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School Health Curriculum in the U. S.

Jung H. Cho*

I. Introduction & Chronological Development

Health education in today's schools in the United States of America has been evolving since 1918 when the "Commission on the Reorganization of Secondary Education" released a report entitled "The Cardinal Principles of education". One of the seven(7) cardinal principles was 'Health'. Six others are 'Command of Fundamental Processes', 'Worthy Home Membership', 'Vocation', 'Citizenship', 'Worthy Use of Leisure', 'Ethical Character'.

In early 1970, California, Florida, Illinois, Michigan, and New York adopted comprehensive health education curriculum plans for kindergarten through high school seniors (K-12). As part of the nation's bicentennial celebration in 1976, the National Education Association recognized the historical significance of this report and decided to establish a special Commission to re-examine the principles in order to make them more relevant for today's society. Support was given to a broad concept of health including physical, mental, and emotional health for each student.

There has been a rise and fall of public interest creating a continuous change in the school's health curriculum. The growing influence of political action groups has changed the position of health education.

The Health Education Act of 1978 created a comprehensive school health program that organized the study of health into a conceptual structure which in turn can be presented as a curriculum plan. The health education program provides learning experiences by promoting individual health and behavioral skills; 1) to prevent illness, disease, and injury and 2) to enhance the physical and mental health of individual, family, and community.

In 1979, the School Health Curriculum Project (SHCP) became the first health instruction program to be nationally validated for inclusion in the National Diffusion Network (NDN), a federally funded system that makes exemplary and proven educational programs available for adoption by schools, colleges, & other institutions. One year later, the "Primary Grades Health Curriculum Project" was also approved for inclusion in the NDN. These two programs subsequently merged to form "Growing Healthy" which is the only currently approved project for inclusion in the NDN.

In the 1980s, comprehensive health education became recognized as a national education priority by major health or education organizations like Carnegie Foundation for the Advancement of Teaching, the American Medical Association, the National Association of State Boards of Education, and the Centers for Disease Control. Howev-

* County Health Officer & Director
Camden County Health Department
Camden, N. J., U. S. A.

er, a small fraction of students has benefitted. A national survey revealed that lack of teacher training was the most significant barrier for implementation of school health education. The Association for the Advancement of Health Education and the American School Health Association formed a joint committee in January 1990 to address these concerns.

According to the 1990 Harvard School Health Education Project (Journal of School Health, August 1992), some form of health instruction is mandated by law in 36 states; 43 states have established a legal basis for health education through educational codes or other legislation. Actual requirements vary; 32 states require that health education be taught at some time during grades K-12; 19 states require health education sometime during grades 1-6; 22 states require it either in grade 7 or 8; and 25 states require a course in health education for high school graduation.

II. Curriculum Development

Curriculum development is a complex procedure with the potential for problems during many states of the process.

Tyler (1975) has developed a series of steps to be followed; 1) selecting & defining the objectives, 2) developing a philosophy, 3) selecting & creating learning experiences, 4) organizing learning experiences, and 5) curriculum evaluation.

Posner and Rudnitsky (1978) have provided a model of curriculum development process including the various activities and sequence of steps or events that characterize the curriculum development enterprise (see Fig. 1).

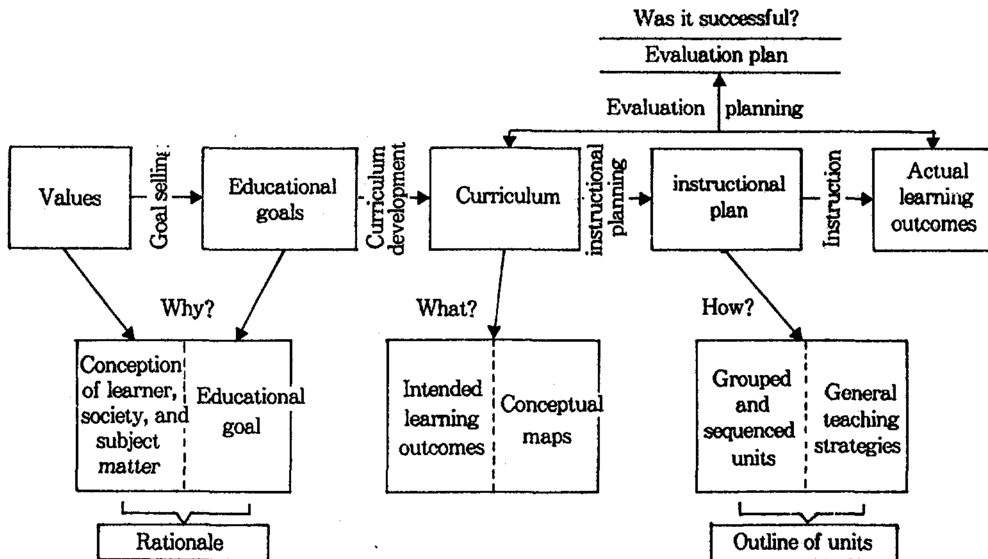

Fig. 1. A model of the components and processes of curriculum development sources, (*From George J. Posner and Alan N. Rudnitshy: Course design: a guide to curriculum development for teachers., ed. 2, New York, 1978 and 1982 by Longman, inc. Reprinted with permission.*)

The health instruction framework for California public schools was developed by a Curriculum Framework Criteria Committee on Health, California State Department of Education in 1978. The framework encompasses 10 topic areas; 1) personal health, 2) family health, 3) nutrition, 4) mental-emotional health, 5) use and abuse of substances, 6) diseases & disorders, 7) consumer health, 8) accident prevention & emergency health services, 9) community health, 10) environment.

The American School Health Association,

through funding from the U. S. Department of Education's Comprehensive School Health Education Program, had published "Criteria for Comprehensive Health Education Curriculum" in 1990. The first step in developing or choosing a comprehensive school health education curriculum is to organize a district team. Suggested members for this include;

- health education specialist
- curriculum specialist
- teacher
- school/district administrator
- school counselor
- principal
- parent
- school nurse
- student
- representative from a community health agency, such as, the local health department
- representative from a local voluntary health agency

After receiving thorough orientation and guidance, the team needs to accomplish the following tasks: 1) develop realistic, attainable goals for the curriculum 2) carefully review the criteria, 3) decide on additional criteria the team thinks is important, 4) determine how the curriculum will fit into the overall comprehensive health program, 5) find out what curricula are being used by other districts.

Many school districts are interested in developing a health education curriculum specifically in their own district but there are many existing health education curricula that districts may want to use in lieu of developing their own. Since the quality of curricula may vary by grade level, it is suggested that the criteria be used to evaluate one curriculum at each grade level.

Birch recommended a Model for Curriculum Development in Health Education to the State of Maine Department of Education & Cultural Services. The model presented the following steps; 1) organize a School/Community Committee, 2) survey the community for perceived health education needs, 3) assess what is currently being taught, 4) become familiar with state & local laws, rules, and guidelines, 5) review existing curriculum resources including comprehensive & categorical curriculum, 6) identify prospective teachers and provide an opportunity for input into its curriculum development process, 7) Develop the curriculum, 8) Identify appropriate inservice training mechanisms for teachers, 9) present the curriculum to the community, 10) implementation, 11) evaluation & revision.

Ⅲ. Curriculum Design

According to Goodlad's Conceptual Scheme, content & behavior are the organized elements of curriculum design (see Table 1). This shows an

Table 1. Conceptual framework for health education curriculum

behavior elements	Smoking, alcohol, and drugs	Dter and nutrition	Safety and first aid	Family life and sex education	
Level Ⅲ behavioral objectives	Differentiate between use and misuse of alcohol	Explain relation ship between nutritional status and health	Analyze the relation ship between accidents and emotions	Compare and contrast male and female reproductive systems	Organizing elements (content+objectives)
Level Ⅱ behavioral objectives	Explain the effect of alcohol on the body	illustrate variety of food in a good diet	illustrate relation ships between accidents and human behavior	Explain body changes occuning in puberty	← learning objectives
Level I behavioral objectives	Identify wses of alcohol	Identify	Describe on accident and how to prevent it	List similarities and differences between boys and girls	

Adaptation Irom Goodlsd, J. I., et al.; Curriculum inquiry, the study of curriculum pratice, New York, 1979, McGraw · Hill Book Co.

adaptation such as might be employed for the development of a health education curriculum. The largeted learning objectives for students are determined by the points at which the columns of subject matter elements intersect the rows of the behavioral elements.

The Health Education Act of 1978 identifies 21 different health topics which are to be organized into a progressive sequence of learning activities taught through the elementary and secondary school years (see Table 2).

Table 2. A scope and sequence chart for a comprehensive health education curriculum

Suggested topics	Grade emphasis			
	K-3	4-6	Junior high	Senior high
Personal cleanliness and appearance	X	X	Omit	Omit
Physical activity, sleep, rest, and relaxation	X	X	X	Omit
Nutrition and growth	X	X	X	Omit
Dental health	X	X	X	Omit
Body structure and operation (in cluding the senses and skin)	X	X	X	Omit
Prevention and control of disease	X	X	X	Omit*
Safery and first aid	X	X	X	Omit
Mental health	X	X	X	X
Scx and family living education	x	X	X	X
Environmental and community health	X	X	X	X
Alcohol, drugs, and tobacco	Omit	X	X	X
Consumer health	Omit	X	X	X
World health	Omit	Omit	Omit	X
Health careers	Omit	Omit	X	X

From Willgoose, C. G. J. Sch. Health 43; 189, 1973.

*Decisions ragarding which topics will receive emphasis at a paricular grade level are determined at the state and local school level. However, in view of the current AIDS epidemic. no doubt the topic of infectious clisease would be emphasized at all educational levels.

Ⅳ. Curriculum Model

A. Conceptual Health Model

The curriculum reform movement of the 1960s-1970s, which supported a comprehensive treatment of subject matter, manifested the theory that the study of health can be structured into a conceptual model which in turn can be presented as a curriculum plan. This model can be taught in an articulated sequence of learning experiences beginning in the elementary school and continuing through high school. The goal of this approach is the development of a health-educated citizenry.

School Health Education Study (SHES, 1968) defined that health is a quality of life involving dynamic interaction and interdependence among the individual's physical well-being, his or her mental & emotional reactions, and the social complex in which he or she exists. Any one dimension may play a greater or lesser role than the other two at a given time, but the interdependence and interaction of the three dimensions still hold true.

The term 'hcalth' implies a wholeness or, as modern-day philosophers and scholars have contended, a dynamic process in which the individual is functioning in harmony both with his or her

total self and with the total environment.

However, examination of the SHES conceptual model for curriculum design reveals that it is more characteristic of the field, or cognitive, theory of learning. The SHES model is based on the concept of health that serves as the focal point in organizing a structure of health and from which the outline for health education is derived (Table 1 & Fig. 2).

B. Categorical Health Model

Initially, the School Health Curriculum Project (SHCP) represented a categorical health problems approach for health instruction at the elementary and middle or junior high school levels. However, since its inception, the SHCP has been greatly modified. It now includes an articulated curriculum plan beginning with the elementary grades and continuing through high school. As such, it can perhaps best be described as an intermediate approach between that of a narrowly focused categoric health problems approach and that of a comprehensive curriculum. The curriculum began as a pilot project in California during the early 1960s and was first taught to intermediate grade school children as an in-depth study of the heart and circulatory system. It was first known as the "Berkeley Project" but later was given the litle of the School Health Curriculum Project (SHCP). Its general purpose is to help children learn how their bodies function in a normal, healthy state and the changes that occur when disease attacks. The effects of the environment and our behavioral lifestyle are stressed.

The curriculum outlined is designed for the elementary school, kindergarten through grade 7. The primary grades (K-3) unit studies the senses, whereas successive grade levels (4-7) develop study of a different organ system at each level, including units on digestion, the lungs, the heart, and the brain.

C. Critics for 2 Models

According to Creswell and Newman (1989), the advocates of a comprehensive health education model criticize the categorical health model approach on the grounds that it often becomes teaching health education by crisis. On the other hand, critics of the comprehensive program contend that the conceptual model is too general and too vague to be meaningful or to be communicated effectively. Instead, they argue for a specific problem approach.

V. Health Curriculum Teaching Models

A. Growing Healthy

Originally named as Berkeley Project and the Seattle project, and subsequently the School Health Curriculum Project and the Primary Grades Health Curriculum Project, these two companion projects have merged to form Growing Healthy, a K through 7 program that it student focused and broad based in scope (Tables 4A, 4B, 4C, 4D).

The goals of Growing Healthy are to: 1) increase students' knowledge and decision-making abilities about a wide range of behaviors and in a number of health education areas, 2) help students learn how their bodies function and how their personal choices affect their health, 3) integrate classroom learning with other life situations, 4) offer students and teachers an experience-based understanding of the physical, mental, and emotional dimensions of their own helath.

Ten major content areas are addressed at each grade level: 1) growth & development, 2) mental/emotional health, 3) personal health, 4) family life & health, 5) nutrition, 6) disease prevention & control, 7) safety & first aid, 8) consumer health, 9) substance use & abuse, 10) community and environmental health management.

'Growing Healthy' is successfully being taught to many different communities across the country. According to the National Center for Health Education, New York, 'Growing Healthy' reaches more than one million students in 8,000 schools in 41 states. In 1991 alone, more than 1,

000 new schools incorporated the curriculum and took the first steps to improving the health of their students.

Since it was first developed, 'Growing Healthy' has undergone several evaluations. The most extensive, The School Health Education Evaluation (SHEE), studied 30,000 students exposed to one of four health curricula or to no health program at all. The study found that Growing Healthy students demonstrated the highest overall measures of health knowledge and attitudes among any of the groups.

B. Michigan Model

The Michigan Model for Comprehensive School Health Education, also known as "Wellness Curriculum", is the culmination of efforts undertaken by countless individuals and organizations for over 10 years. A brief review of these efforts will allow the reader to appreciate the preparation and planning that is in place. Moreover, without all of the preparatory work that has occurred, it would not have been possible to initiate and sustain the Michigan Model.

Beginning in the early 1970s, the Michigan State Board of Education, assisted by the State Department of Education, developed performance objectives as part of the accountability model (i. e., assuring that all students will attain at least minimal competencies within the essential educational disciplines), The first performance objectives for health education were established in 1974, revised in 1979 & 1984, revised again for 1989, and presently in the process of being further revised. The Michigan Model is based upon these performance objectives.

In 1981, the Comprehensive School Health Plan was published. An emphasis is placed on cooperative planning and implementation to attain its objectives. Presently, the Michigan Model for Comprehensive School Health Education is a cooperative effort of 7 state agencies in Michigan. The curriculum has approximately 40 lessons per grade level, K through 6, and approximately 50 lessons per grade level 7 through 8 in 10 broad health education topics. The fundamental philosophy of the program is to provide a solid foundation for subsequent decision making. Included are safety, nutrition, family health, consumer health, community health, growth & development, substance use & abuse, personal health practices, emotional & mental health, and disease prevention & control (see Tables 5A, 5B).

Figures 4A-4F demonstrate evidence of success for Michigan Model application on health education teaching.

C. Merrill Health Curriculum K-12 (see Tables 6A, 6B).

D. ETR Assoc. Contemporary Health Series (see Talbes 7A, 7B).

E. Cherry Hill School District, New Jersey (see Table 8).

VI. Discussion

Curriculum development and teacher's training are the most critical process to the success of a school health instruction program. While numerous models exist for curriculum development in school health instruction, most models include similar steps or activities. In the U. S., each State Board of Education and/or State Department of Education adopts their own guidelines and each local school board develops a health curriculum which is best suited for their own school district.

Although this presentation in being made in Korea, it has not been placed in the context of the korean process of curriculum development nor does it include references to the current status of school health in Korea. Nevertheless, the curriculum models and school health principles enumerated in this presentation are meant to be useful examples for any system with the proviso that local needs and culture must play a dominant role.

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