

A STUDY TO DETERMINE WHAT CONSTITUTES A DESIRABLE
HEALTH PROGRAM FOR THE SECONDARY SCHOOL

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INTRODUCTION

The balance and harmony sought by the Greeks is, in modern terms, an education of the whole person in which the health and physical takes its proper place in the unfolding of the intellectual, social, emotional, and esthetic powers of the individual.

This emphasis upon the education of the whole person runs the risk that the physical may be neglected because of the pressing demands of the intellectual and because of the high compensation that an industrial society pays for mental skills, nevertheless, that risk should be run. Force and strength without humane direction are too terrible to contemplate. All persons should know that vigor vitality of peoples are dependent mainly upon their health for their maintenance and their survival.

The entrance of the United States into World War I tended to focus attention on the need of broad programs of health and physical education in the schools in the process of developing strong and hardy youth. Consequently, in the years following World War I those responsible for the schools recognized the need for, and emphasized to some extent, programs of health and physical education¹

¹ Leslie W. Irwin, Curriculum in Health and Physical Education. (St. Louis: C. V. Mosby Company, 1944), p. 5.

Regardless of the experience with health and physical education programs in the schools following World War I, with the entrance of the United States into World War II, which again suddenly focused attention on the physical condition of youth, health and health programs as they had existed in the past were seriously questioned concerning their value in developing physical and health fitness. Anxiety as a result of the war served to bring forth considerable adverse and much unwarranted criticism of certain phases of the health and physical education curriculum in schools of America. This chaotic condition multiplied the uncertainty already existing in the minds of many teachers and school administrators.

It is my ardent desire to put forth a practical program of health education for high schools in the hope that the present state of confusion might be decreased to a minimum.

The early chapters bring the reader up-to-date in the field of health education along with a comparison to the general objectives of education. In later chapters emphasis is placed on the ideal methods and objectives of health education in order to improve the health behavior of the children themselves, and toward improved health conditions in the home, school, and community.

CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

For many years a difference of opinion has existed regarding what should constitute a health program in our schools. Should it take in only health instruction or should it involve all phases of school and community living? After much study and research I attempt to answer these and many other questions which confront the teacher, administrator, and the school boards in regards to exactly how a health program should be initiated, practiced in the light of the goals of education.

I. THE PROBLEM

Statement of the problem. It was the purpose of this study (1) to offer a desirable program of health education for high schools; (2) to show the relation between the objectives of health education and the accepted goals of education; and (3) to offer teaching aids and principles to teachers of health education.

Importance of the study. Health development has frequently been stressed as one of the most important aims of education. In spite, however, of the rather general recognition by schoolmen of the value of health education, the program is sadly lacking in techniques designed to aid

in the attainment of an ideal health program. Teachers of health education are not quite sure of what a health program should consist of. Unless the administrators and the teachers themselves are confident of their program, how can we as educators convince the community of its necessity and value and hence get the needed appropriations. In this study an attempt was made to keep the ideal program at a level at which the average high school could meet some degree of perfection.

II. DEFINITIONS OF TERMS USED

Attitudes. Attitudes encompass both personal and social outcomes in health, with varying emphasis according to the attitude and its field of operation¹

Course of study. It is an official guide prepared for use by administrators, supervisors, and teachers of a particular school or school system as an aid to teaching in a given subject or area of study for a given grade or group. It may include the aims of the course, the expected outcomes, and the scope and nature of the materials to be studied, with suggestions as to suitable instructional aids, textbooks, and supplementary reading²

¹ Frank S. Freeman, Theory and Practice of Psychological Testing. (New York: Henry Holt and Company, 1950), p. 386.

² Fay Adams, Educating America's Children. (New York: The Ronald Press Company, 1946), p. 60.

Curriculum. The curriculum is a body of perscribed educative experiences under school supervision, designed to provide an individual with the best possible training and experiences to fit him for the society of which he is a part and to qualify him for a trade or profession.³

Health. Health in the human organism is that condition which permits optimal functioning of the individual enabling him to live most and to serve best in social and personal relationship.⁴

Health Education. Health education is the sum of experiences which favorably influence habits, attitudes and knowledges relating to the individual, community, and racial health.⁵

Health Examination. A health examination is that phase of health service which seeks through examination by physicians, dentists, and other qualified specialists to determine the physical, mental, and emotional health of the individual.⁶

³ Nelson L. Bossing, Prinicoles of Secondary Education. (New York: Prentice-Hall, Inc., 1940), p. 394.

⁴ Jessie Feiring Williams, M.D., Fannie B. Shaw, Methods and Materials of Health Education. (New York: Thomas Nelson and Sons, 1938), p. 6.

⁵ Ibid., p. 2.

⁶ Ibid., p. 7.

Health Instruction. Health instruction is that organization of learning experiences directed toward the development of favorable health knowledges, attitudes, and practices.⁷

Health Services. 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 the defects that may be present, to prevent disease, and correct remediable defects.⁸

Healthful School Living. 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 pupil-teacher relationships as to make a safe and sanitary school, favorable to the best development and living of pupil and teachers.⁹

Hygiene. Hygiene is the applied science of healthful living; it provides the basic scientific knowledge upon which desirable health practices are found.¹⁰

Public Health. Public health is the science and art of preventing disease, prolonging life, and promoting

⁷Williams, Shaw, op. cit., p. 5.

⁸Ibid., p. 4.

⁹Ibid., p. 6.

¹⁰Ibid., p. 3.

Public Health Education. Public health education is that part of health education that takes place in the home and community.¹¹

Preventive Medicine. Preventive medicine is sometimes used as a synonymous with the term public health; but in its more exact and restricted meaning, it applies to immunization and other medical procedures which protect the individual against specific diseases.¹²

School Health Program. The school health program includes all the activities carried on in a school system in the interest of health.¹⁴

The writer will attempt to analyze what the experts in the field of health education have said and what they have determined to be the most desirable aspects of a complete school health program since its birth during the 1850's. In the chapters that follow, the reader must/bare in mind that what constitutes a desirable health program now comes to us only after a hundred years of laborous work on the part of the valiant men and women who have given their lives to the development of health education.

¹¹C.E.A. Winslow, "The Untilled Fields of Public Health", Science, 51 (U.S.): 23, 1920.

¹²C.E. Turner, School Health and Health Education, (St. Louis: C.V. Mosby Company, 1947), p. 24.

¹³"Report of the Committee on Terminology of the American Physical Education Association," Journal of Health and Physical Education, December, 1934.

¹⁴C.E. Turner, op. cit.; p. 38-39.

CHAPTER II

PHILOSOPHY, OBJECTIVES, ESSENTIALS, SCOPE OF THE FIELD.

A point of View on Health Education:

A democratic life has to be learned from the beginning according to Broady, French.¹ Each individual has to learn new ways for himself. The democratic government which people create requires that children be trained for a new way of life and that they help create that life.²

According to Broady, schools must play their part. This has grown much greater as other methods for attaining the democratic ideal have failed. The responsibilities of the school include far more than teaching of subject matter. The child must be prepared for his life in the democracy in which he will be living the rest of his life and probably without any more concentrated emphasis on health and a healthful way of life. (He must be taught to develop a healthy body, and educated mind, and a self-disciplined, self-reliant, socially-minded personality. In brief, he must be helped to adjust happily and successfully to the American pattern of living.³

¹Hois Pedersen Broady, Ester French, Health and Physical Education in Small Schools, (Nebraska: University of Nebraska Press, 1942, p. 38.

²Leslie W. Irwin, op. cit., p 242.

³Broady, French, op. cit., p. 45.

Health--A continuing National Problem.

The health of the nation has not reached an ideal status or even a satisfactory status; it nevertheless is no cause for despair. It is neither as good as it could be nor as bad as it might be and it is constantly improving. The opportunity for self-improvement constitutes a challenge to the schools and an obligation to evaluate their present contributions with a view to improvement.³

The school is not the sole agency responsible for the health of the people. The health of the people is determined by many factors, including heredity, home environment, nutrition, personal attitudes, intelligence, information, economic status, accidents disease, or injury. Yet the schools are a vital factor. In the school is offered unparalleled opportunity for acquiring health knowledge, forming health attitudes, and establishing health practices. Ignorance about health remains widespread, even among otherwise well-informed and well-educated persons.⁴

³Grout, op. cit., p. 8-12.

⁴Florence L. Meredith, Hygiene (Philadelphia: The Blakiston Company, Fourth Edition, 1948) p. 3-23.

Health--A continuing Educational Problem.

In the modern health program of the modern school in a democracy there are six basic areas of responsibility.⁵

They are listed as follows:

1. A health environment must be provided. Such an environment is essential in any functioning health program.
2. A health guidance program is essential. Day-by-day observations by teachers, periodic health examinations, and health histories are necessary to discover children who have conditions which are detrimental to themselves and to others.
3. Emergency health conditions demand immediate care. No matter how healthful the school environment may be, some illness is certain to develop and some accidents to happen. Both the pupils and the staff must be prepared to care for such emergencies.
4. Sound health habits and attitudes need to be established. Besides knowing what things are good for one's health, and mental health included, a person needs to establish sound health habits. It is only by the practical habitual use of one's knowledge that both physical and mental health will be maintained.
5. The exceptional child requires a modified school program. This is particularly true for children who are ill or crippled or who do not see or hear normally. The health program includes the special care that is needed to give these children an educational opportunity comparable with that of normal children.⁶

⁵Twentieth Yearbook American Association of School Administrators, Health in Schools, 1942, p. 24-57.

⁶Irwin, op. cit., p. 245.

The Secondary School Health Program.

Protection and promotion of the physical, mental, emotional, and social health of the pupil is one of the major objectives of the secondary school. An adequate program to accomplish this goal includes many activities and involves the co-operative effort of a variety of persons in the school and the community. Only through co-operative planning and action can real health improvement be attained and essential services and experiences organized.

The school health program includes provisions for (1) Health Services and Guidance, (2) Healthful School Environment, and (3) Health Instruction⁶

Health Services and Guidance.

The provision of adequate health services and guidance for high school students involves co-operative action of schools, homes, community agencies, and private physicians and dentists. The extent and nature of services will depend on local resources, and the plan of operation will be dependent upon the type of administrative organization existent in each situation? Regardless of the

⁶Williams and Shaw, op. cit., p. 6-84.

⁷Ibid, p. 165.

source of services, the school has responsibility to see that services are effective and are integrated within the total school program in such a way that attitudes, understandings, and practices of students in respect to health services are positively influenced. Five types of health services are essential:

1. Health appraisals of entering students, athletes participating in vigorous sports, students with special health problems, and students applying for work permits.

The appraisal should be made by a physician employed by the school board or public health department, or by a private physician of the student's choice. Examinations should be unhurried and as complete as facilities and personnel will permit and should provide time for students to receive guidance concerning their health problems. Records should be standardized and functional and should be filed in the school for use of nurses, teachers, guidance directors, and administrators.⁸

2. Follow-up measures to further the correction of remediable defects. Follow-up may be the responsibility of public health nurses employed either by schools or health departments who work with students, parents, and community agencies; of teachers and guidance directors who work with students directly; or of health co-ordinators who work with students and with homes. In the secondary school, increasing responsibility should be placed upon students to secure corrections of their handicaps.⁹

⁸Williams and Shew, op. cit., p.135-171.

⁹Turner, op. cit., p. 229-230.

3. Measures to reduce incidence and to initiate early control of communicable diseases.

Case-finding programs for discovery of tuberculosis should be conducted in high school in co-operation with public health departments and local tuberculosis associations, such programs to be used primarily for educational purposes. Vaccinations for small pox should be made available to all students. Isolation and readmission policies should be set up to discover and remove persons from the group who show evidences of communicable infections. Students should be educated to assume personal responsibility for the protection of others from their infectious conditions.¹⁰

4. Care for emergency illness and accidents.

Policies should be developed in each school in regard to emergency situations, defining responsibilities of various personnel involved.

5. Provision for individual health guidance.

Health co-ordinators, nurses, guidance directors, and teachers should be available to students who need help with their health problems on an individual counselling basis.

Healthful School Environment.

The maintenance of a healthful school environment is the responsibility of all persons who make up a school. Administrators and school boards have primary responsibility for the provision of a safe, sanitary and healthful school plant.¹⁰ Custodians have primary responsibility for maintenance

¹⁰California Community Health Education Project, California State Department of Education, "Teachers' Guide in Health Education for Secondary Schools," August, 1947.

of healthful environmental conditions. Teachers and pupils have responsibilities in the use of their environment to foster healthful practices. The healthful school environment will provide: (1) A healthful physical environment which is safe, sanitary, attractive, and healthful. Special attention will be given to lighting, ventilation, seating, water supply, sewage disposal, drainage, cleanliness, fire prevention, removal of accident hazards, food sanitation; (2) A healthful school schedule which provides time for relaxation, exercise, rest, and food consumption; (3) Teachers who are physically sound and emotionally balanced; (4) An adequate and nutritious noon meal, available to all students at a minimum cost.¹¹

HEALTH INSTRUCTION.

A planned program of health instruction should be incorporated within the high school curriculum and should be aimed at the development of intelligent health behavior on the part of all pupils. The health instruction programs should be (1) required of all students, (2) based on student interests and needs, both present and future, and (3) taught from the functional point of view.¹²

¹¹Winslow, op. cit., P. 20-39.

¹²Williams and Shaw, op. Cit., p. 175-211.

CHAPTER III

Milestones in public Health.

The development of public health can be traced back to ancient Greece¹, but the writer will only trace the modern public health movement. This movement rather naturally falls into three distinct periods. Rather than list a very lengthy number of events, the writer shall try to summarize the trend of the era and mention only a few of the most important events.
First Era--1850-1870.

The abatement of nuisances constituted the chief public health activity of this first era of the modern public health movement. The personnel consisted solely of untrained police officers who were charged with duties of enforcing certain sanitary laws.²

1. Lemuel Shattucks' report entitled "Sanitary Survey of the State of Massachussets" published at this time is considered as one of the classics in public health. The formation of the first Board of Health (State) by Massachussets was no doubt, influenced by this report.³

¹F. A. Musacchio, "The History of the Modern Public Health Movement," New Orleans Medical and Surgical Journal, 65:1-12, (July, 1942)

²Ibid., p. 83.

³Ibid., p. 85.

2. In England, during this same period John Snow, a London practitioner demonstrated water as an important factor in the dissemination of cholera. His epidemiological analysis of the London cholera epidemic in 1854 was outstanding--his report is one of the landmarks in the science of epidemiology.⁴

Second Era--1870-1920.

The achievements of this era were primarily in the fields of sanitary sciences and sanitary engineering, and the control of communicable diseases was the chief activity of the health department. As a result, the mortality rates for the following dropped to a record low: Tuberculosis, Diphtheria and Smallpox.

1. "Golden Age of Bacteriology" is the title some have attached to this period for there were many really great scientific discoveries. The writer need mention only few of the names: Pasteur, Koch, Lister, Budd, Snow and others.⁵

2. In 1910, Charles Chapin wrote an outstanding paper entitled "The Source and Modes of Infection"--it is too, considered a land mark in the public health history.⁶

⁴Grout, op. cit., p. 13-20.

⁵Musacchio, op. cit., p. 33-36.

⁶Williams and Shaw, op. cit., p. 83.

3. Environmental sanitation became important to communicable disease control.⁷
4. The first compulsory pasteurization law was passed in Chicago in 1908.

Third Era--1920-Present.

According to Musacchio⁸ this era is characterized by the shift of public health interest from the environment to the individual. Emphasis was placed on positive health and physical fitness; that is, the improvement of the health of the individual. Some of the fields of interest which have become important in public health are listed below:

1. Development of the County Health Organization.
2. New Public Health Programs of this Era:
 - a. Tuberculosis
 - b. Venereal diseases
 - c. Communicable disease control
 - d. Vital statistics
 - e. Laboratory services
 - f. Maternal-Child Hygiene
 - g. Adult Hygiene
 - h. Public health Nursing
 - i. Public health education
 - j. mental hygiene
 - k. Cancer control
3. Voluntary Health Agencies.

This group of agencies has done much for the development of public health in the United States.

⁷Musacchio, op. cit., p. 3.

⁸Ibid., p. 4.

4. Social Security Act(1935)

Financial support from this Act has expanded the following programs plus many others:

- a. Pheumonia control
- b. Cancer control
- c. Public Health dentistry
- d. Industrial Hygiene
- e. Recurring training of personnel

5. Recent Developments.

These are really too numerous to mention, but a few important ones are:

- a. Increased emphasis on geriatrics
- b. New hospital legislation
- c. Beginnings of emphasis on school health.

B. Milestones in School Health Education.

<u>Era</u>	<u>Date</u>	1. Laws enacted regarding school health particularly on health protection of children. Beginning of regulatory and mandatory phase of school health environment of entire health education.
		2. Physicians added to school staffs.
		3. Beginning of present day school health inspection.
Physiology	1842	4. Beginning of present day program of direct health instruction through effort of Horace Mann.
W.C.T.U.	1880 1890	5. A wedge for broad program of health education was made by efforts of W.C.T.U. in their legislation against evils of alcchol. This was a negative approach based upon incorrect facts, fears, and emotional approach. ⁹

⁹W. G. Smillie, Preventive Medicine and Public Health, (New York: Macmillan Company, 1946), p. 38-102.

¹⁰Musacchio, op. cit., p. 119.

- Peace-Meal Era 1890-1910 6 Various agencies within and without the school concerned with child health came with experiments and projects from which broadening of the field to its present scope has been accomplished.
- World War I 1916-1920 7. 37 States passed laws requiring that health and physical education be taught as a regular part of the school curriculum.¹¹
8. School health examinations that consisted of finding and recording health defects with little or no follow-up.
9. Introduction in schools of communicable control program on a wide scale.
10. General education listed health as the first of seven cardinal principles of secondary education.¹²
- World War II 11. Child health organization of America very good in stimulating interest for modern program of health education.
12. Federal Aid to States for agriculture and Home Economics in school work.
- Bone or Factual Era. 1917-1918 13. Beginning of mass production in health instruction, stressing logical order and memorization of facts with no relation to their practical application.
14. Inadequate and disinterested teachers required to conduct classes in direct health instruction.
- Depression Era 1928-1934 15. Direct health teaching was soft-pedaled because of previous unsuccessful application to everyday living, and lack of interest on part of teachers, pupils and administrators and general public.¹³

¹¹Smillie, op. cit., p. 88

¹²E. L. Mustard, Government in Public Health, (New York: Commonwealth Fund, 1945), p. 20-230.

¹³J.M. Gosenau, Preventive Medicine and Hygiene, (New York: D. Appleton Century Company, 1935.(p. 35-89).

16. Possible beginning of stress on mental health education because of leisure and problems of depression.
17. Beginning of incidental health teaching approach.
18. Arousal of national interest in the child and relationship of the field to agencies concerned with health of the school child through White House Conference, 1930.
19. Right of childhood expressed through Children's Charter.
20. Modern curriculum of school health outlined by Committee headed by T. D. Wood.
- Cooperation Era 1935 21. National groups and committees prepared reports for "Whole" school program attempting to define responsibilities of a particular group.
Era 1940
22. Stress on health teaching in the education of the "Whole" child and on a modern concept of learning.
- World War II 1941 23. Schools have called on trained workers outside its ranks.
1945
24. Actual over-all programs were attempted as a whole and correlated with community efforts.
25. The public is being made more conscious in terms of school work.
- Present Time 1946 26. Activity in School Health Education is greater than at any other time.¹⁵

¹⁴Turner, op. cit., p. 22-50-.

¹⁵Smillie, op. cit., p. 220-230.

Since the First Era of health education which had its origin in the 1850's, up to 1950, the process of developing a sound health education program has finally arrived at what experts such as Steinhouse, Turner, and Williams refer to as the accepted goals of health education. The reader must keep in mind when reading the next few chapters that the goals and objectives listed by the authorities are not the net result of only one study but rather are the sum total of findings that have been given us by the founders of school and public health programs since its founding during the seventeenth century and the progress that the program made during the next one-hundred years.

In the chapter that follows the writer mentions the common goals of health education which all school health programs that are complete will attempt to offer the pupils.

In the following chapters the writer has attempted to show the relationship between the objectives of education and those of health education. One can readily see that the objectives of education can adequately be installed as the objectives of health education....the objectives of one do not conflict in any way with the objectives of the other.

CHAPTER IV

Goals of Health Education

Portrait of a Citizen Who is Well Educated from a Health Standpoint:

1. He is free from all curable diseases and remedial defects, including dental defects, halitosis, and body odors¹.
2. He is immunized and vaccinated in accord with practices approved for the area of his residence. He understands the nature of and reasons for these practices.
3. He knows and understands the findings of his own chest X-ray, blood test, blood typing, blood pressure, and eye and ear examination.
4. He is able to identify in himself and in others the onset stages of illness and knows how to secure appropriate medical care and hospital services.
5. He is sensitive to the health needs of others; regulates his conduct so as not to jeopardize their health and safety; gives intelligent support to communal health efforts.
6. He enjoys a wide range of wholesome nutritive foods, and knows why these are desirable. He knows when and how to eat, and successfully regulates his bowel movements without recourse to medication in any form.
7. He has his own body weight under control and is able to modify it safely when needed, within limits controllable by diet.
8. He possesses good physical strength, endurance, flexibility, and posture; and understands the principles and methods for maintaining the same without reliance on foundation garments. He is able to run, jump, and swim well, and has well established safety habits.
9. He is free from handicapping habits relating to the use of alcohol, tobacco, the many pain killers, and

¹Arthur H. Steinhouse, "Modern Concepts of a Total School Program." 1946.

dopes, including the excessive use of caffeine or benzedrine.

10. He understands the role that proper construction, sanitation and maintenance of physical environment plays in health and safety and consistently regulates the environment and his relationship thereto in ways conducive to the health and safety of himself and others.
11. He possesses hobbies or other recreational habits consistent with the time and opportunities available to him.
12. He shows nervous stability and behaves in accord with the best practices for maintaining mental health. He has appropriate sleep habits.
13. He has attained a reasonably satisfying philosophy of life.
14. He is informed of the best knowledge and practices surrounding courtship, mate selection, marriage, reproduction, the rearing of the succeeding generation, and of how sensibly and gracefully to accept the changes that aging will bring to his own body?

²Ibid., "Modern Concepts of a Total School Health Program." 1946.

CHAPTER V

OBJECTIVES OF EDUCATION AND OF HEALTH EDUCATION

<u>Objectives of Education</u>	<u>Objectives of Health Education as related to General Objectives of Education.</u>
I. The optimum development of the individual himself.	1. The optimum development of the individual himself with special reference to physical and emotional development.
a. To use wisely the fundamental tools of learning.	a. The use wisely of the fundamental tools of learning in the field of health.
1. Speech	(1) To speak articulately and intelligently on matters of health.
2. Reading	(2) To read selectively and understandingly in the field of health.
3. Writing	(3) To write simply and accurately on health.
4. Numbers	(4) To be reliable in his interpretation and translation of health data.
b. To develop his powers of listening and observation	b. To show discrimination in what he listens to in the field of health. To use his powers of observation wisely to broaden his comprehension of health.
c. To maintain and improve his health	c. To develop and practice intelligently desirable health behavior.
d. To use leisure time wisely	d. To participate in a variety of wholesome and healthful recreational and leisure-time activities. ¹

¹Grout, op. cit., p. 73-76.

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|---|--|
| e. To appreciate beauty | e. To appreciate the esthetic values of growth and of healthful living, including cleanliness and sanitation. |
| f. To develop a philosophy which gives self-direction to his life. | f. To make emotional adjustments which enable him to face life realistically. To develop ability to give self-direction to his own health behavior. |
| 2. The betterment of home and family life | 2. The betterment of home and family life, particularly from the standpoint of health betterment |
| a. To develop ability to consider the well-being of others | a. To contribute to the maintenance and improvement of health of members of the family. |
| b. To enjoy a rich, sincere and varied social life | b. To find emotional satisfaction in daily relationships in the school, home and neighborhood. |
| c. To cooperate with others in work and play | c. To work cooperatively, rather than competitively with others in the solution of health problems. |
| d. To observe the amenities of social behavior, particularly in respect to family relationships | d. To understand the physical and emotional health problems associated with marriage, homemaking and parenthood and to work out ways of handling these problems in the immediate and future family situations. |
| e. To appreciate the family as a social institution | e. To understand and appreciate the biological and emotional bases for unified family life |

²Source: Grout, op. cit., p. 73-76.

3. Economic efficiency in the production and consumption of goods and services.

The Producer³

- a. To know the satisfaction of good workmanship.
- b. To choose intelligently an occupation which is suited to the individual's capacities.
- c. To succeed in a chosen vocation; to make adjustments for maintaining and improving his efficiency.
- d. To choose wisely and to appreciate social values of his work.

The Producer-Consumer⁴

- a. To plan the economics of his own life.
- b. To use judgment and efficiency in buying

3. The application of health facts and principles in respect to economic efficiency in the production and consumption of goods and services.

- a. To recognize and experience the physical and emotional satisfactions associated with appropriate work.
- b. To recognize and accept his own health assets.
- b. To have a wholesome emotional attitude toward his work. To understand the health and safety hazards associated with a chosen vocation.
- d. To appreciate how his work may contribute directly to human health and happiness.

- a. To budget for the essentials for health and illness.
- b. To recognize quackery and nostrums in the field of health, to refrain from purchasing drugs or health cures of unknown value.
- c. To use only dependable resources for health and medical care.

³National Committee of School Health Policies of the National Conference for Cooperation in Health Education, Suggested School Health Policies, (New York: Health Education Council, 1946).

⁴Ibid, Suggested School Health Policies, 1946.

- c. To take appropriate measures to safeguard his interests

4. Civic Responsibility

- a. To have a sense of social justice and understanding, and to act to correct unsatisfactory social conditions
- b. To respect honest differences of opinion
- c. To have respect for the law
- d. To be economically literate
- e. To be a cooperative member of the world community
- f. To accept civic duties
- g. To accept and apply democratic ideals

- c. To take aggressive steps educational and legislative programs which safeguard health of the consumer.

4. Civic Responsibility, Especially in Respect to Health

- a. To recognize that optimum health is the right of every individual and to work for adequate community programs for health maintenance and improvement.
- b. To keep emotionally balanced when associated with people who hold differences of opinion.
- c. To have an attitude of respect for health laws, and to seek improvements or changes any of which he does not approve.
- d. To be aware that many health problems have their roots in economic and social ills, and work actively for conditions that will increase effectiveness of our human resources.
- e. To be aware of the interdependence of nations in respect to matters of health and disease and to recognize the contribution of other countries in this field.
- f. To take active part in school and community efforts for health improvement
- g. To have experience in democratic solution of health problems in school, home, and community

⁵Ibid., Health Teaching in Schools.
Philadelphia: Saunders Co., 1948.

CHAPTER VI

HEALTH ORGANIZATION AND COORDINATION

School Health Coordination.

According to Tucker, coordination of health services and activities is a necessity in the secondary school if an effective program is to be developed.¹ To effect co-ordination, the organization of a school health committee, composed of interested faculty members and non-certified personnel, is a desirable procedure. Appointment of a trained person to serve as chairman of the committee and to implement the co-ordination is imperative if effective action is to result.²

The school health co-ordinator should be vested with administrative and supervisory responsibility over the health program within the individual school.³ Planning of the program should be done by the school health committee and with the health service staff which serves the school, whether that staff is employed by the schools or by the public health department. A clear definition is needed if an effective program is to be organized and friction avoided. Details of the program should be worked out in accordance with a statement of policy, and the health co-ordinator should be held responsible for their administration, utilizing the capabilities of all interested persons within the school.⁴

¹Edythe Tucker, "A functionary School Health Council, Journal of Health and Physical Education, XIX:5.

²Ibid., XIX:5.

³Ibid., XIX:5.

⁴Ibid., XIX:5.

In a large high school the position of health co-ordinator should be a full-time assignment if optimum results are to be obtained⁵. If such an arrangement is impossible, the maximum time available should be allotted to this position. In a small school a part-time co-ordinator may conduct an effective program. In order that the functions of the health coordinator may be more clearly defined, an outline of the aims of co-ordination and the qualifications, activities, and procedures of the health co-ordinator is presented here.

I. Aims of Health Co-ordination Program⁶

- A. To co-ordinate the health activities of the entire school staff
- B. To co-ordinate school health activities with activities of the public health department and other community agencies.
- C. To organize a program of health guidance and instruction for the students and teachers, so that they may have a thorough understanding and appreciation of health.

II. Qualifications of the Health Co-ordinator⁷

- A. Education and Experience
 - 1. Scientific background in the health sciences
 - 2. Possession of a secondary credential
 - 3. Successful teaching experience
- B. Personality
 - 1. Interest, enthusiasm, understanding, tact, sense of humor.
 - 2. Ability to work harmoniously with students, faculty, parents, community groups.

⁵Teacher's Guide in Health Education for Secondary Education, Prepared under direction of California Health Department, California State Department of Education, August, 1947.

⁶Ibid., Teachers Guide.

⁷Op. cit., Teachers Guide.

III. Activities of the Health Co-ordinator.

- A. Co-ordination of health services (the integration of health activities of the student, doctor, nurse, teacher, and home.)
- B. Integration of health instruction in the curriculum.
- C. Development of health services so that they provide health education experiences.
- D. Organization of procedures relating to admissions and exclusions as they as they relate to health. This should be done in co-operation with the nurse, physician, administrator, and teachers.
- E. Maintenance of health records in co-operation with the nurse.
- F. Organization of a program to care for emergency illness and accidents in co-operation with the staff.
- G. Consideration of health and safety factors in transportation facilities.
- H. Study of fatigue of study and exercise of the students.
- I. Stimulation of interest in the mental health program.
- J. Promotion of public relations:
 - a. Contact with the home.
 - b. Contact with the press.
 - c. Contact with community organizations.⁸

⁸National Conference for cooperation in Health Education, The School Administrator, Physician, and Nurse in the School Health Program, (New York: Metropolitan Life Insurance Company, School Health Monograph, Number 13.

IV. Suggested Procedures

A. For the Administrator

1. Presents and explains the health program to the school staff for the purpose of clarifying the position of the health co-ordinator and establishing clear working relationship with all employees, both certified and non-certificated?
2. Allocates time for health co-ordination
3. Appoints a school health committee
 - a. Suggested personnel--administrator, public health officer, doctor, nurse, bus driver, cafeteria manager, custodian, faculty representatives from departments having significant responsibilities in health instruction, counselors?
 - b. Functions--to act in an advisory capacity, to plan, stabilize, and help carry out the health program of the school.

B. For the Co-ordinator

1. Meets with the school health committee to
 - a. Make general plans for the health program, according to the needs of the particular school.
 - b. Appoint sub-committees of teachers and students to deal with specific problems.
2. Arranges for periodic surveys of environmental conditions by qualified personnel to be followed by conferences with administrator concerning desirable changes?
3. Stimulates interest in the health program on the part of the faculty.
4. Organized in-service training programs in health education for teachers and other members of the school staff.

⁹Op. cit., The School Administrator, Physician, and Nurse in the School Health Program.

5. In co-operation with teachers and nurses confers with individual students.¹⁰
6. Arranges for medical examinations of students in cooperation with the nurse.
 - a. Allocates sufficient time to make examinations of educational value.
 - b. Makes appointment lists and notifies pupils.
 - c. Notifies teachers of pupils scheduled for examinations.
7. Co-operates with nurse and teachers in following up recommendations of Doctor.
 - a. Notifies teachers of findings which have class-room implications.
 - b. Notifies parents of findings where nurse is unavailable.
 - c. Assists in making necessary adjustments in students' programs, as far as possible.
 - d. Helps students to secure clinic appointments where necessary and where nurse is unavailable to make this responsibility.
 - e. Advises students as to available medical facilities.
8. Supervises problem of admissions and exclusions as they relate to health.
 - a. Confers with registrar or secretary of admissions.
 - b. Keeps illness records of absentees in co-operation with teachers and nurse.
 - c. Notifies teachers of students who have been absent due to prolonged illness.
9. Aids nurse in the maintenance of health records, assuring that these are to be used by teachers and parents with the aid and guidance necessary.

¹⁰Op. cit., p. 87-88.

¹¹James F. Rogers, Health Instruction in Grades IX-XII, United States office of Education, Department of Interior, Pamphlet Number 43, p. 18-28.

- a. Made accessible to those concerned.
 - b. Kept up to date.
10. Assists with plans for care of emergencies.
- a. Arranges for location, supply and maintenance of first aid stations.
 - b. Arranges with principal for delegation of responsibility for emergencies.
 - c. Arranges for distribution of information to entire school staff as to their responsibilities and limitations¹¹
11. Investigates health and safety factors in transportation¹²
12. Directs the program for co-ordination of health services--with education.
- a. Helps doctor and nurse to make the examination and inspection an educational experience for the student
 - b. Helps teachers to relate their health instruction to student needs as revealed in health examination¹²
13. Directs study of integration of health instruction into the curriculum, with the assistance of the school health committee. The functions of the committee are to
- a. Study and evaluate the curriculum for health content.
 - b. Advise as to health implications within the units already established in various departments.
 - c. Recommend placement of important health units not already included in the curriculum¹²
14. Works with the school health committee to organize school programs concerned with particular health problems.

¹¹Ibid., p. 21.

¹²American Association of School Administrators, Health in Schools, Twentieth Yearbook, Washington, D. C.: The Association, 1942, Chapter XV.

- a. Acquaints faculty with plans.
 - b. Appoints committees responsible for each program.
 - c. Evaluates results and arranges for effective follow-up.
15. Promotes public relations.
- a. Home
 - 1. Obtains signed statement from parent or guardian as to procedure desired in case of emergency.
 - 2. Informs parents of any significant changes in health status of student where nurse is not available.
 - 3. In co-operation with the nurse, arranges for any home visits which may be necessary.¹³
 - b. Press
 - 1. Establishes, in co-operation with principal, regular publicity program with local editor.
 - 2. Publicizes school health programs through effective demonstrations and exhibits in the community.
 - c. Community organizations
 - 1. Endeavors to have school representation in as many community organizations as feasible.
 - 2. Co-operates with local health department, and lends support to other community health agencies.
16. Assists in control of factors contributing to fatigue.
- a. Studies factors contributing to fatigue.
 - b. Recommends adjustment of students' school program.
 - c. Counsels students concerning conservation of time.

¹³Ibid, chapter XV.

¹⁴op. cit., The physician and Nurse in School Health Program
 P. 13-14.

¹⁵Ibid., p. 13, chapter XV.

17. Promotes nutrition program

- a. With the help of student and faculty committee, arranges for mid-morning nutrition period.
- b. Confers with cafeteria manager and home economics teacher on adequate lunches.
- c. Stimulates interest in good eating habits.
- d. Refers malnourished children to home economics teacher and nurse for individual guidance.¹⁶

18. Stimulates mental health program.

- a. Arranges for in-service training programs for staff member which will
 - 1. Help them to develop a better understanding of adolescent behavior.
 - 2. Help them to become aware of deviations from the normal.
 - 3. Suggest practical solutions to individual problems.¹⁷
- b. Assists in the establishment of procedures for helping maladjusted students.
 - 1. Arranges individual conferences for maladjusted students.
 - 2. Confers with parents.
 - 3. Helps to see that recommendations of physician, psychologist or psychiatrist are followed.¹⁸

¹⁶Ibid., p. 15.

¹⁷Op. cit., Rogers, 22-30.

¹⁸Ibid., p. 35.

CHAPTER VII

HEALTHFUL SCHOOL ENVIRONMENT

The administration and teachers should give special consideration to the influence of school environment upon the development of youth.¹ Every school has a responsibility for providing a healthful environment: physical, social, and emotional.² According to the information obtained by the writer, the desirable situation follows:

1. The school location and grounds.³

a. Location

1. Accessible (reasonable travel distance).
2. Free from traffic hazards, railroad crossings, noise and odors.
3. Opportunity for fresh air, sunshine.

b. Surroundings

1. Landscaping without limiting activities.
2. Free from trash and unnecessary waste.
3. Well-placed sidewalks.
4. Unbroken cement sidewalks.

II. Structure of building.⁴

a. Fire Protection.

1. Fire-proof construction of building.
2. Standpipes - - 3" in diameter.
3. Chemical fire extinguishers.
 - a. 1 per 2,000 square feet of floor space (area)
 - b. extra equipment in laboratories, shops.

¹⁻⁴American Association of School Administrators, Health in Schools, Washington, D.D., N.E.A., 1942.

4. All doors leading out equiped with panic bolts.
 5. Clearly marked and illuminated signs should indicate the fire exits.
 6. Electric fire alarm.
 7. Fire extinguishers, three times checked per year and the dates recorded as to date checked.
 8. Stairways, fire escapes, and the approaches there- to be kept free from all obstructions.
 9. Vamps provided with skidproof covering.
- b. Heating and Ventilation.
1. Desirable timperature range 65 to 75 degrees.
 2. Thermostatically controlled heat regulation.
 3. Central heating system which meets the requirements of the State Department of Education.
 4. Exhaust ducts extending to the roof.
- c. Lighting.
1. Natural lighting - good, but must be properly installed and of sufficient amount.
 2. Windows on one side of room only.
 3. Indirect lighting - good - but must be properly installed and of sufficient amount.
 4. Semi-direct lighting is acceptable as most satisfactory.
 - a. Translucent glass which allows 10-20% of light rays to diffuse into room.
 - b. Top of glass board covered with clear glass which allows beams of light to pass upward. (Height, 8 feet from floor)

5. Window Shades.

- a. Two shades near center - one roll upward, the other downward.
- b. Best colors - white, very light sage, or light tan.

6. Minimum standards of lighting for board of education.

- a. Locker rooms, corridors, stairs, toilets - 4 ft. candles.
- b. Auditoriums and cafeteria - 6 ft. candles.
- c. Classrooms, study halls, libraries, shops, laboratories - 15 ft. candles.

d. Water Supply.²

Water supply obtained from a municipal system.

1. Water Fountains.

- a. Constructed of impervious substances such as vitreous china, porcelain, or enameled iron.
- b. Self-cleansing bowls with a non-splash rim.
- c. Jet issues from side of the bowl at an upward angle of about 45° and high enough so as not to be submerged if the bowl becomes flooded.
- d. A nonoxidizing guard around the nozzle prevents the mouth or nose from touching the jet.
- e. One drinking fountain for 75 students.

e. Sewage Disposal.²

- 1. Sewage disposed by municipal system.
- 2. Meet public health department standards.

f. General cleanliness of the buildings.

- 1. Competent janitorial service.
- 2. Cleanliness of:

- a. Floors.
- b. Ventilating equipment.
- c. Lighting fixtures.
- d. Windows.
- e. Furniture.
- f. Walls.

III. Toilet and washrooms³

- a. Windows of sufficient size for adequate light.
- b. Floor of water-proofed material and sloped toward a drain connected with the sewer.
- c. Ventilation partially through the windows, but more especially by a series of small registers in the walls connected to exhaust ducts entirely independent of other systems.
- d. Plumbing which meets specifications of public health department.
- e. Toilet paper provided.
- f. Provided with mirrors.
- g. Toilet units -- girls - 1 per 45 pupils.
 boys - 1 per 100 pupils.
 boys urinals - 1 per 30 pupils.
 laboratories - 1 per 100 pupils.

IV. Classrooms.⁴

- a. Size of classroom.
 - 1. Average - planned for 40 pupils.
 - 2. Approximately 22 feet x 30 x 12.
 - 3. Each pupil 18 square feet.
- b. Walls and ceiling of class rooms.
 - 1. Oil paint - durability, light reflecting quality, decorative effect, and ease of cleaning. Slightly roughened plaster prevents glare.
 - 2. Color - luminant neutrals.

³N.E.A. op. cit., Suggested School Health Policies.

⁴Turner, op. cit., chapter X.

c. Floors of classrooms.

1. Hard wood best.
2. Finished with non-skid material, no wax

d. School Furniture.

1. Adjustable, moveable seats and desks.
2. Structure of seat fitting the body.
3. A desk slant of 15 degrees.

e. Blackboards⁵

1. Trend toward fewer square feet of blackboard as it absorbs light. (green preferred)
2. Chalk tray covered with removable light meshed screen.

f. Corridors.

1. 8 to 10 feet in width.
2. Corridors, lockers, stairways, floors, kept free from any safety hazard.

V. Lunch Room Sanitation⁶

a. Lunch room.

1. Pleasant room.
2. Ample size and seating capacity to permit the leisurely eating of noon meal.

(Keep it clean) writer's emphasis.

3. Well lighted and adequately ventilated.

b. Kitchen facilities.

1. Proper refrigeration.
2. Proper cooking equipment which are sanitary.
3. Adequate storage space.
4. Garbage stored and disposed of according to law.

⁵Dunham, Military Medicine, Wash. D.C.

⁶Op. cit., Health in Schools.

5. Dishes washed as follows:⁷

- a. Dishes scraped and pre-rinsed.
- b. Dishes washed in clean water at 110-120°F, with plenty of soap.
- c. Dishes rinsed and thoroughly disinfected by being submerged in clean water at 170° for thirty seconds.
- d. Dishes drained dry without the use of towels.
- e. Cleaned dishes and utensils stored in closed cupboards.

- 6. Complete handwashing facilities readily available for kitchen and lunchroom workers.
- 7. Kitchen and lunch workers meet health standards set by health and school authorities.
- 8. Milk pasteurized and served in original small-sized containers with straws.

VI. Dressing and Locker rooms and Showers⁸

- A. Dressing and locker rooms located adjacent to gymnasium.
- b. Toilet facilities provided.
- c. Sufficient number of showers provided.
 - 1. Soap provided at all times.
 - 2. Towels supplied and laundered.
- d. Foot bath at exit from showers.
 - 1. Supplied with 0.3 to 0.6 per cent chlorine.
- e. Floor of cement or tile.
- f. Lockers and space for each girl to have full length locker.
- g. Definite amount of ventilation and lighting.

VII. Nurses Office.

- a. office
 - 1. Waiting room of sufficient size.

⁷Leslie W. Irwin, Health and Physical Education, (St. Louis: C.V. Mosby Company, 1944. p. 242-254.

⁸Irwin, op. cit., p. 242-254.

2. Facilities necessary for nurse's office.
- b. Examination Room.⁹
 1. Adequate space for privacy.
 2. Facilities necessary for adequate examination.
- c. Rest Rooms
 1. Adjacent or close to nurses office.
 2. Adequate size for several cots.
 3. Location of nurses office should be so that it is easily accessible to the gym and office.

VIII. Gymnasium.¹⁰

- a. Separate instructors for the boys and girls.
- b. Construction of gymnasium.¹¹
 1. Floor
 - a. Boards free from knots.
 - b. 50 feet x 84 feet playing floor - minimum.
 - b. Boards $1\frac{1}{4}$ inches wide.
- c. Obstructions.
 1. No radiators, pipes, etc., interfering with actual playing area.
- d. Walls
 1. Hard and smooth
 2. Above - wall material which decreases noise and sound reverberation.

⁹Irwin, op. cit., p. 244-245.

¹⁰N.E.A. Checklist of Safety and Safety Education.

¹¹State of Minnesota, Standards of Organization and Administration of the Health Program in the Public Schools, Department of Education, April, 1944.

- e. Ceiling
 1. Acoustically treated ceiling to reduce noise.

- f. doors

1. Swing out - away from playing area.

- g. Adequate ventilation

IX. Play ground and athletic field.¹²

- a. Location

1. Away from the building and classrooms.
2. Play area at least 10 acres plus 1 acre for each 200 students.

- h. Athletic Field.

1. Fencing of play ground - turf is the best.
2. Porous enough to permit enough withstand hard use.
3. Free from mud in wet weather.(dust in dry)

- c. Play ground equipment built and maintained with minimum element of danger.

- d. Play ground kept free of hazards, such as rocks, tin cans bottles, wire, and nails.

X. Health Instruction class room.¹³

- a. Size of ordinary classroom.
- b. Space and shelves for health books and equipment.
- c. Class room with adequate facilities for teaching of home nursing.

¹²Irvin, op. cit., chapter x.

¹³Turner, op., cit., 182, 368.

CHAPTER VIII

HEALTH SERVICES

School health services encompass a broad field and represent a tremendously important part of the school health program. They provide some of the most vital health experiences of the pupil - experiences which directly affect his health and which shape his knowledge, attitudes, and health practices.¹ Health services are particularly important in shaping pupil attitude toward health.² Teachers and principals must know what health services are in order that they may cooperate effectively with those who render school health services, and make use of these services in the educational program. The teacher needs to know what each of the health specialists does for the child, what the specialist does for the teacher, and what is expected of the teacher.³ The medical, dental, and nursing professions, and the rest of the community should know what the school health services are.

¹Lenor Baumgartner, "For Healthier School Children" Child Magazine, March, 1947.

²American Association of School Administrators, Health in Schools, N.E.A., Twentieth Yearbook, Wash. D.C., 1942.

³Health in Schools, op. cit., 1947.

The purposes of health service in the school are:

1. To determine the health status of pupils and to inform the children and their parents of this status.
2. To follow up and secure the correction of remedial defects.
3. To control the spread of communicable diseases.
4. To aid teachers to recognize the signs of optimal health in the child and to observe any deviations from this optimum.
5. To render emergency treatment in cases of injury or sudden illness.
6. To determine pupil capacity for physical activity.
7. To supervise the health conditions throughout the school.⁴

Staff

The school board should employ a full time physician and nurse. The services of a part-time dentist and nutrition expert should be available. The school counselor and all the teachers are also a vital part of the health services. Each member should have his or her duties outlined and know what is expected of them and how they can contribute to the health services to make it a vital part of the student's health education.⁵

⁴Op. cit., Child Magazine, March 1947.

⁵Irwin, op. cit., p. 242.

Examinations.

A health examination should be given to every student entering senior high school and in the final year of senior high school.⁶

Periodic inspections should be made by the nurse and teacher. In this way the pupils that need attention will receive it. The teacher can also make daily observations of students and refer cases that need attention to the nurse.

Screening tests such as dental, vision, hearing, speech, and weighting and measuring should be made. A dental examination should be given each year. An X-ray examination should be made whenever it is possible. The teacher can do these tests very easily and the results are reliable. Hearing and speech tests should be given every year also. The speech teacher should give the speech test and the other teachers can give the hearing test. The hearing test should be done with an audiometer.⁷

The health examination should be conducted in a private office and the parent should be present if possible. The nurse should act as a co-ordinator for the physician and student.

⁶National Committee on School Health Policies, School Health Policies; A Charter for Schools, Health Education Council, 1945.

⁷National Committee for Cooperation in Health Education, The School Administrators, "The physician and School Nurse", Metropolitan Life Ins., Co., Monograph Number 13.

The teacher should prepare the students for examinations by showing them what is being done and how they can cooperate during the examination.

Psychological examinations should be given to all students that are referred for such examinations by the teacher, nurse, doctor and counselor. The mental health aspect is very important for the total health of the student. The psychiatrist employed by the school should make the examination.⁸

Every student in school should be weighed and measured at least three times a year. This is a very good indication of the student's health when he or she is growing.⁹

Records

Each student should have a health record. This should be a standard and functional record. It should also be a cumulative record. The records should be kept in a centrally located place such as the nurses or doctor's office. These records should also be open to the teachers and other persons that need to consult the records. The nurse should be responsible for all the health records in the school.¹⁰

The student health record should follow the student if he or she should change schools.

⁸Dorothy B. Nyswander, Solving School Health Problems, (New York: The Commonwealth Fund, 1942).

⁹op.cit., Healthier School Children, p. 30.

¹⁰Williams, Shaw, op. cit., p. 180-230.

The health record should include the following:

1. The pre-school examination.
2. The school health service examination including the history, findings, and advice.
3. Correspondence with the family
4. Correspondence with family medical advisors.
5. Correspondence with clinics and agencies.
6. School health services; notes; reports from teachers, nutritionist, and psychologist; and doctor's report.
7. Notes of counselors and record and use made of these for guidance purposes.
8. Notes of counselors and record of use made of these for follow-up purposes.
9. A chronological record of examinations, tests, corrections, illnesses, and observations from all sources.¹¹

Follow-up Program.

A follow-up program for correction and remedial defect should be established after the examinations so that the maximum results and benefits can be accrued from the exam.

The pupils and parents should be informed of defects and methods of corrections. The teacher or nurse should notify the pupils and parents.

¹¹Williams and Brownell, The Administration of Health and Physical Education, 3rd edition, (New York: W.B. Saunders Company, p. 105-141.

Visits by the nurse and visiting teacher to the homes of students should be done to secure the cooperation of the parents in helping to correct and prevent defects.

The school should get assistance from public and private agencies for the students from homes of low income for correction of defects.

The school program should be adjusted for those students which adjustment is indicated. Plans should be made for classes of correction.¹²

Communicable Diseases.

The school should provide the following measures to control and prevent communicable diseases:

1. An immunization program should be provided for the students of the school. Smallpox immunization should be offered each year. Other immunizations should be given every year.
2. Diagnostic tests, such as the tuberculin test should be given every year.
3. Daily inspection of students by the teacher and refer students who show signs of illness or disease to the nurse.
4. Students that have a communicable disease should be isolated until the parents are notified.
5. Supervision of the lunchroom service to insure sanitary food handling and preparation.

¹²Ibid., p.156-159

6. Inspection of school facilities for sanitary conditions.
7. Education concerning control, prevention and detection of communicable diseases.
8. Require medical examinations for all school employees and teachers every year.
9. In-service training for teachers concerning communicable diseases.
10. All students with communicable diseases should be examined by the doctor or nurse for readmission to school.¹³

Emergency Illness and Accidents.

The nurse or doctor should be notified immediately, and if they cannot be reached any other person qualified should be called to give first aid ONLY. The names of doctors and hospitals should be listed so they can be called if necessary.

The parents should be notified at once and find out what they wish done.

First aid equipment should be available and accessible for first aid

¹³Ibid., p.15-16.

CHAPTER IX

HEALTH INSTRUCTION

I. Health and Safety Instruction

The promotion of health through instruction related to real life situations constitutes a distinct challenge to present-day education. Although schools have unique opportunities for instructing large numbers of young people, the health instruction in a community should not be limited to school children. Adults have health interests and needs which could be met by a community-wide program of health instruction¹.

Schools should clearly and definitely instruct pupils concerning the functioning of the human organisms, the maintenance and improvement of health, the causes and methods of prevention of diseases, and the organization and functions of community health programs. As a result of the greatly increased complexity of modern living, it becomes necessary to include, as a part of the general program, instruction in matters pertaining to the prevention of accidents². Throughout this chapter those phases of "safety education" that are most intimately connected with healthful living are included under the larger term "health".

¹Helen M. Starr, Essentials Basic to a Successful Health Instruction Program on the Secondary Level, p. 33-35.

²Ibid., p. 36.

Health instruction should arouse interest, engender compelling motives, and stress the development of good habits and attitudes as well as the acquisition of knowledge.³

One value of school health instruction comes from the awakening of a scientific attitude toward problems of health and disease and a realization that the principles of biology, physics, and chemistry are as applicable to the human body as to matter elsewhere. A scientific attitude toward health can break down superstitions and fads and thereby help pupils to analyze critically advertising and propaganda which may be misleading. Practice in distinguishing between fact and fallacy in health problems and learning where to find scientific data and authentic opinions are methods to be employed in evoking a scientific concept of personal and community health problems. Care should be taken to present instruction in such a way that pupils will not develop fears or feel that they can diagnose and treat their own ailments. There should be consideration of the limitations and dangers of self-diagnosis and self-treatment in first aid and in procedures for the home care of the sick⁴

³op. cit., C. E. Turner, p. 23.

⁴National Committee on School Health Policies, A Charter for School Health, (New York: Health Education Council, 1946, Chapter I-VIII.

No one method of incorporating health and safety instruction into the curriculum will suffice; all opportunities for influencing health behavior and for providing an understanding of health should be utilized. A well-organized program will give proper emphasis to direct health instruction and to supplementary of incidental instruction in other subject-matter areas. Extra-class activities, auditorium programs, day-by-day healthful school living, and the experiences of students with the various procedures for health protection and promotion should be used.⁵

Courses of study in health should be carefully planned and the material adapted to the needs, interests, and capacities of students. The program should be so organized that unnecessary duplication or serious omission in content may be avoided.⁶

Visual aids, textbooks, and other materials used in secondary health instruction should be selected with thoughtful consideration both of their appropriateness for the grades with which they are to be used and of their scientific accuracy. The school medical advisor and other health specialists can especially aid in checking for accuracy.

⁵Op.cit., Charter for School Health, Chapter V.

⁶Op.cit., C. E. Turner, p. 250-260.

⁷Society of State Director of Health and Physical Education
The War and Postwar Program in Health, Physical Education and Recreation, 1950.

II. Health Instruction in the Secondary School

At the secondary school level, the planning of health instruction becomes complicated by many conditions peculiar to the secondary schools. One of these is the departmentalization of instruction which is apt to make teachers subject-minded rather than pupil-minded. There is a growing tendency, however, to center attention on the needs of students and to expect each teacher to be interested in students as individuals. In keeping with this trend, home-room and classroom teachers should assume responsibility for the day-by-day health supervision of the students in their charge.⁸

Another factor which complicates instruction in high schools is the number of subjects which offer valuable opportunities for supplementing the instruction given in specific health courses. Science courses, both physical and biological; social studies; industrial arts; home economics; and physical education are among the subjects which have significant contributions to make. The relationships of these areas to health requires that each high school coordinate its various departmental programs in order that they may appropriately supplement specific health courses and at the same time avoid undesirable duplication. The School Health Council offers a valuable

⁸A Basic Plan for Health Education and School Health Program, Department of Health, Illinois, July, 1944.

channel for coordinating health instruction, for relating the classroom instruction to the work of health specialists, and for insuring that the over-all content reflects the health needs of the students and community.⁹

Specific health courses should be provided in secondary schools and should have a minimum time allotment of a daily period for at least one semester during the ninth or tenth grade and similar amount of time in the eleventh or twelfth grades. Health courses should be placed on par with courses in other areas of instruction and given proportional credit or recognition. Health courses should be given in regular classrooms with classes comparable in size to those in other subject matter areas.¹⁰

The content of secondary school health courses should meet present and anticipate future needs of students. [Appropriate future needs of students.] Appropriate emphasis in the ninth or tenth grades would be an orientation to the student's personal health problems. Young people need to become acquainted with themselves as functioning organisms and to understand the scientific basis of sound health behavior in home, school, and community. In the eleventh or twelfth grade emphasis should be placed on student preparation for adult personal and family living, vocational

⁹Ibid., Illinois Department of Health, No. 3.

¹⁰Op. cit., Illinois Department of Health, No. 13.

competency, and community responsibilities. Any topic related to health and sanitation that may be important to the individual and the community in which he lives, is appropriate for inclusion in health courses.¹¹

Whenever possible, health courses should be given by teachers with specific preparation and with certification in health education. If such teachers are required to teach some other subject area, they should be licensed in that area too. Schools should make every effort to see that health instruction is given by teachers fully prepared and qualified; it should not be regarded as an incidental subject to be relegated to any teacher who has a light teaching load or a conveniently free period.¹²

III. Basic Essentials of a Successful Health Instruction Program on the Secondary School Level

1. The existence of well stated, democratically arrived at policies to benefit the needs and interests of individuals within the community. These policies should be flexible, up to date, ever changing, continually evaluated in terms of medical and health research, educational advancement and changing needs of the community.¹³

¹¹op. cit., Williams and Brownell, p. 231.

¹²op. cit., Suggested School Health Policies.

¹³op. cit., Williams and Brownell, p. 191.

2. The existence of an active school health council in each school interested in curriculum and instructional phases of school health education.¹⁴
3. Trained, well qualified person in each school to act as health coordinator, able to carry on the accepted responsibilities involved in the health teaching integration of the health instructor in the school curriculum.¹⁴
4. The existence of an active health council of the school system, with representation from all community agencies and by people interested in the promotion of the health of the school age child.¹⁴
5. Qualified teachers in related fields, prepared through pre-service training, in the opportunities and responsibilities for the incorporation of developing health behavior through their area.¹⁵
6. The existence of a health teaching laboratory or classroom complete with health teaching materials and resources.¹⁵
7. Adequate plant facilities so that health facts may be put into practice through provision of numerous learning situations in the school, i. e.,

¹⁴Edythe Tucker, "A functioning School Health Program", Journal of Health and Physical Education 19:5 (May, 1948).

¹⁵H. McCloy, Physical Education For American, Educational Record, January, 1946.

8. The staff with pre or in-service training in sound procedures in health guidance and counseling¹⁵
9. Freedom in planning on the part of instructors in using resources of school and community as a health teaching device.
10. Direct courses or planned units in health instruction on Jr. and Sr. High School levels ideally - an hour a day to be devoted to Health and Physical Fitness¹⁵
11. Classes in direct health be held at least two days in a week combined with Physical Education on a give day plan, or a one semester course in Junior High School five days a week and a one semester course in Senior High School five days a week¹⁵
12. A core course, called common learning be developed in which health problems of pupils relating to school and community be taught. This core period would have three consecutive hours each day in Junior High School and two hours each day in Senior High School for laboratory experience and to be used by all teachers contributing to social living.
13. That there be up to date sufficient library resources in school and community to meet requirements of health instructional purposes.

¹⁵James F. Rogers, Health Instruction in Grades IX-XII, U. S. Office of Education, Department of Interior, Pamphlet No. 43, p. 18-20.

¹⁶Ibid., p. 25-30.

14. That the content of the health instructional program be based upon the needs and interests of the particular group with which the school is working. This includes providing for the needs of the atypical child from a health viewpoint as well as the needs of an individual student.
15. That the staff are alert to possibilities and responsibilities to the use of community health resources as a means to teach pupils to use available comments on health resources.¹⁷
16. That school boards and school administrators back the health instructional program in all its aspects and possibilities from program and curriculum to furnishing materials and supplies.
17. That teachers realize that health instruction cannot be carried on in a formal lecture and/or without adequate teaching tools anymore than a chemistry course or a home economics course can be taught without certain tools.
18. That every teacher must be aware of the needs of all students in their classes regarding their health status.¹
19. That every teacher must be alert to observation of health needs and changing health conditions of the individual students in her home room.

¹⁷National Committee on School Health Policies of the National Conference for Cooperation in Health Education, Suggested School Health Policies, (New York: Health Ed. Council, 18op.cit., Tucker, Chapter x.

20. That teachers should confer about health problems and try to come to conclusions as to how they can help the students better their conditions.
21. That the school and community work together on the development of such a program.
22. That lines of authority and responsibilities be clearly defined, arrived at and understood by all.
23. There should be an adequate health instruction program required of all pupils, and coordinated and directed by teachers certified for such service.
24. All teachers in the school should have adequate preparation in the field of health education, and such preparation should be included in requirements for their certification.
25. The minimum time allotment should provide for a daily program or its equivalent for at least one semester in each of the Junior and Senior High divisions of the high school. More time than this may be desirable to meet the need.
26. The size of classes in health instruction should be no larger than those in other academic subjects. Classrooms, as well as texts, references, charts, slides, models, moving pictures, and other instructional aids should be provided to the staff.¹⁹

¹⁹The School Health Program, Metropolitan Life Ins. Co., School Health Monograph, Number 12.

27. The content of health courses should meet the needs of the pupils and should include many phases of personal, home, school, and community hygiene.
28. Schools should place course in health instruction on a par with those in other subjects, and give them the same recognition in the curriculum.
29. All courses concerned with health in secondary schools should be so organized that unnecessary duplication or serious omission in content may be avoided.
30. All teachers in the various school grades should recognize their opportunities for giving health instruction whenever the situation or subjects matter merits such procedure.
31. All persons concerned with the health instruction program should cooperate fully with the health services that are offered them by the home, community agencies, and those who are interested in public health education.
32. High school pupils should be offered instruction in such subjects and aspects of military hygiene as disease control, recreation, and psychological adjustments.
33. Every pupil should be given adequate instruction concerning communicable diseases.
34. The official Red Cross course in First Aid and home nursing should be given.²⁰

²⁰Alice V. Keliher, Life and Growth, (New York: D. Appleton Century Co., 1948, p. 245

CHAPTER X

HEALTH CORRELATION AND INTEGRATION

It is recognized that every school subject has some opportunity for inclusion of health teaching. Such correlations should be recognized and utilized where they fitting and meaningful. Possibilities for correlation in various subjects matter areas are briefly listed:¹

a. Physical Education

1. Incidental Health Instruction
2. Individual health advice
3. Practice of health habits.
4. Sanitation of environment.
5. Enjoyment of wholesome physical activity.
6. Learning to live within physical limitations.

b. Homemaking

1. Nutrition
2. Methods of preparing and preserving food.
3. Home sanitation.
4. Family life education.
5. Home nursing.
6. Child care.
7. Clothing and health (posture, feet)
8. Personal grooming
9. Safety in the home.

¹Teacher's Guide in Health Education for Secondary Schools, Prepared by California Dept. Education, August, 1947.

c. Biological Science.

1. Physiology
2. Life processes of plants and animals.
3. Micro-organisms and disease.
4. Heredity and eugenics.

d. Physical Science.

- | | | |
|-----------------------|---|------------------|
| 1. Air |) | |
| 2. Water |) | IN RELATION TO |
| 3. Energy and force |) | HUMAN HEALTH |
| 4. Heat |) | AND ADJUSTMENTS. |
| 5. Light |) | |
| 6. Sound |) | |
| 7. Chemical reactions |) | |

e. Social Studies.

1. Health as a broad social problem.
2. Governmental activities in health.
3. The family as a basic social institution.
4. Health in industry.
5. Historical developments in the control of disease and prolongation of human life.
6. How disease has affected the history of the world, migration, industrial revolution, wars, etc.
7. Housing

²op. cit., Teachers' Guide, August, 1947.

- f. Industrial Arts and Trades.
 - 1. Safety and first aid.
 - 2. Occupational hygiene.
 - 3. Methods of accomplishing safety.
- g. Agriculture
 - 1. Life processes in plants and animals.
 - 2. Heredity and eugenics.
 - 3. Control of disease.
 - 4. Farm sanitation.
 - 5.. Prevention of farm accidents.
- h. Commercial
 - 1. Posture
 - 2. Vision and hearing
 - 3. Co-ordination
 - 4. Nervous control and stability.
- i. English
 - 1. Biographies of important pioneers in the health field.
 - 2. Pasteur, Florence Nightingale, Madame Curie, and Trudeau
 - 3. Health topics for oral and written composition.
 - 4. Journalism - Health information, and Health Column.

³op. cit., Williams and Brownell, p. 191

⁴op. cit., Teacher's Guide, August, 1947.

CONCLUSIONS

Effective health education is best accomplished through the cooperative services of the professional personnel of the schools and health agencies in the community.

The superiority of the functional approach, which gave rise to learning experiences through the health-related activities performed by the pupils, is a must to every health program. The fact that attitudes and right practices stand foremost in importance and difficulty among the aims of health teaching, makes the activity and participation approach particularly desirable.

An effective health education program is directly dependent upon community understanding and support. Nothing so appeals to the sympathetic concern of a community as the health of its children.

The activities essential to successful health programs have involved other educational objectives, along with health, and contributed to them also.

In conclusion to this writing and after much study and research it can be said that there is a definite need for a more broadly functional program of teacher education, to develop competence in cooperative health planning and participation.

It can also be concluded that any substantial improvement in the effectiveness of health education at any level requires the positive support and encouragement of the school administrator. The attitude of teachers toward supplementing their training to meet the changing curriculum is greatly influenced by the recognition accorded such efforts by the administrator.

The total school health program is divided into seven unique divisions. As was shown by the writer, all of these divisions must be given ample coverage before a school can be considered to possess a well-balanced school health program. The seven divisions along with a statement about each are listed:

1. Health Instruction consists of those learning experiences which are consciously incorporated into the curriculum in order to educate the pupil in terms of better health attitudes, judgments, knowledge, and practices.

2. Health Services deal with those activities carried on in the school by, or under the direction of, the school physician, school nurse, or other medical or public health specialists for the detection and ultimate correction of physical and emotional defects, or other conditions needing attention.

3. Mental Health is concerned with the emotional health of both the pupil and the teacher.

5. Sanitation of the school environment is a vital part of the school health program both for the pupil and the teacher.

6. Nutrition in the school health program centers around the hot-lunch room and the home economic classes.

7. Safety is concerned by all the pupils and all of the staff members.

8. Physical education is probably the most effective area where health education can occur. Examinations, cleanliness, safety, diet, skills, mental and physical health are all a very vital part of the physical education program and hence the total health program

The above areas of health education constitute the total health program combined with good facilities, organization and administration, a good teacher and boys and girls; a vital part of the youth of America will be aided for the rest of their lives....remembering always that the nation who possess a strong and healthy youth will be a strong and healthy nation.

TEACHING AIDS

Health Education Texts for High Schools.

The following are some available texts for high schools. A suitable group could be selected from this list for placing in the health instruction class room. Single copies of many of these would be suitable to be put in the health section of the school library also.

Allen, Ross L. Real Living - Workbook for Boys, New York, N.Y.: A.S. Barnes and Company. Book II. 1939
68 pp. 50¢

Baxter, Laura; Justin, M.M.; and Rust, L.O. Sharing Home Life. Philadelphia, Penn.; J.P. Lippencott Co., 1940. 597 pp. \$1.80

Betts, George H. Foundations of Character and Personality. New York, N.Y.: The Bobbs-Merrill Company. 1937. 371 pp. \$2.00

Blount, Ralph E. The Science of Everyday Health. Boston, Mass., Allyn and Bacon. Revised 1941. 415 pp. \$1.20
Workbook in Health. 60¢

Brockman, Marry, What is She Like? A personality book for girls. New York: N.Y.: Charles Scribner's Sons. 210 pp. \$1.25.

Brownell, C.L.; Williams, J.F.; and Hughes, W.L. Health of our Nation Series. New York, N.Y.: American Book Company. 1942-43. Being Alive - Human Structure and Functions. 430 pp. \$1.60
Health Problems, - How to solve them. 317 pp. \$1.14.
Youth Faces Maturity - Health Problems, 30 pp. 20¢

Brownell, C. L. and others. Adventures in Growing Up. New York, N.Y., American Book Company, 1941, 48 pp. \$1.60.

Burnett, R. Will. To Live in Health. New York 3, N.Y., Silver Burdett Co. 1944, 332 pp. \$1.96.

- Clemenson, Jessie Williams, and LaPorte, William Ralph. Your Health and Safety. 1942, 587 pp. \$1.96.
- Cobb, Walter F. Health for Body and Mind. New York, N.Y.; D. Appelton-Century Company, 1936. 534 pp. \$1.60.
- Cockefair, Edger A. and Cockefair, Ads. Health and Achievement; Boston, Mass.: Ginn and Company. 1938. 558pp. \$1.68.
- Crampton, Charles Ward. Start Today - Your Guide to Physical Fitness. New York, N.Y.: A.S. Barnes & Company, 1941. 224 pp. \$1.75.
- Delassus, Wilma, and Harrison, P.E. Bloomington, Illinois: McKnight and McKnight. Foods (guide book). Paper 62 pp. 24¢ Clothing. Paper 40 pp. 24¢.
- Edgerton, Avis E. Public Health in America. Evanston, Ill., Row, Peterson and Company. 1941, 47 pp. 32¢.
- Emerson, H. Alcohol, Its Effect on Man, Student Edition. New York, N.Y.: D. Appelton-Century Company, 80¢.
- Fedder, Ruth. A Girl Grows Up, New York, N.Y.: McGraw-Hill Book Company., Inc., 1939 231 pp. \$1.75.
- Fisher, Irving and Emerson, Haven. How to Live, 20th Edition. New York, N.Y., Funk & Wagnalls Company. 1938, 449 pp. \$2.50.
- Gogle, Gladys B. A Workbook in Health for High School Girls, New York, N.Y., Ginn and Company. 1943 595 pp. \$1.00.
- Hunter, Lucretia P. The Girl Today, the Woman Tomorrow. New York, N.Y.: Allyn and Bacon. 1938. 364 pp. \$1.20.
- Jordan, Helen M., Ziller, M.L.; and Brown, J.F., Home and Family. New York, N. Y., Macmillan Company. 1935, 426 pp. \$1.60.
- Justin, Margaret M. and Rust, Lucile Osborn. Home and Family, New York, N.Y., Macmillan Company. 1935. 426 pp. \$2.00.
- Keliher, Alice V., Life and Growth, New York, N.Y., D Appleton-Century Co., 1938, 245 pp. \$1.20.
- Lippitt, Louisa C., Hygiene and Home Nursing, Yonkers-on-Hudson, New York, World Book Company, 1944, 434 pp., \$1.48.
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- Lloyd-Jones, Ester and Fedder, Ruth. Coming of Age. New York: N.Y.: Whittlesey House, McGraw-Hill Book Company, Inc., 1941. 280 pp. \$2.50.
- Long, Alme. Home Health and Nursing. New York, N.Y.: D. Appleton-Century Co., Inc., 1943 378 pp. \$2.25.
- McKown, Harry C. and LeBren, Marion. A Boy Grows Up. New York: N.Y.: McGraw-Hill Book Company. 1941. 299 pp. \$2.
- McLean, Donald. Knowing Yourself and Others. New York. N.Y., Holt. 1939. 294 pp. \$1.40.
- Oberteuffer, D. and Bechtell, P.C. Experience Workbook-Health Activities and Problems. Boston, Mass.: Houghton Mifflin Co., 1940. 147 pp. 60¢.
- Prosser, C. A. and Anderson, W. Keeping Physically Fit. A Guide. Bloomington, Ill., McKnight and McKnight. 96 pp. Paper. 36¢. Cloth. 68¢. Practice book. 15¢.
- Rathbone, Josephine L.: Bacon, F. L.; and Keene, C.H. Foundations of Health. Boston, Mass.: Houghton Mifflin Company. 1939. 410 pp. \$1.44.
- Ruch, Floyd L.; Gordon N. MacKenzie; and Margaret McLean. People are Important. New York City: Scott, Foresman & Company. 1941. 283 pp. \$1.32.
- Schacter, Helen. Understanding Ourselves. Bloomington, Ill., McKnight and McKnight. 118 pp. Paper. 48¢.
- Taibot, Nora; Passon, Millie V. and Others. Practical Problems in Home Life for Boys and Girls. New York: N.Y.C.: American Book Company. 525 pp. \$1.40.
- Thackston, John and Thackston, J.F. Human Health. New York, NY.: Holt, 1936, 459 pp. \$1.40.
- Turner, Clair E. and McHose, Elizabeth. Effective Living for girls. A textbook in personal regimen. Philadelphia, Penna.: J.P. Lippincott Company. 1936. 538 pp. \$2.00.
- Wall, F.P. and Zeiberg, R.D. Health Guides and Guards. New York, N.Y.: Prentice-Hall, Inc. 1938. 380 pp. \$1.40.
- Wheat, Frank M. and Fitzpatrick, Elizabeth T. Everyday Problems in Health. New York, N.Y.: American Book Co. 1936. 446 pp. \$1.32.
-

- Willard, Florence and Gillott, Lucy H. Dietetics for High Schools. New York, N.Y.: The Macmillan Company. revised, 1939. 290 pp. \$1.48.
- Williams, Jesse F. Healthful Living. New York, N.Y.: The Macmillan Company. Revised, 1941. 600 pp. \$1.60.
- Williams, Jesse F. and Oberteuffer, Delbert. Health in the World of Work. New York, N.Y.: McGraw-Hill Book Company, Inc., 1942 405 pp, \$1.96.
- Wilson, C.D; Bracken, John L.; and, Almack, John C. Life and Health. Indianapolis, Indiana. Bobbs-Merrill Company. 1945. 547 pp. \$2.12.

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United States Department of Education, Washington, D.D.
 Metropolitan Life Insurance Company, New York City, N.Y.
 State Department of Health, Helena, Montana.
 United States Department of Health, Washington, 5, D.C.
 National Education Association, New York, New York.

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

Cycle I Part I	1942	Revised	71 pages	\$1.50
Cycle I Part 2	1942	Revised	71 pages	1.50
Cycle 2 Part I	1942	Revised	65 pages	1.50
Cycle 2 Part 2	1942	Revised	70 pages	1.50
Cycle 3 Part I	1942	Revised	71 pages	1.50
Cycle 3 Part 2	1942	Revised	82 pages	1.50

Films

Information about films may be obtained from:

1. The American Social Hygiene Association, 1790 Broadway,
New York 19, N.Y.
2. The Association of School Film Libraries, Inc. 9
Rockefeller Plaza, N.Y.
3. The United States Department of Agriculture, Wash. D.C.
4. The United States Public Health Service, Washington, D.C.
5. Association of Film Librarians, Inc., New York City.
6. DeVry Corp., 1111 Armitage Avenue, Chicago, Illinois.
7. United States Film Service, Washington, D.C.
8. Bray Pictures, Inc., 729-7th Avenue, New York City.
9. Educational Film Catalog, H.W. Wilson, Co., New York City.
10. Society of Visual Education, 327 LeSalle Street,
Chicago, Illinois.
11. One Thousand and One, Film Catalog, 64 East Lake Street,
Chicago, Illinois.
12. Film Slides: Combosco Scientific Co., Boston, Mass.
13. Bell and Howell, 1801-15 Larchmont Avenue, Chicago, Ill.
14. Bureau of Visual Education, 404 Administration Building
University of Minnesota, Minneapolis, Minnesota.
15. Montana State Film Library, Helena, Montana

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State of Illinois, A Basic Plan for Health Education and the School Health Program, Department of Health and Department of Instruction Publication., Springfield, Ill., July, 1944.

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