept.)

*X-ray film MUST have been taken within three months of date of contract. X-ray film with all laboratory reports must be sent to the county health department for approval and record. X-ray films will be filed for future reference. All information will be treated confidentially.

(See Appendix page 140, *Sections* 232.29; 232.30-.31-.32)

2. **Health examinations for school children.** The local full time health unit is the agency which should organize and be responsible for the health examination of school children. In counties without full time health services the school authorities are responsible for securing the advice and assistance of the local medical and dental societies, the State Board of Health, and the State Department of Education for planning and conducting the examinations.

   In all health examinations the attitude of the examining physician is of utmost importance in gaining the confidence of the child and in making the examination worthwhile. The teacher's thorough understanding of the purposes, procedures, and findings of the health examinations of his pupils is necessary to insure that educational outcomes result. Children should be taught and urged to have annual health examinations by private physicians in addition to the school health examinations.

   The availability of examining personnel as related to the total number of children needing examinations in a given school or locality will help determine which children should be examined and at what intervals these examinations should be conducted. Three general types of programs are in practice today:

   (a) the annual examination of all pupils
   (b) the routine examination of children in certain grades at intervals of two or three years
   (c) the examination of groups of children selected by a screening process from each or any grade level

   The third method named, which provides for the examination of selected groups, is recommended as the most practical because it enables a greater percentage of professional time and services to be devoted to the most needy children. When mass examinations are attempted the limitations on the number and time of medical personnel too often necessitate merely a rapid cursory inspection of children rather than an adequate health examination. Such inspections are of very limited value to either the children, the parents, or the teachers.

   A program which provides for the adequate examination of carefully selected groups will also serve better to balance the total community health program. The amount of time spent on school health examinations should not be out of proportion to the time spent on other community health programs in the light of results possible of achievement.

Today it is recommended that the classroom teacher make a preliminary or "screening" survey, as well as systematic continuous observations of the pupils to be sure that no significant symptoms go unnoticed. The value of the teacher's participation in the selection of children needing a physician's examination should not be underestimated. In addition to alleviating conditions where the examination of all children is either impossible or not advisable, this plan presents excellent opportunities for sound health instruction concerning the importance of building and maintaining favorable health status.

The exact procedure to be followed by the teacher in conducting a preliminary survey should be carefully explained and demonstrated by the public health nurse or the examining physician. The survey should be conducted as a demonstration to the children of some of the procedures used in a properly conducted health examination. The teacher's screening process is not medical. It should never be accompanied by diagnosis, advice, or treatment. But through the demonstration of certain phases of a health examination the teacher cannot only select the children most in need of medical examination but can guide all of the children to become more self-directing in their observations of their own deviations from normal.

Generally the teacher will conduct the survey to include the "Preliminary Procedures" described on page 54 (weighing, measuring, testing vision and hearing as well as to observe for general cleanliness, posture, skin eruptions, marked over or under weight, or other deviations from normal indicated by the nurse or physician for teacher observation). The continuous daily observations, unobtrusively yet systematically and thoroughly done, should be recorded on the child's health record form as should the results of the demonstration survey. Health and behavior symptoms indicated by the teacher help to furnish information valuable to the examining physician and also help the teacher in selecting children most needy of further examination. All of these observations as well as survey findings may form a nucleus for class discussions in the evaluation of related everyday health practices.

A nurse-teacher conference should follow the completion of the observations so that the nurse may aid and check the teacher in her selection of children to be examined further. The number of children to be examined from each grade on each examination day will depend upon the schedule for examinations as planned by the examining physician and

the school administrator. Priority in the matter of receiving attention should be given to the children with the greatest immediate needs. The selection should be based on evaluations which take into account the physical, mental, emotional, and social problems of each child.

The persistance, if not the presence, of most physical defects is largely the result of lack of knowledge on the part of the family concerning either the needs for medical care or the methods for securing such care for the child. Such lack of knowledge can be corrected only through the direct teaching of the future parents who are our present school children. This can best be done by adequately trained teachers in the public schools. Care should be exercised in following the recommendation that all children secure a periodic health examination from their family physicians in addition to school health examinations. Unless sound health instruction accompanies school health examinations children and parents may come to rely upon the school and the medical examining personnel for all of their medical advice. Directing persons solely to school or health department medical staffs can prevent children from gaining the experience and knowledge of how best to use the existing medical facilities of the community. This is essential to the future assumption of individual and family responsibility for medical care. Children should be taught to be self-directing in securing health services rather than to rely upon sources which are withdrawn from them when they leave school. Health instruction which is properly coordinated with school health service should result in an understanding of the values of personal and family physicians and of all available health services in the community as well as an understanding of how to obtain the proper health services under various conditions.

PRELIMINARY PROCEDURES

(a) **ARRANGING FOR EXAMINATIONS.** The county nurse or a member of the health unit personnel should consult with the school administrator to plan details of the health examinations such as the time, the number and groups of children to be examined, invitations to parents, the preparation of the examining room, the distribution to teachers of the record forms and instructions for the preliminary testing and recording. When this has not

been done, or in counties where there is no full-time health unit, the school authorities should be responsible for initiating arrangements with the agencies which will be cooperating with the school health examination program. These arrangements should be made sufficiently in advance of the examinations to enable teachers and school administrators to perform the important preliminary procedures as completely and effectively as possible.

(b) **PREPARING THE CHILD.** The school child should be prepared psychologically by the teacher to desire the health examination and to realize its importance. This can be accomplished through class discussion concerning the examination and its relationship to everyday healthful living and the prevention of disease. To develop favorable pupil interests, attitudes, and understandings concerning health examinations the teacher should be familiar with the procedures to be used in examining and should be prepared to use this knowledge in effective teaching. Teachers can prepare themselves in securing essential background understandings through studying the health examination record forms (page 59), reviewing and adapting the suggestions for using health examination records in health instruction as described on pages 78, 79, 80, 93, and through studying the general examination procedures described in this chapter on pages 61-67. Conferences with previous teachers concerning past examination results and former health problems, as well as consultations with the nurse, the parent and the examining physician, should disclose to the teacher the more specific nature of the local examinations to be given and indicate the probable reactions and attitudes of his specific pupils to these examinations. With such preparation, the teacher should be able to judge the most effective ways and means for preparing his pupils for their next health examination.

(c) **INVITING PARENTS TO ATTEND THE EXAMINATION.** If the school situation permits, particularly in elementary schools, it is very desirable that the parents be present at the health examination to discuss the findings with the physician and to hear his recommendations first hand. After consultations with the examining physician, school authorities should be responsible for inviting parents to these examinations where their attendance

is possible. A very simple statement should be made to invite parents, giving them details concerning the time and place for the examination and stating simply the reasons why their attendance is important. Some such statement as the following might be used:

> **"You are cordially invited to participate in your child's periodic school health examination which will be held at (place) on (date). Your child's examination will be much more beneficial if at least one of his parents is present because it will enable you to talk with the physician and reach a fuller understanding of your child's health status and the physician's recommendations."**

Arrangements can be made with parents and with the physician for the examination of all school members of one family on the same day so that parents need not make several trips. If parents cannot be present the public health nurse should visit the home as soon as possible to communicate the results of the examination to the parents. The public health nurse should act as intermediary between the home and the private physician and dentist, or between the home and the agencies cooperating in the correction of defects. The school health examination, through this follow-up service by the public health nurse, can be an important part of the whole family and community health program. Teachers should be responsible for assisting the nurse in this follow-up work in their conferences with parents concerning the child's school progress.

(d) **PREPARING AND KEEPING RECORDS.** A uniform examination record for each child should be used. There should be two copies of each child's record, one to be kept on file in the school and one to be placed in the health department file. Teachers should be responsible for filling in certain information on both forms, depending upon school regulations. The official record form, shown on page 59, can be obtained in sufficient quantities from the local health unit or from the State Board of Health. The school copy of these records can be made on the Florida Cumulative Guidance Records, the recommended folder for pupil records used in most schools, or duplicate copies of the official forms can be kept on file in the school. The official record forms should be secured in sufficient time prior to health examinations

so that teachers can fill in the preliminary information and conduct the preliminary testing. If records are not kept properly and continuously, they are of little use and are a waste of time and energy. The classroom teacher should be responsible for having the records of his pupils up to date on both the school forms and on the official forms prior to the examinations. For children in departmentalized grades the home room teacher or a teacher appointed by the administrator should be responsible for preparing and keeping the records for a specific group and should be responsible for the preliminary testing and other preliminary procedures.

At the time of the examination the official record forms should be filled in carefully by the physician or by the public health nurse under the physician's instructions. After the physician or nurse has discussed the health of each child with the teacher, a copy of the record should be made on the school form by the teacher. These records should be easily accessible to the teacher or the teacher should make his own notations concerning the health problems of each child for his own use. The original record should be kept in the full time county health unit to be used by the public health nurse for follow-up home visits. Any further entries made on either copy should be transferred to the other by the nurse or teacher at periodic intervals. The confidential nature of health examinations should be observed at all times.

(e) **RECORDING PRELIMINARY INFORMATION.** In checking to see that the record forms are in readiness before the health examination date the teacher should be sure that the following information, needed by the physician, has been filled in on the forms as completely as posible:

(1) The previous history of the family and child. (Names, addresses, age, date and place of birth, etc. as requested on the top of the examination form shown on page 59).

(2) Record of illnesses, particularly communicable diseases. (See the blank spaces under "Disease Experience" on the sample record form. Any information not already supplied by previous notations should be secured from the parents or nurse.)

(3) Results of previous examinations. The nurse should be consulted concerning any lack of recording of previous examinations. This also includes the recording of the date and results of "Immunizations and Clinical Tests" as shown on the sample record form.

(4) Observations by the teacher. On the back of the record forms under "Notes on Clinic, Conference, and Field Visits", the teacher should record at any time observations that would be helpful to the physician in better understanding the child. Pertinent observations which have been made on the school cumulative guidance records concerning the child should be transferred to the health examination record form. These should be recorded under the column headed "Notes", and the teacher's signature under the column headed "Worker". Such teacher observations as follows should be recorded:

(a) Academic progress.
(b) Social behavior.
(c) Health practices and attitudes.
(d) Physical or mental abnormalties.

(5) Observations made by parents should be recorded by the teacher, public health nurse, or physician.

(f) **PRELIMINARY TESTING.** The teacher should be responsible for the weighing, measuring, the testing of sight and hearing of his pupils, and for recording results on the record form prior to the regular health examination by the physician. All teachers can learn to perform these simple procedures. When teachers conduct these preliminary tests time is saved for the physician or nurse to spend on items demanding more professional attention. This also provides the teacher with additional opportunities for valuable demonstrations in health teaching.

(1) **Weighing and measuring.** Pupils should be weighed and measured at school at least every three months and immediately before the health examination. This procedure should be used as a teaching experience. Weight and measurement are not sufficient criteria for the determination of the nutritional status of the child, but must be utilized with other factors, which include the total health examination as well as an understanding of the physical characteristics of the parents. The important feature about weighing and measuring is to show progressive, orderly increases in weight and growth. Standard weight is no longer considered a measure of health, and deviations should not be emphasized by the teacher or the parents. This should be explained by the family physician or the health authorities.

For weighing and measuring it is advisable for the child to have all heavy extra clothing and shoes removed. Conditions should be as similar as possible to those of the previous weighing and measuring. Children should wear approximately the same amount of clothing and should be weighed at approximately the same time of day as at the last weighing. The scales should be checked frequently for balance during examinations and the weight should be recorded to the nearest quarter of a pound.

If the scales are not equipped for measuring height, a tape measure can be used. It should be accurately tacked to a straight wall. The end of a chalk box or a book may be placed against the tape on the wall and as a child stands in front of the tape the box should be lowered easily until it rests upon the head of the child. The child being measured should stand facing straight ahead so that his head is not tilted backward or up. Height should be recorded to the nearest quarter of an inch.

(2) **Testing hearing and sight:** The classroom teacher controls in many ways the child's school progress, school adjustments, and social-emotional development which are decidedly influenced by his ability to see and hear. Therefore, it is especially important that teachers conduct the testing of sight and hearing. Furthermore, the teacher is responsible for making adjustments for children with visual or hearing defects as well as for motivating the correction or alleviation of such physical handicaps.

Several testing methods are described below. The teacher should consult the health unit personnel, however, concerning the testing method preferred for recording on the regular health examination record form.

HEARING TESTS

The 4A audiometer is the most reliable test for determining the extent of hearing loss. It is highly recommended for school use and should be the means used for testing hearing whenever possible. It is advisable for either the county school system or the county health unit to purchase an audiometer to be used by all schools in the county although this is difficult because of the present limited supply.

Where audiometers are available they should be shared as widely as possible and teachers should learn how to use them. Since there are few audiometers available for school use in Florida at present, however, several other less accurate testing methods can be used to determine at least which children appear in need of further attention.

The Whisper Test: The normal child should be able to hear a whispered voice at 20 feet distance. A fairly loud whisper, not a stage whisper, and clearly enunciated words, should be used in testing and should be kept as uniform as possible. A quiet room is needed. Any outside or extraneous noises should be at a minimum at the time of testing. The child should hold one ear closed so that one ear is tested at a time. Simple directions which the child can easily comprehend, such as "walk forward," "turn right," "repeat these numbers or words" should be whispered from 20 feet distance. If the child cannot hear, the teacher should move up one foot at a time and repeat the direction until the child can hear. If he hears at 20 feet the ear being tested can be recorded at 20/20, if he hears only at 16 feet, the score is 16/20. The same procedure is used for testing the other ear. The accuracy of this test, of course, is dependent upon the uniformity of conditions present, such as the presence of other sounds, the volume of whisper, the accuracy of the distance. The teacher should attempt to have conditions as uniform as possible for each test.

The Watch Test: Even less accurate than the whisper test, this test involves using a watch, preferably of medium size and quietness. The distance of the watch from the ear will vary in establishing the "norm" in respect to the loudness of the watch used. Naturally the same watch should be used for examining all class members. The teacher should hold the watch in the palm of his hand and stand behind the child being examined. The child should close one ear while the other is being tested. Starting at about arm's length from the ear (depending upon the loudness of the watch) the teacher gradually moves closer until the child indicates he can hear the watch tick. The distance of the watch from the ear may be roughly measured. Testing all members of the class with the same watch and same procedure will help the teacher to judge normal or possibly impaired hearing. Retesting will be necessary, but at least doubtful cases can be determined.

VISION TESTS

The Snellen Eye Charts are most commonly used and the most readily available school means for testing vision. It should be remembered, however, that these charts are used primarily for testing visual acuity, and that a number of eye defects may be present which the Snellen Eye Charts do not reveal. Many authorities recommend the use of the

telebinocular in addition to the Snellen Eye Charts because these instruments, when properly used and interpreted, will indicate other visual defects. Telebinoculars, like audiometers, are not numerous in Florida for general school use, however, while the Snellen Charts can easily be secured through local health departments or the State Board of Health. These charts sould not be kept on display constantly, but should be placed properly for use only during the eye testing periods. Window cards (cards with centers cut out to approximately the size of various letters) should be used in vision testing as they help to eliminate the memorization of the chart by the children.

In using the Snellen Eye Charts it should be remembered that they do not indicate the degree of farsightedness which may exist, nor the presence or seriousness of astigmatism or color blindness, nor the coordination and efficiency of the two eyes working together.

A child may have a 20/20 or normal vision rating on the Snellen charts and still have a vision defect which may be serious. The teacher, therefore, in addition to using this test as part of the health examination, should be constantly alert for observable signs of eye trouble, such as:

Complaints of frequent headaches, burning eyes, sties, inflamed or crusted eyelids.

Blinking, brushing hair away from the eyes, rubbing the eyes.

Holding reading materials very close or very far from the eyes.

Shutting one eye or screwing up the face when looking at objects or when reading.

Stopping frequently to look up when reading.

Inattention to wall charts, maps or backboard displays.

Although these signs do not necessarily indicate eye disorders, they do indicate that the condition of the child's eyes should be carefully considered as a possible cause of such conditions.

In routine vision testing, the Snellen charts will help in the discovery of children who may need to have further attention given to their eyes. Either the Snellen letter chart, the Snellen "E" chart, or the combination chart should be available in schools for testing purposes. On these charts each line of letters or "E's" is labeled as the 100 foot, 70 foot, 60 foot line, and so on. The chart should be hung where it receives good light, at least 10 foot candles, but not in a glaring light. The child should be seated 20 feet from the chart. One eye should be tested at a time by covering the other eye with a card. The child should be asked to name aloud certain letters or to indicate with his hand the direc-

tion of the three lines on the "E"s. The line which he is last able to read correctly is the foot line to be used in scoring. If he can read correctly the "20 foot line" but makes an error in the "15 foot line," his vision is considered at 20/20. Normal vision is considered as 20/20, which means that the child with normal vision should be able to read the 20 foot line at 20 feet distance. If, however, he is able to read only the line that should be seen at 30 feet, and makes a mistake on the 20 foot line, his vision would be recorded as 20/30. If no line below the 40 foot line can be read at 20 feet, it is recorded as 20/40. Although a score of 20/40 is considered indicative of faulty vision, any child whose record shows that less than normal vision is present in either eye should be referred to the examining physician or to a competent ophthalmologist for complete examination. Variations in the use of these charts may be recommended and explained by health unit personnel. Such variations may involve marking off the floor at different distances so the child can move up until he is able to read a certain line correctly. Different fractions are then used in recording. The advice of the examining personnel should be followed.

(g) **PROVIDING AN EXAMINATION ROOM.** If possible, proper clinic rooms should be available in every school. If such a room is not available a temporary space, well-lighted and sufficiently large to provide privacy for the examination of each child, should be provided by school authorities. The examining room should be supplied at least with the following: a desk, chairs, tables, sheets and paper towels. Someone to serve as a clerk or recorder should be provided. School authorities should consult with the examining personnel when other preliminary arrangements are being made to determine the quantity of such supplies and the nature of other supplies that may be needed. These should be ready and in the examining room before examination time.

THE HEALTH EXAMINATION

(See Appendix page 137, *Section* 230.23(8) *(f))*

The attitude of the children at the time of the examination is a good test of the teacher's preliminary health instruction and psychological preparation of the children. Interested, unworried, and cooperative attitudes should be manifested rather than those of over-excitement or fear. The teacher's previous understanding and teaching concerning the following general examination procedures as well as his familiarity with the purposes and items to be examined will have helped to achieve this. Items

SCHOOL HEALTH EXAMINATION RECORD FORM

NAME _____ (LAST) _____ (FIRST) _____ COLOR: W C SEX: M F

ADDRESS (1) _____ NAME OF FATHER _____

(2) _____ NAME OF MOTHER _____

DATE OF BIRTH _____ PLACE OF BIRTH _____

GRADE: SCHOOL								
AGE: DATE								
HEIGHT — WEIGHT								
NUTRITION								
ORTHOPEDIC								
POSTURE								
SKIN AND SCALP								
EARS								
EYES								
NOSE								
MOUTH								
TEETH, TEMPORARY								
TEETH, PERMANENT								
THROAT								
GLANDS								
THYROID								
HEART								
LUNGS								
HEARING		R 20 L 20		R 20 L 20		R 20 L 20		R 20 L 20
VISION, WITHOUT		R 20 L 20		R 20 L 20		R 20 L 20		R 20 L 20
VISION, WITH		R 20 L 20		R 20 L 20		R 20 L 20		R 20 L 20
PARENT PRESENT								
EXAMINER								

IMMUNIZATIONS AND CLINICAL TESTS

	DATE & RESULT	DATE & RESULT	DATE & RESULT
TYPHOID FEVER			
SMALLPOX			
DIPHTHERIA			
SCHICK			

DISEASE EXPERIENCE

	DATE	DATE		DATE	DATE
TYPHOID FEVER			OTITIS MEDIA		
SMALLPOX			PNEUMONIA		
MEASLES					
SCARLET FEVER					
WHOOPING COUGH					
DIPHTHERIA					

DATE	EXAMINER'S NOTES; SIGNIFICANT FACTS IN HISTORY; PHYSICIAN'S ORDERS

SCHOOL RECORD

FLORIDA STATE BOARD OF HEALTH
C. H. W. 3

Notes on Clinic, Conference, and Field Visits

Date	Food Habits	Rest	Conditions Under Medical or Dental Treatment	Notes	Worker

Code: O—satisfactory; 1, 2, 3—slightly, moderately, markedly unsatisfactory; X—needs medical attention; A Dash—no information obtained; OO—correction

C. H. W. 2

are listed on the record form (page 59). The teacher should inquire in advance concerning the specific procedures to be used with his group and should have taught the importance and purposes of each. This can be done most efficiently by the teacher's demonstration of the health examination and the procedures which will be used. Much valuable instruction should accompany this demonstration and it should serve as a good review of points studied in previous class discussions.

(a) **GENERAL EXAMINATION PROCEDURES:** At the time of the examination the health record forms, properly prepared, any advisable educational literature, and the physician's examining equipment should be placed on convenient tables or desks. Physicians will naturally vary in the procedures followed in their examination for the different items listed on the record forms. The description given here presents a general picture of the nature of a school health examination. Physicians will also vary in the methods they desire used in recording their findings. The following included suggestions for recording examination results may serve as examples for the information of teachers attempting to better understand the total examination procedures. The explanation of the code used for recording can be noted on the sample record on page 60.

(1) **Nutrition Examination:** Accurate measurements of malnutrition cannot be made easily, yet the physician can state whether a particular child appears to be in need of additional attention in respect to his nutritional status. The height and weight of the child are noted and an appraisal made of his general physical development and growth. The use of height and weight in determining nutritional status should not be overemphasized. Individual variations of different bodily types should be taken into account. Muscle tonus, texture of the skin, lustre of the eyes, color of eyelids, and appearance of the hair may be noted in making this appraisal. If suggestions of nutritional anemia are present a hemoglobin rating should be taken. The values of a well rounded diet and the associated need of plenty of sleep to promote growth can be explained. The relationship between nutrition, exercise and good posture can be explained.

In recording the nutritional status of each child the following code may be used:

0—Satisfactory

1—Some slight evidence of temporary loss of normal fat.

2X—Definite loss of fat, muscle tone, and distinct evidence of malnutrition.

3X—Marked evidence of abnormal nutrition, needing immediate attention.

(2) **Orthopedic and Posture Examination:** During the course of the examination the presence of orthopedic defects will be noted. Children with orthopedic defects will be referred to their private physicians to discuss examination and treatment at an orthopedic clinic if necessary.

Postural defects, when noted, should be explained in respect to their possible causes, such as poor nutrition, lack of proper exercise resulting in poor muscular tone, and mental attitudes and fatigue. The extent of the defects noted may be coded in the appropriate space as follows:

Orthopedic:

0—Satisfactory.

1—Slight impairment which will be evidenced by stooped shoulders, flat feet and postural defects of an orthopedic nature.

2X—Any impairment of a moderate nature which could be improved either by treatment or operation.

3X—This would include such things as more serious postural defects, spinal curvatures, high shoulders, hunch back, limping and post paralysis impairments.

Posture:

For recording postural defects other than those of an orthopedic nature:

0—Satisfactory.

1—Slight impairment as evidenced by flat feet, stooped shoulders or other defects due to faulty nutrition, lack of exercise, mental attitudes or fatigue.

2X—Faulty posture of a moderate functional nature, such as drop shoulders, functional lordosis (hollow back) or scoliosis (lateral curvature of the spine), which could be improved by corrective exercises, improved nutrition, proper attitudes and increased rest.

3X—In this class would come the worst cases of children with functional postural defects.

(3) **Skin and Scalp Examination:** The texture and consistency of the hair and the contour of the head will be noted. Presence or absence of abnormal growths, prominences of the head, and the presence or absence of pediculi or nits in the hair may be noted.

The general cleanliness of the skin and scalp, and the presence of skin eruptions will be noted. Signs of scabies or impetigo should be checked very carefully.

The following outline should be used for recording various observations made under "Skin and Scalp" (See Health Examination forms):

0—Satisfactory. No eruption. Clear skin. Clear scalp.

1—Slight eruption of minor nature.

2X—Moderate degree of eruption or scratch mark on the back of the hands and between fingers. Ulcerated areas more or less oozing or covered with a scab on face, margin of hair, or on legs or other parts of the body.

3X—Marked degree of eruption of the character designated above. Special note if pediculi are present.

(4) **Ear Examination:** The physician will examine the external ear for abnormalties such as eczema, discharge, foreign bodies, and for general cleanliness. The ears may be examined next with an otoscope. The otoscope is nothing more than a flash light attached to a funnel in such a way that the light passes from the mouth of the funnel to its outlet at the small end, producing a concentrated spot of light. A magnifying glass is fastened over the large end of the funnel. The instrument can be explained to the child. With this instrument the physician examines for abnormal wax or other foreign bodies which may be obstructing the external ear. He also notes the appearance of the ear membrane (ear drum). By this observation he is able to determine the presence or absence of infection in the middle ear. The

results of the child's preliminary hearing test as recorded on the examination form should be noted and checked by the physician and appropriate advice given to the parent.

For recording ear examination findings the following code may be used:

0—Satisfactory.

1—Slight eruption or uncleanliness.

2X—Evident obstruction such as hard wax and removable foreign body; moderate degree of eczema or moderate ear involvement.

3X—Marked obstruction requiring operative removal; middle ear involvement with running ear and eczema.

(5) **Eye Examination:** The eyes will be observed for conjunctivitis (redness or inflammation), "pink eye", swelling and granulation of the lids. The physician may test the muscular action of the eye muscles and note any squinting, blinking, nystagmus (jerky motion) or strabismus (cross eyes). The child's record is consulted for the vision test reading, and if an abnormal finding is noted this is explained and recommendations made.

The physician's findings on eye examinations should be recorded as follows:

0—Satisfactory.

1—Slight variation from normal.

2X—Moderate redness or inflammation, swelling or granulation of the lids.

3X—Marked conjunctivitis, "pink eye", strabisms, nystagmus, eye injury or other abnormalities.

(6) **Nose Examination:** The physician will examine the nose for congenital defects, obstructions such as deviated septums, foreign bodies, polyps (grape-like growth of tissues), congested mucous membranes, abnormal discharges and enlarged adenoids.

For this examination the physician will probably use a sterilized nasal speculum. This is a flexible instrument with funnel like dividers at the end to spread open the nasal passage.

The physician's findings should be recorded as follows:

0—Satisfactory.

1—Slight choryza (watery discharge due to upper respiratory cold) or slight deviation of septum (division between nasal passages) producing little obstruction.

2X—Moderate obstruction due to deviated septum, foreign bodies, polyps, congested mucous membranes, abnormal discharges, enlarged adenoids, or symptoms of sinus involvment.

3X—Marked conditions as described in 2X.

(7) **Mouth, Teeth and Throat Examination:** In examining the mouth, teeth and throat the child's color and general physical state are taken into account.

For the purpose of examining the mouth and throat a tongue blade is used. The tongue depressor is used to push the inner surface of the mouth away from the gums so that the condition of the teeth and the gums may be observed. The gums will be observed for pallor, inflammation and oral hygiene, and for the presence or absence of congenital abnormalties such as cleft palate or harelip. The teeth will be observed for faulty development, occlusion and caries.

NOTE: The physician's dental inspection will be more or less casual. Attention should be given to temporary teeth even though they are coming out to make way for the permanent teeth, as a neglected temporary tooth will make trouble for the permanent one. Attention should be given particularly to the sixth year molars which are permanent teeth. (See Dental Examinations on page 66.)

The tongue depressor is also used to hold down the tongue while the throat is being examined. The throat is observed for defective tonsils, naso-pharyngeal drainage, edema (engorgement of the mucous membrane of the nasal pharynx), obstruction of the nasal pharynx, enlargement of the tonsils or adenoids.

The following codes may be used in recording the findings:

Conditions of the mouth:

0—Satisfactory.

1—Slight evidence of mouth breathing (may be temporary condition due to acute cold), slight high-arched palate (a condition which may be the result of mouth breathing which has been allowed to continue too long without attention).

2X—Unmistakable evidence of mouth breathing, but the condition has not progressed to such an extent as to cause a permanent facial distortion. Note anemia of gums or poor oral hygiene.

3X—Marked evidence of mouth breathing. Cannot breathe through nose. Mouth breathing has progressed so as to cause a permanent facial distortion.

NOTE: Make a special note of the presence of cleft palate or harelip and marked gingivitis (inflammation of the gums). (A cleft palate is where nasal and mouth cavities are united through a cleft in the palate. Any degree of cleft palate and harelip is apt to interfere with speech.)

Conditions of the throat:

0—Satisfactory.

1—Slight inflammation.

2X—Moderate inflammation and enlargement of tonsils and adenoids with naso-pharyngeal drip.

3X—Marked degree of conditions noted in 2X.

Condition of teeth:

(The same code is used for both temporary and permanent teeth)

0—Satisfactory. Teeth clean and no evidence of decay.

1—Slight defect. Teeth unclean or slight pit cavities in the temporary teeth.

2X—Moderate defect. Teeth with heavy green stain or badly broken down cavities in the permanent teeth.

3X—Urgent condition in either temporary or permanent teeth which have abscesses in the gums near their root.

(8) **Glands Examination:** This portion of the examination refers particularly to the anterior glands in the forepart of the neck, but there are similar small aggregations of adenoid tissue located in various parts of the body such as at the back of the neck, under the armpits, and in the groin. The anterior glands of the neck which are located in the angle of the jaw with the neck are connected with similar adenoid tissue of the tonsils and mouth region. The ones behind the neck receive the lymphatic draininge from the scalp. The anterior glands may become inflamed and enlarged from an acute sore throat, acute tonsilitis, chronic enlarged tonsils, infected adenoids, infected sinuses or abscessed teeth, for in all these conditions the infected areas drain into the same region of the neck. They may also become enlarged through serious diseases of the glands themselves.

The following code may be used with particular reference to anterior glands in the forepart of the neck. Involvement of other glands in the body should be recorded as a special note.

0—Satisfactory. No visible evidence of abnormalities.

1—Slight enlargement, size of a shelled peanut, detected by the physician's feeling the region with the fingers.

2X—Moderate enlargement, size of a small lima bean.

3X—Marked enlargement, size of a small acorn or larger. Special note if gland is discharging.

(9) **Thyroid Examination:** The thyroid gland is a gland of internal secretion and is closely linked with other glands of internal secretion. Any abnormality of this gland may become part of an abnormal endocrine (glands of internal secretion) symptom complex. The normal thyroid is so small it cannot be easily seen or felt. Where abnormalities of the thyroid are found their nature and relationship to the other glands of internal secretion in the body should be explained.

The following code should be used for recording abnormalities:

0—Satisfactory. No enlargement.
1—Slight enlargement.
2X—Moderate enlargement accompanied by slight nervousness, loss of weight and increased heart rate.
3X—Greatly enlarged and disfigured, particularly accompanied by nervousness, loss of weight, bulging of the eyes, rapid heart and flushing of the face.

(10) **Heart and Lungs Examination:** For heart and lungs examination the children should be stripped to the waist if feasible. The examination is conducted for the most part with the use of a stethoscope. The stethoscope is an instrument consisting of a funnel shaped piece of metal attached to two long rubber tubes connected with ear pieces which are placed in the physician's ears. The bell shaped portion of the stethoscope funnel is held close to the chest at different points in the front or the back. This instrument magnifies the sound in the chest. It is through these variations in sound that the physician is able to interpret normal from abnormal chest conditions. The chest will be examined for abnormal density and breath sounds characteristic of certain abnormal conditions. Albnormality of the chest should be checked by X-ray.

The heart of the child is checked for irregularity of rate or rhythm and for the presence of murmurs, before and after exercise. Positive heart findings should not be over-emphasized but should be explained as being questionably of functional or organic nature. Recommended further observations will reveal the significance of any such findings.

Code for the heart:

0—Satisfactory.
1—Slight observation, probably transient.
2X—Heart murmur, questionably functional or organic in nature.
3X—Enlarged heart. Marked palpitation. Murmur. Decidedly organic.

A 3X condition will be characterized frequently by shortness of breath when at play or in climbing stairs, or by sudden flushing of the face. The type of murmur, whether systolic or diastolic, may be recorded in a special note.

Code for the lungs:

0—Satisfactory.
1—Slight observation, probably transient.
2X—Lung findings associated with the history of persistent coughing over an extended period of time and associated with constant loss of weight, or a history of tuberculosis in the child's family.
3X—Marked chest findings associated with history of acute upper respiratory infection or a history as outlined in 2X.

(11) **Emotional Status:** The emotional status of a child in relationship to the scholastic accomplishment should be considered. The intelligence quotient of the child should be taken into consideration. When facilities are available, children with average intelligence, but with marked evidence of maladjustments, should be referred to a child guidance clinic.

Abnormalities of personality and adjustment may be recorded in the additional space on the health record, using the general code to show the degree of maladjustment and a special note as to the type of abnormality.

(12) **Immunization History:** If the child's record shows that he has not been vaccinated consistently for smallpox or immunized for diphtheria, the need to bring these up to date will be emphasized. Parents and children who fail to become vaccinated are susceptible and frequently contract the disease on exposure. The fact that rapid transportation contributes to the increased possibility of exposure to communicable diseases should be brought out.

(12) **Hookworm Infestation:** Signs and symptoms of hookworm infestation, if present, will be noted along with the general examination. If previous tests do not confirm these findings subsequent tests should be requested. A record of tests that have been taken should be found under the "Immunization and clinical tests" section of the health record form. The nature of the disease and its relationship to sanitation and the measures necessary to rid the child of the infestation may be explained.

(b) **DENTAL EXAMINATIONS:** The condition of a child's teeth has a direct bearing upon his entire health status and should be considered a definite part of the school health examination. Arrangements for the dental examination of school children should be made by the school authorities in cooperation with the local dental society and the health authorities. Dental examinations should be made by a dentist. Where no dentist is available, however, a dental hygienist or a physician may make inspection. The examiner should present at least the basic facts about teeth in respect to the dental defects that are observed. At all times the necessity of early and continuous dental care by the dentist should be stressed so that teeth may be saved and infections prevented. Defects found should be recorded on the health examination form as are other examination results. Dental inspections or examinations are not of real value unless followed by corrective programs. Assistance in establishing a dental corrective program, either in the private dentist's office or in the dental clinic, should be a part of every school health program. The teacher and the nurse should be responsible for instigating and assisting with dental follow-up work as a part of their follow-up of other examination results. Where regular dental examinations are not made frequently enough, both the teacher and nurse should plan and conduct the inspection which will screen out the most urgent dental defects and lead these children to sources for further examination.

(c) **OTHER EXAMINATIONS:**

1.) Examinations should be made of all students taking part in major athletics at the beginning of the practice season for each major sport. The examination should be made by the team physician in cooperation with the full-time health unit.

2.) At least annual re-examinations should be made of every child in whom major defects are found, to ascertain from time to time the progress of the child.

3.) Many preventable defects develop during the pre-natal, infant, and pre-school periods. Obviously the periodic examinations made during these periods should aid in bringing to the school a child in better physical and mental conditions. Immunizations should be given during the first year of life as a part of these examinations. Summer round-up examinations have been made because of the lack of adequate facilities for periodic examinations during the pre-school period of the child's life. Where adequate pre-natal, infant, and pre-school services are available there should be no need for the summer round-up. Where these are not available it is advisable to examine early in the spring those pupils who intend to enter school for the first time in the fall. Thus any defects found may be corrected before school opens.

4.) Transfer students. All transfer students should be examined upon entrance unless there is an accompanying record of a recent adequate examination in the former school. Health records should be transferred when the pupil changes schools.

3. **Educational significance of health examinations:** The accurate recording of examination results, the completion of the teacher's copy or the school copy of the record form, and the consultations with the nurse or examining physician are the teacher's first responsibilities in the important follow-up work after the health examinations. Teachers should review the chapter on Health Instruction for more detailed suggestions on the use of health examination findings in the health teaching program. The teacher's actual follow-up work, involving individual conferences with specific children, their parents, and the nurse, should not be forgotten any more than should the more general use of the examinations in health teaching. The importance of both the preliminary procedures and the most effective use of examination results cannot be over-emphasized. Unless the educational purposes and possibilities are well utilized, the value of the health examination is at a minimum and the educational results may even be negative. The parents, the nurse, the teacher, the school authorities, the health unit, and other community agencies should cooperate closely in making health examinations and the correction of defects most sound and educationally significant.

CORRECTION OF DEFECTS

Periodic health examinations are of little value unless the defects found are corrected. It is the parents' responsibility to arrange for the adequate treatment of the child. Where the parents are unable to pay for this service other means should be sought, but utilized only with the consent of the parents.

The correction of defects can be facilitated by:

1. The presence of the parents at the health examination: A form detailing the definite defects in readily understandable terms should be presented to the parents at the termination of the examination. When the parents are not present this form should be taken to the home by the public health nurse and carefully explained.
2. The home visits made by the public health nurse to advise the parents and to assist them in obtaining corrections.
3. The utilization of the health examination findings in the health instruction program in the school.
4. The teachers' follow-up work through conferences with pupils and parents concerned with corrections.
5. For parents unable to pay, the full utilization of community resources, which should be carefully studied by the health authorities to assist in providing for the correction of defects. Welfare agencies should be consulted concerning the degree of indigency before help is given.

THE GUIDANCE OF HANDICAPPED CHILDREN

(See Appendix pages 137, 139, *Sections* 230.23(8) *(e);* 232.06(1)*)*

School authorities are responsible for providing adequate instruction for all children who are compelled by law to attend school. This includes the provision for such individualized instruction as may be necessitated by the presence of handicapped children in school. Children with orthopedic, visual, speech, hearing, heart, neurological, or certain mental abnormalties present problems in many schools. Special attention must be given to adjusting instruction so that the needs of these children are as adequately met as possible. There are two schools of thought concerning the provision of special facilities for handicapped school children. One group of school administrators believes that special schools should be built and staffed for the care and teaching of children with the various types of handicaps. Under this type of administration, children are segregated from their playmates who are not handicapped, and often make greater progress during their school experience than would be possible in an average school.

A second group believes that special schools are necessary for a very limited number of handicapped children and that the average school can be adapted to the care and instruction of most of the handicapped children who are not bed patients and who are able to reach the school through transportation facilities afforded by the school authorities. It is recognized, of course, that there still remains a large group of children who are home bound and who will require care and instruction in their homes. The establishment of special schools and special instructors for children handicapped with various types of conditions tends to set them apart from contacts with normal children which makes it difficult for these children to adjust themselves to society when they have completed their education. The group of administrators which believes in attempting to adapt the average school, in so far as is possible, to the needs of all children has made considerable headway in recent years along these lines.

It is assumed that each child shall have a proper inspection by the teacher on entering school and at frequent intervals thereafter. In addition, it is assumed that children with obvious or specific defects shall have a proper examination by a qualified physician who will be expected to indicate the special care that the child should have in order to proceed with his education. Unless a thorough physical examination is given to these children, it would not be possible for the teacher to appreciate the handicap of the child and the special precautions which should be observed for him during the period he is attending school.

The major responsibility for the guidance and instruction of handicapped children falls upon the classroom teacher. These children need social and emotional guidance as well as individualized care in respect to their specific deviation from normal. For this reason handicapped children should not be set apart from the normal social group but should be helped in finding a satisfactory place among the total group. On the other hand, the type of attention paid to the handicapped child should not be of such nature or extent that the progress of the rest of the class is delayed. The teacher will need a thorough understanding of the children needing this type of guidance and a knowledge of the nature and degree of the specific handicaps involved. It is suggested that the teacher have one or several conferences with the medical specialist caring for each handicapped child. By observing carefully the opportunities for favorable seating arrangements in respect to comfort, light, and sound; for individualized study programs; for extra conferences; for assigning responsibilities through which such children can

experience real success and through other devices, the skillful teacher can assist handicapped children to achieve satisfaction and growth as members of the total class group.

Extreme cases present difficulties, of course, and all community resources should be utilized in securing the proper assistance for these children. There are several suggestions given below, however, which may aid the teacher in the classroom guidance of handicapped children attending regular school:

1. **Orthopedic Defects.** The child with an orthopedic defect (one with a disability of the arm, leg, or spine involving some motor handicap) often has difficulty in negotiating the stairs or in going to the toilet after he has reached school. Teachers and principals can assist this child by arranging to have him assisted or carried upstairs or to the toilet. The seats in the school room are designed for the use of children with normal physical development. Slight modifications, such as the addition of a box for the feet, a higher or lower seat, a homemade adjustment of the back, a support for the leg, or legs, or for a semi-reclining position, will make the child comfortable and permit him to participate in the school program without pain or discomfort.

   School children can be cruel in their attitude toward crippled children, although they are ordinarily not inclined to do so. With proper direction and stimulation, the average normal school child will accept a handicapped child as an equal and will go out of his way to assist him.

   Without a tendency to segregate the child and deny him the pleasure of social contacts, it goes without saying that every attempt should be made to have children with orthopedic handicaps examined by qualified private orthopedic surgeons or by the surgeons employed by the Florida Crippled Children's Commission, in order to see whether or not anything can be done to correct the disability. Infantile paralysis still continues to be an important if not a major cause of handicap in children of school age. The neglect of a child with long standing poliomyelitis usually results in a disability due to weak or overstretched muscles that should have been supported by appropriate bracing and appliances. The longer the condition is neglected the greater the degree of disability. It is important, therefore, that slight orthopedic disabilities should be recognized as promptly as possible and appropriate measures taken to protect the child from a subsequent handicap that inevitably develops.

2. **Visual Defects.** Visual defects constitute one of the most frequent forms of handicapping conditions among school chil-

dren. The proper use of the standard Snellen test chart should be made by the teacher and other signs of visual disturbance observed carefully. The teacher should do everything possible to see that children with suspected visual disturbances are reported to the nurse or examining physician or that such children secure a thorough examination by a competent ophthalmologist.

The type of school lighting has a profound influence on the ability of children to read and follow instructions on the ordinary blackboard. The Florida Council for the Blind is issuing a special pamphlet on school lighting, which should be secured by administrators and teachers.

In addition to these methods of proper school lighting, the average school principal and teacher can improve conditions in the room by proper adjustment of the blinds, the position of the seats, and frequent cleaning of the walls and the globes surrounding the source of light. Lighting engineers point out that the efficiency of light rapidly decreases when the bulb or globe becomes dirty. Arrangements should, therefore, be made for systematic and regular washing of bulbs and globes. (See page 31 for standards on classroom lighting.)

3. **Speech Defects.** Defects of speech also constitute an important difficulty with many school children. Stammering, stuttering, and lisping are quite common speech defects among school children. It is unfortunate that this type of child often becomes the object of imitation or ridicule by other children. The strenuous attempt of the child to overcome his difficulty often aggravates his condition. It is only through the careful guidance of the teacher that the child is protected against ridicule and is taught the fundamentals of good speech. There are a number of text books on this subject that should be helpful to teachers with these problems. In addition, there is at the University of Florida a Division of Speech Correction which will give helpful advice.

4. **Hearing Defects.** Unrecognized hearing defects are a frequent cause for an apparent inability of a child to learn rapidly, because he does not hear the teacher. In the same manner as with visual difficulties, these children should be tested by the teacher, as described on page 55, to be followed, whenever possible, by a physical examination by a qualified physician. All too frequently, the lack of ability to hear is caused by impacted wax or foreign bodies in the ear canal. Other conditions which cause partial deafness are frequent head colds, chronic middle ear disease, and enlarged adenoids. Obviously such conditions should receive treatment at the

earliest opportunity. As has been suggested concerning visual defects, children who do not hear well should be seated in the schoolroom towards the front so that they can hear the teacher more distinctly.

5. **Heart Defects.** It is more difficult perhaps for the teacher to recognize conditions which may indicate heart defects and the teacher should never attempt to classify or diagnose cases as such. A child that has blue lips, cyanosed finger nails, puffy ankles, and who is short of breath on exertion should be immediately referred to a physician for a complete examination. Children who participate in strenuous athletic events should be given an additional heart examination before the practice period for the sport begins, as irreparable damage can be done to a diseased heart through such activity. If, after an examination by a physician it is considered that the child with a heart condition is able to attend school, provision should be made for him to lie down for a rest period sometime during the day. Many schools have been able to improvise folding cots for this purpose, or to use canvas inclining chairs. Such children's programs of exercise should be carefully planned and supervised.

6. **Neurological Defects.** Neurological defects as distinguished from mental defects are more difficult to handle in the average school room. The acceptability of these children for the average school will depend largely on the type of the difficulty and the ability of the child to compensate in carrying on the regular activities of the school. Although there are a number of conditions such as spastic paralysis that are closely allied to orthopedic defects for which no operation appears to benefit the child, there are, in addition, a number of minor neurological conditions such as habit spasms and tics that are associated with behavior disturbances and an inferiority complex. Where these exist, the understanding teacher in cooperation with the examining physician can accomplish a great deal in adapting a child to the normal school routine.

7. **Certain Mental Defects.** The child with an obvious and outstanding mental defect as shown by a careful psychological and physical examination should not be allowed to attend the public school. In the border line cases, the child frequently becomes the object of ridicule from other children unless an understanding teacher directs the normal pupils to special consideration of the child's disabilities. Insufficient provision is usually made for special instruction for these children, and it is particularly important that they

should not be urged to attempt mental processes far beyond their ability to comprehend.

8. **General Debility and Anemia.** General debility and anemia is a condition too frequently found in school children to neglect special attention by teachers. The incidence of intestinal parasitic infestation in school children throughout the state, especially in Northwest Florida, is so high that a special effort should be made to have the stools of all school children examined at regular intervals and plans made for appropriate treatment through the school authorities. The State Board of Health provides a laboratory service to the schools, without charge, and medication for treatment on request. The health record of each school child should include a definite statement at frequent intervals regarding this matter. It is just as important as the routine record of immunizations. A continuous drive should be carried on in all schools to urge the construction of sanitary privies for each home. In some schools manual training departments have used the construction of model privies as a project for pupils. It is only by a coordinated and continuous drive by all educational personnel and health authorities that progress can be made in the control and eradication of intestinal parasitic infections. Similarly, frequent studies should be made on the actual food each child eats in order to determine the type of instruction on food and food habits to be taught in the schools.

FIRST AID FOR SCHOOL ACCIDENTS

1. **Responsibility:** It is expected that schools will do everything possible to prevent accidents in school buildings and grounds through the elimination of dangerous or imperfect equipment, through alert supervision, the observance of other safety procedures, and through safety education.

   In case of accident or sudden illness, first aid for ordinary injuries is the responsibility of the teacher. The ideal is that every teacher should be prepared adequately through the Red Cross Standard Course in First Aid. Classes for such training usually can be arranged through the local Red Cross Chapter. If this is not feasible, the Red Cross National Headquarters in Washington, D. C., can advise concerning the nearest authorized instructor. If all teachers in a school cannot have such training, at least one should be so prepared. It is advisable that one teacher in each school be qualified by the Red Cross as an Instructor in First Aid.

2. **Facilities:** There should be a first aid cabinet or kit in every room; the minimum should be at least one in every school, in a place accessible to all. There should be a clinic room or rest room, or in one-room schools, a first aid corner of a cloakroom where emergency cases can be treated. Every school bus should be equipped with a first aid kit and bus drivers should be trained in first aid care. Wherever a Red Cross Highway First Aid sign is displayed, trained personnel is available.

3. **Limitation of Treatment:** A teacher trained in first aid will know what should not be done as well as what should be done. In cases of sickness, a teacher should not give medicines except under a physician's direction. A teacher should never diagnose any illness nor any accident.

4. **Notification of School Authorities:** When an accident or illness occurs the teacher should notify the school administrator as soon as possible so that he is familiar with what has happened in case inquiries are directed to him.

5. **Notifying Parents:** As soon as possible after an accident or the onset of sickness, the school should notify the parents, turning over to them the responsibility for deciding on further arrangements for a child's transportation home.

6. **Disposition of the Pupil:** Before or after first aid has been administered, a pupil who needs to be removed from school should be kept quiet and away from a crowd until a physician, an ambulance, or the parents reach the school. Ordinarily the pupil should not be sent home alone or accompanied only by another pupil.

7. **Accident Record Form:** An account of the accident should be written on an accident record form. In cases of accidents which may prove serious, the names and addresses of witnesses and a signed statement as to what they observed should be taken at the time of the accident.

8. **Educational Aspects:** The need of administering first aid provides a learning situation which should be utilized in class discussion as to how the accident happened, how it could be prevented next time, how it was taken care of. First aid care to prevent infection can be related to general science and health instruction. The care for shock, bleeding, and broken bones, can be related to the study of the structure and functions of the body. Making equipment for an emergency room or corner may be a problem for the shop, industrial arts, or home economics classes.

HEALTH INSTRUCTION

CHAPTER FIVE

HEALTH INSTRUCTION

DEFINITION

"Health Instruction is that organization of learning experiences directed toward the development of favorable health knowledges, attitudes, and practices." Every teacher in the school has a function in the health instruction program, although at different school levels certain teachers will assume major responsibilities. Every teacher, therefore, should be familiar with the health education program of the school so that his health teaching contributes toward the aims of the total school program. Health teaching is in part a problem of recognizing teaching situations as they arise and using these situations to best educational advantage at the time and place they occur.

INTRODUCTORY STATEMENT

Health should be taught in each school according to the general plan of instruction used in teaching other areas of learning. If an integrated plan of general instruction is used, there are many excellent opportunities for integration in health teaching. If the school follows the plan of dividing the day into subject periods, a definite period for health instruction should be provided. Just as is true with all teaching, health content should be scientifically accurate, and the teaching methods educationally sound. Especially in the field of health there are many dangers that faulty information may lead to the development of erroneous attitudes and practices unless teachers are thoroughly prepared and use accurate and scientific sources of information.

Health education has been described as a way of living as well as a subject to be taught. Health instruction, therefore, should develop from and improve the quality of the life experiences of the child. Since the school provides only one part of the total experiences of the child, health instruction must be concerned with home and community influences and must seek to relate the child's understandings, attitudes, and practices with his everyday living in home, school, and community. The child's

actual health needs should be basic in determining what to teach, and health instruction should result in such modifications of the child's health practices as will lead to the solution of his health problems and improve his adjustments to problems of everyday living. Health instruction should help to enable the child to live a fuller, happier, and more satisfying life. It should guide him to become self-directing in his daily living. To be effective, therefore, health instruction must be concerned with the inseparable physical, social, emotional, and mental reactions and interactions of the whole child.

As a part of the total program of health education, health instruction is definitely related to both the health service and the healthful school living phases of the program. Not only do the health services and the school living practices provide bases for determining what to teach but the effectiveness and educational values of both of these programs are dependent upon the methods, procedures, and content of the health instruction program. The first and most important responsibility of the health instruction program lies in the educational significance it offers to the health service program and to the program of healthful school living.

The values and outcomes of health examinations, morning observations, school measures for preventing and controlling communicable diseases, and other health services will be decidedly limited unless the children are soundly motivated and taught through the health instruction program to derive lasting benefit from these services. It is the teacher's responsibility to prepare his pupils so that they appreciate and cooperate with health examinations. This necessitates the teacher's understanding of the nature and purposes of health examinations as basic to his responsibility for developing favorable pupil understandings and attitudes relative to health examinations. If the findings and results of health examinations and other health services are not considered fundamental in the planning of health instruction, the total school health program may fail to achieve its educational aims for improving the health status and the healthful living practices of children.

Procedures related to healthful school living will likewise have only narrow and limited value unless given direct educational and instructional interpretation. School living situations cannot be soundly improved nor profitably utilized unless pupils are guided in the correct use and care of the school building, its equipment and supplies; unless pupils are taught how to live effectively throughout a hygienically planned school day; nor unless their learning experiences include participation in classroom activities where the social and emotional tone is conducive to

happy living. Children learn more, perhaps, from their environfent and from the adjustments they make to it than from what is actually taught in the classroom. The teacher must consider the problems of school living, therefore, as most important instructional situations and should guide the child in his adjustments to his school environment so that he progressively contributes to the improvement of healthful school living.

It should be clear, consequently, that although there are specific problems which may be more directly related to one than to another of the three phases of school health education, all phases are definitely inter-related. School or health department personnel who are concerned with the school health program and who lack an understanding of the inter-relationships between all three phases of school health education will be performing only a limited function and service at best.

DETERMINING WHAT TO TEACH

The individual teacher is faced with the important responsibility of deciding which specific health experiences should be provided for his specific pupils. Understanding that existing needs and interests of the children should be basic in determining what to teach, the teacher should also realize that any prescribed outline of health teaching content can never serve as a sound starting point. Such prescribed outlines cannot present accurately the comparative importance of health problems among specific children. Outlines of suggested problems should be considered as merely "suggested", and should be used by the teacher only as a check on possible needs which may have been overlooked.

There are several definite and specific guides the teacher can follow in determining what to teach. It should be remembered that for every grade level in the school sound health instruction will begin at the present level of the children and progress as far as possible toward desired and needed outcomes. The basic task of the teacher, therefore, is the discovery of the present level of his children in respect to their health status, practices, attitudes, and knowledges. So long as a health problem still exists it has its place in the curriculum at any grade level until the problem is satisfactorily solved. The teacher should study his pupils, his school and teaching situation, and his community in the light of the following guides to determine what to teach:

1. **What are the findings of the health examinations?** The actual health status of each child can best be determined through conferences with the examining physician or the public health

nurse concerning the health examination findings. The teacher should make and keep confidentially his own record of these findings, which provide the first and most important determinant of what needs to be taught. If dental defects or malnutrition, for example, are disclosed by the health examinations to be serious problems with specific children, health instruction should provide the knowledges and develop the attitudes which lead to the solution of these problems.

2. **What are the observable health and safety practices of specific children in specific situations?** The classroom teacher is the best person to judge the relative needs for health instruction based on the actual practices of the children in respect to hand-washing, the use of toilet facilities, the selection of food, pupil practices in getting to and from school, practices at play and rest, and many others. Alert observation, informal discussion, and conferences with other teachers and parents are the teacher's means for determining needed health instruction on the basis of the present practices of the children.

3. **What are the health practices in the homes of the children?** Through informal discussions with the children, home visits, and conferences with the nurse, the teacher can determine many of the home health practices which greatly influence the health practices of the children. The nature of these home practices should guide the teacher in the type of health instruction to plan for the children.

4. **What are the social, emotional, mental, and physical characteristics of children at specific age levels?** The teacher should understand the characteristics to be expected of children at the age level of his pupils in respect to physical growth, social development, emotional stability, and mental capacity. The degree to which specific children deviate from known and expected characteristics of their age group will indicate needs for adjustments. Understanding children at specific age levels will also assist the teacher to determine the types of approach, the motivation, and the methods most likely to be effective with specific groups.

5. **What are the children's needs as related to the basic physiological needs of all persons?** Basic physiological needs of man have been described as the needs for air, water, food, sleep, rest, sunshine, exercise, and elimination. A study of the pupils' problems in meeting these basic needs in their own lives will reveal the specific nature of certain learning experiences needed by the pupils. What are the pupil's problems related to air, to food, to sleep, to exercise, to elimination?

6. **How do health situations in the local school furnish leads to needed health instruction?** The total school environment as

it deviates favorably or unfavorably from healthful school living standards has decided influence upon the health and education of children. It is the teacher's responsibility to understand the school environmental forces affecting his pupils and to guide their adjustments to this environment so that sound educational experiences result. A study of the local school environment as suggested in the chapter devoted to "Healthful School Living," page 27, should suggest many teaching opportunities. The school lunch room, for example, should certainly be used as a laboratory for health teaching or else it has no place in a public tax-supported educational institution. The type of lunch room in which specific children eat, the kinds of food provided for their selection, and the children's food selection practices all provide excellent leads to health instruction. Many other phases of the school environment should be similarly studied by the teacher who wonders what health instruction is needed.

7. **What have been the previous health learning experiences of the children?** Conferences with previous teachers, a study of student records, the administration of health knowledge tests, and other similar procedures should indicate to the teacher the previous health instruction experienced by his pupils. An inquiry should be made concerning methods and emphases previously employed. The results of previous teaching should be both observed and tested. Such study should reveal rather definitely the needs for certain re-emphases, for a change or continuance of certain methods and for the introduction of new experiences based upon previous learning.

8. **What major student interests are related to needed health instruction?** An alert recognition of vital pupil interests not only guides the teacher in selecting what to teach but will indicate the most effective motivation to be used in teaching. Current student interest may be centered around sand-lot play activities after school, football spectatorship, Boy or Girl Scout activities, hobbies, reading, or others. More general interests may be centered around the desire for growth, for being accepted by the group, or around the desire for success. The degree to which health experiences are closely related to vitally felt pupil interests will influence the degree to which health experiences are significant to children.

9. **What pupil experiences in other study areas provide leads for needed health instruction?** The opportunities for emphasizing and enriching health teaching through the leads from other study areas should not be overlooked. In planning, the teacher will know in advance when these opportunities are likely to arise. The teacher should be prepared to seek definite health outcomes as well as outcomes related to other areas. Health

outcomes do not result "incidentally" and they require just as definite teaching as do other educational ends. The actual health needs of the group, rather than merely the presence of opportunities for correlation, should determine the emphases and the amount of time to be given to the health contributions of other subjects.

10. **How should health instruction be related to the persistent problems of all children as indicated in the general program of instruction for elementary grades described in Bulletin No. 9?*** Since the guidance of health experiences is an integral part of the general instruction program for Florida's elementary schools, a study of Bulletin No. 9 should indicate further to the teacher certain health problems related to the general teaching plan. The program of instruction described in Bulletin No. 9 is based upon the expanding interests of children and provides a plan for gradation which will be helpful to the teacher in relating specific health problems to general instruction.

11. **What are the health and safety hazards in the local community?** The teacher's knowledge of the most important health and safety problems in the local community will indicate definite health instruction needed by the children who are influenced by these hazards. Local statistics concerning the prevalence of certain diseases; the causes of accidents; the safety of the water, milk, and food supply; the measures employed for communicable disease control; and the possible presence of malaria mosquito breeding ponds or of insanitary privies should be understood by the teacher so that the choice of teaching content is based upon factual rather than assumed needs. A visit of inquiry to the local health department or to other local official agencies should disclose to the teacher facts about these problems. Instruction based upon these problems should give emphasis to the pupil's relationships to the conditions found.

12. **What do statistics reveal concerning the most important health problems in the State?** A general description of Florida's major health problems is given on page 3 of this Bulletin. A more detailed description may be found in "The Health Situation in Florida" which can be secured through the State Board of Health. The most recent statistics should be secured through the local health unit or the State Board of Health. A study of the reasons for the existence of these major health problems in Florida will point to many specific knowledges, attitudes, and practices that Florida children should develop. The specific locality, the specific teaching situation, and the specific needs, age level, and characteristics of the pupils will help the teacher to determine the degree to which each of these Florida problems

* **A Guide to Improved Practices in the Elementary School.** Bulletin No. 9. State Department of Education, Tallahassee. 1940.

is important to his own group. For example, elementary school children might study the control of the most important communicable diseases among younger children while the study of tuberculosis prevention would be more appropriate for high school children. The local prevalence of hookworm would make the study of this problem more important in some sections than in others.

13. **What current health events or problems indicate leads for needed health instruction?** A local epidemic, a current accident, present or seasonal drives and programs of health organizations, a school health problem being emphasized at the time, the national drive for physical fitness, a very recent classroom event, and others, provide excellent opportunities for health teaching. Some of these events can be foreseen in advance by the teacher, who should be prepared to use the heightened student interest and enthusiasm to best educational advantage. Although pre-planning is often impossible, the teacher who is constantly aware of the most important health instruction needed by his pupils will be prepared to use current opportunities as they arise as most effective "teachable moments."

SUGGESTIONS CONCERNING GRADATION

Health Instruction, including the gradation of content, methods, and materials, should be consistent with the local program of curriculum organization and the general instruction policies of the school. The specific content to be taught in any particular grade should not be determined by any super-imposed outline from remote sources but should be clear to the teacher who follows the guides described in the section, "Determining What To Teach." The presentation of content so determined should then be planned so that it is consistent with the school's general instructional program. Several general policies concerning the conduct of health instruction on the various grade levels are suggested below:

IN THE ELEMENTARY SCHOOL

In schools where the general program of studies follows the plan of Bulletin No. 9, *A Guide to Improved Practices in the Elementary School,* teachers will be familiar with the guides offered therein for the gradation of health instruction through integration with the "persistent problems" of children, basic to the plan of Bulletin No. 9. The specific health problems of particular groups will vary, but the teacher should be able to adapt most of the needed health instruction according to the emphasis given to the "persistent problems" on the various grade levels. If this is imposible, direct teaching should be done toward the solution of health problems not adaptable to the plan. Regard-

less of whether the plan of Bulletin No. 9 or another plan of general instruction is used, the following suggestions for teachers of various grade levels should be generally applicable in nearly all elementary school situations:

(1). **In Grades One, Two, and Three:** (See page 18) Health instruction in grades one, two, and three should be centered chiefly around the every-day living experiences of the child as he comes to school, lives with others in the classroom, as he selects and eats his lunch, as he engages in play activities, and as he participates in rest and relaxation periods, and the many other daily practices. Definite and effective teaching should occur whenever these situations or needs arise. Practically everything that goes on during the day concerns the child's health education and the alert teacher will use these daily experiences wisely in guiding the child's behavior as he learns to adjust to changing situations.

It is of great importance that the classroom environment be conducive to health and happiness. Positive, joyous, happy approaches should be stressed while those which may be conducive to fears or anxieties should be avoided. Basic guidance in many of the little daily experiences is frequently provided by merely a well-timed word of approval, a thought-provoking question, a bit of information given to individual pupils, a thoughtful and careful answer to a question. Small group or class discussions can also be conducted so that improved practices are motivated by the attitudes developed. This guidance can often be supplemented with health stories or pictures which should be closely related to the health practice or attitude being discussed or experienced. Direct group health instruction should be given when emphasis is needed. Special emphasis at these grade levels should be placed upon the development of desirable practices and attitudes rather than placing too much stress on health knowledges. Health information that is presented should be within the child's scope of understanding and should be imparted for the chief purpose of improving specific attitudes and practices.

In the first three grades it is recommended that health readers should be used rather than textbooks. Several textbooks can be used advisedly with third grade groups provided they are used as references for the solution of health problems which have arisen from child experiences. Textbooks here, as generally throughout the elementary school, should not be used as the point of departure for page by page study. Health stories selected should involve dramatic episodes and the subjects and plots should be closely related to the experiences of the children rather than more far away or remote subjects. Often the dis-

cussions centered around these stories will serve to enrich and broaden the health concepts of the primary child concerning the meaning and importance of his daily experiences.

In all primary grades the pupils should engage in many creative activities involving the dramatic expression of health concepts. Many experiments in gardening, cooking, eating, in observing animals under control experimental situations are quite effectively adaptable to these lower grades and serve to assist the teaching of health concepts realistically and interestingly to children.

(2). **In Grades Four, Five, and Six:** (See page 18) Teachers of the fourth, fifth, and sixth grades will discover a need to re-emphasize and further develop the attitudes and practices formerly stressed so that more definite convictions concerning them are established. This demands a more definitely planned sequence of instruction with graded differentiations so that the "how" and "why" of health practices are answered to the satisfaction of the children. Health experiences of children of the upper elementary grades should draw upon health facts which furnish the needed understandings demanded by children of this inquisitive age. Consequently, although the teaching may be concerned with the same general health problems the children faced in lower grades, further progress toward the solution of these problems is achieved through deeper and progressive understandings rather than by mere repetition.

A fresh approach is needed based upon the changing characteristics and on the expanding interests of the older boys and girls, such as interests in growth, in excelling, in belonging to clubs, and in being respected and accepted by the group. More emphasis is needed on the development of self-direction in health practices. All health practices need continued and enriched emphasis since life practices and behavior patterns need continuous attention for long periods before they become permanently established as skills in living. Following the guides for "Determining What To Teach", the teacher of these grades will find new problems to be solved in addition to a re-direction of emphasis on continuing health problems and practices.

Textbooks in these grades should function as a source of information useful in the solution of specific problems as children seek to answer their own questions concerning the needs for and importance of specific health practices. Special periods for direct health teaching will be more frequently necessary than formerly and should occur as often and as close to the time that the need for them arises as possible.

IN THE SECONDARY SCHOOLS

Frequently the departmentalization of study causes a serious decline in health instruction because the guidance of child health practices, assumed to be every teacher's responsibility, results in being no one's responsibility. Children who have been closely guided in healthful practices in the elementary school are suddenly without guidance, although they have certainly not reached an age level where they should be expected to be totally self-directing in all of their practices. Consequently much that has been gained earlier is often lost when the guiding hand is removed. Teachers in secondary schools should make more decided efforts to discuss, decide, and plan together the standards and procedures which should be emphasized by all of them concerning the pupil's daily practices in handwashing before lunch, in selecting and eating lunch wisely, in wearing and caring for the right kinds and amounts of clothing, in observing practices which prevent and control disease, and the others which may be specific problems in the local school. All teachers in the secondary school are responsible for the definite instruction—not merely incidental or "accidental" instruction—which is related to these daily health practices.

The responsibilities for the more direct and orderly sequence of health instruction, however, should be placed upon teachers who are specially prepared and trained for the work. Suggestions concerning the secondary school graduation of planned health instruction, during definite periods of the school day, are as follows:

1. **In Grades Seven and Eight:** (See page 19) It is recommended that health instruction in these grades be correlated with the problems of science and home living. This occurs in many schools in a daily required course entitled "Everyday Living." State Department of Education Bulletin No. 29 gives specific guides to teachers of this course. The Bulletin, titled "Everyday Living", can be secured upon the request of the school principal from the county superintendent. In this course approaches are made through the life problems involved in the student's adjustment to his school environment and friends, to his home, and to his community. Personal health problems are given emphasis as they are related to science concepts, to personal and home living practices, and to the improvement of local community living. The personal relationships to and importance of Florida health problems are also emphasized.

2. **In Grades Nine and Ten:** (See page 19) It is recommended that wherever possible the major health instruction for these grade levels be provided through correlation with Biology dur-

ing the tenth grade year. To be effective, however, this would necessitate that (1) Biology and Health be required of all tenth grade pupils, and that (2) the present course in Biology be altered so as to include important health concepts. Neither the requirement nor the correlated course has been expected of all Florida schools, although in many localities, fortunately, both situations are present. Definite provisions for health instruction on the ninth and tenth grade levels, however, is a matter of local planning.

Many schools offer a ninth grade Science-Health course and a tenth grade Biology course, pupils being permitted to take either one or the other to fulfill the State Board of Education regulation requiring one unit in biological science. This plan does not satisfactorily solve the problem of providing adequate health instruction unless very definite attention has been given to the inclusion of health in both of these courses.

Concerning the ninth grade Science-Health course, the "Programs of Study in Florida Secondary Schools" (Florida School Bulletin for April 15, 1942, vol. IV, No. 8, page 28) states, "Since it is important that all pupils receive some definite health instruction either in the ninth or tenth grade, the course in Science-Health 9 should stress human biology. Formerly general science has emphasized the physical and biological aspects to about an equal degree. Since boys will be required to take a physical science course beyond grade nine, it is suggested that in the future the work in this field at the ninth grade level stress rather heavily the biological phase and include such topics as food, body care, nutrition, and the dependence of man upon plant life."

Concerning the tenth grade Biology and Health Course the "Programs of Studies" states (page 35) "The course in biology should lay a foundation for intelligent living and for proper care of the human body. It should acquaint pupils with learnings which will lead to a better appreciation of growth and of the importance of living things and of the necessity for conserving resources. It should not be a course in technical definitions, elaborate drawing, or intensive classification."

Through either science course, then, and preferably through correlation with biology, health instruction can be offered which stresses the nature and functions of the human body. Many opportunities are present for health teaching related to micro-organisms, insects and other living things important from a health standpoint, and related to the present health problems of the pupils in the care of their own bodies. Opportunities should not be overlooked for emphasizing the most locally important Florida health problems (see page 5). A definite effort and plan

must be made, however, to insure that needed health instruction is included, regardless of the curriculum plan being followed. Science teachers who are responsible for these classes are urged to take courses in health education so that they may better utilize their opportunities for relating science and health instruction.

3. **In Grades Eleven and Twelve:** (See Page 19) The recommendation that "health instruction should occupy the center of emphasis for the equivalent of one semester during either the eleventh or twelfth grade year" should be given careful consideration in the light of local curriculum possibilities. There are many needs, particularly at these grade nevels, for offering much more time than this recommended minimum for direct health instruction to all pupils. Wherever possible efforts should be made to increase this time allotment through the provision of a separate health course so that sufficient emphasis is given to the health concepts concerning community, state, and social health problems, as well as to personal health problems related to economic, vocational, and social efficiency.

Many important health problems will need direct emphasis at these grade levels. Several may be named, such as;

(a) Continued and directed emphasis on personal health practices as they are related to employability, to college living, to preparation for parenthood, and to fitness for service to state and nation.

(b) Continued and improved use and understanding of private and public health services from a national as well as a personal, community and state standpoint.

(c) The study of Florida health problems (see page 5) from the standpoint of social control and prevention.

(d) The study of national and international health problems.

If only the recommended minimum of 70-90 periods for health instruction can be provided, it is still the best plan to offer this through a regular one-half unit course dealing exclusively with health and taught by a teacher with at least a minor in health education (see page 20). It is recognized that curriculum difficulties will be encountered in some schools. Where it is impossible to provide a separate health course, the following suggestions may be helpful in planning for the time-allotment through correlation with other subjects:

(a) The community health phase may be given as a six-weeks unit in connection with the social studies;

(b) The work relating to safety and first aid may be given in connection with physical education;

(c) Where a course in Consumer Science is given at the eleventh and twelfth grade level, the relationship between this study and needed health instruction could be planned;

(d) A special provision for the study of home hygiene and care of the sick may be offered.

The plan of using correlated and special short courses as a means of meeting the needs for health instruction is not as satisfactory as the provision of a definite course for direct health study. Plans will have to be made carefully and teachers will have to be adequately prepared to insure that health learnings are effectively integrated. The problem of providing the health instruction so that all pupils are reached is also important. Such planning necessitates the decided efforts of the administrator and teachers alike in adjusting curricula to the end that sound health outcomes accrue.

THE CHOICE AND USE OF METHODS AND MATERIALS

Having discovered the problems needing instructional emphasis, the teacher is concerned with selecting the best ways and means for accomplishing the desired ends. The very nature and extent of the problems themselves will often point to the best methods and materials to be employed. Important factors to be considered are: (1) the child, his nature, background, needs, and interests; (2) the teaching situation, its type, location, and time limits; (3) the specific outcomes desired in terms of understandings, attitudes, and practices. The teacher's plan for selecting methods and materials for his general teaching program will also influence his selection of health instruction methods and materials.

From a child-centered viewpoint it is difficult to draw a line of distinction between **methods** and **materials** for instruction because probably both can be expressed best in terms of **pupil activities.** Since classroom experiences comprise only a part of the child's total experience, the teacher who is selecting methods should consider the many opportunities for pupil activities in the home and community as well as in the classroom. To be considered, likewise, as materials for instruction are the resources and facilities of the home, school, and community as well as the classroom supplies or printed materials. Printed materials are only one of the various types of teaching materials. Teaching methods include far more than what is actually done in the classroom. The choice and use of methods and materials, therefore, is largely a problem of selecting, planning, and conducting desirable pupil activities.

CRITERIA FOR SELECTING AND CONDUCTING PUPIL ACTIVITIES

1. **Will the selected activity present an accurate, true picture?** Is the information disclosed scientifically sound and within the child's realm of understanding? Is the activity planned so that extraneous experiences and observations will not confuse the major emphases to be stressed?

2. **To what extent will the activity be conducive to desired improvement in pupil practices?** How will the activity modify the child's behavior in respect to the objectives for which it was planned? Are the understandings gained closely related to the desired practices involved? Does the activity stimulate the child's progress in self-direction? To what extent does it promote desirable and positive emotional reactions? Is it whosesome and enjoyable rather than conducive to worry, anxiety, or fears?
3. **Does the activity arise from and relate to the everyday living experiences of the child?** Does it emphasize his own life practices rather than pointing to remote, far away, fairy tale experiences? Does the child see the relationship of the activity to his other daily experiences?
4. **Is the activity related to the local situation?** In rural communities are the activities related to rural life experiences? Is the activity based upon local conditions and does it include local applications throughout? To what extent do local resources, such as the health department, dairies, farms, industries, stores, other public or private services and their personnel, make vital contributions to the child's learning experiences?
5. **Is the activity based upon the child's interest in the problem to be solved rather than in merely the activity for its own sake?** Is the activity important to the child primarily because it helps to solve the problem being emphasized?
6. **To what extent do the pupils initiate class or group activities?** Are pupils encouraged to suggest the activities in which they engage? To what extent do pupils participate in planning, carrying out, and evaluating activities?
7. **Is the activity adjusted to the child's level?** Is is more than a mere repetition of a similar activity of a lower level? Does it involve a new approach that is interesting to the child at his level? Is it too advanced for the child? Does the activity provide for individual differences?
8. **Are the conditions under which the activity is conducted consistent with sound health practice?** Are class trips, home projects, or other activities healthfully conducted throughout? Is the child's environment considered equally important during reading activities as the material he is reading?
9. **To what extent are activities varied so that learnings are re-emphasized through different approaches?** Are visual, creative, and discussion activities as well as active and quiet experiences well balanced? Are reading materials well illus-

trated? Are trips or surveys reinforced with discussion and study? Are opportunities provided for creative expression?

10. **Does the activity lead to other worthwhile activities?** Are there continuing outgrowths of the activity?
11. **Does the activity avoid the use of certain undesirable teaching practices such as the following?**
    a. Motivating interest through artificial rewards
    b. Relying upon poorer forms of competition which stimulate false reports or which replace the basic problem as the center of child interest
    c. Creating undesirable self-consciousness or furthering feelings of inferiority on the part of any child
    d. Calling attention to economic low levels in such a way that blame is placed upon factors beyond the child's control
    e. Using dogmatic generalizations about health rules rather than stressing individualized adjustments to specific situations.
12. **Does the teacher's example emphasize rather than detract from the educational values of the activity?**

SUGGESTED TYPES OF PUPIL ACTIVITIES

In studying the teaching possibilities for specific children with a definite problem in a given local situation, the teacher should consider the following suggested types of pupil activities in the light of the above criteria:

1. **Reading and Visual Activities:** Solving problems and studying through the use of textbooks, pamphlets, reference books, magazines, related stories and fiction; through the use of films, slides, pictures, diagrams, charts, and posters.
2. **Creative Activities:** Writing stories, poems, songs, articles; speaking in class, in debates, in assembly; constructing posters, charts, scrapbooks, drawings, diagrams, handicrafts, exhibits; dramatizing through plays, pageants, pantomines, quizz programs, in the classroom, in assembly, for radio programs, and others.
3. **Discussion and Conference Activities:** Discussing problems informally in class, inviting speakers and visitors for round table or panel discussions, conducting interviews and conferences concerning health problems.
4. **Field, Survey, or Observation Activities:** Conducting specific home, school, or community surveys of prevailing conditions; observing health activities of the Safety Patrol, Red Cross, health unit, welfare agencies, local stores, restaurants, dairies, school lunch room; observing community activities for

maintaining safe food, milk, and water supplies, for sanitation in sewage and garbage disposal, street cleaning, and other means for preventing and controlling communicable diseases.

5. **Projects and Experimental Activities:** Participating in home, school, and classroom health projects for practice, study and experimentation; observing, conducting, and demonstrating specific experiments.

6. **Committee Activities:** Using committee organization for conducting campaigns, special studies or projects, for conducting additional experimentation and enrichment activities.

7. **Daily Practice Activities:** Focusing pupil attention at the right times and places and in the best manner upon improving daily practices in preparing for and coming to school, taking care of school room supplies and equipment, protecting selves from foreign articles and diseases, observing safety precautions, using toilet, handwashing, and drinking facilities, selecting and eating lunch, selecting and wearing clothes, playing and resting, helping and cooperating, keeping happy and being pleasant with associates, and many other daily practices.

AREAS OF HEALTH SUBJECT MATTER FOR TEACHERS

The following outline, though not all-inclusive, indicates essential health subject matter areas which should be thoroughly mastered by health teachers of all grade levels. Only when the health instructor has a sound knowledge of the scientific facts basic to healthful living can he hope to guide his pupils in experiences that stimulate interest in solving health problems.

It is suggested that every teacher use these areas as a guide to thorough and extensive study prior to the planning of his teaching program—whether he organizes health instruction units, whether he correlates health with other subjects, or whether he assigns the next chapter. In any conceivable teaching process the instructor must know his subject if he is to favorably influence the health practices of his pupils.

DEFINING HEALTH

What is the difference between mere absence of disease and positive health?

What is the meaning of the statement, "Health is a quality of life capable of enrichment or deterioration"?

What are some living practices which enrich health? deteriorate health?

What are the influences of heredity, environment, and personal health practices upon health status?

How is health influenced by the function of the nine organic systems of the body?

What is meant by the development of the whole child?

Why do the majority of people have a mediocre concept of health?

Compare the constant waste of human life in terms of death rates and under par living with the waste of other natural resources.

Show geographic, climatic, social, and economic influences upon health status in Florida.

LIVING HEALTHFULLY AT SCHOOL

What are children's activities in getting ready for school?

How can adjustments best be made when the child first enters school? When going from elementary into junior high school?

What essentials of the physical environment are favorable to effective study?

What habits of study should be thoroughly established in all pupils?

How can a daily schedule which more or less balances activities of work, play, and rest for all pupils be maintained?

How can monotony and boredom be substituted for wholehearted participation and intelligent self-direction in school activities?

How can the strain of regular school work be reduced?

What is the relationship between the social and emotional tone of the classroom and the preparation and personality of the teacher?

How may play, rest, and relaxation, lunch and study periods help to relieve strain and avoid fatigue?

What mental hygiene practices of individuals and groups should be established in every school room?

How may a program of study and extra-curricular activities be wisely arranged?

What eating practices at school make for health? Is clean drinking water accessible where needed? Are the bodily functions and needs adequately met?

What health practices in school prevent the spread of disease?

How can the physical and emotional condition of the teacher influence the health of pupils?

What safety regulations should a school room enforce in order to prevent accidents in the school room, in passing in or out of the room, on the schools grounds, in going to and from the school?

How can the eyes of pupils be protected in school? How should the room be ventilated and heated?

How do friend contribute to healthful school living?

How can school tests be healthfully administered?

How are children in school protected against communicable diseases?

What recreational opportunities does the school provide?

HAVING A HEALTH EXAMINATION

In what several ways may a health examination be given to pupils?

What are the teacher's responsibilities in planning and giving such examinations?

What are the advantages in having parents present at examinations of their children?

What constitutes an adequate examination?

When should examinations be given?

What is normal eye sight? hearing? condition of nose and throat? teeth? pulse rate? blood pressure? lung condtion? breathing? heart? haemoglobin? urine analysis? skin condition and color? texture of hair and nails? bone and muscle structure? feet? general posture?

What educational uses may the teacher make of the health examination record cards?

How may the teacher work toward the correction of defects?

CORRECTING DEFECTS

Has a record been compiled of all defects found in each grade or class, and is it readily available to the teacher?

Which of these defects can be corrected by the school program?

Which defects offer leads for health instruction programs?

Which defects require home visits to encourage parents to assist with corrections?

Which children need financial assistance with their corrections? (Confer with local welfare department to ascertain ability to pay for corrections.)

What agencies in your community are able and willing to assist with correction of defects?

What clinical, hospital, dental, and surgical facilities are found in your community?

DEVELOPING PHYSICAL FITNESS

What kind of fitness does modern life require for effective living?

For each age level, what standards may be used for determining fitness—physical, social, moral, mental, emotional, and spiritual?

How can a person attain the level of fitness desirable for his age, sex, and capacities?

What is the role of food, of rest and sleep, of exercise, of freedom from defects, of avoidance of excesses in the physical fitness program?

How may communicable diseases be prevented?

How may one's living environment be made more sanitary?

How may strength and endurance be developed?

How may emotional stability be increased?

What is the meaning of the term "morale"?

How may good morale be attained and maintained?

EATING EFFECTIVELY

What are the eight essential kinds of food important for growth and for maintenance of physical fitness? What foods are in each group?

What does each of the essential food groups contribute to health?

What are the deficiency diseases? How caused? Which of these are prevalent locally?

What are the guides for selecting a well-balanced diet? for caring for foods?

What are healthful eating practices?

How do the emotions influence digestion?

What are the important digestive processes?

What effect does alcohol have upon the digestive process and the organs of digestion?

What are the essential factors of a healthful school lunchroom?

What are some food fads, fallacies, and idiosyncracies? How can appetites be re-educated?

What are food allegies?

What are the Pure Food and Drug Acts? How are they administered? Enforced locally?

What foods are grown in your community?

What are the various ways of conserving foods?

How do the food needs vary for different ages? for different occupations? or different climates and seasons?

What is a calorie?

What are the calorie requirements for your pupils?

What is known about anemia? pellagra? To what extent are either of these important locally?

Why should one drink pasteurized milk?

ELIMINATING WASTES

Through what channels does the body normally eliminate wastes?

What body processes result in waste products?

Why is regularity in bowel evacuation important?

How is exercise related to waste disposal?

How can constipation be avoided?

What diseases and body conditions are discovered through examination of urine? of feces? of sputum expelled from lungs?

What sanitary regulations are desirable concerning disposal of body wastes?

CONTROLLING COMMUNICABLE DISEASES

In what ways are communicable diseases transmitted?

What diseases are usually contracted from the soil?

What diseases are spread by animals? insects?

What diseases are spread by contact infection? by human carriers?

What are the contributions of each of the following to the control of disease: quarantine, isolation, immunization, disinfectants, insecticides?

UNDERSTANDING THE HUMAN BODY

What makes the body grow? What is normal in growth from year to year?

What are the similarities between our body and a machine —its structure, fuel needs, and functions? How is the body superior to any machine?

How are the vital processes—respiration, circulation, digestion, elimination, heat regulation, reproduction—maintained at an efficient level in functioning?

What interrelations exist between the vital functions? between the ductless glands' secretions?

What relations exist between the thoughts, feelings, and vital processes in the body?

What controls are needed and how can behavior be guided into those channels that will lead to a healthy mind and body?

How can the physician and the psychiatrist help us in understanding ourselves?

What are man's basic biological, physical, mental, emotional, and social needs for attaining abundant health?

What are the guiding principles for developing mental health?

How can one avoid hysteria, neurasthenia, nervous disorders?

What are the basic essentials to good posture? What effect does posture have on health? What affects posture?

Where defects of the body are not remedial, how can they be minimized as handicaps to effective living?

What are adenoids, tonsils, and how can they handicap health?

What is metabolism? When is it normal? What might cause abnormality and how can this be improved?

PROTECTING THE SENSE ORGANS

What is the nature, structure and function of each sense organ?

How is each most commonly injured in modern living? What are the safeguards that could prevent these injuries? How does nature safeguard each?

What practices will maintain optimum functioning of the eyes? of the ears? of the nose? of the mouth? of the fingers and all organs of touch?

What are the diseases that attack each sense organ and how can each be prevented or cured?

DEVELOPING EFFECTIVE PERSONALITY

What do we mean by an attractive personality?

What place has health in personality?

What do we mean by social qualities and how are they important in personality development? What is emotional control? What is spiritual strength?

How can a person improve his personality?

What are the effects of appropriate clothing, grooming, and good manners upon personality? How can such qualities as sincerity, poise, sympathy, courage, courtesy, good judgment, and the like be developed in a child?

Of what value are hobbies in personality development?

In the effective personality, how are such qualities developed as self assurance, independence, leadership, honesty, frankness, orderliness, self-control, cheerfulness, tactfulness, tolerance, open-mindedness, aesthetic appreciations, and a sense of humor? What role can "hero worship" play in the development of ideals?

Why cannot a person afford to "carry a grudge" or a "chip on his shoulder"?

IMPROVING PERSONAL APPEARANCE

What factors are included in improving personal appearance?

What part has clothing played in the life and history of men—from cave man to present-day?

How do clothes affect health? personality?

What clothes are appropriate for each type of activity in childrens' daily living?

How can one's complexion be improved?

How can the hands, the nails, the hair be made more attractive?

How are the following related to personal appearance: emotional stability, mental alertness, facial expression, and physical fitness?

What place has cleanliness in improving appearances? What place has artistic selection of color, style, and appropriateness in dress?

How can deodorants be used wisely?

How can the care of the teeth enhance personal appearance?

How can cosmetics be used wisely?

PLAYING HAPPILY

How can a child get the greatest values from play? What factors limit the values of play, and how can they be avoided? What are the play activities suited to various age levels?

Under what conditions will the child's play be safe—what are the hazards in equipment used, in environmental conditions existing, in social contacts made, in expenditure of energy and in bodily skill, speed, strength, endurance demanded, in vigorous competitive work?

How can children be guided in playing together more happily?

How can selfishness, discourtesy, aggrandizement, and poor sportsmanship be overcome in play?

What social qualities aid in playing happily?

USING LEISURE TIME CONSTRUCTIVELY

What can recreation re-create?

What are the individual's needs for leisure time activities, and what types of activities best meet these needs?

How can health be affected through leisure time activities?

What are the constructive outcomes possible from desirable use of leisure?

What is the relation between leisure time activities and social development? between leisure and success in school work? between leisure and morale? between leisure and personality development?

BUDGETING TIME AND ENERGY

How can economy be assured in the expenditure of time and of energy?

What determines priorities for the items for the budget of time and of energy?

How can planning one's daily program assist in the efficiency of living? assist in avoiding chronic fatigue and incessant strain?

How much time daily should be budgeted for sleep and rest? for work? for active play? for eating? for social activities of inactive nature? for other activities?

AVOIDING FATIGUE

What happens in the body during sleep?

How much time should be devoted daily to sleep and rest by each age child? why?

What is fatigue—its nature, cause, and its effects? How is mental boredom related to fatigue?

How is fatigue related to ill health?

How are happiness, study, play, eating, or exercise affected by over-fatigue?

What relation exists between physical exercise and fatigue? between social relationships and fatigue? between fatigue and the body processes?

How can each child be helped to understand and to avoid over-fatigue?

How does modern living produce strains and tensions? How can these be avoided or overcome?

UNDERSTANDING ALCOHOL AND OTHER NARCOTICS

How and to what degree is the nature of alcohol and other narcotics responsible for their effects upon those who use them? What is meant by the scientific phase of the alcohol problem?

What is the source and nature of ethyl alcohol?

What are the chief chemical actions of ethyl alcohol?

What are the uses of ethyl alcohol in industry, arts, sciences? sciences?

What are the psychological and physiological effects of alcohol and other narcotics inside the human body?

Why do people drink?

What happens to their nervous systems when they drink?

What is "moderation" and what is "excess"?

How may excessive drinking be prevented?

How may excessive drinking be cured?

How widespread is the problem of alcohol addiction?

Why can one person tolerate more alcohol than another?

What is meant by alcohol habituation?

What part do traits of personality play in alcohol addiction?

Is addiction inherited?

How do the strains of our mode of life, our traditional customs and habits, certain occupations, certain situations, make for heavy drinking?

What are the teaching principles upon which effective narcotics education is based?

What simple scientific experiments, projects and correlations can be carried out with absolute and dilute alcohol which will aid in understanding the problems of narcotics?

What is meant by the social phase of the alcohol problem?

How does the nature of alcohol affect communities where many persons drink?

What are some conditions of public health and welfare that are influenced by beverage alcohol?

What is meant by the economic phase of the narcotic problem?

What effects does the liquor traffic have upon industry, legitimate business, politics, and government?

What is the scope and influence of commercial advertising and propaganda upon American health standards and culture?

What is the historic phase of the narcotics problem?

How is the nature of narcotics related to the age-long health and social problems they have created?

What part has alcohol played in some specific turning points in history?

What educational and control cycles have reflected the changing status of the alcohol problem in the United States throughout the years?

What is the legal phase of the alcohol problem and what is its significance for personal and community health?

LIVING SAFELY

What are the facts concerning last year's accident statistics?

How in our own community, school, and home are accidents occurring? What can be done to remove hazards?

How can various forms of transportation be made more safe?

How can adventures become richer and better through safety precautions? (Examples of Admiral Byrd's trip to the North Pole, his foresight and wise planning to make the adventure safe.)

What is the role of foresight, imagination and planning in insuring safe and skillful living?

How do laws protect citizens against fires? against traffic accidents? against drowning? against electrocution? against bites from animals? poisoning in food and in medicines? industrial accidents?

What government agencies today are attempting to improve living—by aiding economically, by improving housing and electrification, by providing safe recreation, by giving medical care and immunization?

Historically how has man developed in his ability to live safely?

CHOOSING PROFESSIONAL HEALTH SERVICES WISELY

When should one see a doctor?

What are the dangers in patent medicines? in friends' proposed remedies? in doctors who advertise their services? in cure-all nostrums? in beer, wine, and whiskey?

To whom should a person go for medical advice? for health examinations? for immunizations? for a clear "bill of health'" after recovery from a communicable disease?

What are the qualifications for membership in the State Medical Society?

What are the services rendered by the private duty nurse? the public health nurse? the nurse's aide?

What is a clinic?

How can the dentist help an individual in attaining health?

BECOMING EMPLOYABLE

What does an employer look for in interviewing a prospective employee?

How does good health help in securing a job? in holding a position?

Why cannot the emotionally unstable person hold a position?

What is involved in social health as an asset for employability?

How do leisure time activities affect a person's employability?

WORKING COOPERATIVELY WITH OTHERS

In a democracy what relation has an individual to the group?

If several work together, as in building a house, what factors will determine the success of the project?

Why do some well-trained workmen lose their jobs?

If a person has difficulty working with others, how can he diagnose the trouble? How can the cause of the trouble then be removed?

Why is the self-centered individual usually a poor teammate?

What limits personal freedom to do as one pleases?

EDUCATING FOR PARENTHOOD

Have pupils learned the vocabulary for expressing needs and interests in life processes?

What are the values of friendships between members of the opposite sexes—early school days, high school, college?

How can the adolescent be helped in understanding himself, his developing functions as a member of society and a potential parent and home maker?

How can the girl be helped in understanding menstruation and in developing normalcy in the function—also in overcoming malfunctioning where it exists?

What hazards are there and what opportunities for lasting satisfaction in courtship? in early married life?

What are the guides for choosing wisely a life companion? What role does health play?

What is the importance of having a health examination before marriage?

What are the simple facts of human reproduction?

What are the functions of maternal and well-baby clinics?

What determines the health of the baby—physical, mental, emotional, social?

What is the relationship of home life and parental influence upon the development of the child and, through him, the progress of the race?

IMPROVING HOME LIVING

How can we help take care of ourselves in the home? (getting up on time, caring for our bodies—teeth, skin, fingernails and toenails, hair, clothes, food, elimination.)

What safety hazards can we recognize and remove from the home?

How can we help keep ourselves and others in the home well? (not spreading infections, remaining at home in bed when ill, wearing clothes to protect from rain and cold).

What are the home practices in the selection, care, and service of food?

What emotional conditions in the home affect the child's health?

What practices in the home will improve the child's health?

What measures are taken to insure home sanitation, pure drinking water, proper lighting, heating, and ventilation?

What essential knowledge and skills in first aid should all parents possess?

What home recreations are available and enjoyed by all members of the family?

Do all members of the home group share in the responsibilities of maintaining and of improving home living?

Does every child have a bed of his own? Is the sleeping room well ventilated and comparatively quiet?

IMPROVING COMMUNITY HEALTH CONDITIONS

What health problems face the average community? Your local community?

What housing problems may hinder healthful living?

How does the community control its water supply? milk? garden products? other food supplies? its waste disposal?

What protective measures does the community enforce to prevent diseases of various types?

What kind of health examination is required of house maids, food-handlers, and cooks?

What kind should be required?

How are roaches, ants, flies, rats, mice, mosquitoes controlled?

What can the school child do to improve health conditions in the community?

What are the community nuisances? How can they be removed?

What opportunities are there for beautifying the community?

What recreational opportunities does the community afford? How can these be improved and others added if needed?

How can economic strains be eased where they now exist in any area?

What is the relation between health and Workmen's Compensation? Insurance?

How is the community caring for the crippled, the indigent, the old people who cannot support themselves?

Is there a good public library in the community? Are there adequate, well-supervised play grounds, community recreation centers?

Are there sufficient churches and schools? hospitals?

USING COMMUNITY HEALTH RESOURCES

What health organizations and services are available in the community?

From which diseases may all citizens become immunized? How?

How can the health unit assist an individual in developing physical fitness? What other helpful resources are available?

What are the services of the health unit? How can the citizens cooperate to make the best use of all available health resources?

What resources does the community have for caring for the sick? Can these be improved?

UNDERSTANDING FLORIDA'S HEALTH PROBLEMS

What are Florida's health problems?

What are the state, the county, the community, the school, and the home doing about hookworm? malaria? syphilis and gonorhhea? tuberculosis? pneumonia? infant mortality? maternal mortality? diarrhea and enteritis? pellagra? typhoid fever? typhus fever? undulant fever? traffic and other accidents?

What is the individual's responsibility in regard to each of these health problems?

What are the communicable diseases—their nature and symptoms—and how can a person best be protected against each?

TEACHING MATERIALS:

Reading and visual activities have been described as one type of pupil activity. A list of many sources for classroom reading and visual materials is found in Chapter Six. The selection and use of such materials should be done carefully in light of the suggestions made in Chapter Six, so that a balance and variety is provided which meets the needs of the local teaching situation.

Very important to the classroom health instruction program are the basic textbooks, the study of which is also one type of pupil activity. Criteria for selecting and conducting all pupil activities (page 89) should, of course, guide the teacher in the use of textbooks. The Florida State Adopted Health Textbooks are listed below with suggestions concerning the numbers and kinds of each which should be ordered for the average school or class. Local conditions and other criteria may warrant a number of variations from these suggestions, of course, and such local needs should govern the selection.

STATE ADOPTED HEALTH TEXTBOOKS

Grades 1-6:

1. **Health, Happiness, Success Series** by Burkhard, Chambers, Maroney; published by Lyons and Carnahan. (These books are state-adopted and may be requisitioned through the county superintendent on regular forms provided for this purpose. See Notes 1 and 2.)

	Grade
a. *Health Stories and Practices* (price, 57c)	3
b. *Health by Doing* (price, 57c)	4
c. *Building for Health* (price, 57c)	5
d. *The Body and Health* (price, 57c)	6

NOTE 1. A teacher's manual is furnished free to teachers using these books. It should be secured at the same time the requisition for books is made.

NOTE 2. In requisitioning these books for a class of approximately 30, in the third grade, requisition 12 third grade books and 2 fourth grade books. In all grades above the third, 10 books for the particular grade level of the class should be requisitioned and 2 each of the grade level immediately above and below the class: e.g., in a fourth grade class of 30 pupils, 10 fourth grade books, 2 third grade books, and 2 fifth grade books should be ordered. This would then make approximately 1 book for each 2 students and would give the variety needed for students with different abilities.

2. **Road to Safety Series** by Buckley, et. al.; published by the American Book Company. (These books are state-adopted and may be requisitioned by the county superintendent on regular forms provided for this purpose. See Notes 1 and 2.)

	Grade
a. *Away We Go* (price, 25c)	1
b. *Happy Times* (price, 42c)	1
c. *In Storm and Sunshine* (price, 48c)	1
d. *In Town and Country* (price, 54c)	2
e. *Here and There* (price, 54c)	3
f. *Around the Year* (price, 57c)	4
g. *On Land and Water* (price, 60c)	5
h. *Who Travels There?* (price, 56c)	6

NOTE 1. A teacher's manual is furnished free to teachers using these books. It should be secured at the same time the requisition for books is made.

NOTE 2. The 8 books of this series begin with the pre-primer and extend through the sixth grade. The first 3 books listed are for the first grade. Teachers, principals, and county superintendents in planning their programs and in making their requisitions should order for a class of approximately 30: 4 books on the grade level of that class, 1 for the grade level immediately above, and 1 for the grade level immediately below. This provides 1 book for each 5 students with the variety needed for students of different abilities. One first grade book of each title should be procured for each 5 students in the class.

Grades 7-12:

The following books for the secondary schools are state-adopted and may be requisitioned through the county superintendent on regular forms provided for this purpose (See note below):

1.. *Helping the Body in Its Work* by Andress et. al.; published by Ginn and Company; price, 43c. A teacher's manual is furnished free to teachers using this book. It should be secured at the same time the requisition for books is made.

2. *The Healthy Home and Community* by Andress et. al.; published by Ginn and Company; price, 48c. A teacher's manual is furnished free to teachers using this book. It should be secured at the same time the requisition for books is made.

3. *Be Healthy* by Crisp; published by J. B. Lippincott Company; price, $1.17. This book has a supplement on sex education called "Growing Into Maturity". It is furnished at no additional charge, but must be requisitioned separately. Instructors may use the book or not, as desired. Its use in classes should be determined by individual counties and schools. An instructor's book is furnished to teachers using *Be Healthy*. It should be secured at the same time the books are requisitioned.

4. *Health and Human Welfare* by Burkhard et. al.; published by Lyons and Carnahan; price, $1.20. A course of study is furnished free to teachers using this book. It should be secured at the same time that books are requisitioned.

5. *American Red Cross First Aid Textbook;* published by Blakiston Company; price, 70c.

6. *Be Safe and Live* by Berthick et. al.; published by Johnson Company; price, 70c.

Note: In requisitioning health textbooks for classes organized according to the first plan recommended under each grade level, pages 86-89, sections 1, 2, and 3, the materials listed below are suggested. Classes organized on other bases should likewise make plans for a variety of materials for student use.

Grade 7:

Two copies of (1) and (2) above for each 3 students in the class; one copy of each (3), (4), and (5) above for each 15 students in the class;

Grade 8:

Two copies of (1) and (2) above for each 3 students in the class; one copy each of (3), (4), and (5) above for each 15 students in the class; one copy of (6) above for each 8 students in the class.

Grades 9 and 10:

Two copies of (3) above for each 3 students in the class; one copy of (1), (2), (4), and (5) above for each 15 tudents in the class; one copy of (6) above for each 8 students in the class.

Grades 11 and 12:

Two copies of (4) above for each 3 students in the class; 1 copy of (5) above for each student in the class; 1 copy each of (1), 2), and (3) above for each 15 tudents in the class; 1 copy of (6) above for each 8 students in the class.

SOURCES OF MATERIALS

CHAPTER SIX

SOURCES OF MATERIALS

CRITERIA FOR SELECTION OF MATERIALS

1. Is it scientifically sound?
2. Is it educationally sound in its approach and presentation?
3. Is the vocabulary and subject matter within the range of the child's ability and interest?
4. Does it give a knowledge of the situation that will bring an understanding of the problems involved?
5. Is it suited to the purpose for which it is used?
6. Is it unbiased, that is does it favor or promote one product?
7. To what degree will it influence the child's behavior?
8. What attitudes will be developed through the subject matter?
9. Does it develop a sense of proportion and an understanding of the area in which there is limited knowledge to the extent that overconfidence results?
10. Is arrangement simple, attractive and legible as to type and paper?

SOURCE LIST

Each of the organizations listed has helpful material on health subjects for distribution. Much of it is free and the remainder may be purchased for a nominal sum. If purchased in quantity the price lowers considerably. The material offered is in the form of bulletins, pamphlets, charts, posters, films and slides. Posters should be used only as suggestive guides for the actual making of posters by the children. Teachers are urged to use discretion in allowing children to write state and national organizations for materials. The teacher's request or that of the principal or superintendent for a specific number of copies will rceive more prompt attention than will a pupil request. When several children write from one grade to the same office it is urged that they be instructed to give the name and address of the teacher so that all material may be sent in one package to him.

NATIONAL AGENCIES WHICH DISTRIBUTE LISTS OF PUBLICATONS IN HEALTH EDUCATION

American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, Northwest, Washington, D. C.
American Association of University Women, 1634 Eye Street, Washington, D. C.
American Dental Association, 212 East Superior Street, Chicago, Illinois.
American Home Economics Association, Mills Building, Washington, D. C.
American Medical Association, 535 N. Dearborn Street, Chicago, Illinois.
American National Red Cross, 17th Between D and E Streets, Washington, D. C.
American Public Health Association, 1790 Broadway, New York City.
American Social Hygiene Association, 1790 Broadway, New York City.
American Society for the Hard of Hearing, 1537 35th Street N. W., Washington, D.C.
Association for Childhood Education, 1201 Sixteenth Street, Northwest, Washington, D. C.
Child Study Association of America, 221 East 57th Street, New York City.
Evaporated Milk Association, 307 N. Michigan Avenue, Chicago, Illinois.
John Hancock Mutual Life Insurance Company, Boston, Massachusetts.
National Dental Hygiene Association, Shoreham Building, Washington, D. C.
Metropolitan Life Insurance Company, 1 Madison Avenue, New York City.
National Association for Nursery Education, Distribution Center, W. 514 East Hall, University of Iowa, Iowa City, Iowa.
National Committee for Mental Hygiene, 1790 Broadway, New York City.
National Dairy Council, 111 N. Canal Street, Chicago, Illinois.
National Society for the Prevention of Blindness, 1790 Broadway, New York City.
National Organization for Public Health Nursing, 1790 Broadway, New York City.
United States Department of Agriculture—Bureau of Home Economics and Farm Security Administration, Washington, D. C.
United States Department of Labor—Children's Bureau, Washington, D. C.
United States Office of Education, Federal Security Agency, Washington, D. C.
United States Public Health Service, Federal Security Agency, Washington, D. C.
Office of Defense Health and Welfare Service, Federal Security Agency, Washington, D. C.
White House Conference on Children in Democracy—National Citizens Committee, 122 East 22nd Street, New York City.

FLORIDA STATE AGENCIES WHICH DISTRIBUTE HEALTH EDUCATION MATERIALS

State Department of Education, Tallahassee, Florida.
Florida State Board of Health, Jacksonville, Florida.
Local City and County Health Departments.
Florida Tuberculosis and Health Association, Jacksonville, Florida.
State Department of Agriculture, Tallahassee, Florida.
State Board of Public Welfare, Jacksonville, Florida.
Home Demonstration Service, Tallahasse, Florida.
General Extension Division, Gainseville, Florida.
Agricultural Experiment Station, Gainesville, Florida.
Woman's Field Army for the Control of Cancer, Mrs. Malcolm Smith, Stovall Building, Tampa, Florida.

HEALTH EDUCATION TEXTS FOR TEACHERS

Bauer, W. W. and Hull, Thomas G. *Health Education of the Public.* Philadelphia. W. B. Saunders Company, 1937, 277 pp. Price $2.50.

Chenoweth, Lawrence B. and Selkirk, Theodore K. *School Health Problems.* N. Y. F. S. Crofts and Company, 2nd ed. 1940. 419 pp. Price $3.00.

Conrad, Howard L. and Meister, Joseph M. *Teaching Procedures in Health Education.* Philadelphia. W. B. Saunders. 1938. 160 pp. Price $1.75.

Diehl, Harold S. *Textbook of Healthful Living.* N. Y. McGraw-Hill Book Company, Inc., 1935. 634 pp. Price $2.50.

Diehl, Harold S. *Healthful Living.* N. Y. McGraw-Hill Book Company, Inc. 1935. 354 pp. Price $2.50.

Dobbs, Alma A. *Teaching Wholesome Living in the Elementary School.* N. Y. A. S. Barnes & Company. 1939. 410 pp. Price $2.50.

Etheredge, Maude L. *Health Facts for College Students.* Philadelphia. W. B. Saunders Company. 3rd ed. 1939. 410 pp. Price $2.00.

Grout, Ruth E. *Handbook of Health Education.* N. Y. Doubleday, Doran & Co., Inc. 1936. 298 pp. Price $2.00.

Hardy, Martha C. and Hoefer, Carolyn H. *Healthy Growth.* Chicago. The University of Chicago Press. 1936. 360 pp. Price $3.50.

Health Education. Joint Committee on Health Problems of the National Education Association and American Medical Association. Washington, D. C. N.E.A. 1941. 368 pp. Price $1.50.

Health in Schools. 1942 Yearbook of the Association of School Administrators. Washington, D. C. N.E.A. 1942. 544 pp. Price $2.00.

Hill, Frank Ernest. *Education for Health.* N. Y. American Association for Adult Education. 1939. 225 pp. Price $1.25.

Hussy, Marguerite M. *Teaching for Health.* N. Y. Prentice-Hall. 1939. 328 pp. Price $2.25.

Keene, C. H. *The Physical Welfare of the School Child.* Boston. Houghton Mifflin Company. 1929. 505 pp. Price $2.50.

Keliher, Alice V. *Life and Growth.* N. Y. D. Appleton-Century Company. 1938. 245 pp. Price $1.20.

Krueger, Walter W. *Fundamentals of Personal Hygiene.* Philadelphia. W. B. Saunders Company. 3rd ed. 1940. 304 pp. Price $1.75.

Langton, Clair V. *Orientation in School Health.* N. Y. Harper and Bros. 1941. 680 pp. Price $3.00.

Langton, Clair V. and Isaminger, Melvin P. *The Practice of Personal Hygiene.* N. Y. Harper and Bros., Publishers. 1933. 351 pp. Price $2.00.

LaPorte, Wm. Ralph. *Hygiene and Health*—a Student Manual. Los Angeles. The Caslin Printing Company. 3rd ed. 1938. 149 pp. Price $1.00.

Meredith, Florence L. *Twelve Hours of Hygiene.* Philadelphia. The Blakiston Co. 1935. 387 pp. Price $1.90.

Meredith, Florence L. *Hygiene.* Philadelphia. The Blakiston Company. 3rd ed. 1941. 833 pp. Price $3.50.

Patty, Willard Walter. *Teaching Health and Safety in Elementary Grades.* N. Y. Prentice-Hall Inc. 1940. 371 pp. Price $2.50.

Phair, John I., Powers, Mary and Robert, Robert H. *Health—A Handbook.* Toronto, Canada, Ryerson Press. 1938. 198 pp. Price 50c.

Rice, Thurman B. *Living.* Chicago. Scott, Foresman and Company. 1940. 450 pp. Price $2.50.

Rugen, Mabel E. *Problems for Methods and Materials in Health Education.* Ann Arbor, Michigan. The Edwards Letter Shop. Rev. 1939. Mimeographed. 109 pp. Price $1.00.

Scott, K. Frances. *A College Course in Hygiene.* N. Y. The Macmillan Company. 1939. 202 pp. Price $2.50.

Smiley, Franklin and Gould, Adrian Gordon. *College Textbook of Hygiene and Community Hygiene.* N. Y. The Macmillan Company. Rev. 1935. 751 pp. Price $3.50.

Strang, Ruth M. and Smiley, Dean F. *The Role of the Teacher in Health Education.* N. Y. The Macmillan Company. 1941. 359 pp. Price $2.00.

Turner, Clair E. *Personal Hygiene.* St. Louis, Mo. The C. V. Mosby Company. 1937. 335 pp. Price $2.25.

Turner, Clair E. *Personal and Community Health.* St. Louis, C. V. Mosby Company, 5th ed. 1939. 680 pp. Price $3.00.

Turner, Clair E. *Principles of Health Education.* Boston. D. C. Heath and Company. 2nd ed. 1939. 355 pp. Price $2.00.

White House Conference. *Children in a Democracy.* General Report Adopted by the White House Conference on Children in a Democracy. Children's Bureau Publication No. 266. 1940. 86 pp. Price 25c. Order from Superintendent of Documents, U. S. Government Printing Office, Washington, D C.

Williams, Jesse F. *Personal Hygiene Applied.* Philadelphia. W. B. Saunders Company, 7th ed. 1937. 627 pp. Price $2.50.

Williams, Jesse F. *Healthful Living.* N. Y. The Macmillan Company. Rev. ed. 1941. 600 pp. Price $1.60.

Williams, Jesse F. and Brownell, Clifford Lee. *Administration of Health Education and Physical Education.* Philadelphia. W. B. Saunders Company. 1939. 634 pp. Price $300.

Williams, Jesse F. and Shaw, Fannie B. *Methods and Materials of Health Education.* N. Y. The Ronald Press. Rev. 1943. 331 pp. Price $2.00.

HEALTH EDUCATION TEXTS FOR PUPILS

HIGH SCHOOL TEXTS

Allen, Ross L. *Real Living*—Workbook for Boys. N. Y. A. S. Barnes and Company. Book II. 1939. 68 pp. Price 50c.

Andress, James M., Aldinger, A. K. and Goldberger, I. H. *Health Essentials.* Boston, Ginn and Company. 1928. 495 pp. Price $1.68.

Berry, Glenn H. *Healthful Living Syllabus Series.* 9004 Rosewood Avenue, Los Angeles, California.

Cycle 1	Part 1	1941	Revised	71 pages	Price $1.50
Cycle 2	Part 2	1941	Revised	71 pages	Price 1.50
Cycle 2	Part 1	1941	Revised	65 pages	Price 1.50
Cycle 2	Part 2	1941	Revised	70 pages	Price 1.50
Cycle 3	Part 1	1941	Revised	71 pages	Price 1.50
Cycle 3	Part 2	1941	Revised	82 pages	Price 1.50

Betts, George H. *Foundations of Character and Personality.* N. Y. The Bobbs-Merill Company. 1937. 371 pp. Price $2.00.

Blount, Ralph E. *The Science of Everyday Health.* Boston. Allyn and Bacon. Rev. 1941. 415 pp. Price $1.20. *Workbook in Health* Price 60c.

Bolduan, Charles F. *Illustrious Contributors to Public Health.* (Privately printed.) N. Y. New York Academy of Medicine. 1936. 33 pp. Price $1.00.

Brockman, Mary. *What Is She Like?* A personality book for girls. N. Y., Charles Scribner's Sons. 1936. 210 pp. Price $1.25.

Brownell, C. L., Williams, J. F., Hughes, W. L., and others. *Health of Our Nation Series.* New York. American Book Company. 1941-42.

Book VII	*Living and Doing.* 336 pp. Price	$1.00
Book VIII	*Training for Living.* 352 pp. Price	1.04
Book IX	*Adventures in Growing Up.* 496 pp. Price	1.60
Book X	*Being Alive — Human Structures and Functions.* 438 pp. Price	1.60
Book XI	*Health Problems—How to Solve Them.* 325 pp. Price	1.52
Book XII	*Youth Faces Maturity—Health Problems.* 30 pp. Price	.20

Buckard, W. E., Chambers, R. L., and Maroney, F. W. Health-Happiness-Success Series. Chicago, Lyons and Carnahan. *Health and Human Welfare.* 1939. 630 pp. Price $1.60. Health Course of Study. Price 20c.

Burnham, Helen A., Jones, E. G., and Redford, H. D. *The Boy and His Daily Living.* Philadelphia. J. B. Lippincott Company. 1935. 363 pp. Price $1.80.

Cobb, Walter F. *Health for Body and Mind.* N. Y. D. Appleton-Century Company. 1936. 534 pp. Price $1.60.

Cockefair, Edgar A. and Cockefair, Ada. *Health and Achievement.* Boston, Ginn and Company. 1936. 558 pp. Price $1.68.

Crawford, C. C., Cooley E. G. and Trillingham, C. C. *Living Your Life.* Boston. D. C. Heath and Company. 1940. 450 pp. Price $1.56.

Crisp, Katherine B. *Be Healthy.* New York. Lippincott. 1938. 532 pp. Price $1.56.

Delassus, Wilma and Harrison, P. E. Bloomington Illinois. McKnight and McKnight. *Foods* (Guide Book) Paper. 62 pp. Price 24c. *Clothing* (Guide Book) Paper. 40 pp. Price 24c.

Dobbs, Alma A. *Teaching Wholesome Living in the Elementary School.* N. Y. A. S. Barnes. 1939. 304 pp. Price $2.50.

Emerson, H. *Alcohol, Its Effect on Man.* Student Edition. N. Y. Appleton-Century Company. Price 80c.

Fedder, Ruth. *A Girl Grows Up.* N. Y. McGraw-Hill Book Company, Inc. 1939. 231 pp. Price $1.75.

Fisher, Irving and Emerson, Haven. *How to Live.* 20th ed. N. Y. Funk and Wagnalls Company. 1938. 449 pp. Price $2.50.

Gogle, Gladys B. *A Workbook in Health for High School Girls.* N. Y. A. S. Barnes Company. 1937. 264 pp. Price $1.00.

Hunter, Lucretia P. *The Girl Today, The Woman Tomorrow.* N. Y. Allyn and Bacon. 1938. 364 pp. Price $1.20.

Jordan, Helen M., Ziller, M. L. and Brown, J. F. *Home and Family.* N. Y. Macmillan Company. 1935. 426 pp. Price $1.60.

Justin, Margaret M. and Rust, Lucile Osborn. *Home and Family Living.* N. Y. J. B. Lippincott Company. 1941. 751 pp. Price $2.00.

Keliher, Alice V. *Life and Growth.* N. Y. D. Appleton-Century Company. 1938. 245 pp. Price $1.20.

McKnown, Harry C. and Le Fron, Marion. *A Boy Grows Up.* N. Y. McGraw-Hill Book Company. 1941. 299 pp. Price $2.00.

McLean, Donald. *Knowing Yourself and Others.* N. Y. Holt. 1939. 294 pp. Price $1.40.

Oberteuffer, D. and Bechtel, P. C. Experience Workbook—*Health Activities and Problems.* Boston. Houghton Mifflin Company. 1940. 147 pp. Price 60c.

Prosser, C. A. and Anderson, W. A. *A Health Program.* Bloomington, Illinois. McKnight and McKnight. 96 pp. Paper. Price 36c. Cloth 68c.

Rathbone, Josephine L., Bacon, F. L., and Keene, C. H. *Foundations of Health.* Boston. Houghton Mifflin. 1939. 510 pp. Price $1.44.

Schacter, Helen. *Understanding Ourselves.* Bloomington, Illinois. McKnight and McKnight. 118 pp. Paper Price 48c.

Tabot, Nora A., Pearson, Mille V. and others. *Practical Problems in Home Life for Boys and Girls.* N. Y. American Book Company. 525 pp. Price $1.40.

Thackston, John A. and Thackston, J. F. *Human Health.* N. Y. Holt. 1936. 459 pp. Price $1.40.

Turner, Clair E.. and McHose, Elizabeth. *Effective Living.* St. Louis, Missouri. The C. V. Mosby Company. 1941 432 pp. Price $1.90.

Van Duzer, A. L. and others. *Everyday Living for Girls;* a textbook in personal regimen. Philadelphia. J. B. Lippincott Company. 1936. 528 pp. Price $2.00.

Wall, F. P. and Zeidberg, R. D. *Health Guides and Guards.* N. Y. Prentice-Hall Inc. 1938. 380 pp. Price $1.40.

Wheat, Frank M. and Fitzpatrick, Elizabeth T. *Everyday Problems in Health.* N. Y. American Book Company. 1935. 446 pp. Price $1.32.

Willard, Florence and Gillett, Lucy E. *Dietetics for High Schools.* N. Y. The Macmillan Company. 1939. 290 pp. Price $1.48.

Williams, Jesse F. *Healthful Living.* N. Y. The Macmillan Company. Revised 1941. 622 pp. Price $1.60.

Pamphlet—*Come Over to My House*—A new kind and form of home life program for girls. Includes health and safety pointers. Price 35c. Order from The Girls' Friendly Society, 386 Fourth Avenue, New York.

Lloyd-Jones Esther and Fedder, Ruth. *Coming of Age.* New York. Whittlessy House McGraw-Hill. 1941. 280 pp. Price $2.50.

Stewart, Ernest I. J. *Attention! To Your Health.* A practical handbook for the future selectee. New York. Bureau of Publications, Teachers College. 1941. 81 pp. Price 35c.

HEALTH EDUCATION TEXTS—ELEMENTARY SCHOOLS

Alexander, H. and Alexandroff, C. P. 3 vols. *Right Things To Do for Health and Growth.* Chicago. A. J. Nystrom and Company. 1938.
Book I 70 pages Price 45c
Book II 70 pages Price 45c
Book III 70 pages Price 45c

Andress, J. M. and others. *Safe and Healthy Living Series.* Boston. Ginn and Company. 1939.
Grade I *Spick and Span.* 149 pages. Price 72c
Grade II *The Health Parade.* 174 pages. Price 80c
Grade III *Growing Big and Strong.* 146 pages. Price 84c
Grade IV *Safety Every Day.* 244 pages. Price 84c
Grade V *Doing Your Best for Health.* 291 pages. Price 92c
Grade VI *Building Good Health.* 281 pages. Price $1.00
Combination of V and VI *Pathways to Health and Safety,* 528 pp. Price 1.40
Teacher's Manual for each 10c

Andress and Evans. *Practical Health Series.* Boston. Ginn and Company. 268 pp. 88c.
Grade V Book One. *Health and Success.* Rev. Ed.
Grade VI Book Two. *Health and Good Citizenship.* Rev. Ed. $1.08. 391 pp.

Baruch, Dorothy and others—(Curriculum Foundation Series) *Good Times With Our Friends*—the health primer of the series. Chicago. Scott, Foresman and Company. 1941. 128 pages. Price $64c.

Brownell, C. L., Williams, J. F., Hughes, W. L. and others. *Health of Our Nation Series.* New York. American Book Company. 1941-42.
Book I *Well and Happy.* 156 pp. Price ..... $ .76
Book II *Clean and Strong.* 180 pp. Price ..... .80
Book III *Fit and Ready.* 243 pp. Price ..... .84
Book IV *Safe and Sound.* 279 pp. Price ..... .88
Book V *Hale and Hearty.* 304 pp. Price ..... .92
Book VI *Active and Alert.* 320 pp. Price ..... .96

Brownell, C. L. and others. *Health and Safety Series.* 2nd ed. New York. Rand McNally. 1936-37
Grade III *Friendly Living.* 186 pages. Price 60c
Grade IV *Happy Living.* 202 pages. Price 64c
Combination of the two above. Price 88c
Grade V *Everyday Living.* 218 pages. Price 68c
Grade VI *Helpful Living.* 232 pages. Price 72c
Combination of the two above. Price $1.00

Bundesen, H. N. and Manry, Corinne. *The Road to Health.* New York. Liadlaw. 1932.
Grade I 96 pages. Price 52c
Grade II 127 pages. Price 56c

Burkard, W. E., Chambers, R. L., and Maroney, F. W. *New Health-Happiness-Success Series.* New York. Lyons and Carnahan. 1941.
Grade III *Health Stories and Practice.* 256 pages. Price 76c
Grade IV *Health by Doing.* 314 pages. Price 76c
Combination of the two above 96c
Grade V *Building for Health.* 309 pages. Price 76c
Grade VI *The Body and Health.* 313 pages. Price 76c
Combination of Grades V and VI 96c
Health Course of Study 20c

Carpenter F. G. and Carpenter, F. New York. American Book Company.
4th Grade: *The Foods We Eat.* 184 pages. Price 80c
The Clothes We Wear. 200 pages. Price 84c
The Houses We Live In. 206 pages. Price 88c

6th Grade: *How the World is Fed.* 382 pages. Price $1.04
How the World is Clothed. 351 pages. Price $1.04
How the World is Housed. 352 pages. Price $1.04

Charters, W. W., Smiley, D. F., and Strang, R. M. *New Health and Growth Series.* 6 vols. New York. Macmillan Company. 1941.
Grade I *All Through the Day.* 178 pages. Price 64c
Grade II *Through the Year.* 180 pages. Price 72c
Grade III *Health Secrets.* 241 pages. Price 76c
Grade IV *Healthful Ways.* 244 pages. Price 76c
Grade V *Let's Be Healthy.* 276 pages. Price 80c
Grade VI *Habits Healthful and Safe.* 277 pages. Price 84c
Combination of Grades III and IV $1.08
Combination of Grades V and VI $1.20

Comfort, M. H. *Happy Health Stories.* Chicago. Beckley-Cardy Company. 1932.
Grade IV 160 pages. Price 70c

Dansdill, Thersa. *Health and Growing Up.* Chicago. B. H. Canborn Company.
Grade 2. 1937. 127 pages. Price 72c

Dawson, Alvin. *Health Lessons.* New York. American Book Company.
Book I 191 pages. Price 72c
Book II 288 pages. Price 82c

Dearborn, Blanche J. *Aleck and His Friends.* Boston. Houghton Mifflin Co.
Grades 2-3 1932. 140 pages. Price 80c

Emerson, C. P. and Betts, G. H. *Habits of Right Living Series.* 2 vols. Indianapolis. Bobbs-Merrill. 1936.
Book I *Habits for Health.* 247 pages. Price 72c
Book II *Living At Our Best.* 328 pages. Price 84c

Fowlkes, J. G., Jackson, L. Z., and Jackson, A. S. *Healthy Life Series.* 4 vols. Philadelphia. J. C. Winston Company. 1936.
Book 3 *Healthy Bodies.* 216 pages. Price 64c
Book 4 *Healthy Growing.* 216 pages. Price 64c
Combination of 3 and 4 ..... $1.08
Book 5 *Keeping Well.* 264 pages. Price 80c
Book 6 *Healthy Living.* 288 pages. Price 84c
Combination of 4 and 5 ..... $1.08
Combination of 5 and 6 ..... $1.20

Kinne, Helen and Cooley, Anna M. The Homemaking Series. New York. Macmillan Company.
Grades 5-8 *Food and Health.* Price 96c
Grades 5-8 *Food and Health.* Price 96c

O'Shea, M. V. and Kellogg, J. H. *The Everyday Health Series.* 2 vols. New York. Macmillan Company.
Grades 4-6 *Building Health Habits.* Price 84c

O'Shea, M. V. and Kellogg, J. H. *Health Series of Physiology and Hygiene.* N. Y. Macmillan Company. Revised.
Grades 3-5 *Health Habits.* Price 84c
Grades 5-6 *Health and Cleanliness.* Price 84c
Grades 6- *The Body in Health.* Price $1.00

Patterson, Alice Jean. *Nature Study and Health Education.* Bloomington, Illinois. McKnight and McKnight.
Grade 3 184 pages. Price 60c
Grade 4 132 pages. Price 60c
Grade 5 192 pages. Price 80c
Grade 6 224 pages. Price 80c
Each text has a special notebook, each 40c

Riley, Philip L. and Fitchpatrick, Harriet V. *Health Ways Series.* 4 vols. Cleveland. The Harter Publishing Company.
Grade 1 Book I Part I *First Steps to Health.* 64 pp. Price 20c
Grade 1 Book I Part II *At Home.* 64 pp. Price 20c
Grade 2 Book II Part I *In School.* 64 pp. Price 20c
Grade 2 Book II Part II *A Trip to the Farm.* 64 pp. Price 20c

Schawe, W. *A Journey to Many Lands.* Yonkers, N. Y. World Book Co. 1932.
Grade IV 199 pages. Price.....80c

Towse, A. B. and Gravy, W. S. *Health Stories* (curriculum foundation series: life reading service) 3 vols. Chicago. Scott, Foresman and Company. 1934-39.
Grade 1 144 pages. Price.....64c
Grade 2 176 pages. Price.....72c
Grade 3 208 pages. Price.....80c

Turner, C. E. and others. *Health-Safety-Growth Series* (formally Malden Health Series) complete revision. Boston. D. C. Health and Company. 1941.
Grade III *Growing Up.* 216 pages. Price.....76c
Grade IV *Keeping Safe and Well.* 214 pages. Price.....76c
Grade V *Gaining Health.* 246 pages. Price.....76c
Grade VI *Cleanliness and Health Protection.* 244 pages. Price.....76c

Turner, C. E. *A Program of Health Education* (Conspectus). 1941. Price 5c

Walpole, B. A., New York. Macmillan Company. A Workbook. Grades 5-8. *The Science of Living Things.* Price 52c.

Whitcomb, C. T., Beveridge, John, and Townsend, E. E. *My Health Habits.* 4 vols. New York. Rand McNally. 1929-32.
Book 1 149 pages. Price.....64c
Book 2 200 pages. Price.....72c
Book 3 238 pages. Price.....80c
Book 4 249 pages. Price.....88c

Wilson C. C. and others. *The American Health Series* (A new publication in preparation.) Indianapolis. The Bobbs-Merrill Company. Grades 1-6.

Winslow, C. E. A. and Hahn, M. L. *The New Healthy Living Series.* 4 vols. New York. C. E. Merrill Company. 1934-38.
Grade III *Let's Grow.* 186 pages. Price.....72c
Grade IV *Let's Stay Well.* 184 pages. Price.....72c
Grade V *Game of Healthy Living.* 218 pages. Price.....72c
Grade VI *The Habits of Healthy Living.* Price.....72c
Book I Grade V and VI in combination edition. 332 pages. *"New Healthy Living."* Price.....92c

Wood, T. D. and others. *Adventures in Living Series.* 4 vols. New York. Nelson and Company. 1936-38. (In process of revision.)
Grade III *Now We Are Growing.* 218 pages. Price.....68c
Grade IV *Many Ways of Living.* 209 pages. Price.....68c
Teacher's Manual 36c
Grade V *Keeping Fit.* 237 pages. Price.....27c
Grade VI *Blazing the Trail.* 248 pages. Price.....72c
Teacher's Manual 36c

16 MM HEALTH FILMS AND THEIR USE

Use of Films for Health Instruction Purposes: The use of films for instructional purposes requires as much if not more preparation on the teacher's part as any other activity which may be included in the program of instruction. Too often the use of films becomes merely a pastime with doubtful or even negative results. In order to get the best results from the use of a film the teacher should preview it in advance of the first showing. Even previewing a film twice may often be advisable. The teacher should take notes during this preview which will enable him to summarize the following:

1. What points does the film bring out that need emphasizing?

2. Which phases of the film particularly emphasize the point being studied in the classroom?
3 Might the film create any erroneous ideas that should be corrected before it is shown?
4. What questions will the students have concerning possible supplementary material presented by the film?
5. What words are used in connection with the film which might not be clearly understood?

The teacher will then be in a position to lead the preliminary discussion and direct the attention of the class to the points that he wishes to emphasize.

The first showing of the film should be followed by a discussion, reports, tests, or some device designated to concentrate the attention of the students on certain phases or ideas of the film and to indicate to the teacher just what the class has derived from it. Following this a second showing should be given to consolidate the learnings which have been emphasized. Teachers who use these films should be as careful as possible to use them to educative advantages. Unless properly used films can often prove to be of no value or even to be detrimental to the learnings which we wish students to realize. Teachers should consider carefully the purpose for which the film is to be used and plan thoroughly for carrying out that purpose in actual practice.

Many teachers not only use films for instruction but also either operate the film machines themselves or train others to operate them. Specific suggestions for film machine operators are found at the end of this section on page 126.

Film Lists: 16-m.m. health films available through the Bureau of Health Education of the State Board of Health, through the General Extension Division of the University of Florida, and through the Florida Tuberculosis and Health Association are listed and described below. Other visual aids are also available from these sources, the descriptions of which will be furnished on request. Films can be borrowed from the State Board of Health, the General Extension Division, and the Florida Tuberculosis and Health Association under the conditions of their respective service rules which are also described below. Films and other visual aids are available from a number of the national and state agencies listed on page 108. Requests for film lists should be made directly to these organizations.

HOW TO ORDER FILMS

(1) Note the two classifications—Subject index (page 118) and Alphabetical Index (page 126). Use the former for finding films on a particular subject; use the latter to find a particular film by its title. Both indexes refer to page where the film is described.

(2) All films are 16mm. in size; sound films cannot be run on silent projectors, but silent films can be run on both silent and sound projectors.
(3) Title of film appears in italics.
(4) Letters EJS designate whether film is suitable for elementary (E) junior (J) or senior (S) high school use.
(5) Then follow brief data on content of film.
(6) Where film may be borrowed is shown by use of numerals, 1-2-3-4, referring to distributor and their rules for borrowing films:

1—State Board of Health.
2—General Extension Division.
3—Florida Cooperative Film Library.
4—Florida Tuberculosis and Health Association.

RULES FOR BORROWING FILMS

1—State Board of Health, P. O. Box 210, Jacksonville, Florida. Films are loaned free to schools, county health departments, public health nurses, and other public health workers for use before medical societies, schools, and civic organizations.

How To Request Films: Requests for films should be made well in advance to the Bureau of Health Education, State Board of Health, Jacksonville. Give first and second choice of films and also alternate showing dates when possible. Films will be scheduled for one day's use only unless otherwise requested and they must be returned on the due back date indicated.

Shipment Of Films. Films will be sent express collect and must be returned express prepaid immediately after final showing. The return express rate is one-half the cost of sending the films.

2—General Extension Division, University of Florida, Gainesville.

The films listed have been placed by their owners on deposit with the Audio-Visual Instruction Department of the General Extension Division, Gainesville, Florida, which acts as a central circulation agency for the convenience of all educational institutions and community groups of the State; or they are the property of the Florida Cooperative Film Library described on page 117.

Rules Governing the Service:
1. Industrial and government films are scheduled for one day's showing; Cooperative Library films for two days.

2. The only charge is transportation from Gainesville and return. When films are sent by express, they may be returned for half the outgoing rate.
3. By booking films from this or ANY other bureau the borrower is assuming responsibility for the safety and good condition of these films. Lost or damaged films will be charged at the cost of replacement.
4. All showings of films must be reported on blanks supplied by the Department.
5. No admission may be charged for showings of industrial or government films.

3—Florida Cooperative Film Library, University of Florida, Gainesville.

The Florida Cooperative Film Library maintains a collection of educational films purchased by Florida schools for their joint use and by Commercial Sponsors, such as the American Fire and Casualty Company in Florida, who are assisting in this way schools in which they are interested. The films are circulated among the Library member schools by the Department of Visual Instruction of the General Extension Division which acts as the Library's distributing agent. They are designed especially for classroom use and are among the best teaching films available in their several fields.

Library membership and access to these films are open to any Florida school. The only requirement is the purchase and deposit with the Library of one reel of approved classroom film.

One reel of sound film priced at $45 permits the donor the use of sixty Library films over a period of two years. The cost per booking is thus just seventy-five cents. One reel of silent film priced at $24 permits the use of thirty films during a one-year period. Of course Library members have unlimited use of industrial films. Members pay all transportation charges on Library as on other films.

Rules Governing the Service. Same as under "2—General Extension Division."

4—Florida Tuberculosis and Health Association, 111 West Ashley Street, Jacksonville.

The films listed are available directly from the Florida Tuberculosis and Health Association, or through local county tuberculosis associations. There is no cost other than transportation charges both ways.

Make reservations *early.* These films are heavily booked and are not available on short notice. Films must be returned *promptly* by express.

SUBJECT INDEX OF 16 MM FILMS

PERSONAL HEALTH AND HYGIENE

Teeth and Their Care

About Faces—1 reel—sound—JS
Importance of good teeth to social life, work, and national defense. (1)

Care of the Teeth—1 reel—silent—EJS
Records the parts of a tooth, prophylactic treatment, the process of decay, the effects on the teeth of bad habits and disease; and the rules for systematic home care and brushing of teeth. Depositor: Hillcrest Elementary School, Orlando (2)

Priceless Pearls—1 reel—silent—EJS
Importance of good teeth and consequent importance of good care for them. Producer: Kolynos Toothpaste Co. (2)

Smiles Have It—1 reel—sound—EJS
What two children learn about their teeth on their visit to the dentist for their quarterly dental check-up, and what they find out at the zoo about the relationship between the teeth of various animals and those of man. (1-3)

Eyes and Their Care

Eyesight—1 reel—silent—JS
Structure and functions of the eye; necessary precautions to preserve the eyesight. (1)

How You See—¾ reel—silent—EJ
Theory of sight explained by animated diagrams and photography. Principles common to the eye and to the combination of lens, diaphragm, and sensitive plate of the camera are illustrated. Depositor: Mainland High School, Daytona Beach. (2)

Preventing Blindness and Saving Sight—2 reels—silent—JS
Various causes of blindness and simple sight-saving precautions. Producer: National Society for the Prevention of Blindness. (2)

Vision for Victory—1½ reels—Sound—EJS
The story of the importance of vision, not only in defense activities but in all lines of human work. The structure and function of the eye are studied, and there are scenes showing the making of optical glass, and the grinding and polishing of lenses to accommodate individual eye defects. Producer: Better Vision Institute. (2)

Ears and Their Care

How We Hear—1 reel—sound—JS
Structure and function of the human ear are shown. Sound waves briefly explained. Complete ear diagrams show the major parts of the ear. The tympanic membrane, the ear bones, the Eustachean tube are diamgramed, and the inner ear is shown in detail. Depositor: Bartow High School (3)

Body Structure and Function

Alimentary Tract, The—1 reel—sound—JS
Supplements "Digestion of Food." Treats in detail motility phenomena of the gastrointestinal tract. Different types of movements in the stomach are shown as well as segmentation and peristalsis of the intestines. Depositor: P. K. Yonge School, Gainesville. (3)

Body Framework—1 reel—silent—JS

Shows how the skelton determines the shape and size of the body and how it protects the vital organs. Bone structure and composition, change during growth, mending of a fractured bone, relation of sunlight and cod-liver oil to bone development. Depositor: Memorial Junior High School, Orlando (3)

Digestion of Foods—1 reel—sound—JS
Summary of the digestive process including the work performed in mouth,

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stomach, and small intestine. Secretions, enzymes, systems affected, and products formed. Relation of circulatory and nervous systems to the digestive process. Depositor: Santa Rosa County High School, Milton. (3)

Endocrine Glands—1 reel—sound—S
Describes the nature and functions of the parathyroid, pituitary, pancreas, and thyroid glands. Shows influence of calcium and parathyroid extract on muscular control, the effect of pituitary hormones on egg development, use of insulin in treatment of diabetes, characteristics of hyper and hypothyroidism, and the stimulation of the mammary gland by pituitary and ovarian hormones. Depositor: South Broward High School, Dania. (3)

Heart and Circulation—1 reel—sound—JS
The mechanics of the pulmonary and systemic systems. Delineation of heart action, and microscopic shots of capillary action. Heart beat sounds are amplified. Blood pressure and its relation to health portrayed. Depositor: Gadsden County High School, Quincy. (3)

Heredity—1 reel—sound—S
Mendelian laws of inheritance presented through the use of animated charts and animal picturization. Depositor: Robert E. Lee High School, Jacksonville. (3)

Kidneys, Work of The—1 reel—sound—S
Detailed exposition of the kidneys and their functions. Laboratory experiments show the properties of the semi-permeable membranes which function in the kidneys to allow wastes to pass but restrict passage of food materials. Anesthetized animals are used to study the factors affecting rate or urine formation, including blood sugar content and external temperature. Depositor: Pompano High School. (3)

Mechanisms of Breathing—1 reel—sound—JS
The breathing mechanisms in operation. Animation portrays gaseous exchange in the lungs and body tissue cells, including pathological conditions. Nervous control of breathing and factors affecting rate and depth of breathing are shown. A demonstration of artificial respiration is included. Depositor: Gadsden County High School, Quincy. (3)

Nervous System, The—1 reel—sound—JS
The structure of the nervous system, together with its pathways and connections is depicted. Nature of the nerve impulse, conditions for setting up impulses, their passage from cell to cell, their discharge and resultant activity are shown along with reflexes, sensory integration, and activity of the cerebrum. Depositor: Eustis High School. (3)

Reproduction Among Nammals—1 reel—sound—S
The story of embryology. The domestic pig was selected for the purpose of illustration. The story is quite complete from the formation of the original germ cells to the active newborn pig. Depositor: Winter Haven High School. (3)

General Health Habits—1 reel—silent—EJS
Encourages the formation of habits promotive of health. (1)

Posture and Exercise—1 reel—sound—JS
A new film on the subjects of posture and exercise, particularly adapted for junior and senior high school groups. (1)

Why Willie was Willing to Wash—1 reel—silent—E
Shows how a dirty little boy learned the importance and value of cleanliness. (1)

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HEALTH AND VOCATION

Finding Your Life Work—2 reels—sound—JS

The importance of "knowing yourself" and of "studying occupations" in preparing for a vocation. Use of aptitude tests, the value of the educational record, study of character, interests, accomplishments, social assets and financial ability to sustain the individual. Means of obtaining information about various occupations, value of various school courses, and the building blocks of success. Depositors: Monticello High School and Florida and Leon High Schools in Tallahassee. (3)

Nursing—1 reel—sound—S

Shows nurses at work in many different jobs—in operating rooms, as x-ray helpers, as school nurses and in various visiting nursing bureaus. A vocational guidance film being widely used to interest girls in the profession of nursing, so vital to our country in these times. Producer: Vocational Guidance Films. (1-2)

GROWTH AND NUTRITION

Foods and Nutrition—1 reel—sound—S

A study of the metabolic processes showing distribution of carbohydrates, fats, proteins, minerals, vitamins, etc., through the body. Depositor: Sebring High School. (1-3)

A B C of Food—1 reel—silent—JS

The simple facts about the value and purpose of the various types of food. The body is compared with an engine and digestion with combustion. (1)

Good Foods—Milk—¼ reel—silent—EJ

Scenes at a dairy farm, delivery of milk at a city home. Kittens drink milk, a boy enjoys it with his dinner, children drink it in a school lunchroom. Depositor: Martin County High School, Stuart. (3)

Health and Happiness, For—1 reel—sound and color—EJS

Signs of good growth and nutrition which everyone can learn to recognize and to build for, shown by scenes of children who have had the right food, exercise, sunshine, affection, companionship and intelligent care. Excellent shots of various foods. Producer: Department of Agriculture. (1-2)

Hidden Hunger—3 reels (2 reels duplicate of movie version with supplementary reel giving more details on nutrition)—sound—JS

The story of Link Squire's one month campaign to reform the eating habits of a nation. It makes understandable the newer knowledge of nutrition, points out the waste of food through improper cooking and waste of money through the waste of food through improper cooking and waste of money through improper buying. Link doesn't ask people to "go on any newfangled diet or to cook any newfangled way." The film has been shown widely in theatres and is the official film of the National Nutrition Program. Producer: The Federal Security Agency. (1-2)

Meat and Romance—4 reels—sound—JS

Authentic and practical information for consumers on buying, cooking, carving, and serving meats. A school film committee says it is "a real contribution to the field of audio-visual education . . . A perfect example of how an industrial film can be made without any advertising and yet put a worthwhile message across . . . Exceptionally good for adult groups." Producer: National Live Stock and Meat Board. (2)

Meat for America—2 reels—sound JS

The story of meat packing, the nation's number one food industry. Judging meat animals, the stockyards, the disassembly line, beef dressing, preparing ham, bacon, dried beef, etc. The part meat plays in America's diet. Producer: Armour and Company. (2)

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Miss T—1 reel—sound—JS

Produced in wartime England, this fine film shows life of a girl from infancy to adulthood and explains how the right food contributes to her health and happiness. (1)

Proof of the Pudding—1 reel—sound—JS

The film was produced to emphasize the importance of good nutrition. Food requirements of the body are explained and the results of good and bad diets are illustrated. A story, built around the Jones family, adds interest. Producer: Metropolitan Life Insurance Company. (1-2)

Recipe for Saving on Food Costs—1 reel—sound—JS

A "recipe" is given for saving on food costs. Essentials for the recipe are the telephone, the clock, the calendar, the grocer, notebook and pencil. (1)

Vitamin B1—1 reel—silent—JS

Natural sources of vitamin B1. Effect of a deficiency of this vitamin on pigeons and rats and of an extreme deficiency in human beings. Effects of a balanced diet on beriberi and the need for a balanced diet to maintain health. Depositor: Jupiter and Lake Park Schools. (3)

Well Balanced Diet—1 reel—silent—JS

Stressing need for variety of foods; importance of proper cooking and eating. (1)

PREVENTION AND CONTROL OF DISEASE

Body Defenses Against Disease—1 reel—sound—JS

An exposition of the three lines of defense: The skin, phagocytic cells and lymphatics, and the blood. Includes a section on immunology. Applications of the defense mechanism in specific cases; the action of liver and spleen together with types of anti-bodies and their effects. Depositor: The Sparks' Theatres of Florida. (3)

Dr. Jenner, the Story of—1 reel—sound—JS

The work of the conqueror of smallpox, the plague which in one century killed sixty million persons. Dr. Jenner's development of a vaccine and his successful experiment on a child of the English village where he practices. This is a Teaching Film Custodians' film. Depositor: Central High School, Fort Lauderdale. (3)

Man Against Microbe—1 reel—silent—JS

Three hundred years of progress in public health and medicine. The contributions of Van Leeuwenhoek, Pasteur, Lister, Koch, Von Behring briefly described. Methods of immunization to disease. Confidence expressed in the future of the fight against disease. Producer: Metropolitan Life Insurance Company. (2)

Preventing the Spread of Disease—1 reel—sound—JS

Compares the spread of disease to the creation of a chain of micro-organisms, the film shows various ways by which the chain is created and the steps which should be taken to break it. Illustrates measures which are open to both the individual and the community. Producer: National Motion Picture Company. (1-2)

When Bobby Goes To School—1 reel—sound—S

A small boy is given a thorough check-up by his physician who explains "why" to his mother looking on. (1)

Your Public Health Nurse—1 reel—sound—JS

Activities of the public health nurse engaged in a generalized program of local health service. (1)

Colds and Pneumonia

Confessions of a Cold—1 reel—sound and silent—EJS

Cause, effect, cure and prevention of cold. (1)

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Pneumonia—1 reel—sound—JS
Care and prevention of pneumonia. (1)

Cancer

Choose To Live—2 reels—sound—S
Outlines the fight of the United States Public Health Service against cancer. Causes of cancer, preventive measures, methods of treatment and cure are clearly outlined. The story of one woman's encounter with cancer presents a background of educational information on the subject. Scenes of laboratory and research workers. Producer: U. S. Department of Agriculture. (2)
Enemy X—1 reel—sound—S
Mystery thrills technique used to call attention to depredations of cancer. (1)

Diphtheria

Let's Keep the Killer Down—1 reel—sound—S
A new and timely film on the subject of diphtheria. Although it shows the function of antitoxin, its principal theme is immunization. (1)

Dysentery

Hand To Mouth—2 reels—silent—S
A film on bacillary dysentery and other infectious diarrheas, presenting the dangers of infection as carried from hand to mouth; the chief sources of contamination, and the preventive measures required for correction. (1)

Malaria

Mosquitoes and Malaria—1 reel—sound—JS
Life cycle of the mosquito and the course taken through the blood stream of the human body by the malarial germ. (1-2)
Singing and Stinging—1 reel—silent—JS
The life story of the mosquito. How science is assailing the pest is shown, also the simple manner in which anyone can assist. (1)

Poliomyelitis

Report To The People, A—1 reel—sound—S
History of fight against infantile paralysis. Shows modern methods in orthopedic care and physical therapy. (1)

Tuberculosis

Another To Conquer—1 reel—sound—JS
Story of two young Indians (over whom hangs the shadow of tuberculosis) and of their grandfather. With the exception of Dr. W. W. Peter, all the cast are Navajos. Filmed on Navajo Reservation, Arizona, in cooperation with the U. S. Office of Indian Affairs. (4)
Cloud In The Sky—2 reels—sound—JS
Story of a Spanish family's fight against tuberculosis and the means employed in Consuelo's cure. Gay fiesta scenes and Spanish music. Producer: National Tuberculosis Association. (1-2-4)
Behind The Shadows—1 reel—sound and silent—JS
A doctor explains to a group of high school boys and girls what tuberculosis is. As he speaks off-stage, pictures, x-rays and animated diagrams illustrate his story. (4)
Goodbye, Mr. Germ—1 reel—sound—EJS
The germ of tuberculosis tells his life story to Professor Buzzle, who has discovered how to talk to germs. (4)
Let My People Live—1 reel—sound—JS
Tuberculosis prevention and cure described in a dramatic story of a negro family. The urgency of physical examinations and early care is emphasized. Producer: National Tuberculosis Association. (2-4)
On The Firing Line—2 reels—sound—JS
General view of the problem of tuberculosis in the United States. Preventive

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and therapeutic work in various areas of the country. Producer: National Tuberculosis Association. (2-4)

Story of My Life By Tee Bee—1 reel—silent—E

Animated cartoon for use before elementary school groups. "Goodbye, Mr. Germ," sound, designed as substitute. (4)

They Do Come Back—1 1/3 reels—sound—S

Modern tuberculosis case finding, diagnosis, hospitalization, and methods of patient rehabilitation. How tuberculosis which interrupts the plans of Roy and Julie is conquered. Producer: National Tuberculosis Association. (2-4).

Tuberculosis—1 reel—sound—JS

The story of this dread disease. Its symptoms, favoring conditions, methods of infection, the tuberculin skin test and the x-ray in diagnosis. Sanatorium treatment for early stages and pneumothorax for advanced cases are shown. Depositor: Health and Physical Education Department, University of Florida. (3)

Venereal Disease

Health Is a Victory—1 reel—sound—S

Gonorrhea discussed for the lay audience. (1-2)

In Defense of the Nation—1 reel—sound—S

Shows how a community can help to protect soldiers, sailors and defense workers from syphilis and gonorrhea. (1)

Know For Sure—2 reels—sound—Male Audiences only

A very frank treatment of the subject of syphilis particularly designed for showings in camps and war industries. (1-2)

Let's Open Our Eyes—1 reel—sound and silent—S

The problem of syphilis and what can be done about it. (1-2)

Three Counties Against Syphilis—2 reels—sound—S

Methods by which three counties in Georgia effected the control of syphilis. Treatment makes the film suitable for any audience. Producer: U. S. Department of Agriculture. (2)

With These Weapons—1 reel—sound—S

Briefly and effectively tells the facts about syphilis and its relations to personal, family, and community health. (1-2)

HOME, SCHOOL, AND COMMUNITY SANITATION

Defending the Cities Health—1 reel—sound—S

Shows methods in city sanitation and disease control. (1)

And So They Live—2 reels—sound—S

Documentary film on lack of proper diet, housing, and sanitation, and need for better adaptation of school program to problems of community. (1)

Drinking Health—2 reels—silent—EJS

Health film on dangers of impure drinking water. Purification of a city water supply. The importance of individual drinking cups and proper dishwashing methods. Producer: Films of Commerce. (2)

Eating Out—2 reels—silent—S

Deals with the subject of restaurant sanitation and food handling. (1)

Every Drop a Safe One—1 reel—sound—S

Importance of pure water to health; making water safe. (1)

House Fly, The—1 reel—sound—JS

Story of this common pest. The four stages of the fly's life cycle are shown: Egg, larva, pupa, and adult. Activities as a carrier of disease are presented. Effective means of eliminating fly menace are illustrated, special emphasis being laid on community action. Depositor: Santa Rosa County High School, Milton. (1-3)

Key: E—elementary school
J—junior high school
S—senior high school

1—State Board of Health
2—General Extension Division
3—Florida Cooperative Film Library members only
4—Florida Tuberculosis and Health Association

Housing In Our Time—2 reels—sound—EJS
A dramatization of the Federal Government's slum clearance and low-rent housing program to 1939. Shows the development of a project from the granting of a loan to occupancy. Producer: Federal Public Housing Authority. (2)
Keep 'Em Out—1 reel—sound—JS
Describes the economic damage and health hazards caused by rats and indicates some control methods. (1)
Local Health Problems In War Industry Areas—1 reel—sound—JS
The launching of a defense project in Seneca County causes a sudden influx of 300 persons into a community of fifteen. The dreadful and dangerous lack of sanitation and shelter is recorded and methods are shown to safeguard the health of the people. (1)
Mosquitoes—3 reels—silent—JS
First illustrates the types of economic losses due to mosquitoes and proceeds to the life histories of various kinds of mosquitoes and finally to methods of control. Illustrates places about the home and farm which are breeding spots and shows how swamps are cleared by special equipment. Dusting by airplanes is shown and the effects of stocking pools with minnows. Producer: U. S. Department of Agriculture. (1-2)
School Days In The Country—1½ reels—sound—JS
Illustrates various ways by which school teachers and administrators may protect and conserve the health of their pupils and their communities. Measures depicted include teacher inspection of children's hands, pupils sent home at the first signs of illness, use of the light meter to check eyestrain, preparation of hot lunches, afternoon naps for some children. Particularly good for PTA and other community showings. (1-2)
Slinging Hash—1 reel—silent—S
Taking an average restaurant as an example, the film shows and explains graphically sanitary and unsanitary handling of food and eating utensils. (1)
T'wixt the Cup ad the Lip—2 reels—sound—JS
An epidemic of colds brings to light unsatisfactory conditions in food handling. (1)
What Price Health—1 reel—silent—JS
Meets the arguments against sanitation by showing they may be greatly outweighed by the possible costs resulting from insanitation. (1)
Your Health Department—2 reels—sound—JS
Function, achievements and goals of health department's activity. (1)

SAFETY, FIRST AID, AND HOME HYGIENE

Before the Doctor Comes—4 reels—sound—JS
Reel 1—Techniques for control of bleeding and treatment for shock; reel 2—Artificial respiration and treatment of burns; reels 3 and 4—First aid for fractures, application of splints, and methods of transporting injured persons. (3)
First Aid—Care of Minor Wounds—¼ reel—silent—JS
Emphasizes the importance of immediate care for even the slightest wound. Demonstrates proper method of applying sterile dressings. Depositor: Memorial Junior High School, Orlando. (3)
First Aid—Carrying the Injured—¼ reel—silent—JS
Demonstrates the making and using of stretchers in emergencies, and methods of carrying injured persons without stretchers. Depositor: Hillcrest Elementary School, Orlando. (3)
First Aid—Control of Bleeding—¾ reel—silent—JS
Shows accepted methods of control of arterial and venous hemorrhages. Depositor: Memorial Junior High School, Orlando. (3)

Key: E—elementary school
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1—State Board of Health
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First Aid—Life Saving and Resuscitation—1 reel—silent—JS

Demonstrations of various approaches and holds used in rescuing the endangered swimmer. Methods of resuscitation shown include use of the inhalator. Depositor: Winter Park High School. (3)

Help Wanted—1 reel—sound—JS

Although not designed particularly as a teaching film, this film shows some of the simpler basic techniques of first aid. It may be shown to illustrate a lecture and to aid in the presentation of the first aid course itself, or it may be screened for general audiences to stimulate interest in first aid training. (1)

Horse Sense In Horse Power—1 reel—silent—JS

Early automobiles and changes leading to the traffic problem. Causes of accidents and illustrations of bad driving practice. Testing modern cars for safety and performance. Producer: Plymouth Division of Chrysler Corporation. (2)

Life Saving—1½ reels—sound—EJS

The film was formerly used in CC Camps to teach life saving. It illustrates the swimming ability which a person taking a life saving course should possess as well as the changes made in the different strokes for life saving purposes. Shows the different approaches to the victim, different "carries," grips and releases, and methods of carrying the victim ashore. Closes with instruction in artificial respiration. Producer: U. S. Department of Agriculture. (2)

Parade of Champions—2 reels—sound—S

A safe-driving film effectively styled to influence drivers of high school age. Grantland Rice, the commentator, capitalizes upon youth's enthusiasm for sports and champions to point out the similarity of qualities needed to be an outstanding athlete and a good automobile driver, e.g., sound physical condition, knowledge of fundamentals, timing, concentration and attitudes of cooperation or team play. Producer: The Ford Motor Company. (2)

Word To the Wise A—1½ reels—sound—JS

A fire prevention film showing by means of one family's story the common fire hazards existing in many homes. Widely used in Office of Civilian Defense training programs. Producer: National Retailers Mutual Insurance Company. (2)

MATERNAL AND CHILD HEALTH

Baby's First Year—1 reel—sound—JS

Health activities of mother and child during first year following birth. (1)

Before the Baby Comes—1 reel—sound—S

Health routine of expectant mother, cooperation of husband, role of doctor, and health authorities. (1)

Care of the Expectant Mother—1 reel—silent—S

Emphasizes necessity of adequate prenatal care to expectant mother. (1)

Child Grows Up—1 reel—sound—JS

Development of normal child from first year to first school year. (1)

Clocking the Champion—1 reel—sound and color—JS

Around the clock with a young baby. Outlines schedule of rest, feeding, etc. (1)

Judy's Diary: Part I: From Morning Until Night—2 reels—silent—JS

Shows care of six months old baby, featuring table-bath, preparation of food and training. (1)

Your Baby—1 reel—silent—JS

Problems of bathing, dressing, and feeding the baby, stressing importance of immunization. (1)

Key: E—elementary school
J—junior high school
S—senior high school

1—State Board of Health
2—General Extension Division
3—Florida Cooperative Film Library members only
4—Florida Tuberculosis and Health Association

SUGGESTIONS FOR FILM OPERATORS[1]

Human error is the cause of almost all film damage, although a faulty or dirty projector will damage films.

As a basis for training new operators and a check list for ALL operators, the following classification of types of film damage and their causes is given.

1. **Enlarged sprocket holes—too short a loop at film gate or too tight tension spring.**
2. **Broken sprocket holes—faulty threading of film in the projector; i.e., improper adjustment of loop or failure to engage claw with film before starting projector.**
3. **Scratches—particles of dust and dirt lodged in film gate left by operator who fails to clean film gate before shows.**
4. **Sprocket teeth marks between sprocket holes—failure to place the sprocket holes of film properly over the sprocket wheel teeth. The film "rides" on the tops of the teeth which punch through the film.**
5. **Sprocket wheel marks on sound track—sound film on a silent machine.**
6. **Accordion pleating—first loosely winding film on reel followed by an attempt to tighten by pulling the loose end or by failure to note film break and allowing footage to pile up in the machine.**
7. **Breaking film—too tight take-up reel, allowing film to become looped around a stationary part of machine during threading, and other ways.**

To avoid damaging a film the condition of the unprojected film on the feed reel should be frequently compared with that going onto the take-up reel. If there is a difference the projector should be stopped at once and the threading corrected.

[1]This entire section is used with the permission of the General Extension Division of the University of Florida, which Division adapted it from a classification prepared by the Extension Division of the University of California.

ALPHABETICAL INDEX OF 16mm. FILMS

ALPHABETICAL INDEX OF 16 mm. FILMS

ALPHABETICAL INDEX OF 16 mm. FILMS—continued

SUGGESTIONS FOR EVALUATING THE SCHOOL HEALTH EDUCATION PROGRAM

CHAPTER SEVEN

SUGGESTIONS FOR EVALUATING THE SCHOOL HEALTH EDUCATION PROGRAM

In evaluating the School Health Education Program, it should be remembered that there are three types of outcomes to be expected:

(a) Improvement of Health Status of the Children
(b) Improvement in the Environment in which the Children live
(c) Educational Outcomes which measure progress in terms of favorable practices, attitudes and knowledge relating to personal, community, and racial health.

Evaluation procedures may be of subjective and objective types. Both are accepted by health authorities. It is helpful to use some methods of evaluating the program in order that progress may be measured and to determine emphasis for further work. The following brief suggestions are offered:

IMPROVEMENT OF HEALTH STATUS OF THE CHILDREN

1. The number and per cent of children free from physical defects.
2. The number and per cent of physical defects corrected during the school year.
3. The number of immunizations given and per cent of children immunized during the year.
4. The number of children absent because of illness. The number of days lost from school because of illness (For analysis of cause of illness).
5. Number of children showing satisfactory growth during the year (As shown by growth charts).
6. Number of children showing improvement in nutritional status during the year (As determined by physician).

IMPROVEMENT IN THE ENVIRONMENT IN WHICH CHILDREN LIVE AT SCHOOL

1. Adjustments made in lighting, heating, ventilation, seating.
2. More adequate toilet, drinking and handwashing facilities provided.
3. Enlarged and improved playgrounds.

4. Improvements made in lunch room, rest room, and clinic room facilities.
5. Adequate first aid facilities furnished.
6. Specific safety precautions taken.
7. Improved methods of cleaning adopted.
8. The use of safe water and safe milk in the school is insured.

EDUCATIONAL OUTCOMES IN TERMS OF HABITS, ATTITUDES AND KNOWLEDGES

It is difficult to measure habits and attitudes. The subjective method of observation will necessarily have to be employed here. The observing teacher may unmistakably see improvement in the health practices and attitudes of his group. Suggested methods for observing improvement in health habits are:

1. Inspection each morning for improvement in personal appearance.
2. Occasional observation of health practices in everyday situations at school, as (1) the number of pupils choosing balanced lunches; (2) the number of pupils observing good sitting, walking or standing postures; (3) the number of children voluntarily washing hands before eating lunches; (4) the number of pupils removing wraps on arrival at school. Other similar practices may be observed.
3. Health-habit questionnaires may be used occasionally to determine the health behavior of pupils both at home and school.
4. Interviews may be held with parents to check on co-operation in health-habit improvement in the home.
5. Questionnaires may also be sent to parents to ascertain changes made in health practices.

There are no widely used tests for the evaluation of health education as it relates to improving attitudes. Some suggestions are:

1. Improved attitude toward the nurse, doctor, dentist, and the family physician.
2. Interest toward and efforts made to correct defects.
3. Enthusiasm shown for health education activities.
4. Co-operation in maintaining healthful environment in the school.
5. Consideration for health of group as shown by willingness to remain at home when there is danger of spreading disease.
6. Interest in public health activities in the community.

Health knowledge may be measured in much the same way as other school subjects. Objective tests probably serve their

best function when the classroom teacher is able to make them to meet a specific situation, as at the end of a particular unit of work.

HEALTH TESTS, HEALTH APPRAISAL FORMS AND CHECK LISTS

Health Tests

American Child Health Association. *Health Education Test Forms.* Story Matching, True-False, Five Rules, Time-Sample Set (without scoring keys). Price 25c. Each test may be secured in lots of 50 with scoring key as follows:

Story Test $1.25 Matching Test $.55 Time Test $.36
True-False Test $1.50 Five Rules Test $.36

Write to National Education Association, 1201 Sixteenth Street, N. W., Washington, D .C.

American Child Health Association. *Health Education Tests.* Number I of the School Health Research Series describes the relation of tests to the aims and objectives of health instruction; the evidence interpreting the significance of the tests used in the School Health Study, together with forms and standards for the 5th and 6th grades. Sample pages of tests and directions for giving are also included. 1929. 70 pp. Price 60c. Write to National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C.

Bell, H. M. *The Adjustment Inventory Adult Form and Student Form.* It provides a measure of four adjustments — home, health, social and emotional. 100 copies $5.50; 500 copies $25.00, 1,000 copies $40.00. Plastocele scoring scale $1.00. Write to Stanford University Press, Stanford, California.

Brewer, Schrammel. *Health Knowledge and Attitude Test.* 2 forms of 2 pages each to be used in grades 4-8. 1935. Sample set 15c. Write to Bureau of Educational Measurements, Kansas State Teachers College, Emporia, Kansas.

Byrd, Oliver E. *Health Attitude Scale.* Suitable for last three years of high school and the first two years of college. 100 copies $5.50; 500 copies $25.00; 1,000 copies $40.00. Write to Stanford University Press, Stanford, California.

Bureau of Educational Measurements. *Every Pupil Scholarship, Health Knowledge and Atttiude Test.* Forms for elementary, high school and college use. Per copy 1½c, scoring key 2c. Write to Bureau of Educational Measurements, Kansas State Teachers College, Emporia, Kansas.

Cincinnati Health Knowledge Test. 8th, 9th, or 10th grades. 4 pages. For prices in quantity and further information write to Albert Grant, Supervisor Appraisal Service, Cincinnati Public Schools, 216 East Ninth Street, Cincinnati, Ohio.

Derryberry, Mayhew and Weissman, Arthur. *Using Tests as a Medium for Health Education.* Reprint No. 2144 from the U. S. Public Health Reports, 1940. 5 pp. Price 5c. Write Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.

Derryberry, Mayhew; Franzen, Raymond; and McCall, W. A. *Health Awareness Test.* An abbreviated form of the battery of five tests of the American Child Health Association. (See above) to be used in Grades 4-8. 1937. Sample set 15c. Write to Bureau of Publications, Teachers College, Columbia University, New York City, New York.

Forsythe, W. E. and Rugen, M. W. *Health Knowledge Test.* (Under revision.) Research Quarterly, May, 1935. Write to American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, Northwest, Washington, D. C.

Gates, Arthur I. and Strang, Ruth M. *The Gates-Strang Health Knowledge Tests.* Forms A, B, and C for grades 3-8. Forms D, E, and F for grades 7-12. Revised 1938. Sample set 15c; 100 for $3.15; 1,000 for $25.00. Write to Bureau of Publications, Teachers College, Columbia University, New York City, New York.

Kilander, Holger Frederick. *Kilander Health Knowledge Test.* For high school

seniors and college freshmen. 1936. 8pp. Sample set 15c. Write to Holger Frederick Kilander, Panzer College, East Orange, New Jersey.

Krziza, E. H. *Health Test.* The Instructor, May 1936. Write to F. A. Owen Publishing Co., Dansville, New York.

Loy, David T. and Husband, M. W. *A Health Knowledge Survey.* Research Quarterly, May 1939. Write to American Association for Health, Physical Education, and Recreation, 1201 16th Street, Northwest, Washington, D. C.

Public School Achievement Test in Health. Grades 4-8. Four forms. Items in the test on sanitation, diseases, foods, safety habits, etc. Sample set (one form and direction sheet) 10c postpaid. Write to Public School Publishing Co.

Trusler-Arnett. *Health Knowledge Test.* For high school and college level. For a package of 25 tests, 50c plus transportation. Write to Bureau of Educational Measurements, Kansas State Teachers College, Emporia, Kansas.

Turner, Clair E. and Naomi C. *Objective Tests for Cleanliness and Health.* 6th grade. 1934. 32 pp. Sample set 10c. Write to Dr. Clair E. Turner, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Conrad, Howard L. *The Construction of Health Knowledge Tests.* The Journal of Health and Physical Education for December 1938, page 620. Write to The American Association for Health, Physical Education and Recreation, 1201 Sixteenth Street, Northwest, Washington, D. C.

Health Appraisal Forms

Committee on Administrative Practice of the American Public Health Association. *Appraisal Form for Local Health Work.* In Part II one division is entitled School Hygiene and deals with health examinations, nursing service, teacher participation and health status. First edition 1938. 185 pp. $1.60. Write to American Public Health Association, 1790 Broadway, New York City, New York.

The Department of Biology and Public Health, Massachusetts Institute of Technology. School Health Appraisal Form. Provides two forms, one for elementary schools in cities and one for Rural Schools. 1930. 73 pp. 50c. Write to The Department of Biology and Public Health, Massachusetts Institute of Technology, Cambridge, Mass.

Utah State Board of Health, Division of Maternal and Child Health and Utah Congress of Parents and Teachers. *Utah School Health Appraisal.* A good example of a health appraisal form used in a specific state. Mimeographed. 1940. 12 pp. Write for information concerning this form to Division of Maternal and Child Health, Utah State Board of Health, Salt Lake City, Utah.

Health Check Lists

Dearborn, Terry H. *A Check List for the Survey of Health and Physical Education Programs in Secondary Schools.* 1940. 23 pp. 60c. Write to Stanford University Press, Stanford University, California.

United States Office of Education. *Safety and Health of the School Child.* A self-survey of school conditions and activities. Pamphlet No. 75, price 10c. Write to Superintendent of Documents, Government Printing Office, Washington, D. C.

APPENDIX

APPENDIX

LAWS RELATING TO SCHOOL HEALTH

The following sections from the *Florida School Code* are those pertinent to the health of the school child, the teacher and other personnel, and the school environment. (For complete code see *Florida School Code,* Title XV, Statutes, 1941.)

SECTION 227.12

(18) SCHOOL DAY.—A school day for any group of pupils is that portion of the day in which school is actually in session and shall comprise not less than six hours including intermissions for all grades above the third; not less than four net hours for the first three grades; and not less than three net hours in kindergarten and nursery school grades: Provided that the minimum length of the school day herein specified may be decreased not to exceed one net hour under regulations of the state board.

SECTION 230.23

POWERS AND DUTIES OF COUNTY BOARD.—The county board acting as a board shall exercise all powers and perform all duties listed below:

(8) (e) Provide for Education of Special Groups.—Provide, insofar as practicable, for special facilities for classes for backward, defective, truant, or incorrigible children of school age and for part-time or night school or classes for adolescents and adults, including illiterate and groups needing Americanization and, when desirable and practicable, to provide for the education of children below the first grade level in nursery school or kindergarten classes.

(f) Health Examinations and Treatments.—Provide for all children of school age in the county to have periodic physical and dental examinations and, insofar as practicable, arrange and cooperate with other organizations for the prompt treatment of all pupils who are in need of remedial and preventive treatment; provided, that except in emergencies pupils may be given remedial or preventive treatment only on written consent of the parent.

(10) TRANSPORTATION OF PUPILS.—Make provision for the transportation of pupils to the public schools or school activities they are required or expected to attend: . .. . and adopt the necessary rules and regulations to insure safety, economy, and efficiency in the operation of all busses, as prescribed in Section 234, hereof.

(11) SCHOOL PLANT.—Approve plans after considering any recommendations which may have been submitted by the trustees of the districts

concerned, for locating, planning, constructing, sanitating, insuring maintaining, protecting and condemning school property as prescribed in Section 235 and as follows:

(b) Sites, buildings, and equipment.—Select and purchase school sites, playgrounds, and recreational areas located at centers at which schools are to be constructed and of adequate size to meet the needs of pupils to be accommodated; provided that the trustees of any district shall have authority to refuse, on the grounds of excessive cost or improper location; . . . to expand existing sites; . . . to insure that all plans and specifications for buildings provide adequately for the safety and well-being of pupils . . .

(c) Maintenance and upkeep of school plant.—Provide adequately for the proper maintenance and upkeep of school plants, so that children may attend school without sanitary or physical hazards and to provide for the necessary heat, lights, water, power and other supplies and utilities necessary for the operation of the schools.

(e) Condemnation of buildings.—Condemn and prohibit the use for public school purposes of any building which can be shown for sanitary or other reasons to be no longer suitable for such use, and when any building is condemned by any state or other government agency as authorized in Section 235, to see that it is no longer used for school purposes.

SECTION 230.33

DUTIES AND RESPONSIBILITIES OF COUNTY SUPERINTENDENT.—The county superintendent shall exercise all powers and perform all duties listed below; provided, that in so doing he shall advise and counsel with the county board:

(8) Child welfare.—Recommend plans to the County Board for the proper accounting for all children of school age, for the attendance and control of pupils at school, for the proper attention to health, safety, and other matters which will best promote the welfare of children in the following fields, as prescribed in Section 232:

(15) Cooperation with other agencies.—Recommend plans for cooperating with and on the basis of approved plans to cooperate with federal, state, county and municipal agencies in the enforcement of laws and regulations.

SECTION 231.09

(1) Teaching.—Teach efficiently and faithfully, using the books and materials required, following the prescribed courses of study, and employing approved methods of instruction, the following: . . . the true effects of alcohol and intoxicating liquors and beverages and narcotics upon the human body and mind, ... state and county officials shall furnish and put into execution a system and method of teaching the true effects of alcohol and narcotics on the human body and mind, provide the necessary textbooks, literature, equipment, and directions, see that such subjects are efficiently taught by means of pictures, charts, oral instruction, and lectures and other approved methods, and require such reports as are deemed necessary to show the work which is being covered and the results being accomplished.

SECTION 231.40

SICK LEAVE.—Any member of the instructional staff em-

played in the public schools of the State who is unable to perform his duty in the school because of illness, or because of illness or death of father, mother, brother, sister, husband, wife, or child, and consequently has to be absent from his work shall be granted leave of absence for sickness by the County superintendent, or by someone designated in writing by him to do so. The following provisions shall govern sick leave:

(1) **Extent of leave.**—Each member of the instructional staff shall be entitled to not more than five days of sick leave during any one year; provided, that such leave shall be taken only when necessary because of sickness as herein prescribed. Such sick leave shall be cumulative from year to year; provided that not more than twenty school days' sick leave, including sick leave for the current year and accumulated sick leave for previous years may be claimed in any one year; and provided that unused sick leave credit for any one year may not be claimed later than the end of the third year thereafter; and provided, further, that at least half of this cumulative leave must be established within the same county school system.

SECTION 232.03

EVIDENCE OF DATE OF BIRTH REQUIRED.—Before admitting a child to the first grade, the principal shall require evidence that the child has attained the age at which he should be admitted in accordance with the provisions of Section 232.01. The county superintendent or attendance assistant may require evidence of the age of any child whom he believes to be within the limits of compulsory attendance as provided for in Section 232.01-232.19.

SECTION 232.06

(1) PHYSICAL AND MENTAL DISABILITY.—Children whose physical or mental condition is such as to prevent or render inadvisable their attendance at school or application to study; provided, that before issuing a certificate for physical or mental disability, the county superintendent shall require the submission of a statement from the county health officer, if a licensed physician, in counties having such an officer, and in other counties from a licensed practicing physician designated by the county board, certifying that the child is physically or mentally incapacitated for school attendance; provided further, that children who are handicapped by deafness or blindness as to be unable to make satisfactory progress in the public schools shall attend the Florida state school for the deaf and the blind or some other institution within or without the state in which equivalent instruction is offered, the rating of such instruction to be determined by the state superintendent under regulations prescribed by the state board; and provided further, that if any child is so seriously crippled as to make impossible or inadvisable his or her attendance at a regular public school, the county superin-

tendent shall attempt to make arrangements for such child to attend a public or other school for crippled children.

SECTION 232.29

PHYSICAL AND MENTAL EXAMINATION.—The state board of education and the state board of health shall jointly prescribe uniform forms, rules and regulations, and, through their executive officers, shall arrange for the examination at appropriate intervals of each child attending the public schools of the state for the purpose of discovering, reporting and promoting treatment of mental and physical defects that require medical or surgical treatment for the proper development of each child.

SECTION 232.30

MEDICAL EXAMINATION OF SCHOOL CHILDREN UNDER SUPERVISION OF STATE BOARD OF HEALTH.—Subject to these rules and regulations the state board of health shall have supervision over all matters pertaining to the medical examination of school children in Florida, with such duties and powers as are prescribed by law pertaining to public health, and all school children shall be examined as to their physical condition at appropriate intervals. Any work done by health authorities in schools shall be arranged with the school authorities.

SECTION 232.31

COUNTY BOARDS AND HEALTH AUTHORITIES TO CO-OPERATE.—County boards of public instruction and county health authorities shall cooperate in providing and arranging for periodic medical examinations of all school children under regulations of the state board of education and the state board of health.

SECTION 232.32

COUNTY HEALTH UNITS: COOPERATION WITH.—In counties in which county health units have been provided and are in active operation, it shall be the duty of the county board, and the county superintendent shall cooperate with said units in all matters having to do with the health and welfare of school children; provided, that if the periodic medical inspection of school children is a part of the program of a county health unit such medical inspection shall be considered as meeting the requirements for a medical inspection as set forth in this chapter.

SECTION 232.33

CHILD ILL AT SCHOOL.—If a child becomes ill while at school the teacher or principal shall segregate such child from other children until such time as he can be removed to his home.

SECTION 232.34

PROCEDURE DURING EPIDEMICS.—In case of an epidemic of a communicable disease among the pupils of a school, the county superintendent shall observe such measures as are advisable by the full-time county health officer who shall act in accordance with rules and regulations prescribed by the state board of health. In case there is no full time county health officer, the county superintendent shall act on the advice of a physician designated by the county board, which physician shall act in accordance with rules and regulations prescribed by the state board of health regarding control of communicable diseases.

SECTION 232.35

ADMITTANCE OF CHILD AFTER ILLNESS WITH COMMUNICABLE DISEASE.—A school child who has been ill of a communicable disease shall in no case be allowed to return to school except on the written permission of the full-time county health officer or other reputable physician licensed to practice in the State of Florida.

SECTION 232.36

SANITATION OF SCHOOLS: STATE REGULATIONS.—The state board of education and the state board of health shall jointly adopt and promulgate all needful rules and regulations having to do with sanitation of school buildings, grounds, shops, cafeterias, toilets, school busses, laboratories, rest rooms, first aid rooms, and all rooms or places in which pupils congregate in pursuit of the school duties or activities.

SECTION 232.37

DUTIES OF COUNTY BOARDS WITH REFERENCE TO SANITATION.—The county board shall see that all state rules and regulations having to do with sanitation of the schools under their control are enforced; provided that additional rules and regulations not in conflict with the state rules and regulations may be adopted by the county board and enforced through the county superintendent.

SECTION 234.02

SAFETY AND HEALTH OF PUPILS.—Maximum regard for safety and adequate protection of health shall be primary requirements which must be observed by county boards in routing busses, appointing drivers, and providing and operating equipment.

SECTION 234.05

EXAMINING PHYSICIANS.—Each county board shall designate a physician or physicians to examine and report the physical condition of bus drivers and driver applicants in accordance with regulations of the state board and procedure prescribed by the state superintendent.

SECTION 235.06

(2) CONDEMNATION BY STATE DEPARTMENT OR STATE BOARD OF HEALTH.—An inspection of any school property may be made by the state department or by the state board of health, either of which may order the property to be withdrawn from school use until undesirable conditions are corrected; provided, that the state board of health shall notify the state superintendent of any such action taken by it.

SECTION 235.13

FIRE PRECAUTION.—A principal or teacher in charge of a school shall see that all teachers, janitors, and any and all school employees under his direction take proper precautions in handling or storing of waste papers, kerosene lamps, oiled dusting cloths, and any and all inflammable articles and to endeavor to see that pupils exercise all necessary precautions. All closets, cabinets, attics, basements, storage spaces, and any places within or under the building where supplies are kept or where waste paper or other materials may accumulate shall be regularly checked by the principal and county superintendent and any improper conditions shall be remedied.

SECTION 235.14

FIRE DRILLS.—The state superintendent shall formulate and prescribe regulations and instructions for fire drills for all the public schools of the State of Florida, and each principal or teacher in charge of each such school shall be provided with a copy of such regulations and instructions; and each such person shall see that fire drills for his school are held at least twice each semester and that all teachers and pupils of the school are properly instructed regarding such regulations and instructions.

SECTION 235.20

SITE MUST BE ADEQUATE.—Each new site selected shall be adequate in size to meet the needs of the school to be served. As far as practicable, any present sites which are not adequate shall be increased to conform to minimum standards for new sites. Each school site shall contain a minimum of two acres

for a one-teacher school. At least one acre shall be added to this minimum size of the site for each fifty pupils enrolled in the school after the first fifty pupils and until the enrollment reaches five hundred pupils; provided that this requirement may be waived in the discretion of the state superintendent under regulations of the state board when any county board files evidence showing that a school site of that size is impracticable in any given situation.

SECTION 235.21

OTHER MINIMUM STANDARDS TO BE MET.—It shall be the responsibility of the county superintendent to recommend to the county board for purchase and of the county board to purchase school sites in accordance with the provisions of Section 230 which meet standards prescribed below and such supplementary standards as may be prescribed by the state board to promote the educational interests of the children. Each site shall be well drained, reasonably free from mud, and the soil shall be adapted to landscaping as well as to playground purposes. Insofar as practicable, the school site shall not adjoin a right of way of any railroad or any through highway and shall not be adjacent to any factory or other property from which noise, odors, or other disturbances would be likely to interfere with the school program.

SECTION 235.22

UNDESIRABLE PLACES PROHIBITED NEAR SITES. — No place at which liquors are sold, gambling devices are provided, or other features classed under regulations of the state board as detrimental to the moral or physical welfare of children shall be located nearer than three hundred feet to any school site.

SECTION 235.24

NEW BUILDINGS MUST MEET MINIMUM STANDARDS.— In order to provide for the sanitary, safe, and economical construction and maintenance of public school plants, toilets and physical equipment, and in order to promote the physical welfare and safety of the school children of the state, any building hereafter constructed for public school purposes in any county in this state shall meet all minimum standards prescribed by law or by rules and regulations of the state board of education, and, in addition, all minimum standards prescribed jointly by the state board of education and the state board of health as herein provided. It shall be the responsibility of the state board of education and of the state board of health to prescribe jointly necessary minimum standards relating to the sanitation of school buildings and the protection of public health as affected by the school plant.