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ABSTRACT

This guide is designed to assist local educators and community leaders in the development and implementation of a comprehensive, integrated curriculum in health and safety education for students in grades K-12. The program is designed to develop critical thinking, problem-solving, and decision-making skills, and to provide the necessary information to motivate students to protect, maintain, and improve their health. Ten chapters are presented as follows: (1) Comprehensive Health Education; (2) What Is Health and Safety Education?; (3) Curriculum Development Process; (4) Philosophy and Goals; (5) Organization of Topics; (6) Learning Objectives--A Process; (7) Selecting Learning Objectives; (8) Curriculum Evaluation; (9) Related Issues; and (10) Reinforcing Health Concepts. Five appendixes provide an evaluation checklist, an implementation model, text of relevant legislation, a list of criteria and program characteristics to help administrators choose effective drug prevention programs and speakers, and a set of sugestions on how to answer difficult questions. (LL)

A GUIDE TO CURRICULUM DEVELOPMENT

HEALTH AND SAFETY

STATE OF CONNECTICUT BOARD OF EDUCATION • 1990

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A GUIDE TO CURRICULUM DEVELOPMENT IN HEALTH AND SAFETY

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FOREWORD

The State Board of Education's most fundamental commitment is to educational equity and excellence for all Connecticut students. The depth and richness of that commitment is thoughtfully, thoroughly and forcefully expressed in *Challenge for Excellence: Connecticut's Comprehensive Plan for Elementary, Secondary, Vocational, Career and Adult Education 1991-1995*. This series of curriculum guides, developed for the 1990s, represents an important element in the Board's efforts to achieve Goal VI of its Comprehensive Plan: To Improve the Quality of Instruction and Curriculum.

These books also are published to carry out the State Board's statutory responsibility to "prepare such courses of study and publish such curriculum guides . . . as it determines necessary to assist school districts to carry out the duties prescribed by law." The letter of the law which requires the Board to provide these materials is clear, and clearly important. More important, however, is the manner in which the Board embraces the task of meeting the spirit of the law.

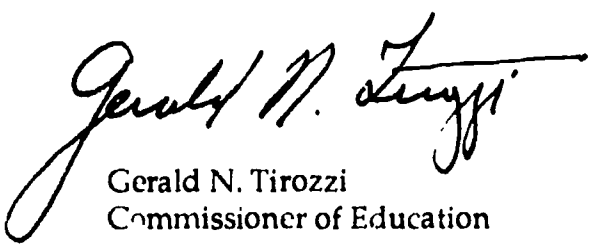
The Statewide Educational Goals for Students 1991-1995 (part of the Comprehensive Plan adopted by the State Board in April 1990) and *Connecticut's Common Core of Learning* (adopted in January 1987) together are the heart and soul of the achievement we envision for all Connecticut students. This vision can only become reality, however, at the district level through the creativity, talents and special understanding that local education professionals and citizens bring to the K-12 curriculum planning process. These curriculum guides are specifically designed to help districts develop state-of-the-art learning programs and opportunities in each of the 11 mandated curriculum areas: the arts; career education; consumer education; foreign language; health and safety; language arts; mathematics; physical education; science; social studies; and vocational education.

In these guides we have endeavored to present meaningful and up-to-date ideas consistent with the State Board's goals for public education. Central to this effort are the convictions that (1) all children can learn and are entitled to an appropriate education; (2) diversity is enriching to school systems and all students benefit from the opportunities that diversity affords; (3) no single method of instruction is adequate to meet the educational needs of all children; (4) schools share the responsibility to maximize the comprehensive development of students; (5) mastery of knowledge and the ability to manipulate ideas are essential to being productive citizens; and (6) schools are but one vehicle through which education can be fostered — the vital role families play in supporting student learning must be recognized and families and the public schools must cooperate effectively to maximize student achievement.

The Statewide Educational Goals for Students, *Connecticut's Common Core of Learning* and these curriculum guides describe what can and should happen in quality K-12 educational settings. This series seeks to firmly establish the principle that the individual student is the beneficiary of these curriculums. The State Board of Education's mission is to educate students to think, explore and apply a variety of knowledge in ways that reward them and that contribute to growth in our society.

The guides have been developed under the direction of subject-area specialists in the State Department of Education, with the assistance of advisory committee members chosen from schools, universities and, in some cases, other agencies or community groups. These individuals have brought to the task a rich variety of experience and a shared commitment to the education of Connecticut students. Procedures suggested in these guides, while strongly recommended, are optional; the content represents expert professional opinion rather than state requirements. (In cases where state statutes prescribe certain content, the appropriate statute is cited.)

It is our hope that these guides will be used as resources in an ongoing curriculum planning process that has as its focus the lifelong achievement and well-being of all Connecticut students.



Gerald N. Tirozzi
Commissioner of Education

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This guide to curriculum development has become a reality through the hard work, dedication and guidance of many individuals whose contributions may not be acknowledged here, but whose efforts are greatly appreciated. Without the help and concern of these outstanding educators, administrators and mentors, this guide would not have been possible. To all of these individuals, a heartfelt thank-you.

While many individuals have contributed to this guide, several key people should receive special thanks:

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Veronica M. Skerker, Consultant
Substance Abuse, Health and Safety

PREFACE

Throughout history, schools have been viewed by society as an agent of change. *The Massachusetts Teacher, Vol. V* (Massachusetts Teachers' Association and Samuel Coolidge, 1852), outlined ways educators could prepare children for success in the "modern world of 1852." In *The New Student's Reference Book For Teachers, Students and Families* (Beach, 1911), children were taught sanitary procedures to be followed at home in order to prevent the spread of disease. And in *How To Teach Personal Purity* (Shannon, 1913), children were told how to resist the evils of the world so that they could become "perfect men."

Schools also have been expected to provide for children things that parents could not. In the early 1900s Hartford educator Annie Fisher instituted the practice of offering to elementary school children hot showers twice a week because most children had no bathtubs at home. While providing showers for needy children certainly could not be viewed as the school's role, Fisher saw a need and provided the solution.

In light of these examples, schools today are being asked to do no more than schools always have been asked to do – provide children with knowledge, skills and "things" that parents may not be able to provide.

It may seem that the problems facing America today are greater than those of the past. Certainly they require complex solutions. For example, two out of three high school seniors use alcohol regularly; one out of six 13-year-olds uses marijuana; one out of 10 high school students has attempted suicide; eight out of 10 high school seniors are sexually active; and thousands of young people survive youth emotionally and physically disabled. While these problems seem overwhelming, we must believe that solutions can be found today just as they were found in the past.

As we enter a new decade and approach the 21st century, the State Department of Education hopes this guide will inspire educators to begin the process of developing curriculums that will meet the challenges of the future. In the words of Robert Kennedy, "Some men see things as they are and say why. I dream things that never were and say why not." We hope this guide will be the spark to ignite educators to change our children's dreams into reality.

COMPREHENSIVE HEALTH EDUCATION 1

"We must have...a place where children can have a whole group of adults they can trust."
– Margaret Mead

The Role of Schools
Cultural Diversity
Societal Problems
Finding Solutions

Health education is a process of learning experiences which enables children to become healthy, effective and productive citizens. A comprehensive health education program gives children information which enables them to promote, maintain and protect their health and, at the same time, helps them to acquire the necessary skills to make health-related decisions and develop positive attitudes about health and about themselves.

The *Guide to Curriculum Development in Health and Safety* is designed to assist local educators and community leaders in the development of a comprehensive and integrated curriculum in health and safety for students in Grades K-12. Such a program will develop critical thinking, problem-solving and decision-making skills, and provide the necessary information to motivate students to protect, maintain and improve their health. This guide describes how a local school district might proceed to develop and implement such a curriculum.

School districts should note, however, that a health and safety curriculum is but one component of a comprehensive health program. Health services such as health screening, emergency care and a healthful school environment (including such things as food services and school climate) are not addressed specifically in this guide.■

The Role of Schools

Our schools originally were designed to teach reading, writing and arithmetic, and to train and develop effective and productive citizens. Today, schools are asked to do even more. Over the past decade, shifting patterns in our society have wrought enormous changes upon the family and its support systems and, therefore, upon children. Teachers and students alike also have been affected by societal changes, and some say the resulting challenge to schools to fulfill these additional expectations has become overwhelming. Unfortunately, teachers and schools often are unable and unequipped to respond to this challenge as quickly as necessary.

Teachers now have the additional responsibility of being available to and supportive of children in more ways than formerly were required. They need to be more aware of their impact on students, and begin to teach the skills necessary to build self-esteem and self-confidence. The school has emerged as the central and dominant social setting for our youth today (Polk, 1984).

The challenge facing school districts today is to design a curriculum that will meet the needs of all students. As a prerequisite, educators must address cultural and societal changes that have occurred over the past decade.■

Cultural Diversity

In the not-too-distant past, the staff of a neighborhood school could assume that a majority of its students came from similar cultural, ethnic and social backgrounds. If children had come from different backgrounds, schools often were seen as the vehicle to help these children merge into the "great American melting pot." These assumptions no longer are true or necessarily desirable, as schools today are expected to help maximize the potential of each child regardless of his or her background. This goal, however, is not easily attained.

Teachers must become sensitive and knowledgeable about the cultural differences of the children within their classrooms. Curriculums must be sensitive to the needs and differences of all children and have the flexibility to engage and motivate children from divergent cultures. Schools also must develop in all children the skills necessary to respect, communicate with and relate to all people regardless of their backgrounds.■

Societal Problems

Not only must schools be aware of the cultural diversity of their student populations, they also must be aware of the problems that children face at home and in their communities. The following statistics suggest only the "tip of the iceberg" and should be considered by educators as they begin to develop an appropriate curriculum for today's students.

- 988 children in the U.S. are abused every day (Edelman, 1988).
- 11.6 million U.S. teenagers are sexually active, and 2.5 million teenagers are infected each year with sexually transmitted diseases (*Instructor, Secondary Edition, 1988*).
- 17 percent of young men surveyed in the U.S. between the ages of 16 and 19 have had at least one homosexual experience (*Morbidity and Mortality Weekly Report*, 1988).
- 3,000 teenagers in the U.S. become pregnant every day (*Instructor, Secondary Edition*, 1988).
- 25 percent of all children in the U.S. live with an alcoholic (National Institute on Alcohol and Alcoholism, 1983).
- Children of alcoholics are from two to four times more likely to become drug involved sometime in their lives (ibid.).
- 36 percent of fourth grade students surveyed in the U.S. have felt pressure to try alcohol or marijuana (National Transportation Safety Board, 1986).
- 20 percent of all U.S. high school students experience problems resulting from substance abuse (ibid.).
- The suicide rate among U.S. teenagers more than

Drinking Status	Percent who use marijuana M	F	Percent who are nonvirgins M	F	Percent who are high in deviance M	F
Abstainers	0	2	5	4	15	2
Non-problem drinkers	31	42	23	39	40	34
Problem drinkers	79	80	52	73	73	43

Source: Jessor, 1988

Figure 1

tripled between 1950 and 1980 (Klagsburn, 1981).

- Nearly one in five girls and one in 10 boys in the U.S. have attempted suicide (*Instructor, Secondary Edition*, 1988).
- 9,548 Connecticut females under 19 became pregnant in 1986 (State of Connecticut Teenage Pregnancy Council, 1987).
- 293 Connecticut females under the age of 14 became pregnant in 1986 (ibid.).
- 4,053 Connecticut females between the ages of 11 and 19 gave birth in 1986 (ibid.).
- 70 percent of Connecticut's high school students participate in illegal gambling (Steinberg, 1988).
- 12.7 percent of Connecticut's high school students report that they have lost control of their gambling (ibid.).

Schools are beginning to realize that these statistics are not isolated phenomena. For example, students who are drug abusers are potentially at risk of becoming sexually active and/or becoming involved in deviant behavior. Figure 1 (Jessor, 1988) illustrates the interrelationships of at-risk behaviors.

Other studies have shown that students who are at risk for drug abuse, stress, depression and dropping out of school lack specific skills and often have destructive attitudes. David Lohrmann conducted a 1988 study and results show a relationship between specific negative behaviors and attitudes and the lack of specific skills. His findings are shown in Figure 2.

With these interrelationships clearly articulated, it is evident that in addressing one problem, a school often addresses many other problems, as well. By accepting the challenge, schools can become a vehicle to provide students with skills, attitudes, attributes, and explicit and implicit knowledge that allow them to become useful and productive citizens as adults.■

Finding Solutions

As educators begin to look at these and other frightening statistics, and at the great diversity of cultural and ethnic backgrounds of students, the burden of educating the masses may seem overwhelming. While there are no simple answers to the complex problems facing young people today, schools have a great opportunity to enable students to confront and deal more effectively with the problems they face.

A well-developed and comprehensive health and safety curriculum provides schools with an ideal vehicle with which to teach children the knowledge, skills, attitudes and attributes they will need both now and in the future.

AT-RISK CATEGORIES

	Underachievement	Dropout	Depression	Drug Abuse	Stress
Low grades	X	X	X	X	X
Bored with school	X	X		X	
Low self-esteem	X	X		X	
Helplessness			X		X
Negative emotions	X		X		X
Poor school bonding	X	X	X	X	X
Aggression	X	X	X	X	X
Underachievement	X	X	X	X	X
Poor interpersonal communication	X			X	X
Poor social/life skills	X		X	X	X

Source: Lohrmann, 1988

Figure 2

A comprehensive health and safety curriculum should include learning objectives that go far beyond, for example, dental health. Learning objectives should include statements such as the following:

Students will:
- appreciate the uniqueness of others;
- respond to others in a consistent manner, valuing all individuals from diverse backgrounds;
- learn ways to cooperate with others;
- practice making other children feel included and accepted in groups; and
- select foods, based on cultural preferences, which promote growth and development.

Chapter 7 outlines in greater detail the framework of a curriculum that can provide students with the skills and knowledge they will need in order to thrive in the future. Studies have shown that when students learn with skill-based programs, positive results will occur. The following are examples of programs that have resulted in positive changes in children (Van de Kamp, 1987).

- *Skills for Adolescence*, a middle school program that addresses problem solving, self-esteem and responsibility, reports consistent, positive changes in areas such as self-worth, responsibility, respect for others, problem-solving and critical thinking.
- *Skills for Living*, a high school program that addresses decision making, self-esteem and communication skills, reports significant improvements in feelings about one's self and family, and in communication and interpersonal relationship skills.
- *Project Dare*, a 17-lesson program taught by trained police officers, stresses problem solving, self-esteem enhancement and refusal skills. Evaluators of this program have found that 50 percent of the students increased their grade point averages, 56 percent improved their cooperation marks and 43 percent improved their work habit marks .
- *Here's Looking at You, 2000* is a comprehensive skill-based program which reportedly has had a positive impact on developing decision-making skills, informing students about the use and consequences of alcohol and reducing teenage drinking.

Surveys performed by the Metropolitan Life Foundation in 1988 show that, after three years of health education, the percentage of students drinking alcohol dropped from 43 to 33; the percentage of students smoking cigarettes dropped from 20 to 14, and of those taking drugs from 13 to 6. These surveys also show that students who receive comprehensive health education feel they are able to control their health and to follow more positive health practices (*Education USA*, 1988).

It is reasonable to conclude that these skills and attitudes, when taught effectively in a well-developed comprehensive health and safety program, can have a positive and measurable effect on a student's behavior and performance.■

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Polk, Kenneth. "The New Marginal Youth." *Crime and Delinquency.* 30, 3, July, 1984: pp. 464-465.

State of Connecticut Teenage Pregnancy Council. "Pregnant Teens: An Action Plan for Prevention," July 1987: p. 16.

Steinberg, Marvin. "Teenage Gambling – An underpublicized Problem." *Hamden Chronicle*, March 16, 1988.

Van de Kamp, John K. *Schools and Drugs: A Guide to Drug and Alcohol Prevention Curricula and Programs*. Sacramento, CA: California Office of the Attorney General, November, 1987: pp. 37-58.

Resources

Here's Looking At You, 2000. Comprehensive Health Education Project, 20832 Pacific Highway South, Seattle, WA 98198.

Project Dare. Los Angeles Police Department, Department Stop 439, 150 N. Los Angeles St., Los Angeles, CA 90012

Skills For Adolescence. Lions-Quest Program, 665 Sharon Woods Blvd., Columbus, OH 43229.

Skills For Living. Lions-Quest Program, 665 Sharon Woods, Blvd., Columbus, OH 43229.

What Is Health And Safety Education? 2

"All great ideas are controversial, or have been at one time."
– George Selden

TOPICS OF COMPREHENSIVE HEALTH EDUCATION
Self-Concept
Responsibility and Decision Making
Interpersonal Skills and Communication
Bonding
Nutrition
Substance Abuse
Growth and Development
Disease Prevention
Safety and Accident Prevention
Community Health
First Aid and Emergency Procedures
Consumer Health
Physical Fitness
Family Life Education
Integration of Topics

The primary goal of health and safety education is to provide students with the ability to acquire information, develop skills, learn to think critically and make appropriate decisions that will result in a healthy lifestyle. To achieve this goal schools must empower students by teaching them the skills to evaluate and use new information as it becomes available, and to make appropriate and reasonable decisions for themselves.

The topics usually taught to students to achieve the goals of health and safety education are outlined as follows in Section 10-16b of the *Connecticut General Statutes* (the full text is printed in Appendix C):

> "In the public schools the program of instruction offered shall include at least the following subject matter, as taught by legally qualified teachers, ... health and safety, including but not limited to, human growth and development, nutrition, first aid, disease prevention, community and consumer health, physical, mental and emotional health, including youth suicide prevention, substance abuse prevention and safety and accident prevention...."

In order to effectively teach these topics, schools must integrate them into a comprehensive program that clearly articulates their interrelationship and stresses knowledge, skills, attitudes and attributes. To facilitate this process, the topics have been organized into three distinct blocks, encompassing critical skills, essential or core knowledge, and related knowledge.

Block I consists of key attitudes, attributes and skills that have been identified in *Connecticut's Common Core of Learning* (1987) as critical elements to be taught to students. These topics should be taught yearly as part of mental and emotional health education in conjunction with Block II.

Block II consists of major health topics that have been identified as essential knowledge-based elements. Topics in this block should be taught yearly in conjunction with topics in Block I.

Block III consists of important related topics in health. These topics should be taught yearly (or may be taught periodically at key developmental stages); alternatively, they can be integrated easily into other curriculums, or be taught by local community experts in distinct units. A breakdown of Blocks I, II and III is shown in Figure 3.■

Block I

The following skills, attitudes and attributes that all students need to develop in order to become healthy, productive citizens are contained within Block I (these topics can be addressed within the category of mental and emotional health):

Self-concept. The far-reaching significance of a child's positive self-concept is reaffirmed by many research studies. Children with high self-esteem are found to be more effective, competent, independent, creative, academically successful, and bonded to family and peers. Children with low self-esteem are found to feel powerless, hopeless, weak, incompetent and stressed, and to experience lower academic success and be less bonded to family and peers (Alvy, 1987 and Hawkins, 1985 and 1988). Clearly, this basic sense of self-worth plays an important role in many areas of a child's life.

Responsibility and decision making. These skills allow children to apply what they have learned to specific problems, to examine the relationships between

Topics of Comprehensive Health Education

BLOCK I Skills, Attitudes, Attributes[1]	BLOCK II Core Topics	BLOCK III Related Topics
• Self-concept • Responsibility and decision making • Interpersonal skills and communication • Bonding	• Nutrition • Substance abuse • Growth and development • Disease prevention	• Safety and accident prevention • Community health • First aid and emergency procedures • Consumer health • Physical fitness[2] • Family life education

1 Can be addressed under the topic of mental and emotional health.

2 Physical fitness is considered a key component of a comprehensive health education program. For more specific information, please consult Connecticut's *Guide to Curriculum Development in Physical Education* (1981).

Figure 3

a behavior and the consequences of that behavior and to be accountable for the behavioral choices they make.

Interpersonal skills and communication. This area encompasses both verbal and nonverbal communication and the development of trust with one's peers and family. Also included are assertiveness, negotiation and coping skills which allow children to refuse or resist inappropriate or damaging behavior.

Bonding to family, school, peers and community. The sense of bonding is a basic human need. Strengthening and reinforcing relationships with others in one's family, school and community will help children to develop skills fostering respect, trust and appreciation both for themselves and for others.■

Block II

Topics in Block II essentially are knowledge based and include important factual information that children require from the earliest grades. This information should be taught in an age-appropriate and developmentally based manner. Ideally, Block II information is introduced to children in kindergarten, and evolves and is reinforced across all grade levels.

Nutrition. Food intake is the source of nutrients for growth and maintenance of a healthy body. Food selection and eating patterns are influenced by many diverse factors. Sound nutritional knowledge is needed to allow individuals to make wise food choices. Food habits which help to build and protect good health are not acquired naturally; they must be learned. It is important for students during their early school years to be provided with knowledge about nutrition as well as the skills to make informed and responsible choices about the food they eat. Several recent studies on nutrition and food consumption suggest that many Americans are not making well-informed choices. Young children, teenagers, pregnant women and the elderly are most vulnerable to the effects of an inadequate diet. The overconsumption of food also is a serious health problem. According to some estimates, 15 million Americans are sufficiently overweight to impair their health.

Substance abuse. Substance abuse, especially among our youth, is a complicated and difficult problem. Recent studies indicate that substance abuse by students has reached epidemic proportions and has serious implications for our society as a whole. The following information suggests the magnitude of the problem:

- Alcohol, nicotine and marijuana are "gateway drugs." Individuals rarely use drugs such as cocaine, LSD or heroin without first using the "gateway drugs."
- Seriously drug-involved teenagers start using the "gateway drugs" as early as third grade.
- By Grade 6, 52.2 percent of the students surveyed in Connecticut had "experimented" with alcohol, 37.8 percent had used tobacco and 8.9 percent had tried marijuana (Connecticut Alcohol and Drug Abuse Commission, 1989).
- By Grade 12, 86.4 percent of the students surveyed in Connecticut had "experimented" with alcohol, 64.2 percent had used tobacco and 46 percent had tried marijuana (ibid.).
- Alcohol-related accidents are the leading cause of death among the 15- to 20-year age group (National Transportation Safety Board, 1986).

Many studies have demonstrated the negative impact of student substance abuse on learning and behavior. Knowing the facts about drugs and how they are used is critical. However, it is also important to be aware of the interrelationship of substance abuse and other problems. Research shows, for example, that increases in substance abuse parallel increases in suicide, sexual promiscuity, delinquency and violent crimes. Thus, children at risk for any one of these problems also are at risk for the others. Substance abuse is a growing problem in our schools and exacts a substantial toll in the form of preventable deaths, illnesses and disabilities. Substance abuse also contributes to family problems, poor school and job performance, and can lead to long-term chronic disease. A health program which combines the necessary skills and attitudes with knowledge about drugs can be a powerful way to combat this problem.

Growth and development. The most significant characteristic of childhood is rapid and dramatic growth and development. Students have a natural curiosity concerning the wonders and workings of the human body. This interest can become a motivating force for developing an understanding of individual growth potential. Widely diverse factors such as inherited characteristics, environment, nutrition, social conditions and personal habits can work either to nurture or to inhibit normal growth and development. This topic addresses the structure and function of the systems of the body and their contributions to the healthy functioning of the body as a whole. The overall goal is to provide students with information about:

- critical issues in growth and development (including puberty, sexual behavior and causes of premature death);
- the connection between individual behavior and the healthy development of an individual;
- how to utilize health services and resources; and
- accepting responsibility for personal health and protection to assure the optimal functioning of the human body throughout life.

Disease prevention. Everyone from birth onward has some exposure to disease or some risk of developing a health problem. Factors such as heredity, socioeconomic background, prenatal exposure, environment and behavior all influence the degree of risk of developing a particular disease. While medical advances have dramatically reduced the mortality rate due to many major infections, there has been a 250 percent increase in mortality due to major chronic diseases. There is increasing evidence that the roots of many of these diseases, such as heart disease, stroke, diabetes and cancer, are found in patterns established early in life. Eating patterns, exercise habits and exposure to carcinogens all can increase the potential for developing diseases later in life.

Of the remaining infectious diseases, AIDS (Acquired Immunodeficiency Syndrome) poses the greatest threat. Within eight years of the time AIDS was first recognized, the disease touched nearly every aspect of our society. By February 1987, there were more than 30,000 reported cases of AIDS in the U.S. (Connecticut State Department of Education and Connecticut Department of Health Services, 1987); by mid-1988, there were 65,000 cases (Fineberg, 1988). At the time of this printing there were no effective means of stopping or arresting the course of the disease. The principal means of arresting the spread of AIDS is through education and altered sexual and drug use behavior patterns. As is the case with the behavior patterns which predispose one to chronic diseases, the patterns which may place one at risk for AIDS are established early in life. Changes in personal behavior, however, are more difficult to effect when the health benefits are not immediately visible. It is essential that students receive the necessary information to learn how diseases are contracted and spread, and establish appropriate skills and behavior patterns to protect themselves from being exposed to them.■

Block III

Topics included in Block III provide important information for all students. If class time does not permit these topics to be covered as part of the health unit, they can be successfully integrated into existing courses or taught at developmentally appropriate times.

Safety and accident prevention. Accidents are the leading cause of disability and mortality in the 1-21 age group. Students, therefore, must develop a high degree of safety awareness, including a concern for the well-being of themselves and others. Safety awareness provides recognition of potential hazards and the consequences of risk-taking behaviors. Accidents result from both human and environmental factors; thus, most accidents are preventable. In many instances, accidents can be prevented by individual efforts resulting from the development of appropriate behavior. In other cases, it may be necessary to marshal societal resources to identify and correct dangerous conditions or potential hazards which threaten the safety of the public. In either case, the key starting point is to give students the knowledge, attitudes and behavior patterns for safe living and to provide them with an opportunity to practice safe behaviors.

Community health. All individuals share the responsibility for conserving natural resources and the environment, and identifying and addressing community health problems. The increase in population and its accompanying diversity of human activities have made control of the environment increasingly difficult. For example, large-scale programs of environmental protection and sanitation have attempted to resolve the various problems of pollution. The critical factor determining the success of such programs is the degree of individual cooperation in cleaning and protecting the environment. To become a responsible citizen, a student must recognize both what constitutes the environment and what resources exist for its protection and improvement. This awareness then leads to active involvement in promoting, protecting and improving the community and the environment.

First aid and emergency procedures. The continuous emphasis which needs to be given to safety education for all students should be reinforced through training in first aid and cardiopulmonary resuscitation (CPR), so that students may learn to act and react appropriately in emergency situations. Accurate knowledge of the procedures to be followed and the skills to be utilized in handling emergencies can reduce the threat to life and health. Students will need practice time, supervised by qualified instructors, in order to master the necessary skills. The level of instruction should be appropriate for the age and grade level of the students, and subsequent training should reinforce these skills.

Consumer health. Each individual is largely responsible for his or her own health. This responsibility involves not only making critical choices in terms of one's lifestyle, but also in choosing from among the vast array of medical and health-related services, products and personnel. This combination makes up the health industry, which perhaps is the fastest growing industry in the United States. A variety of forces influences an individual in his or her selection of health information, products and services. Health-related information is widely disseminated via the media, requiring that the individual be able to discriminate between what is vital and what is not. Students must acquire sophistication in decision making by the time they reach adulthood. They should be able to identify authorities on health, means of access to the health care system, and community public health resources.

Physical fitness. The state of one's health reflects an interplay of three major factors: the environ-

ment, heredity and personal lifestyle. Of the three, it is invariably through lifestyle – one's habits and behaviors – that a person directly influences the state of his or her own health. Mortality data reflect the importance of choice of lifestyle; of the 10 leading causes of death in the United States, at least seven could be substantially reduced if the persons at risk changed their health behavior. Realizing that one is largely responsible for his or her own health is a significant step in achieving and maintaining good fitness and health. Good health can be achieved and maintained through behaviors and practices that affect physical strength and flexibility, mental clarity and emotional stability. These practices eventually become integrated into one's lifestyle as habits.

Family life education. In its broadest meaning, family life education may be defined as learning experiences which help individuals live a more satisfying life, creatively enriched and productive, as family members, community members and members of a wider society – national and international. It may best be described as education for personality maturation and increased self-understanding of the mental, emotional, social, economic and psychological, as well as the physical phases of human relations, as these affect and are affected by male and female relationships.■

Integration of Topics

Integrating the topics and skills from Blocks I, II and III will enable students to learn essential facts and, at the same time, develop the skills and attitudes required for a healthy lifestyle. An example of this integration of topics and skills is shown in Figure 4.

It is clear that the learning skills generally can be integrated with many different topics and thus are a critically important component of the curriculum. An example is shown in Figure 5.

The goal of teaching these topics as an integrated program is to provide students with the knowledge, attitudes and ability to develop and reinforce behaviors that allow them to become healthy and responsible adults. A well-developed and effectively implemented health and safety education program will enable schools to achieve this goal.■

Facts	+	Skills	+	Attitudes	=	Behavior
Facts about drugs	+	Refusal skills	+	Self-esteem	=	No drug abuse
Facts about nutrition	+	Decision-making skills	+	Self-esteem	=	Well-nourished bodies

Figure 4

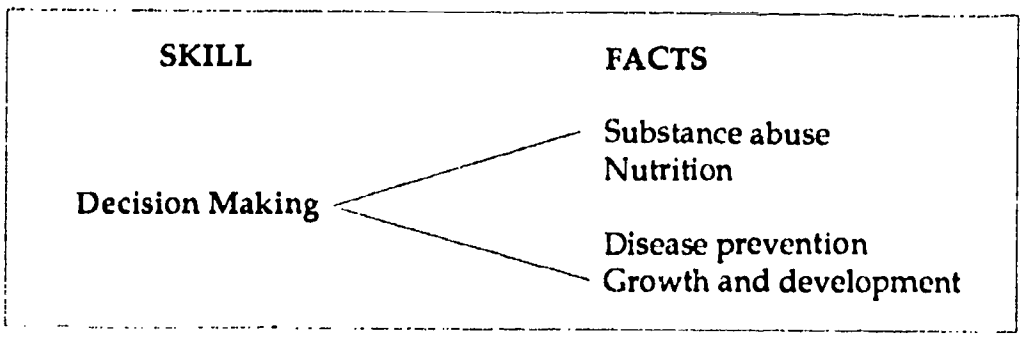

Figure 5

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CURRICULUM DEVELOPMENT PROCESS 3

> *"Education has in America's whole history been the major hope for improving the individual and society."*
> **– Gunnar Myrdal**

Integrating Topics
CURRICULUM DEVELOPMENT PROCESS
Phase I – Curriculum Development Advisory Committee
Phase II – Planning
Phase III – Needs Assessment
Phase IV – Curriculum Development or Revision
Phase V – Implementation
Phase VI – Program Evaluation

Curriculum development is never simple. In fact, developing the number of topics, skills and disciplines that must be integrated into a comprehensive health curriculum can make the task more difficult than similar work in the other disciplines. Curriculum committees often are handicapped because their districts lack sufficient staff with expertise in health education to provide the input required to create a comprehensive skill-based program.

As is the case with other curricular areas, trends over the past decade have negatively influenced the implementation of comprehensive health education programs. A general decline in school enrollment, for example, can result in a concomitant decline in school funds. Thus, educational priorities may shift from supporting the all-inclusive to the basic programs. With the growth of educational consumerism, the public is demanding the right to participate in shaping educational policy. While this trend often is positive, vocal groups can influence what is taught, regardless of the needs of students or the consensus of the majority of the townspeople. State and federal legislation also can affect health education by limiting or increasing the availability of funds based on state and federal priorities.

Not only must curriculum committees address these issues, they also must remember that students receive messages based upon what is taught and what is ignored in an actual lesson. Elliot Eisner (1985) has referred to the "null curriculum," emphasizing that there is a significant message in what is omitted from the curriculum. In other words, we teach by what we do not teach. These issues are important, both in analyzing current programs in health education and in developing new comprehensive programs. Students also learn explicit information provided by the lesson as well as implicit information or subtle messages conveyed through the words or actions of the teachers.

Despite the various trends and difficulties, health education is a critical subject that must be taught effectively. With adequate planning, reasonable resources and community involvement, an effective and appropriate health curriculum meeting present needs and hurdling challenges can be developed.

The successful outcome of local curriculum development efforts depends heavily on the support of various groups: teachers, administrators, members of boards of education, parents, students, health professionals and community agencies and leaders. Many

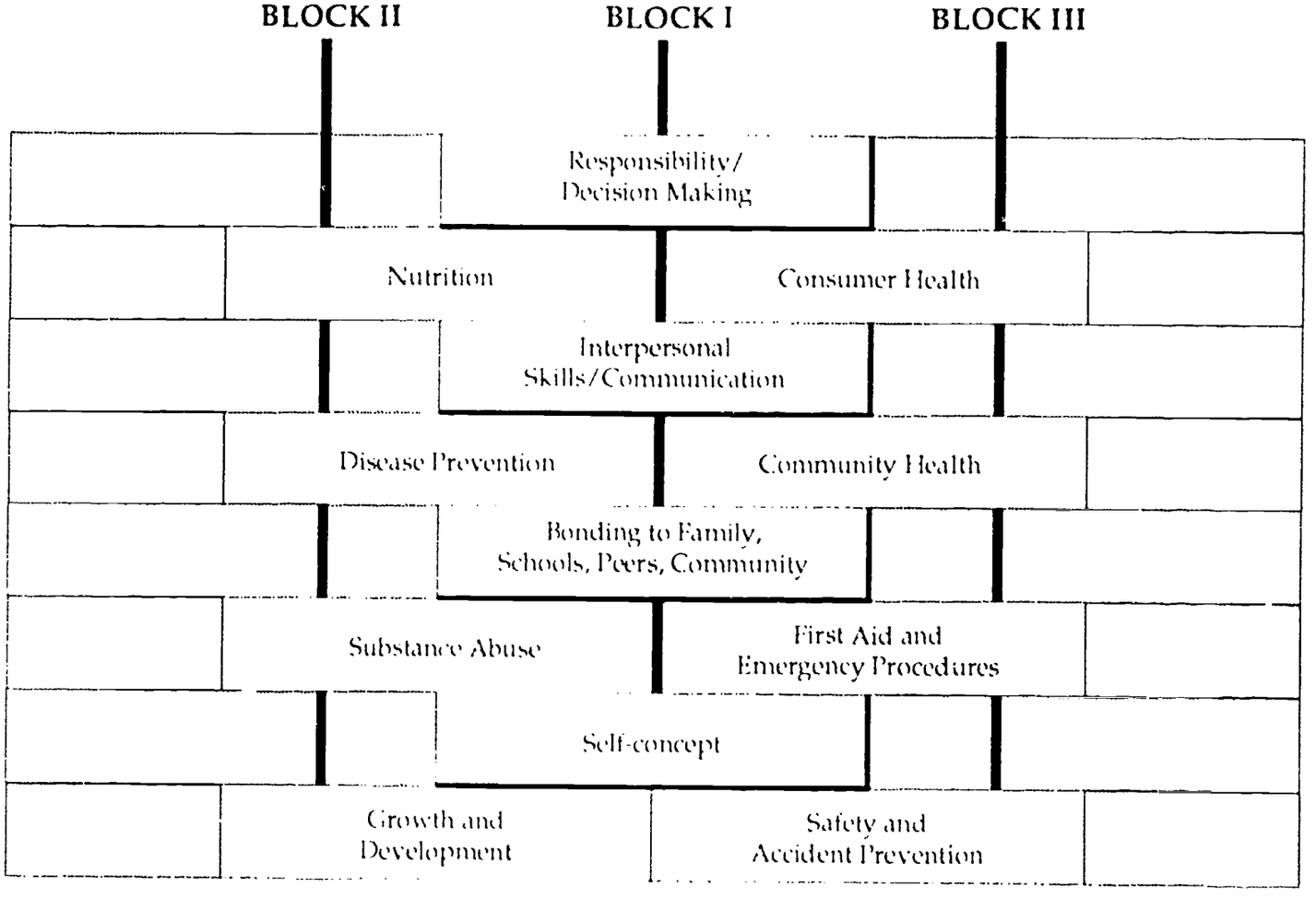

Figure 6

issues in health education are deemed controversial by some groups. One way to avoid unnecessary controversy or limitations imposed by these groups is to have the broadest possible base of community involvement in the curriculum development process.■

Integrating Topics

Before curriculum development can begin, educators must have a vision of what a comprehensive health and safety education curriculum looks like. Figure 6 on page 14 illustrates the interrelationship of Blocks I, II and III. If, for example, each topic were to represent a block in a wall, the closer the placement of the topics (blocks) the stronger the health and safety curriculum (wall) would be. The reverse, unfortunately, also is true.

With the understanding of what constitutes a well-developed, comprehensive health and safety curriculum, the actual task of curriculum development can be addressed.

The task of developing a comprehensive health curriculum might be accomplished in six major phases. Phases I through III represent the steps of the planning process and Phase IV consists of the actual development of the curriculum. Phase V involves reviewing materials, training staff, piloting materials and monitoring the implementation. Phase VI describes a variety of ways in which the curriculum might be evaluated to ensure the success of the program.■

CURRICULUM DEVELOPMENT PROCESS

The following flowchart outlines one possible model:

Phase I. Establishing a Curriculum Development Advisory Committee
Phase II. Planning
Phase III. Needs Assessment
Phase IV. Curriculum Development or Revision
- Step 1 – establish a working committee
- Step 2 – revise, review or develop a philosophy
- Step 3 – revise, review or develop goals
- Step 4 – select topics in health education
- Step 5 – select learning objectives for each topic by grade level
- Step 6 – identify educational resources

Phase V. Implementation
- Step 1 – advisory committee review
- Step 2 – community review
- Step 3 – internal review
- Step 4 – staff assignments
- Step 5 – staff development
- Step 6 – acquiring materials and resources
- Step 7 – pilot program
- Step 8 – monitoring the implementation

Phase VI. Evaluation
- Step 1 – evaluation of student performance
- Step 2 – evaluation of the overall program■

Phase I – Curriculum Development Advisory Committee

Selection of a broad-based curriculum development advisory committee for health and safety education is one way to achieve a participatory planning process which will lead to an effective and appropriate program. The committee should be large and diverse enough to address and complete the necessary tasks, and may include the following: central administrator, secondary administrator, elementary administrator, health teacher, social science teacher, science teacher, home economics teacher, physical education teacher, elementary education teacher, school nurse, school physician, special education teacher, social worker, parents, students and community leaders representing diverse backgrounds. This committee will provide the scope of health curriculum development, ensuring a comprehensive and sequential program.■

Phase II – Planning

Once the curriculum development advisory committee has been named, a broad plan of action and time line for completing the major tasks involved in curriculum development need to be established. Some important factors follow.

- Health and safety education must be offered in a planned, ongoing and systematic manner.
- At a minimum, for a program to be planned, it should have written goals and written learning objectives for the grades in which health and safety education is taught. To be ongoing, the learning objectives should evolve from grade level to grade level. For a health and safety education program to be systematic, it should be implemented equitably across each specific grade or course, e.g., all third grade students should receive instruction in the same agreed-upon learning objectives across each third grade classroom.
- The health and safety education curriculum must include, but is not limited to: human growth and development, nutrition, first aid, disease prevention, community and consumer health, and physical, mental and emotional health (including youth suicide prevention, substance abuse prevention and safety and accident prevention).
- In order to cover the required topics it is recommended that health and safety education be offered every year in Grades K-8. At the secondary level, health and safety education should be offered through a combination of units or courses in

Grades 9-12.

- Instruction must be given by teachers who are legally qualified health educators.
- The health curriculum should be appropriate for the age and developmental base of the students at each grade level in which health and safety education is taught.
- The curriculum should provide for students to learn and use the facts in Blocks II and III together with the concepts and skills in Block I (see Chapter 2), enabling them to make knowledgeable decisions regarding personal, family and community health problems.
- Sufficient financial support should be available to implement an effective health education program.

All of these assumptions must be evaluated as the committee plans or revises its comprehensive health education curriculum.■

Phase III – Needs Assessment

The next task facing the committee, therefore, is to assess what is already in place, and to determine what is needed. Teachers, administrators, students and community members all should be consulted. The information the committee gathers will reveal areas of duplication and unmet needs, gaps in programs, and other strengths and weaknesses. All of this information will serve to guide the committee in its curriculum development process.

There are many ways of collecting the necessary information, but checklists and questionnaires are excellent choices. The checklist in Work Sheet I might be used as a guideline to determine the extent of a district's existing health curriculum.

WORK SHEET I

Yes	No	
		Is written curriculum now available? (If the answer is yes, answer the following:)
		Has the curriculum been revised in the past five years?
		Does it reflect current trends in health education?
		Is it skill based?
		Is it multiculturally sensitive?
		Does it address the needs and concerns of students?
		Does the curriculum contain a written philosophy and set of goals?
		Do the goals reflect the philosophy?
		Do the learning objectives reflect the goals?
		Are learning objectives appropriate, developmental and sequential?
		Do the learning objectives reflect the topics identified in Blocks I, II and III?
		Do teachers at each grade level teach all of the stated learning objectives?
		Are appropriately certified educators teaching health?
		Do all special education students have learning objectives similar to those of regular education students?
		Are materials available to successfully teach the stated learning objectives?
		Does the curriculum reflect the areas of concern of parents and students?
		Have teachers received in-service training to update their skills and knowledge?
		Has the present curriculum been evaluated?
		Have all students been exposed to similar educational experiences prior to the start of Grade 12?

Questionnaires and surveys are useful not only to assess the present level of instruction, but also to determine the needs and concerns of teachers, parents, students and administrators. As a follow-up, certain selected individuals in these categories might be interviewed. Work Sheet II is an example of a survey that might be used.

WORK SHEET II
Teachers' and Administrators' Questionnaire

	Yes	No	Change Needed
1. Does the district have a designated school health curriculum for Grades K-12 inclusive?			
2. Do elementary teachers have a sufficient background in health content to provide adequate instruction?			
3. Are there ample in-service opportunities for teachers to upgrade their skills in health education?			
4. Are teachers with degrees in health education employed to teach health in Grades 7-12?			
5. Is there designated time for health instruction for Grades K-6?			

(Note: Other questions may be added as deemed appropriate.)■

Phase IV – Curriculum Development or Revision

When all necessary data are gathered, the curriculum development advisory committee should assess the information carefully. The results of the surveys and interviews will provide a great deal of information which will enable the committee to determine a course of action. Using this information, the committee now should decide either to revise the existing curriculum or develop a new one. Whether the committee needs to revise the existing curriculum, review commercial materials or develop new materials, the steps of the process will be the same.

Step 1 – Establish a working subcommittee. In order to develop a comprehensive health education curriculum in a time-efficient manner, it is appropriate to establish a working subcommittee of the curriculum development advisory committee. Ideally, this subcommittee should be composed of 5 to 10 subject matter and pedagogy experts. Individuals who should be considered for appointment to the subcommittee include school nurses; teachers certified in health, science, elementary education or home economics; and guidance personnel. Help from other specialists in the areas of social work, special education and administration also may be desirable.

Step 2 – Revise, review or develop a philosophy of health education. The philosophy statement should reflect current research trends in health education, community values and the needs and concerns of both children and adults (see Chapter 4). The philosophy also should be consistent with the school district's general educational goals and/or mission.

Step 3 – Revise, review or develop goals for health education. Chapter 4 outlines the process necessary to develop appropriate goals for the program.

Step 4 – Select topics in health education. The topics selected by the subcommittee should reflect a broad-based approach to health education. Chapter 5 outlines the topics which should be taught as well as two different models for organizing the curriculum.

Step 5 – Select learning objectives for each topic. The subcommittee may wish to review Chapters 6 and 7, which outline risk factors, positive outcomes and negative consequences, and the associated learning objectives for key topics. Learning objectives should reflect the needs assessment and philosophy and goals of the program, and should respond to the risk factors in the community. Ultimately, learning objectives should teach students basic health and safety information that is integrated with the skills, attitudes and attributes, so that students will learn to think critically and develop into healthy and responsible adults.

Step 6 – Identify educational resources. Selecting materials for health education programs can be a difficult task. Textbooks perhaps are not the best choice because they become outdated so quickly. There are, however, other commercially prepared programs and materials available which provide up-to-date information for the classroom. Some of these programs are excellent and can serve as a basis for the health curriculum (with some additions and modifications). The evaluation survey shown in Work Sheet III should help in the assessment of commercial curriculums:

WORK SHEET III
Curriculum Assessment

Yes	No	To Some Degree	
			Does the curriculum contain the topics selected by the committee?
			Does the curriculum have learning objectives for each topic that are knowledge, skill and behavior based?
			Is the curriculum culturally sensitive?
			Does the curriculum contain a variety of activities, including both affective and cognitive skills?
			Are the materials provided "teacher friendly"?
			Does the curriculum suggest appropriate or necessary in-service training for staff?

In most cases a commercially produced program will not meet all needs. If the committee does not find a program that reflects the needs of the community, activities for each learning objective should be developed and available resources identified.■

Phase V – Implementation

The implementation of a new or revised curriculum can be broken down into several distinct steps:

Step 1 – Advisory committee review. The advisory committee should have reviewed materials periodically throughout the curriculum development process. At this time, the entire committee should have an opportunity to review the completed document and make necessary revisions.

Step 2 – Community review. If the committee has followed a schedule and outline, then the opportu-

nity for community input probably has occurred throughout the planning and development stages. However, it often is useful to invite several parents, civic leaders and other community members to review the completed curriculum.

Step 3 – Internal review. Depending upon procedures within a district, Step 1 may occur after Step 2. In either case, it is important that the curriculum committee allow reasonable t.me and opportunity for administrators, teachers, students and board of education members to review the proposed curriculum.

Step 4 – Staffing. Budget and enrollment fluctuations may cause staffing for the health education program to become a serious problem. The optimal situation would be to have a full-time coordinator who is certified in health education. Failing that, a health education coordinator should be designated within the district and be responsible for identifying critical tasks and making recommendations to the administration. This appointment would depend upon the qualifications of the present staff and the district's financial resources to hire additional staff. In determining who will provide health education to students, the committee should keep the following certification requirements in mind:

- At the primary level, holders of an elementary certificate, endorsed in any of the K-8 grade levels; holders of a health certificate; or holders of a school nurse-teacher certificate may teach health and safety education. When a person holding a K-8 elementary certificate has the primary responsibility of teaching health and safety education, that person also must hold a health certificate.
- At the secondary level, holders of a health certificate or school nurse-teacher certificate may teach health and safety education.

Step 5 – Staff development. Despite the almost universal endorsement of comprehensive health education by national organizations and professional associations, very few classroom teachers are adequately prepared in this area. K-6 teachers carry the primary responsibility for health education during a child's critical early years. The curriculum development committee should plan staff development workshops that provide training for all affected personnel. For example, all staff members should be presented with an overview of the curriculum and should receive information on critical issues. All administrators should receive training on issues that may arise during implementation of the curriculum. Finally, teachers who are assigned to teach the new or revised curriculum should receive intensive training prior to implementation.

There are several issues or topics that often require special in-service training before a new health education curriculum is implemented. Included are:

- the school district's policies and procedures on substance abuse, sexual abuse and suicide;
- children of alcoholics and other substance abusers;
- suicide;
- AIDS;
- substance abuse patterns among youths and adults;
- sexual abuse;
- strategies for teaching sensitive issues;
- stress reduction techniques for teachers and students;
- enabling behaviors of schools and teachers; and
- techniques in group dynamics.

The committee should remember that regardless of the curriculum developed or selected, the effectiveness of the program will correspond with the level of training and effectiveness of the staff. One study shows that teacher training affected not only student achievement, but also the general success of implementing the health program (Trucker, 1988).

Step 6 – Acquiring the necessary materials and resources. Before a curriculum can be implemented, it is critical that all materials and other resources required to teach the program be acquired. These materials should immediately be made available to teachers, giving them adequate time for review and preparation.

Step 7 – Pilot program. If time and resources permit, a portion of the program should be piloted. A pilot program will enable the committee to provide for ongoing assessment of the new or revised curriculum. If this is not possible, the curriculum should be implemented with the knowledge that modification may be necessary after the initial start-up period.

Step 8 – Monitoring the implementation. After implementing the new or revised health education program, the curriculum committee must develop monitoring strategies. The specific criteria and procedures the committee develops will depend upon the individual district and committee. Regardless of how the committee monitors the implementation, there are several indicators that will help to assess whether the curriculum is being used consistently. Included are the following indicators:

- Lesson plans are based upon the learning objectives.
- Teachers use the "language" of the materials in their discussions.
- Material and supply requisitions reflect the curriculum.
- Teachers can be observed using the materials.
- Student assignments relate to curriculum topics, and grades are based in part upon attaining objectives.

- Ongoing staff development programs are provided.■

Phase VI – Program Evaluation

Evaluation of the health and safety curriculum is a significant component of the implementation process and should not be overlooked. It is essential that districts with fluctuating budgets, increasing pressures on the school day, and changing student and community needs plan ahead for the evaluation of their health and safety curriculums.

Step 1 – Evaluation of student performance. An important committee responsibility is providing the means for evaluating student performance in the domains of cognitive, affective and skill development objectives. Such an evaluation will enable teachers, administrators, health professionals and others to know how effectively the students are developing health-related knowledge, attitudes, skills and behaviors.

The committee should provide teachers with suggestions and sample tools for determining the levels of student performance in all three domains. Both objective and subjective assessments should include the following:

- pre- and post-tests to determine student knowledge, attitudes and skills related to health;
- student self-evaluation scales and surveys on health status and practices; and
- interviews and discussions (see Chapter 8).

Step 2 – Evaluation of the overall program. Evaluation of curriculum often is viewed simply as a measure of student gains in knowledge. As previously indicated, however, a well-developed health and safety curriculum should do more than teach students mere facts. It should enable students to develop skills, attitudes and attributes that will allow them to mature into healthy adults. It also should empower them to make wise decisions that will be reflected in their overall performances. Evaluation in the field of health and safety, therefore, must encompass a variety of modalities and reflect changes in a student's knowledge, attitudes and behavior. While pre- and post-tests can measure knowledge, the committee also should consider monitoring indicators such as:

- changes in attendance patterns;
- changes in numbers of visits to the school nurse;
- changes in academic conduct and grades;
- changes in numbers of suspensions and detentions; and
- changes in numbers of referrals to the planning and placement team (PPT) and the school social worker.

The local committee can use many different kinds of instruments to evaluate the program. These include checklists, interviews, rating scales, structured discussions, surveys and teacher-developed tests. Whatever instrumentation is decided upon, the curriculum committee should feel that its tasks are completed only when program evaluation plans are established. Chapter 8 presents more detailed information on program evaluation.

Health and safety education can have an impact on students in many ways beyond merely increasing their knowledge base. It is important, therefore, that curriculum committees also review:

- the school district's policies on substance abuse, sexual abuse and suicide;
- role models established by school personnel;
- questionable school practices, such as smoking on school grounds, candy sales and the prevalence of "junk food" in the cafeteria;
- the extent of library resources in the field of health and safety;
- parenting programs; and
- health behavior enrichment activities.

This chapter has outlined the step-by-step process necessary to develop a comprehensive health and safety education curriculum. Other aspects of curriculum development will be discussed in future chapters of this guide.■

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PHILOSOPHY AND GOALS 4

> *"The philosophy of one century is the common sense of the next."*
> – Henry Ward Beecher

Program Philosophy
Program Goals

One of the first tasks facing members of a district's curriculum development advisory committee is to formulate a philosophy and a set of broad program goals. Both should reflect and be consistent with the overall philosophy and goals of the school district. This statement of philosophy, together with the program goals, will give direction and serve as a reference for those responsible for planning, implementing and evaluating the curriculum.■

Program Philosophy

A statement of philosophy clarifies the direction for the curriculum development effort. The philosophy provides a frame of reference from which to develop or revise a curriculum and articulates the vision educators have of what is essential for children to learn in order to develop into healthy, productive adults. In developing a philosophy, Bedworth and Bedworth (1978) suggest that a sound philosophy of health education is one that contains a high degree of pragmatism, seasoned generously with idealism. They see the philosophy statement as the cable that binds theory and practice, and as being of value only if it results in practices which affect the health-related behaviors of students.

It has been suggested that a philosophy statement takes a vision of what should be and translates it into words that ignite the imagination and inspire the layperson. The following are two excellent examples:

- ... ask not what your country can do for you; ask what you can do for your country.

  – John F. Kennedy
- I have a dream...we will be able to transform the jungling discord of our nation into a beautiful symphony of brotherhood.

  – Martin Luther King, Jr.

While these examples from history do not relate directly to health education, they embody the spirit of what constitutes a meaningful philosophy statement. In the course of composing a philosophy statement, the curriculum development advisory committee might consider the following questions:

- What multicultural values exist in the community?
- What attitudes, attributes, skills and knowledge should children have?
- What role can schools play in transforming children into productive citizens?
- What role can schools take in protecting and intervening in children's health?

Another approach to writing a philosophy statement is suggested by Hamburg (1968) and includes the following points:

- Good health is a means to any goal that everyone strives to achieve.
- Health is a dynamic, not a static quality and, therefore, depends upon continuous, lifelong behavior.
- Scientific advances with significance for maintaining and improving health occur at a phenomenal rate. Learning, therefore, is an important ongoing process.
- Schools can provide the educational leadership for a health curriculum which can be structured and implemented so as to maximize the understanding and appreciation of health's personal relevance.

Each local committee will develop a statement of philosophy from its own perspective. The important point is that committee members agree upon a written statement that will guide their work in curriculum development. The following is an example of a model philosophy statement:

> Health and safety education is a multidimensional, multifaceted discipline. It encompasses a range of nuances that aim to create in students a repertoire of knowledge, attitudes, attributes and skills that will allow them to become healthy, productive citizens. Health fosters a child's belief in himself/herself, provides the child with skills to function in a multicultural, diverse world, and teaches the child behaviors that will promote a healthy lifestyle now and in the future.■

Program Goals

The next step is to make the philosophy statement concrete with specific and realistic goals. Program goals may be expressed in terms of the curriculum itself or in terms of student performance. In developing curricular goals, the committee should consider state and federal legislative guidelines for health education, student health needs in a particular community, multicultural values expressed by a community and standards advocated by professional organizations (Nelson, 1986). It also should "provide for consistent educational progression throughout the child's school years and horizontally for a pattern of teaching/learning experiences which will contribute to the social and personal development of the child" (Hanlon and McHose, 1971).

Figure 7 on page 23 organizes the information required to develop appropriate goals.

Determining The Desirability Of School Health Goals

Questions	Sources of Information	Method for Collecting Information
1. What presently are the health goals of the district?	Current school curriculum, services, policies, activities	Describe current goals and efforts in school health.
2. What do regulatory mandates require that we do?	State administrative agencies, including health and education departments	Review regulations and guidelines in consultation with state and local regulatory and service agencies.
3. What student health needs should be addresssed by the district?	Local, state and federal agencies of vital and health statistics	Contact state and local agencies for reports of mortality and health problems of students.
4. What does the community say we should be doing?	Parents, community members, students and school personnel	Survey health-related priorities for the school, schedule focus groups or public hearings to discuss issues and priorities.

Figure 7

The goals developed should reflect the cognitive, affective and psychomotor domains of learning:

- Cognitive – goals that describe what knowledge or information students will learn.
- Affective – goals that address the development of appropriate attitudes. These should be culturally sensitive, reflecting the values of society in general and the local community in particular.
- Psychomotor – goals that establish or reinforce specific behaviors.

The following are three examples of goal statements:

- Students will acquire the knowledge that enables them to become healthy and productive citizens.
- Students will develop the necessary attitudes and attributes that enable them to become healthy, responsible and productive adults.
- Students will evaluate their behavior in relation to risk-taking activities and develop strategies to avoid "risky" behavior.

After writing the goal statements, the curriculum committee should review each goal by asking the following questions:

- Are the goals mutually exclusive?
- Do they cover all major areas consistently?
- Are they written with equivalent levels of detail?
- Are the goals multiculturally sensitive?
- Do the goals address the three areas of acquiring knowledge (cognitive – describing what knowledge or information is to be learned; affective – developing appropriate attitudes and attributes; and psychomotor – establishing or reinforcing healthy behaviors)?

Finally, the curriculum development advisory committee should review its philosophy statement and goals for health education to ensure that they are consistent.

Whether a committee chooses to develop a few broadly stated goals or a more detailed list, program goals will give direction for further curriculum development. The statement of philosophy and goals will articulate a clear expression of why health education is essential in the public schools and what it attempts to accomplish. It also will assist in encouraging more positive attitudes and participation on the part of both school health professionals and community members. A statement of well-developed and articulated goals is the backbone of a quality and comprehensive health education program.■

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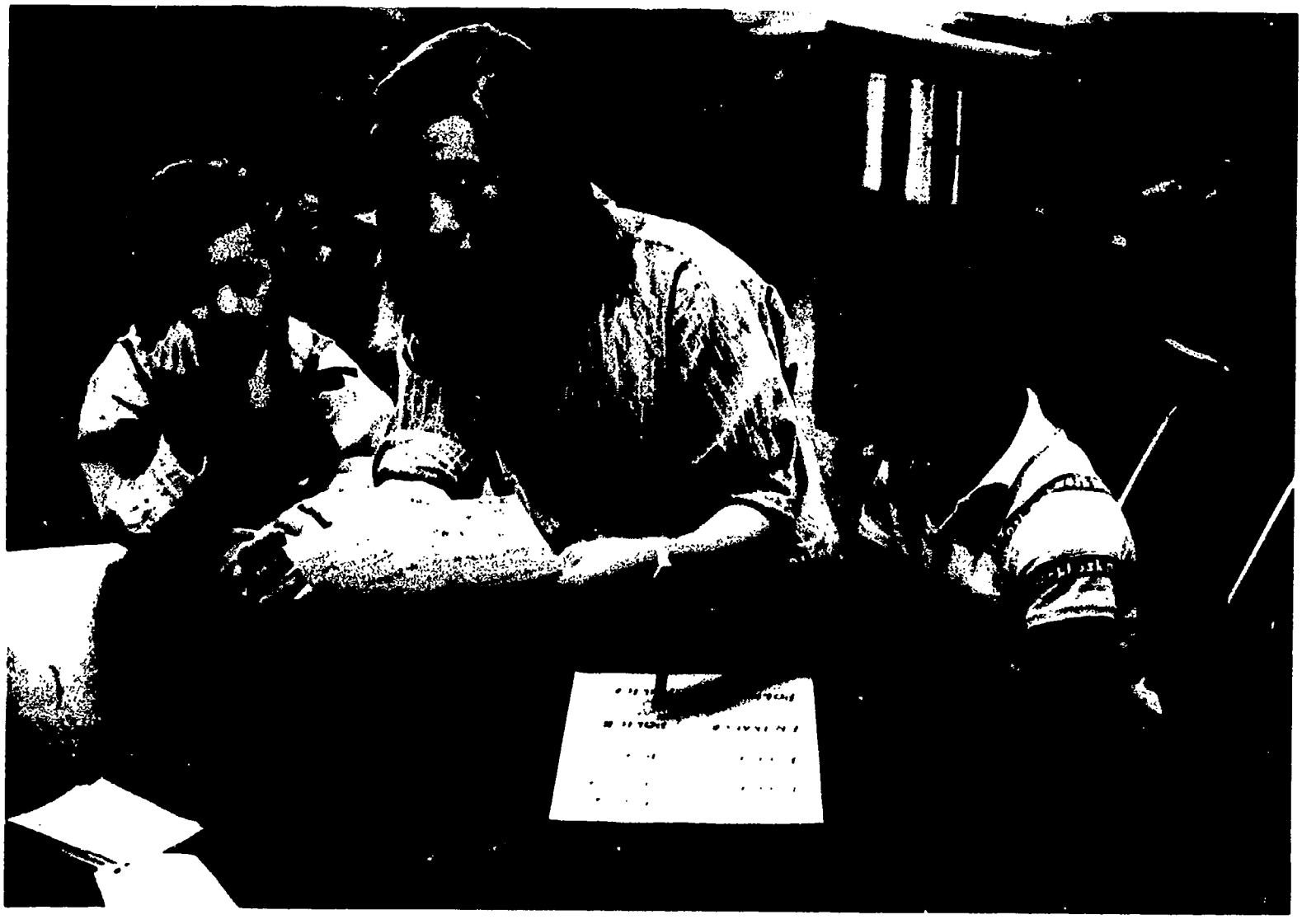
ORGANIZATION OF TOPICS 5

> *"I merely leap and pause."*
> – Vaslav Nijinsky

Alternative Models
Work Sheet On Mandated Topics



Organizing and integrating the comprehensive health and safety curriculum into a school program can be a challenging task. The nature of the community, size of the school district and staff, availability of resources, and the existing health program are variables which can affect the process. It is important to consider all of these variables in deciding how health will be taught as a self-contained, integrated program.

Historically, many Connecticut schools have attempted to teach health education by infusing specific learning objectives or topics into other curriculums, such as science, social studies and physical education. The effect of alcohol on the liver, for example, might be taught in biology; the decision-making process in psychology; and the dangers of driving after drinking in drivers' education. In this fragmented method of teaching health, there is no means of establishing the interrelatedness of the objectives. To encourage effective decision-making processes and basic awareness, students should be taught the knowledge, skills and attitudes together in a comprehensive health and safety curriculum. Although health education can be reinforced by addressing specific concepts in other curriculums (see Chapter 10), it is critical that the basic components of health be taught as an integrated course consisting of separate and distinct topics.■

Alternative Models

Two alternative models have been developed in order to facilitate the process of integrating health and safety education in the overall curriculum.

Model A. Blocks I, II and III (described in Chapter 3) are organized in Model A as integrated components and are taught as a single, distinct course to all students in Grades K-12 each year. This is the preferred method of offering a comprehensive health and safety curriculum. Studies by Connell, Turner and Mason (1985) and others have shown that when 50 lessons of comprehensive health are taught, students' knowledge, attitudes and behaviors are affected in a positive way. Curriculum committees, therefore, should carefully consider adoption of this model. If this is not possible, committees should – at a minimum – review strategies that might make a comprehensive health and safety curriculum a reality in the future.

Model B. The topics in Blocks I and II are integrated into a core program in Model B consisting of 20 to 40 lessons taught yearly to all students in Grades K-12 by qualified and trained educators. The topics in Block III are taught periodically at developmentally appropriate stages, and can be integrated into other relevant curriculums or taught by community experts. The material from Block III should consist of from 10 to 30 lessons per year.

A health and safety program based upon Model B may allow for greater flexibility within the school system and serve as an intermediate stage in the curriculum development process. Using this model, educators are able to concentrate on several interrelated core concepts and use other educators or local experts to cover topics at appropriate times. Other courses, such as science, physical education, social studies, home economics and language arts, may incorporate topics from Block III.

Committees should be aware that this model does have drawbacks. By separating the learning objectives in Blocks I and III, students may not realize the interrelationship of the skills and knowledge. As with any model that allows the infusion of specific learning objectives into other curriculums, some learning objectives may be inadequately addressed or even omitted.

The following checklist may be used to assist a curriculum committee in deciding which model is most appropriate for its own school district.

To use Model A, a school district should have:

- certified health educators (K-12) on staff or the financial resources to hire them;
- certified educators at the high school level to teach a health course, and elementary educators trained to teach health within their classrooms;
- time available to teach 40 to 50 lessons annually; and
- the ability to provide sufficient in-service staff training.

To utilize Model B, a school district should have:

- a well-trained staff with the skills to integrate the health education program on the elementary level;
- trained elementary classroom teachers who are responsible for the overall health curriculum but who utilize "experts" to teach specific topics;
- a well-trained staff on the secondary level that is able to incorporate Block II topics as distinct units into pre-existing courses, or a certified health teacher on the secondary level to teach a core program and infuse other health topics in pre-existing courses; and
- the ability to provide adequate in-service training to all staff members.

Figures 8 and 9 on page 28 illustrate instructional approaches for the elementary and secondary levels, using Model B.

If the committee determines that Model B is the best model to serve students within the district, it is

essential that it determine what topics from Block III will be taught at each grade level and what topics will be infused into other existing curriculums.

In either case, it is important that the committee make provisions for all students, including students who are not mainstreamed, to receive the information covered in the identified topics.

Work Sheet IV is designed for committees that may wish to organize the topics covered in Model A by grade level.

Work Sheet V is designed for committees that may wish to organize the topics covered in Model B by grade level.

WORK SHEET IV

Model A	Topics	Materials	Instructor/Course
Grade			
K			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

WORK SHEET V

Model B	Topics	Materials	Instructor/Course
Grade			
K			
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

GRADE 3 HEALTH AND SAFETY INSTRUCTIONAL APPROACHES

Model B Topics	Materials Used	Instructor/Course
BLOCK I		
Bonding Self-Concept Communication Skills Responsibility	purchased, skilled-based materials	guidance counselor
BLOCK II		
Nutrition	resource materials	classroom teacher
Substance Abuse	commercial program with teacher-generated activities	police officer and classroom teacher
Disease Prevention	teacher-generated materials	classroom teacher and school nurse
Growth and Development	textbook	classroom teacher
BLOCK III		
Accident Prevention	fire department materials	fire department personnel and classroom teacher
Consumer Health	teacher-generated materials	school physician

Figure 8

GRADE 10 HEALTH AND SAFETY INSTRUCTIONAL APPROACHES

Model B Topics	Materials	Instructor/Course
BLOCK I		
Interpersonal Skills Bonding Communication Skills Decision Making	purchased materials	health teacher (mandatory class)
BLOCK II		
Nutrition	resource materials	health teacher (mandatory class)
Substance Abuse	teacher-generated activities and purchased materials	health teacher (mandatory class)
Disease Prevention	resource materials	health teacher (mandatory class)
Growth and Development	teacher-generated materials	health teacher (mandatory class)
BLOCK III		
First Aid and Emergency Procedures	resource materials	physical education teacher (mandatory class)
Community Health	textbook	biology teacher (mandatory class)
Consumer Health	textbook and teacher-generated materials	social studies (elective)

Figure 9

After determining which curriculum model is appropriate for its school district, the curriculum committee should consider the following issues:

- state and federal legislation (see Work Sheet VI and Appendix C);
- local resources, including available trained staff, funding and existing curriculums or texts;
- time available for health education; and
- needs of the students as identified by students, parents, school personnel and leading researchers.

With careful planning the committee can ensure that the curriculum to be developed is well organized and appropriate for all students across the grade levels.

Work Sheet VI has been developed to help committees ensure that all topics mandated by Section 10-16b of the *Connecticut General Statutes* are offered.■

Reference

Connell, D.B.; Turner, R.R.; and Mason, E.S. "Summary of Findings of the School Health Education Evaluation: Health Promotion, Effectiveness, Implementation and Cost." *Journal of School Health*, 1985 55(8): 316-321.

WORK SHEET VI

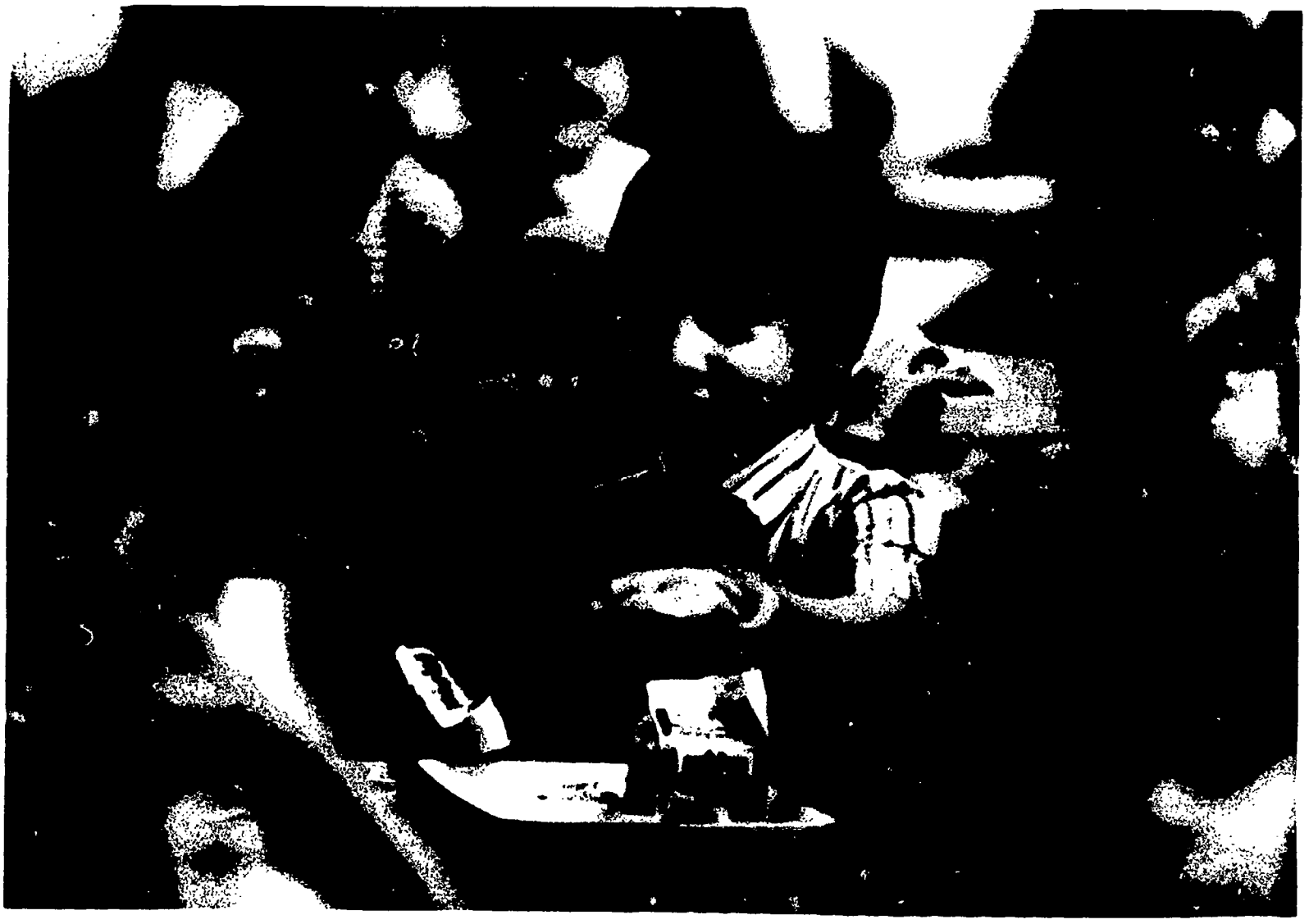
TOPICS IN HEALTH
(Mandated by Sec. 10-16b of the *Connecticut General Statutes*)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Substance Abuse													
Nutrition													
Human Growth and Development													
Disease Prevention													
First Aid, Safety and Accident Prevention													
Consumer Health													
Community Health													
Mental and Emotional Health and Youth Suicide													
Physical Fitness													
Family Life (optional)													

LEARNING OBJECTIVES: A PROCESS 6

"Education is what survives when what has been learnt has been forgotten."
– B.F. Skinner

Establishing A Rationale
Developing Objectives
Integrating Objectives



Once the subcommittee has identified the topics to be taught at each grade level, the next step is to develop specific learning objectives for each topic. The subcommittee should select and develop objectives that are skill based, sequential, developmentally appropriate and multiculturally sensitive. A carefully and appropriately developed curriculum will provide maximum flexibility to reflect the challenges and responsibilities presented by new discoveries, changing knowledge and developing trends in the field of health.

Developing the appropriate learning objectives can be accomplished through the following three-step process:

- Step 1 – Establish a rationale for selecting objectives.
- Step 2 – Develop learning objectives that evolve from grade to grade.
- Step 3 – Integrate learning objectives into the program.■

Establishing A Rationale

The first step is to establish a rationale for selecting learning objectives. One approach is to apply a model used successfully by the American Heart Association. In this model, risk factors that lead to (heart) disease are identified, and then educational promotions are developed around each factor. This approach also has been successful in the field of substance abuse prevention.

David Hawkins' research at the University of Washington has identified risk factors that lead to drug abuse. *Here's Looking at You, 2000*, a commercially developed drug abuse prevention curriculum, has used this model to develop lessons that address risk factors that lead to drug abuse. Preliminary evaluations of this program show that these lessons, which attempt to address specific risk factors, have resulted in predictable positive behaviors and attitudes (Hawkins and Catalano, 1988).

In using this model, a subcommittee should involve health experts to help identify specific risk factors that place students at greater risk for developing poor health or poor health habits. Members then should identify specific risk factors at work in their own community.

To aid committees in this process, the following outline has been developed for the four major topics in Block II. This list includes many, but not all, of the key risk factors identified by health experts for each topic. The negative consequences that may result from the risk factors and the positive outcomes that should result from a good health education program also are provided.

Substance Abuse Prevention

Risk Factors

- family history of alcoholism
- family history of antisocial behavior
- early antisocial behaviors and hyperactivity
- parental drug use and positive attitudes toward use
- academic failure
- little commitment to school
- alienation, rebelliousness and lack of social bonding
- favorable attitudes toward drug use
- early first use of drugs

Potential Negative Consequences

- chemical dependency
- academic failure
- truancy, dropping out
- accidental trauma and/or premature death
- suicide
- premature parenting
- lack of coping skills development
- addicted babies
- fetal alcohol syndrome
- antisocial behavior
- criminal activity

Potential Positive Outcomes

- increased self-esteem
- prevention of chemical dependency
- increased probability of academic success
- development of healthy coping skills
- increased ability to make healthy decisions
- increased ability to achieve full potential as an adult
- reduced risk of premature death
- reduced risk of permanent injury

Communicable and Noncommunicable Diseases

Risk Factors

- family history or ethnic susceptibility to disease, e.g., heart disease, sickle cell anemia
- dysfunctional family systems
- language barriers
- lack of health care
- lack of community resources
- lack of financial resources

- lack of knowledge of and access to community resources
- poor nutritional status

Potential Negative Consequences

- poor self-image
- vulnerability to disease
- participation in potentially harmful behaviors
- low school achievement
- truancy and dropping out
- depression and suicide
- irresponsible behaviors which may lead to life-threatening diseases, e.g., AIDS
- feelings of alienation
- inability to cope and make appropriate health decisions
- increase in school absences
- inability to accept individuals who are different, e.g., people with AIDS and other diseases or disabilities

Potential Positive Outcomes

- increased self-esteem
- establishment of lifelong positive health behaviors
- development of coping skills
- improved academic performance
- increased ability to cooperate and work with peers and others
- acceptance of individuals who are different
- reduced risk of premature death
- reduced illness
- prevention of transmission of diseases, including sexually transmitted diseases and AIDS
- avoidance of "risky" behaviors that may lead to disease
- increased school attendance

Human Growth and Development

Risk Factors

- family history or ethnic susceptibility to disabilities and diseases
- dysfunctional family systems
- language barriers
- lack of health care
- lack of community resources
- lack of financial resources
- lack of knowledge of community resources
- lack of sex education at home and/or school
- violence on television or in community

Potential Negative Consequences

- poor self-image
- vulnerability to disease, disability and premature death
- participation in potentially harmful behaviors
- increased risk of premature parenting
- development of stress-related conditions
- low school achievement
- truancy and dropping out
- depression and suicide
- feelings of alienation
- inability to cooperate with individuals who are different, e.g., people with disabilities

Potential Positive Outcomes

- increased self-esteem
- establishment of lifelong positive health behaviors
- empowerment
- improved academic performance
- prevention of injury
- avoidance of "risky" behaviors
- acceptance of changes that occur during adolescence and over a lifetime
- development of self-control
- acceptance of individuals who are different
- reduced risk of premature pregnancy
- knowledge of support systems within the family and community
- ability to delay gratification

Nutrition

Risk Factors

- lack of financial resources
- poor role models
- lack of education
- limited quality and variety of foods
- ethnic patterns
- food choices that may lead to heart disease, cancer and other preventable diseases
- availability of "junk food"

Potential Negative Consequences

- low self-esteem
- poor health
- tooth decay
- malnourishment
- stunted growth and development
- poor physical performance

- development of eating disorders, e.g., anorexia, bulimia, obesity
- increased risk of cancer, heart disease, hypertension, iron deficiency anemia and osteoporosis in adulthood
- hyperactivity and depression

Potential Positive Outcomes

- achievement of appropriate growth and development
- maintenance of "ideal" weight
- consumption of a balanced diet
- decreased risk of nutrition-related diseases
- selection of food based on nutrition knowledge rather than on peer influence
- consumer awareness of labeling
- ability to assess the nutritional value of individual diet
- increased self-esteem

After reviewing the risk factors, negative consequences and pc .ive outcomes for the Block II topics, the subcommittee should consider the following questions:

- What specific factors place students at greater risk for developing poor health or poor health habits in our community?
- What specific positive outcomes are expected or desired from teaching students about each health topic?
- What specific negative consequences can be avoided by teaching students specific health topics?

While this framework can provide the starting point for developing a health curriculum, each local committee will need to design a program that best utilizes the resources and meets the needs of its own community. Work Sheet VII has been developed to assist committees in identifying specific risk factors, negative consequences and positive outcomes for their own communities.■

Developing Objectives

Having established the rationale for selecting learning objectives, the curriculum subcommittee now is ready to develop the objectives. Chapter 7 outlines learning objectives for each topic identified in Blocks I, II and III. School committees may select learning objectives from these pages or develop their own.

It is important to develop learning objectives that reflect the cognitive, affective and psychomotor domains of learning. Cognitive objectives are measurable and help the student to develop critical thinking skills. The following is a summary of Bloom's taxonomy (Bloom, 1956) for use by committees in developing learning objectives in the cognitive domain:

- **Knowledge** – Students will be able to identify and list logical, concrete concepts.
- **Comprehension** – Students will be able to describe and explain.
- **Application** – Students will be able to compare ideas and concepts, and develop their own models.
- **Analysis** – Students will be able to criticize and evaluate.
- **Synthesis** – Students will be able to integrate a number of concepts and, in so doing, will develop new ideas for themselves which can be used in other situations.

WORK SHEET VII

Risk Factors for This Community	Negative Consequences to be Avoided	Positive Outcomes Desired
Nutrition		
Substance Abuse		
Disease		
Growth and Development		

Whether a curriculum committee uses Bloom's taxonomy or others, it is very important that learning objectives be developmentally appropriate and reflect the increasing intellectual maturation of students. Learning objectives also should be developed which address the affective domain. These objectives reflect feelings and attitudes, and help to develop attitudes, attributes and skills rather than knowledge. Krathowohl's taxonomy (Sergiovanni, 1984) suggests one approach to ensure that learning objectives address the affective and psychomotor domains. The following are examples of Krathowohl's taxonomy:

- **Receiving** – Students will be able to appreciate others' attitudes and share their feelings.
- **Responding** – Students will be able to listen and give appropriate answers to one another.
- **Valuing** – Students will be able to assign an importance to a feeling or behavior.
- **Organizing** – Students will be able to develop and systematize their feelings and behaviors.
- **Characterizing** – Students will be able to describe and act out certain behaviors through, for example, role-playing activities.

In order to facilitate the development of learning objectives, Chapter 7 should be consulted for outlines of each topic in Blocks I, II and III. Whether local committees use these learning objectives or develop their own, the objectives should be clear, concise and measurable. Terms such as "children shall know or understand" should be avoided. It is important that the objectives be sequentially and developmentally appropriate, that they address the specific needs of the children in their communities and that they evolve from grade level to grade level.■

Integrating Objectives

Having examined risk factors and explored positive outcomes and negative consequences, the curriculum subcommittee now should consider how knowledge, skills and attitudes can be integrated into learning objectives in an effective and meaningful way. The examples in Figure 10 illustrate two complementary aspects of a working model.

In using the Figure 10 model to develop effective learning objectives for a particular topic, curriculum committees should use Work Sheet VII on page 34, listing the risk factors known for their communities, the negative consequences they wish to avoid and the desired outcomes for students. With this they will be ready to select and develop learning objectives that provide their students with both the knowledge and skills required to avoid the negative consequences and to achieve the desired positive outcomes.

Work Sheet VIII on page 36 can assist committees in selecting and developing learning objectives for each topic (the topic used is Substance Abuse and the example, Grade 3).

When the learning objectives for each topic have been selected, the following questions might be used to evaluate the resulting curriculum:

- Are the cognitive, affective and psychomotor domains adequately represented in the learning objectives?
- Are the skill-based activities (those which foster decision-making abilities and self-esteem) linked with knowledge-based objectives?
- Are the learning objectives sensitive to multicultural and community issues?
- Are the selected objectives sequential, evolving from grade level to grade level?
- Are the learning objectives developmentally appropriate – presented to students before they need them in order to make appropriate decisions?
- Are student risk factors being considered?

The learning objectives developed according to this three-step process will constitute a sequential, meaningful and comprehensive health curriculum. The major point of this model for developing learning objectives is to create a curriculum that addresses major health issues confronting our children today, and to ensure that it achieves positive outcomes.

Risk Factors	+	Knowledge Objectives	+	Skill Objectives	=	Outcome
Risk Factors	+	Knowledge	+	Skills	=	Positive Consequences
Risk Factors	+	Inadequate Knowledge	+	Lack of Skills	=	Negative Consequences

Figure 10

WORK SHEET VIII

Learning Objectives

TOPIC: Substance Abuse

	Knowledge Base	Attitude/Attribute	Skill
GRADE			
K			
1			
2			
3	List the effects of alcohol on the body.	Brainstorm ways of staying out of trouble.	Practice assertiveness skills.
4			
5			
6			
7			
8			
9			
10			
11			
12			

References

Bloom, Benjamin S., editor. *Taxonomy of Educational Objectives*. New York: David McKay Company, Inc., 1956.

Hawkins, J. D., and Catalano, R. F. *Preparing for the Drug-Free Years*. Seattle, WA: Developmental Research and Programs, Inc., 1988.

Sergiovanni, Thomas J. *Handbook for Effective Department Leadership*. Newton, MA: Allyn and Bacon, 1984.

Resource

Here's Looking At You, 2000. Comprehensive Health Education Project, 20832 Pacific Highway South, Seattle, WA 98198.

SELECTING LEARNING OBJECTIVES 7

"Too often we give children answers to remember rather than problems to solve."
– Roger Lewin

BLOCKS I, II AND III

Kindergarten-Grade 3
Grades 4-6
Grades 7-9
Grades 10-12

This chapter is designed to assist local school districts in the selection of appropriate learning objectives for topics in Blocks I, II and III. The information provided is based upon the model for developing learning objectives described in Chapter 6.

Identifying the desired positive outcomes for each topic gives a focus for effective teaching strategies. Similarly, targeting and recognizing negative consequences provide indicators for the behaviors that can be avoided if appropriate knowledge, skills and attitudes are taught. For example, if good nutrition is the desired positive outcome, then the learning objectives in this topic should ensure that students know what nutritious foods are, as well as how to choose them. In this manner, the curriculum development committee can ensure that learning objectives address the desired positive outcomes.

Learning objectives for topics in Blocks I, II and III are grouped according to the grades (3,6, 9 and 12) by which they should be accomplished. By the third grade, for example, students are expected to have mastered the skills and learned the information outlined for group K-3. The curriculum committee should decide how and when the learning objectives should be taught for each grade group. This decision will be based upon the configuration of the schools in the district, the student population and school resources, and should reflect the directives of the district's board of education. For example, one school district may choose to distribute information about disease prevention over Grades 1, 2 and 3. Another school district may offer all of this information in Grade 3. In either case, the districts will have completed the learning objectives listed for this topic by Grade 3. Figure 11 illustrates the point.

It is important that this plan be both developmental and sequential. For example, it is assumed that learning objectives for Grades K-3 form the foundation from which learning objectives in Grades 4-6 must evolve. For each age group, the objectives must be developmentally appropriate.■

BLOCK I

Block I (pages 39-43) consists of the following skills, attitudes and attributes that all students need to develop in order to become healthy, productive citizens:

- Self-concept
- Responsibility and decision making
- Interpersonal skills/communication
- Bonding to family, school, peers, community

These topics formerly were included under the single topic of mental and emotional health and, as such, were primarily knowledge – rather than skill – based. This collection of topics is relevant to and supports every topic area in Blocks II and III in a skill-based relationship. Topics for all three blocks were developed for this guide by a statewide advisory committee and were reviewed by experts in their respective fields.

It is important for committees to note, however, that these learning objectives may not be inclusive or sequenced properly for each district, school or classroom situation. They are presented as a framework for curriculum committees to use in developing health and safety curriculum objectives appropriate for their districts.■

BLOCK II

Block II (pages 44-49) consists of four topics of essential knowledge-based information, each of which should be addressed yearly in an established health program:

- Nutrition
- Growth and development
- Disease prevention
- Substance abuse■

BLOCK III

Block III (pages 50-53) consists of six topics of related knowledge-based information which can be taught yearly or at appropriate developmental stages. These topics can be included in an established health program or infused into other appropriate curriculums.

- Consumer health
- First aid and emergency procedures
- Safety and accident prevention
- Community health

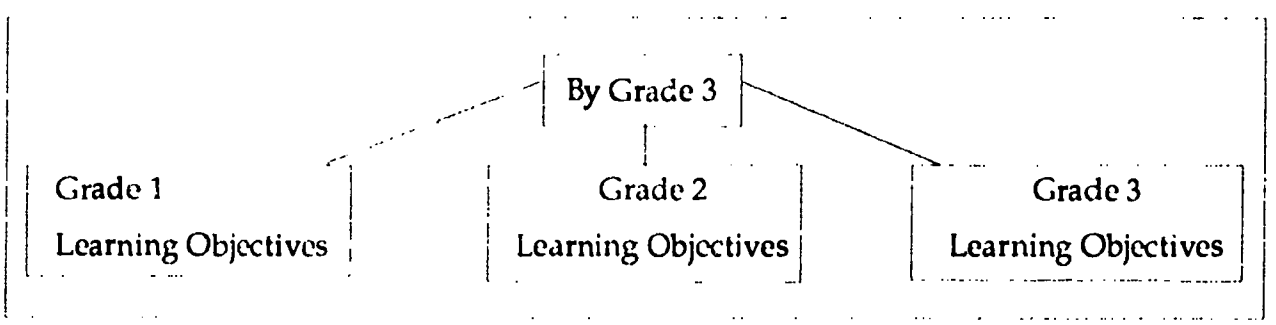


Figure 11

BLOCK I

SELF-CONCEPT

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Accept that they are worthy of care and consideration;	• Appreciate that they are worthy of care and consideration;	• Respond to others in a manner that reflects that they are worthy of care and consideration;	• Respond to others in a consistent manner, valuing all individuals from diverse backgrounds;
• Accept that they are lovable and capable;	• Appreciate that they are lovable and capable;	• Remember that they are lovable and capable;	• Internalize that they are lovable and capable;
• List examples of positive and negative feelings; and	• Identify positive qualities in themselves and others;	• Practice positive self-talk;	• Accept themselves as unique individuals with strengths and weaknesses; and
• Describe appropriate ways of expressing positive and negative feelings.	• Identify ways to enhance their strengths and minimize their weaknesses;	• Identify strategies for enhancing their self-image;	• Appreciate the uniqueness of others.
	• Practice behaviors that enhance their self-image; and	• Evaluate personal behaviors that may hurt themselves or others;	
	• Practice expressing feelings appropriately.	• Give and receive constructive feedback; and	
		• Examine the relationship between individual behavior and others' perceptions of that behavior.	

RESPONSIBILITY AND DECISION MAKING

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• List ways to ask adults for help in making appropriate choices;	• Recognize that an individual has choices;	• Analyze the role the mass media play in individual decision making;	• Internalize the decision-making process;
• Brainstorm ways of dealing with problems;	• Identify the role peers play in decision making;	• Practice the decision-making process in everyday life; and	• Accept responsibility for the effect their behavior may have on others;
• List ways to stay out of trouble; and	• Identify the steps in the decision-making process;	• Identify short- and long-term consequences of behavior.	• Analyze short- and long-term consequences of their own behavior; and
• Recognize that all behaviors result in consequences.	• Role play decision making; and		• Consistently resist negative peer pressure.
	• Accept the consequences of their own behavior.		

INTERPERSONAL SKILLS/COMMUNICATION

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Practice positive ways to ask for what they want from peers and adults;	• Practice assertiveness skills;	• Be assertive when appropriate;	• Make "I" statements;
• Practice ways to ask for help from adults;	• Identify resources for help within the family, school and community;	• Distinguish between reliable and unreliable sources of information;	• Consistently give praise to peers;
• Demonstrate appropriate ways of expressing positive and negative feelings;	• Ask adults for help;	• Recognize when adult help is needed, e.g., potential suicide, drug involvement;	• Give constructive criticism to others when appropriate;
• Demonstrate assertiveness skills;	• Demonstrate verbal and nonverbal communication skills;	• Ask for help for themselves and others when problems that require adult help occur, e.g., potential suicide;	• Recognize and accept that adult help may be needed in specific circumstances, e.g., potential suicide, drug involvement;
• Say "NO" to friends when appropriate, in a way that will not hurt their feelings; and	• Practice expressing positive and negative feelings in an appropriate manner;	• Identify positive ways of gaining attention;	• Develop a plan for whom to contact, what to do and how to get help for a friend who potentially may be suicidal, drug involved or have a serious emotional or physical problem;
• Say "please" and "thank you."	• Give positive feedback to peers;	• Give praise to peers;	• Incorporate stress management, coping and refusal skills into their individual lifestyles; and
	• Role play giving constructive criticism to others;	• Practice giving constructive criticism to others;	• Practice ways to stop their enabling behavior.
	• Role play refusal skills;	• Practice refusal skills;	
	• Identify strategies for managing stress, depression and personal loss; and	• Practice strategies for managing stress, depression and personal loss;	

(continued on page 42) (continued on page 42)

INTERPERSONAL SKILLS/COMMUNICATION, continued

By Grade 6, students will:	By Grade 9, students will:
• List the warning signs of suicide.	• List and describe the stages of grief and loss and demonstrate skills to cope with loss; • Describe the warning signs of suicide; • Describe resources available for students who are concerned about potential suicide; and • Recognize enabling behavior in themselves.

BONDING TO FAMILY, SCHOOL, PEERS, COMMUNITY

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Practice making other children feel included and accepted in groups;	• Accept diversity within their class or school;	• Respond in positive ways to students who may be different from themselves;	• Value diversity within their school and community;
• Name adults who might be helpful to them, e.g., parents, relatives, teachers, clergy, doctor; and	• Describe the role the individual plays within his or her peer group and family;	• Analyze their emotional needs and find appropriate methods to meet them;	• Recognize needs in others and find appropriate ways of meeting those needs;
• Learn ways to cooperate with others.	• Analyze the need children have to belong to some group and the role this need plays in peer selection;	• Describe the importance of peer groups in their lives;	• Demonstrate cooperation and commitment and accept personal responsibility for successful completion of a group project;
	• Describe peer pressure; and	• Describe the roles individuals play in the success or failure of a community;	• Analyze the role of one's family during adolescence;
	• Develop a sense of "classroom community" by accepting individual differences and learning to work cooperatively.	• Describe the importance of volunteerism;	• Analyze contributions that individuals make to group success or failure;
		• Share the reasons peer influences become critical during adolescence; and	• Volunteer for a project of their choice within their community;
		• Develop a sense of "school community."	• Develop a sense of responsibility to the community in which they live; and
			• Internalize their need to belong.

BLOCK II

NUTRITION

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Classify foods according to sources, food groups, textures and traditions;	• Classify foods on the basis of nutrient content;	• Evaluate daily food intake in terms of nutritional requirements for adolescents;	• Develop individual diet plans for self and family;
• Illustrate food combinations that provide a balanced daily meal;	• Describe the function of the major nutrients;	• Analyze the relationship between food intake, physical activity and body weight;	• Differentiate the diet requirements for different lifestyles;
• Describe the effect of foods on fitness and growth;	• Appraise the impact of diet on growth and development during puberty;	• Evaluate temporary and long-term health problems associated with poor food choices and eating habits, e.g., cardiovascular disease;	• Consider the impact of dieting in causing or contributing to specific diseases and health conditions;
• List foods for breakfast and snacks that provide energy and nutrients for work and play;	• Explain the different nutritional needs of individuals depending on age, sex, activity and state of health;	• Assess the nutrient content of common fad diets;	• Assess the influence of economic, social and emotional factors on personal eating habits;
• List foods that are high in fiber, such as fruits and vegetables;	• Select foods that are low in fat – particularly saturated fat – salt and sugar, and foods that are high in fiber; and	• Analyze reasons for eating, e.g., sustain life, boredom, anxiety, low self-image;	• Analyze the impact the media have on food selections;
• Select foods, based on ethnic and cultural preferences, which promote growth and development; and	• Describe social, emotional, ethnic and cultural influences on attitudes about foods and eating habits.	• Recognize emotional and stressful eating patterns and disorders;	• Evaluate the impact of alcohol, tobacco and substance abuse on nutritional needs;
• Conclude that a large variety of food is necessary for good health.		• Recognize and appreciate the nutritional value in cultural and ethnic foods;	• List the U.S. dietary guidelines for healthy lifestyles;
		• Weigh the impact of the media on eating lifestyles; and	• Assess the impact of economics on food selection; and
		• Be able to assess food labeling and compare costs for nutritional value.	• Analyze the impact of food sources on world hunger.

GROWTH AND DEVELOPMENT

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Name and tell the function of the major external and internal body parts;	• Explain the function of each of the body's systems;	• Describe the function and role of the body's systems;	• Analyze the inter-dependence of the body's systems;
• List the behaviors that will maintain and protect the body's systems;	• Describe the behaviors that will maintain and protect the body's systems;	• Differentiate between behaviors that protect the body and behaviors that can potentially harm the body;	• Identify responsible behaviors associated with interpersonal relationships and health;
• Know that cultural beliefs may affect attitudes and behaviors;	• Describe how cultural beliefs may affect attitudes and behaviors;	• Analyze how cultural beliefs may affect adolescent behavior;	• Analyze the social and emotional changes that occur during adolescence;
• Name and list the general function of the body's systems; and	• Describe the changes that occur at puberty;	• Identify personal and community contacts;	• Describe available resources for information and support;
• Identify resources for information and support to help solve problems.	• Identify characteristics of the different stages of the life cycle;	• Describe the social and emotional changes that occur at puberty;	• Describe the physical, emotional and social changes that occur over a lifetime – from birth to death; and
	• Role play the decision-making process as it pertains to healthy behaviors; and	• Describe individual responsibilities associated with physical, social and emotional development; and	• Identify and analyze environmental changes that can affect the body's systems.
	• Practice refusal skills as they pertain to "risky" behaviors.	• Apply the decision-making process to healthy decision making.	

DISEASE PREVENTION

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Define and describe the importance of good personal hygiene;	• Describe the relationship of personal behavior to health;	• Evaluate their personal health practices and behaviors;	• Evaluate their present lifestyles as they relate to wellness;
• Identify behaviors that promote good personal hygiene;	• Describe the role peers, family, community and mass media have on healthy behavior;	• Identify ways to improve their personal health practices;	• Articulate strategies to achieve maximum health as adults;
• Identify behaviors that help prevent disease, e.g., exercise, eating properly;	• Identify the route of transmission of communicable diseases, including AIDS and other sexually transmitted diseases;	• Describe symptoms, causes, prevention methods and routes of communicable diseases, including AIDS and other sexually transmitted diseases;	• Identify and describe diseases or conditions that can affect the health of women, e.g., breast cancer, teenage pregnancy, sexually transmitted diseases including AIDS, and heart disease;
• Define the terms *communicable* (infectious) and *noncommunicable* (noninfectious) diseases, e.g., AIDS and influenza, diabetes and cancer;	• Identify the symptoms, causes and preventions of communicable and non-communicable diseases;	• Describe the symptoms, causes and prevention methods of non-communicable diseases;	• Identify and describe diseases or conditions that affect the health of men, e.g., testicular cancer, sexually transmitted diseases including AIDS, and heart disease;
• Identify germs as the causes of communicable (infectious) diseases; and	• Identify the roles heredity and environment play in health; and	• Evaluate environmental, social and heredity factors that may place them at risk for disease;	• Evaluate behaviors that can prevent or minimize the risk of contracting diseases or conditions that affect women and men;
• Identify the role health care providers play in preventing and treating disease.	• Name the leading causes of death in the U.S.	• Describe the leading causes of death in the U.S.; • Describe the leading causes of death for adolescents; and	• Identify hereditary factors in their families that increase the risk of developing noncommunicable diseases, e.g., breast cancer, high blood pressure, heart disease and sickle cell anemia;
		(continued on page 47)	(continued on page 47)

DISEASE PREVENTION, continued

	By Grade 9, students will:	By Grade 12, students will:
	• Define the roles that medicine, research and government play in prevention and control of diseases.	• Evaluate individual behaviors based on family history of disease;
		• Utilize the decision-making process as it relates to healthy behaviors; and
		• Identify community health resources.

SUBSTANCE ABUSE

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• List the differences between harmful and helpful substances;	• Describe the proper uses of medicines;	• Review the proper use of medication, including reading labels and following directions;	• Analyze the short- and long-term effects of nicotine, alcohol, marijuana, cocaine and other drugs, including steroids;
• Define the words *medicines*, and/or *medicinal* drugs;	• Review the effects nicotine, alcohol, marijuana, cocaine and other illegal drugs – including steroids – have on the body and mind;	• Discuss the effects nicotine, alcohol, marijuana, cocaine and other illegal drugs – including steroids – have on the body and mind;	• Classify acute and chronic health problems associated with substance abuse;
• Explain why medicines should only be taken when administered by a doctor, nurse or trusted adult;	• Compare the short- and long-term physical, social and mental effects of substance abuse;	• Analyze the short- and long-term effects of substance abuse;	• Analyze the influence alcohol and other drugs have on judgment and the ability to make decisions, e.g., sexual activity, driving and risk-taking behaviors;
• Explain why it is important to read the directions on medicine labels;	• Analyze the hazards of illegal drug use;	• Explain how substance abuse interferes with with relationships;	• Analyze the role drug abuse may play in social acceptance;
• Conclude that directions on medicines must be followed exactly;	• Describe the role advertisements play in alcohol and nicotine abuse;	• Analyze the dangers of substance abuse, including sexual exploitation, violence and suicide;	• Brainstorm alternatives to abuse of drugs as a means of social acceptance;
• Identify common substances, including plants, that are poisonous;	• Evaluate the factors that may influence the abuse of drugs, including alcohol;	• Analyze the role the mass media play in drug abuse;	• Formulate an action plan to prevent substance abuse;
• Define the words *illicit* or *illegal* drugs;	• Practice their decision-making, problem-solving, and refusal skills in order to avoid substance abuse;	• Utilize their decision-making, interpersonal, stress management and refusal skills as they relate to substance abuse;	• Analyze the medical, economic and social problems caused by drug abuse;
• Identify illicit drugs as substances;	• Define the word *addiction* and discuss the influences addictions have on health;	• Differentiate between physical and psychological addiction;	• Demonstrate appropriate ways to get help for friends;
(continued on page 49)	(continued on page 49)	(continued on page 49)	(continued on page 49)

SUBSTANCE ABUSE, continued

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Name drugs that are illegal;	• Discuss the concept of family chemical dependency;	• Explain the effect of chemical dependence on members of the family;	• Analyze the laws that regulate the purchase, use and possession of controlled drugs; and
• List the effects nicotine, caffeine, alcohol and cocaine can have on the body; and	• List reasons students give for abusing drugs, including peer pressure, stress reduction and reduction of emotional pain;	• Describe the relationship of drug abuse to suicide;	• Internalize the belief that friends always tell an adult if they believe their friend is suicidal.
• List the steps in refusal skills that can be used to say "NO" to drugs.	• Analyze appropriate ways to handle stress other than abusing drugs;	• Identify resources in the school and community that provide help;	
	• List the warning signs of suicide;	• Identify strategies to prevent suicide;	
	• Conclude that substance abuse is not necessary in order to feel good about oneself;	• Suggest ways of sending friends who are abusing drugs to "helpers;"	
	• Identify resources in schools and communities that can provide help to substance abusers, their friends and/or families; and	• Conclude that they will participate only in activities where no drug use is the norm;	
	• Identify state and federal laws that regulate drug use.	• Support each other not using drugs; and	
		• Interpret the laws that regulate the purchase, use and possession of controlled drugs.	

BLOCK III

CONSUMER HEALTH

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Identify familiar people who assist in promoting and maintaining health;	• Identify and describe community agencies and specialists that provide health services;	• Evaluate the role of health services provided within their community;	• Illustrate the relationship of values, socioeconomic status and cultural experiences to the selection of health services;
• Identify various sources of health information for children;	• Differentiate between quackery and sound medical advice;	• Distinguish between reliable and unreliable advertisements;	• Propose a plan for selecting health insurance coverage for a family, and analyze consumers' rights in obtaining information about one's health;
• Explain the need for regular medical and dental checkups; and	• Evaluate methods used to sell health products and services;	• Assess the impact of false advertising and health fads; and	• Investigate laws and regulations designed to protect the consumer in health services and products;
• List reasons for choosing commonly used health products.	• List factors to consider when choosing health products, services and information;	• Describe the role and function of consumer protection agencies.	• Formulate a personal list of criteria to use in the selection and utilization of health resources; and
	• Assess the reliability of sources of health information; and		• Analyze the role of consumer protection agencies.
	• Role play the decision-making model as it applies to consumer choices.		

FIRST AID AND EMERGENCY PROCEDURES

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Identify an emergency situation; and	• List people who can help in an emergency and how to contact each of them;	• Describe what to do and not to do in an emergency;	• Evaluate an emergency situation quickly and respond appropriately in a simulated accident;
• Demonstrate effective methods of obtaining help during an emergency.	• Demonstrate basic first aid steps to take in life-threatening situations; and	• Demonstrate proficiency in basic first aid procedures, including cardiopulmonary resuscitation;	• Describe responsibilities and legal ramifications of applying first aid procedures in real-life situations; and
	• Develop precautionary measures for specific recreational activities, and describe procedures to follow in the event of an accident.	• Recognize the limitations of first aid practices;	• Assess the availability and accessibility of existing emergency services in a variety of communities or environments.
		• Analyze the differences between first aid and professional treatment; and	
		• Examine the disaster plan of a local community for expected behaviors of individuals, families, schools and the community.	

SAFETY AND ACCIDENT PREVENTION

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Identify safe and unsafe behaviors in daily activities;	• Describe rules for motor vehicle safety, water safety, pedestrian safety and fire safety;	• Assess individual responsibility for observing and enforcing safety regulations;	• Predict potential hazards in unfamiliar environments;
• List rules for water, motor vehicle, pedestrian and fire safety;	• Assess the knowledge and skills needed for safe living;	• Explain uses of safety equipment in schools, homes and the community;	• Evaluate accident data in relation to the impact on individuals, families, the schools and community;
• Identify the hazards found in the environment;	• Analyze their fire-safe patterns of behavior;	• Analyze the interrelationship between emotions and accidents;	• Evaluate the reasons for a higher accident rate among adolescents;
• Describe the reasons for safety rules;	• Recognize the dangers of taking a dare; and	• Practice appropriate skills to ensure safety in everyday life;	• Evaluate individual risk-taking behaviors;
• Create a fire escape plan for their homes; and	• Identify the roles of public safety groups, such as fire departments and ambulance services.	• Describe ways to modify or control natural or man-made disasters; and	• Explain the utilization of community resources during a disaster; and
• Identify the role of attitudes in causing and preventing accidents.		• Examine the complexities of risk taking.	• Evaluate the roles of community groups in reducing environmental hazards.

COMMUNITY HEALTH

By Grade 3, students will:	By Grade 6, students will:	By Grade 9, students will:	By Grade 12, students will:
• Describe things in the environment that affect a person's health;	• Evaluate the importance of a healthy environment;	• Illustrate ways to conserve essential resources to protect health and improve the quality of the environment;	• Evaluate available health care for effective programming accessibility;
• Describe different kinds of pollution and possible solutions; and	• Assess laws and regulations designed to prevent and control health problems;	• Investigate possible health hazards associated with environmental change;	• Identify unmet community health needs and formulate possible solutions;
• List ways to cooperate with others to promote a healthful environment at school, in the home and in the community.	• Compare and contrast the responsibilities of individuals, families, communities and nations in responding to health regulations; and	• Analyze major world health problems – past, present and future;	• Design a personal plan to promote environmental quality and conservation of resources;
	• Identify methods families can use to maintain and protect the environments where they live, work and play.	• Evaluate the health condition of the community as it relates to the individual, the nation and the world; and	• Analyze methods used to gain cooperation from individuals and community agencies to improve the quality of the environment; and
		• Participate as a volunteer in a group effort to improve community services or environmental quality.	• Participate as a volunteer in a group effort to improve community health services or environmental quality.

CURRICULUM EVALUATION 8

"The fellow who never makes a mistake takes his orders from one who does."
– Herbert V. Prochnow

Assessing Knowledge
Assessing Skills
Assessing Attitudes
Evaluating Data
Sample Evaluation Report

A comprehensive health and safety curriculum is essential to educate our children and protect them in the years to come. Therefore, curriculum committees must undertake the responsibility of providing a means for evaluating student performance in terms of cognitive, affective and skill development objectives of the program. Such an evaluation will enable teachers, administrators, health professionals and others to know how effectively the students are developing health-related knowledge, attitudes and behaviors.■

Assessing Knowledge

Assessing student performance in terms of the cognitive domain is relatively straightforward. Constructing tests and other devices that allow students to demonstrate their knowledge in health is the same as in any other curricular area. Tools that allow both formal and informal examination should not, however, be limited strictly to paper-and-pencil situations. Students should be encouraged to explore many other possibilities, such as developing a health newsletter, videotaping health commercials, etc.

Work Sheet IX is provided to assist committees in designing a process for assessing students' knowledge of health and safety. Tasks involved in assessing this knowledge are listed and assignments and deadlines should be filled in.■

Assessing Skills

Evaluating student performance in terms of health-related skills is more difficult. The district should offer many situations, such as role-playing or simulations, in which students actually demonstrate their skills. For example, in evaluating first aid skills, the test might require the demonstration of actual practice rather than written descriptions of procedures. In this way, the levels of student proficiency can be compared and evaluated. Videotaping these demonstrations may provide useful feedback to help students improve their knowledge of procedures.■

Assessing Attitudes

The most difficult area of assessment is that of attitudes and behaviors that help to promote a lifetime of good health. Evaluation of short-range performance often bears little relationship to the eventual long-term effectiveness of the program and of student behaviors. Attitude surveys, teacher observations of how students react in various situations, and logs in which students record their own health behaviors and attitudes are some of the ways of assessing performance. Effective long-term evaluation, however, is not always possible.

Work Sheet X on page 57 and Work Sheet XI on page 58 are provided to assist committees in designing

WORK SHEET IX
Assessing Knowledge

Task	Person Responsible	Completion Deadline
a. Review objectives from health curriculum to identify expected student knowledge outcomes.		
b. Define specific scope of expected student knowledge, referring to curriculum scope and sequence.		
c. Select and/or develop test items corresponding to scope.		
d. Pilot test the instrument.		
e. Determine whether student knowledge has increased.		
f. Make changes as needed.		

Adapted from *How Healthy Is Your School*, by Steven Nelson and Northwestern Regional Educational Laboratory. National Center For Health Education Press, 1986. Used with permission.

processes for assessing student skills and attitudes, respectively.■

Evaluating Data

After collecting the qualitative and quantitative data, the committee must determine how to use the information. Figure 12 on page 58 is designed to assist a committee in evaluating these data.■

Sample Evaluation Report

Once the data have been collected and analyzed, it is useful to develop a report that clearly articulates the benefits achieved by instituting a comprehensive health and safety curriculum. A report from Nelson, 1986 (pages 59-61), is included both to provide a comprehensive example and to urge committee members to think about the results an effective health program can achieve.

WORK SHEET X
Assessing Skills

Task	Person Responsible	Completion Deadline
a. Review objectives from health curriculum to identify expected student health practice outcomes.		
b. Define specific skills and the manner in which they will be demonstrated.		
c. Develop a checklist of observable skills.		
d. Do a trial run using observation checklist to identify problems.		
e. Determine whether observed skills have been attained.		
f. Make changes as needed.		

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WORK SHEET XI
Assessing Attitudes

Task	Person Responsible	Completion Deadline
a. Review objectives from health curriculum to identify expected student health attitude outcomes.		
b. Define specific nature and scope of expected student attitudes.		
c. Select and/or develop items for questionnaires corresponding to definition.		
d. Do a trial run of questionnaires to check for problems.		
e. Determine whether student attitudes have been attained.		
f. Make changes as needed.		

Adapted from *How Healthy Is Your School*, by Steven Nelson and Northwestern Regional Educational Laboratory. National Center For Health Education Press, 1986. Used with permission.

	Degree of Program Effectiveness		
Degree of Program Implementation	**Positive Student Outcomes**	**Mixed Student Outcomes**	**Negative Student Outcomes**
Completely as planned	Maintain existing program	Make minor changes to plan based upon student differences	Make major adjustments to plan or abandon current plan
Partially as planned	Make minor changes to ensure adherence to existing plan	Make minor changes to plan based upon student differences and existing plan	Specific action to be taken cannot be determined
Not as planned	Determine actual procedures utilized and adopt them into new plan	Make changes to ensure adherence to existing plan	Attempt full implementation of existing plan – if not feasible, abandon plan

Figure 12

Adapted from *How Healthy Is Your School*, by Steven Nelson and Northwestern Regional Educational Laboratory. National Center For Health Education Press, 1986. Used with permission.

Date: March 12, 1990
To: Superintendent, Healthy School
From: School Health Team
Subject: Report on the Consumer Health Education Curriculum Evaluation

Conclusion

Does the consumer health education curriculum benefit the students? Yes, students showed increased knowledge about taking personal responsibility for consumer health and identifying legitimate health resources. They also displayed positive attitudes toward the health-related agencies, laws and services which protect their rights. The evaluation, however, did not show changes in students' reported use of over-the-counter health products.

Background

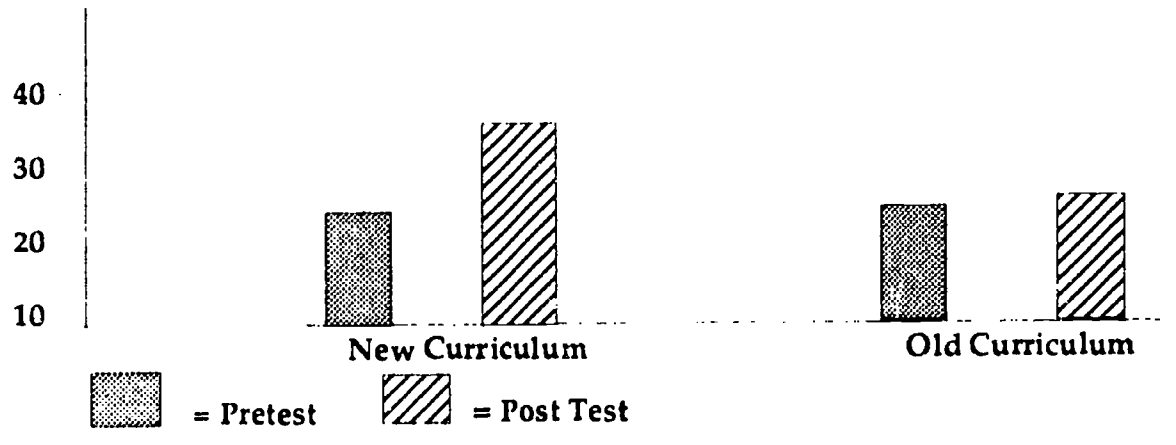
The consumer health curriculum was adopted in one Grade 10 class last fall as a pilot effort to determine if the materials were effective. The curriculum was tentatively adopted after a previous evaluation found that the State Department of Education's health education guide recommended inclusion of consumer health information, and a survey of parents, teachers and students revealed a high interest in this topic. The school board adopted the consumer health goal as part of the high school curriculum and tentatively approved the use of the locally developed curriculum materials on the condition that the materials benefited students. The school health team initiated the evaluation first semester in one of the three high schools. The evaluation focused on three possible ways in which students might benefit: health knowledge, attitudes about consumer health protection, and the practices of students as consumers of health products.

Health Knowledge

The Consumer Health subtest of the Adult APL Survey was given to the Grade 10 students in the health classes of each of the three high schools. The test was given in the three classes again at the end of the semester. The new material had been used by the teacher at the one school. The scores of the students on the 45-item multiple-choice tests were summarized as follows:

	n	Pretest Average	Post Test Average	Differences
New Class	29	21	37	+16
Old Classes	57	23	25	+02
Difference		-02	+12	+14

Students in the health class using the new curriculum gained 16 points on the test, compared to a gain of 2 points by the other two classes. Overall, the students in the new class scored 14 points better than the other classes. Graphically, the results look like this:



This sample report on pages 59-61 is adapted from *How Healthy is Your School*, by Steven Nelson and Northwestern Regional Educational Laboratory. National Center For Health Education Press, 1986. Used with permission.

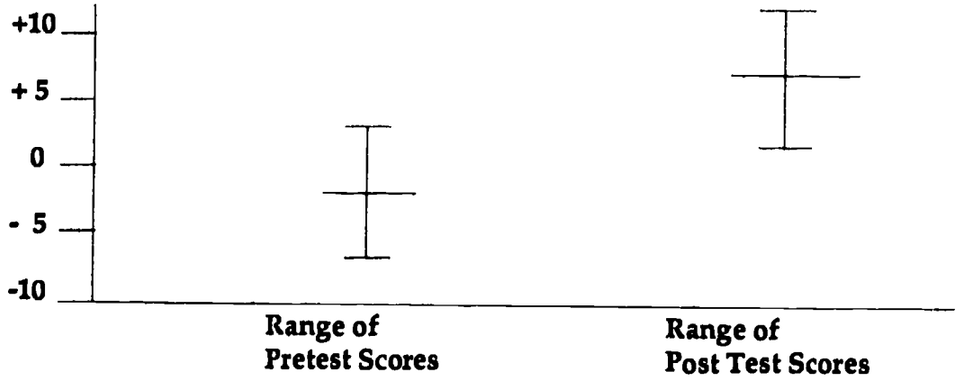
Based on the norms provided by the publisher for Grade 10, the students using the new curriculum moved from the 5th to the 54th percentile – the percentage of Grade 10 students in the nation scoring the same or below. The results suggest that students made substantial gains in health knowledge when compared to norms, their peers and pretests.

Health Attitude

Students in the class using the new curriculum also completed a 10-item attitude survey at the beginning and end of the semester. The locally developed survey asked students whether or not they agreed or disagreed with statements about the role of agencies and laws in protecting consumer health. For example, were the laws an imposition on personal rights, or were they a fair means of protecting the public from dangerous or useless products? At the beginning of the semester, students' scores were slightly negative toward consumer health, but by the conclusion of the semester the attitudes were moderately positive:

	n	Pretest Average	Post Test Average	Difference
New Class	29	-3	+6	+9

The survey scores can range from -10 to +10 points, where zero reflects a neutral attitude. Graphically, students' changes in attitude looked like this:



While no norms were available for other groups tested, the change of nine points on the scale suggests that students' attitudes toward consumer health agencies and laws did improve as a result of the new curriculum.

Health Practices

As part of the attitude survey, students were asked to list the over-the-counter (nonprescription) drugs they had purchased in the past 30 days. This question was asked at both the beginning and end of the semester. Students at the beginning of the term reported that they had purchased an average of seven nonprescription items in the past month, including skin medications, cold remedies and analgesics (aspirin). At the end of the term, students reported the purchase of an average of eight nonprescription items in the past month. While this was a slight increase in reported use of such medications, it may have been due to increased student awareness of these products. Students may, in other words, have underreported their use at the outset of the term. The results are inconclusive.

Recommendations

Based upon the evaluation findings, the health team recommends the full adoption of the consumer health education curriculum in all Grade 10 health classes. Additional evaluation activities also are encouraged to determine if teachers use the materials appropriately, if students' consumer health practices change and if consumer health is being taught at the expense of other health topics.

Regardless of the form of evaluation of the health and safety education program, it is important that administrators, teachers, students, and community members clearly understand their roles in the evaluation process. It also is critical to realize that the curriculum committee's assignment is not complete until procedures for periodic review and revision are in place.■

Reference

Nelson, Steven, and Northwest Regional Educational Laboratory. *How Healthy is Your School?* New York: National Center For Health Education Press, 1986.

Related Issues 9

> *"Soft is the heart of a child. Embrace it!"*
> – Anonymous

Suicide Prevention
Child Abuse
AIDS Prevention
Children of Alcoholics
Student Assistance Teams

As schools begin to implement comprehensive health education curriculums, many sensitive and highly charged issues may emerge.

Children who are being sexually or physically abused, come from alcoholic or chemically dependent homes, have concerns about AIDS or who are depressed and suicidal may reveal their problems to school personnel. It is critical, therefore, that school districts provide appropriate in-service training for all staff members. Resources and appropriate intervention services must be identified or developed to help students, teachers and parents.

Chapter 9 highlights some of these topics and provides some general information about each one.■

SUICIDE PREVENTION

The number of teenage suicides has tripled in the last 30 years. Recent studies show that one in 10 boys and one in six girls have attempted suicide.

The following is a brief overview of information that school personnel should know in order to help prevent the tragedy of youth suicide. This material is adapted from the Connecticut State Department of Education's *Substance Abuse Prevention Education* curriculum resources packet, published and distributed in 1988.■

The Drug/Suicide Connection

The correlation between drug abuse and suicide has been identified in numerous studies as well as by school and agency personnel who work with youth. It is estimated that 50 to 80 percent of the youths who attempt or commit suicide are drug involved. Drugs seem to be related to suicide in at least four ways:

1. Young people who have high levels of stress or pain in their lives often turn to drugs to "medicate" this stress or pain.
2. Drug use over time will produce higher levels of stress, pain and depression. This is especially true of drugs like alcohol, marijuana and cocaine, which seem to alter the brain chemistry that regulates these feelings.
3. Drugs may be used as the method of attempting suicide.
4. Drug use increases impulsivity and "tunnel vision," which may result in a suicidal crisis.■

Progression of Suicidality

Potentially suicidal young people exhibit many of the risk factors and early warning signs that are associated with drug use. While the path toward suicide is more difficult to trace than the path toward addictions, some general patterns do exist.

Phase One – History of high levels of stress and pain, especially in early childhood. Young people who become suicidal usually have experienced higher than average levels of pain and stress in their lives. Some of the factors which may place a young person in a risk category are noted on pages 65 and 66.

Phase Two – Dysfunction and warning signs. The three most common ways in which young people show they are not able to handle the pain and stress in their lives are the following:

1. *School Problems.* This may be seen as chronic underachievement, a decline in grades, problem behavior (especially aggressive acting out), lack of involvement in school activities, truancy, cheating and the like.

2. *Drug Abuse.* As noted earlier, drugs become a means of medicating pain and stress, leading to a downward spiral into more pain and stress.

3. *Depression.* In adolescents, depression often is masked by various negative behaviors which may lead to labels such as "loner" or "bad kid." Often the behavioral warning signs observed in troubled adolescents are markers for more serious mental health disorders, such as depression. The warning signs of potential suicide, while easy to spot, often are misinterpreted or misdiagnosed or, worse yet, ignored as normal adolescent behavior. These warning signs must be responded to when they begin to form a pattern or when they persist for two or more weeks (see page 66).

Phase Three – Precipitating event. Suicide in adolescents may be well planned and thought out or it may be impulsive. In either case there often has been some precipitating event that pushed the adolescent over a line into hopelessness and helplessness. Examples of precipitating events include:

- loss of close relationship;
- disciplinary crisis;
- argument with parent;
- recent trauma;
- recent failure or setback; and
- major change in life such as going to college.

At this point a suicide attempt may occur. Any attempted suicide must be taken seriously and the school must take a very active role with the family in insisting that they obtain help for their child. If help is not obtained, another suicide attempt is likely to follow and may be the final one.

Role of The School in Suicide Prevention

In general, the school is probably the community's most critical resource in identifying a suicidal youth. However, as with all youth problems, the school cannot do the job alone and must join forces with the community. The school has four major roles to play in suicide prevention. As with drug abuse prevention, the job cannot be done effectively by focusing on one area alone but must provide for all four. These four areas or roles are as follows:

1. **Primary Prevention** – Activities which are undertaken to prevent substance abuse also will be effective in helping to prevent youth suicide. This is especially true of activities designed to develop basic life skills and coping mechanisms as well as activities designed to make youths feel meaningful and involved.

   Other activities a school system should undertake include training of the total school community (including students) to recognize and refer potential suicides, development of a suicide prevention component to enhance the health/drug curriculum, and increased school/community collaboration for positive youth development.

2. **Identification of and Service for Students At Risk for Suicide** – Many of the activities undertaken to intervene with students at risk for drug abuse apply to suicide as well. The "student assistance team" approach is particularly effective in identifying and helping these students.

   Each school also should have a suicide prevention policy with procedures, regular programs to increase staff, student and parent awareness, and in-school support programs for troubled students. Specialized training also should be provided to key staff members who may have to assess the degree of risk for students exhibiting warning signs of suicide.

   In addition, the school should develop formal linkages with community agencies such as hospitals and mental health centers to assure that students at risk for suicide receive the services they need. This is an especially important point since it is estimated that close to 75 percent of identified suicidal young people never utilize the mental health services to which they were referred.

3. **Coordination of Services for Students Who Have Attempted Suicide** – The school should be prepared to respond to instances of in-school or out-of-school suicide attempts with procedures that will allow for emergency medical intervention, intensified monitoring of other at-risk students, contact and support for the family, a special re-entry plan and support system for students returning to school following a suicide attempt, and ongoing communication among the school, treating agency and family.

4. **Post Vention: The Aftermath of a Suicide** – The suicide or other sudden death of a student or faculty member will have a tremendous impact on the school community. Suicide prevention procedures should contain a plan to deal with such an event that spells out roles and responsibilities of student assistance team (or crisis team) members, provides for intensive monitoring of other at-risk students, provides an intensive school support system during the crisis period, includes measures to reduce the risk of further "copycat" suicides, and provides support to the survivor's friends and family.

   This overview on youth suicide is designed to motivate school systems to integrate suicide prevention into their drug abuse prevention education programs. Further information is available through the Connecticut State Department of Education, the Connecticut Committee for Youth Suicide Prevention or local mental health service providers.■

Risk Factors For Suicide

No one can say with certainty which life conditions and which personality traits may combine to result in suicide. Nor can we say why one person commits suicide and another with similar circumstances does not. We can, however, identify some common themes as we look back on the lives of those who have turned to suicide. These include:

Family Factors

Suicide of a family member (especially a parent)
Loss of a parent through death or divorce
Family alcoholism
Absence of meaningful relationships and attachment within the family
Destructive, violent parent-child interactions
Inability to meet unrealistic parental expectations
Extremely permissive or authoritarian parenting
Depressed, suicidal parents
Physical, emotional or sexual abuse

Personal Factors

Depression
Feelings of powerlessness

Loneliness
Poor impulse control
Tunnel vision
Unresolved grief
Loss of identity status
Desire for revenge or to punish another
Mental illness
Confusion/conflict about sexual identity
Alienation from traditional societal values
Compulsively perfectionistic
Lack of inner resources to deal with frustration
Inability to perceive death as final
Desire to be reunited with someone who is dead

Environmental Factors

Frequent relocation
School problems
Religious conflicts
Social loss
Social isolation and alienation
Incarceration for a crime
Loss of significant relationships
High levels of stress

Behavioral Factors

Running away
Alcohol/drug use
Eating disorders
School failure, truancy
Aggression, rage
Isolation from others
Fascination with death, violence and satanism
Legal problems, delinquency

Warning Signs of Suicide

It is important to note that adolescence is often a time of change and mood swings. When considering possible warning signs of suicide, persons should look for the pattern (several related signs), the duration (two or more weeks of a given pattern), the presence and the intensity of a particular crisis event. These should be measured against what is normal for a given adolescent.

Perhaps, most importantly, you should trust your instincts. When in doubt, seek help. Any young person exhibiting these signs is probably in need of some type of help.

Early Warning Signs

Difficulties in school
Depression (expressed as sadness or as angry acting out)
Drug abuse
Sleep disturbances
Eating disorders
Loss of interest in activities
Hopelessness
Restlessness and agitation
Feelings of failure
Overreaction to criticism
Excessive self-criticism
Anger and rage (especially if directed at a parent)
Pessimism about life, about one's future
Persistent physical complaints
Inability to concentrate
Preoccupation with death, Satan (often through music)

Late Warning Signs

Talking about suicide, death
Neglect of appearance
Dropping out of activities
Isolating oneself from others (friends, parents)
Feeling that life is meaningless
Perception that no one can help them; helplessness
Sudden improvement in mood, behavior
Preoccupation with one's failures, faults
Putting one's life in order
Giving away possessions

Precipitating Events

Loss of close relationship
Disciplinary crisis
Loss of status with peers
Argument with parent
Identifying with someone who committed suicide
Legal problems
Incarceration
Recent failure or setback
Recent trauma (divorce, illness, move)
Anniversary of someone else's suicide
Fear of major change such as graduation
Major change in life such as going to college ■

CHILD ABUSE

In 1988, the Connecticut State Department of Children and Youth Services received abuse or neglect referrals for over 14,000 school-age children. While this figure is alarming, it does not include the many children who are abused but never identified.

Educators often are the only trusted adults who can help to protect a child. It is important, therefore, that all school personnel recognize the warning signs of child abuse. Any of the following may indicate that a child is being abused or neglected:

- poor academic performance

- difficulty in peer relationships
- inability to concentrate
- depression
- aggressive behavior
- unusual interest in or knowledge of sexual matters
- expressing affection inappropriately
- withdrawal from peers
- soiled or inappropriate dress

In Connecticut, all school personnel are required to report to the Department of Children and Youth Services the name of any child they suspect is being abused or neglected. In order to comply with this mandate as well help protect children, school districts should review the following annually:

- warning signs or behavioral symptoms of child abuse
- *Connecticut General Statutes* Sec. 17-38(b) and (c)
- resources available for the child within the school and community
- techniques to help parents obtain help within the community■

AIDS PREVENTION

Most young children have heard the acronym *AIDS* but have little or no understanding of the disease. Fragments of the AIDS story can be heard by children during family conversations, on television programs and in public places. This has created unwarranted anxiety and fear in some children because they have few resources for obtaining factual answers to their questions or concerns. For this reason the AIDS Curriculum Task Force in Connecticut recommends that AIDS education begin in prekindergarten and continue through Grade 12.

The information presented to children should be age appropriate and developmentally based. AIDS prevention education should be taught as a component of the comprehensive health curriculum, incorporating both knowledge about AIDS and the skills necessary to foster healthful behaviors and relationships.

Connecticut General Statutes Sec. 10-19(b) requires that "each local or regional board of education shall offer during the regular school day planned, ongoing and systematic instruction on acquired immune deficiency syndrome, as taught by legally qualified teachers. The content and scheduling of the instruction shall be within the discretion of the local or regional board of education." To assist boards of education in developing appropriate programs of study, curriculum guidelines are available from the Connecticut State Department of Education.

Merely teaching about AIDS, however, may not be sufficient. As we approach the year 2000, increasing numbers of students will have classmates, teachers, family members, neighbors and other acquaintances who either have tested positive for the AIDS antibodies or who actually are dying from AIDS.

For these students, skills to cope with stress, their fears and anxieties, and the reality of death and dying will need to be taught. Teachers will need to provide these students with emotional support and, when necessary, with the appropriate resources.

School districts should review the following:

- the school policy on admission of HIV-infected students to school and the personnel within the school to be notified
- the school policy on employment of HIV-infected adults
- updated information on AIDS
- the curriculum to be implemented
- available resources within the school and community for students and parents
- appropriate intervention for assisting students who have concerns about AIDS

For further assistance, school districts may contact the State Department of Education, the State Department of Health Services, Project AIDS, the AIDS Hotline or appropriate community agencies.■

CHILDREN OF ALCOHOLICS

The following brief summary (Schecter, Skerker and Bellin, 1988) of recent studies is intended to be an introduction to some of the symptoms and special problems of children of alcoholics. It is important to remember that, while some children fit the models that are described because they are children of alcoholics, other children might exhibit similar behaviors for entirely different reasons. If a student seems to be at risk, teachers and other school officials should follow local guidelines and consult the school's social services or mental health professional.

According to the National Institute on Alcohol and Alcoholism, one out of four children in the United States comes from an alcoholic or chemically dependent household. These children, due to the dysfunction within their families, take on specific characteristics which allow them to survive and function within such families. They tend to assume one of four main roles:

1. The oldest child in the family often takes on the role of **HERO**, assuming responsibilities that should be the parents', like taking care of younger siblings, attempting to prevent physical or sexual abuse from occurring within the family, and making sure young children do their home-

work. In school, these **HEROES** often are the best students. Getting everything right is critically important to them. They tend to take care of everyone in the classroom and often are viewed by the teacher as being perfectly okay. These children function well as long as they understand the rules and there is no deviation from the expected structure.

2. The **MASCOT**, usually a lovable child, often helps the **HERO** maintain the family. This child frequently becomes a confidant or friend of the nonalcoholic or non-chemically-dependent adult in the family. In school, teachers often view the **MASCOT** as a helper to other children. The **MASCOT** is often labeled the class clown. This behavior becomes particularly evident when class discussions take a serious turn and emotional tension in the classroom mounts. The **MASCOT** becomes uncomfortable in this atmosphere, and often will crack a joke or make a comment to try to relieve the tension he or she feels. Teachers often view this comic relief as inappropriate behavior, and wonder why these children cannot seem to take anything seriously.

3. The **DEFIANT** or **PROBLEM CHILD's** primary role within the family is to constantly cause trouble, focusing parental attention on the deviant behavior of this child instead of their own problems. A classic comment in such a family is, "If Johnny would only get his act together, everything would be fine." In school, the **PROBLEM CHILD** is the classic acting out or behavior problem. The **PROBLEM CHILD** often lies, cheats, steals, defies authority, and becomes very aggressive if any attempt is made to contact home, because he or she is acutely aware that the call will set off a series of events that can't be controlled.

4. The **LOST CHILD**, often the youngest child in the family, becomes lost within the chaos that exists in the family structure. These children often revert to "pretend activities" in order to shut out the chaos around them. In school, these children are perceived by teachers as painfully shy; they rarely if ever chance speaking out or entering into classroom discussions. Teachers often see an unexplainable quality of sadness about these lost children.

The **DEFIANT CHILD** and the **MASCOT**, or **CLASS CLOWN**, are often easily identified as behavior problems within the school. A perceptive school system may realize that this inappropriate behavior requires more than mere disciplinary action. They are also the most likely types of children from chemically dependent families to become drug-involved as young teenagers, some as early as third grade. The **LOST CHILD** and **HERO** rarely use drugs in school but in their late teens or early twenties, many of these children grow up to become drug involved in mid-life or marry a chemically-dependent spouse.

It is important for teachers to remember the keys to the behavior of children of alcoholics: **DON'T TRUST; DON'T FEEL; DON'T TELL.**

From the Teacher's Guide to *Fast Forward Future: An Interactive Drug Abuse Prevention Video Program for Elementary Schools*, by Ellen Schecter, Veronica Skerker and Harvey Bellin. Weston, CT: The Media Group, Inc., 1988. Used with permission.

For additional information on working with children of alcoholics, district school officials may contact the State Department of Education or the appropriate mental health agency in their community.■

STUDENT ASSISTANCE TEAMS

As districts implement effective prevention curriculums, the need to develop quality intervention programs, referral systems and postcare plans will become obvious. One approach to fulfill these needs is the Student Assistance Program, a relatively new concept derived from the successful experience of business and industry with the Employee Assistance Program.

The overall concept of the Student Assistance Program is to serve as a systematic school-based early intervention program. The goals of this program include the following:

- To formalize an easily accessible, highly visible helping system within the school which views student misbehavior and academic difficulty as symptoms of student distress.
- To increase student awareness of the concern and helping resources available within the school and to promote a school atmosphere which communicates that it's okay to seek help.
- To promote early identification of and help for students whose personal problems interfere with school performance.
- To teach coping skills and information to problem-free students in order to prevent future problems.
- To increase staff awareness of the type and extent of problems faced by adolescents today.
- To increase staff awareness of helping resources in the school and to increase consultation between the staff and these resources regarding specific

behavioral or academic problems.

- To increase communication between school and parents regarding student problems.
- To provide additional educational and helping resources for parents and students.
- To increase the interaction between school and community in order to provide additional resources for youth within the community.

For more information on student assistance teams, contact the State Department of Education or your local community-based agency.

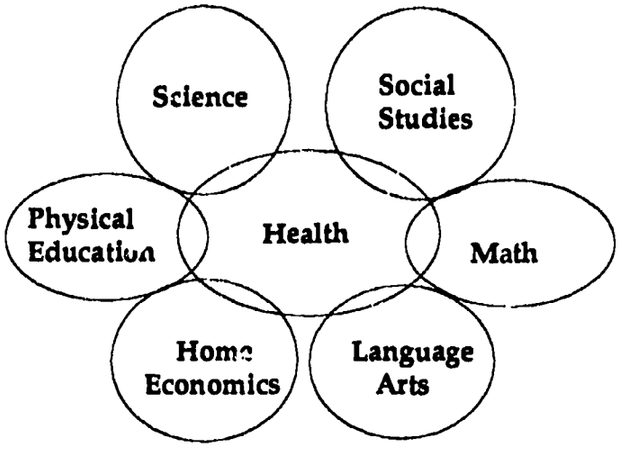
Reference

Schecter, E.; Skerker, V.; and Bellin, H. Teacher's Guide to *Fast Forward Future: An Interactive Drug Abuse Prevention Video Program for Elementary Schools*. Weston, CT: The Media Group, Inc., 1988.

Reinforcing Health Concepts 10

> *"I hear and I forget. I see and I remember. I do and I understand."*
> – Chinese proverb

Health and safety education should be taught as a distinct course or unit, but like other academic subjects, it also should be reinforced in other disciplines. For example, in junior high or middle schools, mathematics is taught as a separate course, but math concepts also are addressed and reinforced in subjects such as science, industrial arts and home economics. Certainly no school district would discourage science teachers from using or reinforcing math concepts in their courses. In fact, the science course may have learning objectives that address math concepts. Furthermore, schools would not rely upon science teachers, or the infusion of math into the science curriculum, to provide the sole exposure to math. Health education also is a separate discipline which can and should – as the accompanying graphic illustrates – be reinforced in other curriculums.



At the University of California at Irvine (UCI), professors in mathematics and teacher education have collaborated to develop and monitor a novel pilot program in the local public schools. The general aim of the program is to introduce substance abuse education throughout the curriculum, rather than limit the issue to the health and life sciences classes. This pilot program, called the University of California, Irvine PACT Project, is funded by the U.S. Department of Education.■

Mathematics

Larry Chrystal, a mathematician at UCI, believes that facts about drugs and alcohol can be used to teach concepts of math, and that math can be used to show students the effects of drugs and alcohol on their lives. For example, the number 100,000 is too great for most students to comprehend. If, however, a student realizes that by age 18 he or she will have watched 100,000 beer commercials on TV, the number begins to have some meaning. Further, if the student imagines each commercial to be a piece of notebook paper, and that all 100,000 sheets laid edge to edge cover an area greater than 1.5 square miles, then the student begins to interpret and understand the concept of the number as well as the impact, through repetition, of alcohol-related advertising.

Chrystal (Greenwald, 1988) points out that every article concerning drugs and alcohol involves mathematics. Relating mathematics to what students read in newspapers and see on television accomplishes at least two objectives. First, the numbers and statistics become real rather than abstract concepts, and second, the information about substance abuse becomes more meaningful.■

Language Arts

The following example is adapted from the PACT Project of an integrated language arts lesson which deals with alcohol and other substance abuse and peer pressure. In this lesson, students are encouraged to develop thinking, reading and writing skills based on discussion and evaluation of substance abuse problems (Bergquist, 1988).

Lesson. Students will participate in a simulation which involves predicting possible reasons given by peers who favor experimentation with alcohol and other drugs, countering them with logical arguments founded on current research, and finally composing a letter designed to persuade an ideal friend to say "No" to negative peer pressure.

Writing Skills Objectives. Students will write a persuasive letter which contains a well-supported argument based on current research. The letter should include two possible reasons which might be given in favor of the issue, counter those reasons with research-based arguments, and follow standard letter format.

Thinking Skills Objectives. Students will use their knowledge of the effects of smoking marijuana to develop, through role playing, a persuasive argument against submitting to peer pressure to experiment with alcohol, marijuana and other drugs. Students will then write their argument in a letter to a friend. Note: Marijuana, the example used here, can be substituted by alcohol and other drugs.

As part of the project, students brainstorm and discuss situations from their pasts which involved trying to persuade a friend to stand by them on an issue rather than take the side of someone else. Students discuss what was effective and ineffective in their persuasion tactics. A large class chart similar to Figure 13 on page 73 can be used.■

Computer Technology

Many computer software programs are available commercially for use in health education. They range from tutorial programs that reinforce knowledge to games that help students practice their problem-solving and

decision-making skills. Computers also can be used as effective tools to "turn on" students to learning about health. Children who are underachievers, have poor language arts skills or have learning disabilities often become reluctant learners when asked to write a report. These students can be motivated to write if they can use a word processor. By using the computer as a tool, spelling and grammar can easily be checked and corrected, and whole sentences and paragraphs easily changed. The final product often becomes one the student is proud of, reinforcing her or his self-esteem and encouraging the student to continue to learn about health.

For these children, as well as others, the use of computers is a viable strategy for learning about health. In fact, the possibilities are endless. Surveys can be developed, results tabulated, sophisticated graphs and charts made and a professional-quality report generated by students. Graphic programs can be used to help students design banners and posters that can promote healthy behaviors or to generate advertisements against smoking and drinking.

Students with an interest in computers can design their own health programs for use by other students. These programs might simply be tutorial in nature or take the form of games that would reinforce concepts. For example, one student developed a computer game that allowed two students to have a boat race, during which the players had to understand the circulatory system and the route blood takes as it flows through the body. Variations of the game include obstacles the boats had to navigate through or around. These obstacles included cholesterol buildups on the walls of the arteries, constriction of the blood vessels and waves caused by an accelerated heart rate.

As these examples demonstrate, the computer can easily reinforce many areas of health education. However, as with any tool, the computer should not take the place of good teaching but rather be used to augment a well-developed health curriculum.■

Library Media Center

It is critical to the success of the health program that the school library have books, magazines and brochures suitable for each grade level and available on a wide variety of health-related topics. These books should include both resource materials as well as novels and true-life stories that address health issues such as living with an alcoholic and the effect of suicide on friends and families. However, not all books and resource materials are appropriate for student use. The media specialist should collaborate with the health teacher or health curriculum committee in order to ensure that the books purchased are age appropriate, up-to-date and convey appropriate messages.

Newspapers, news magazines and other media represent excellent sources of information which can be used to supplement the formal health curriculum. Students can use current events to increase their levels of understanding of a particular topic by preparing an up-to-the-minute account (or news bulletin) on local health issues. After reviewing current newspapers and news magazines, students also can develop their own monthly

Why	What	Who	Age	How	Results
• I really wanted to see that movie but not alone	• Go to a movie I wanted to go to, rather than with group to another movie	• Joey	12	• Told him how good it was	• He went along with other kids
• I thought we'd have fun and become great skating partners	• Take skating lessons with me when group thought it was dumb	• Susan	7	• Begged	• Was mad but took it with me for three lessons then gave up
• Scared and thought it was dangerous	• Dared to jump off top of jungle gym	• Cindy & Donny	6	• Said I wouldn't be their friend any more	• They didn't make me jump

Figure 13

From "Stand by Me: An Integrated Language Arts Lesson Dealing with Alcohol and other Drug Use and Peer Pressure." The University of California at Irvine PACT Project, 1988. Used with permission.

or weekly newsletter. The health newsletter then could be added to the media center's collection. Another possibility is to have high school students develop a newsletter on current health issues for use by elementary school teachers in helping their students to learn about these issues.

More ideas and teaching materials for reinforcing health education across the school curriculum are becoming available. Curriculum committees are encouraged to review commercially produced materials that reinforce health through a multidisciplinary approach, cross-age teaching and cooperative learning, or to design their own plans for reinforcing health education in other curricular areas.■

Professional Development

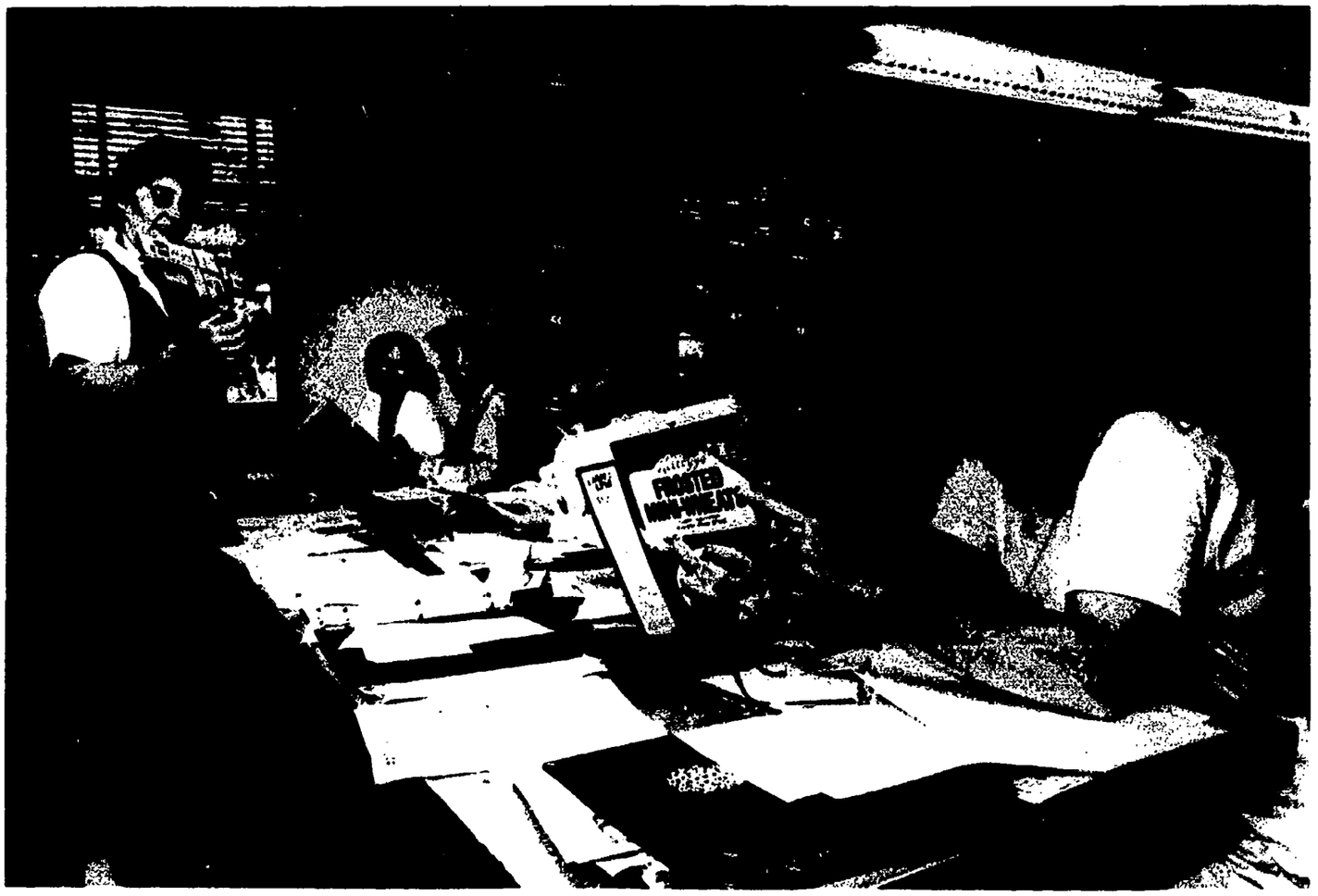
Health and safety curriculum committees should review the professional development plans of their respective districts. Not only should teachers be trained in a specific curriculum that will be offered to students, but all teachers should be exposed to a wide variety of health topics. Well-educated teachers are better able to seize the "teachable moments" and infuse health at the peak of a child's interest. Furthermore, teachers who have had an opportunity to take health education workshops are more likely to develop interdisciplinary projects that integrate health concepts in other curricular areas.

Numerous professional development opportunities are being made available in the health and safety area both at the local district level and through Connecticut's Institute for Teaching and Learning (ITL) program.■

Conclusion

Today's students become tomorrow's leaders, parents, workers, criminals, homeless and helpless. Whether the majority of tomorrow's adults become productive citizens truly may rest in the hands of today's educators. Because of this responsibility, school personnel must not look for pat answers to complex problems, rest on their past successes or look to others to provide leadership. A school district must develop the collective creativity and expertise of its own staff and work collaboratively with other districts and with parents to find solutions to the problems that have yet to be explored.

It is hoped that this guide to curriculum development will spark the imagination of many educators who, collectively or individually, will go beyond what is outlined and develop effective comprehensive health education programs for Connecticut students.■



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Bergquist, Virginia. "Stand By Me: An Integrated Language Arts Lesson Dealing With Alcohol And Other Drug Use And Peer Pressure." Irvine, CA: The University of California PACT Project, 1988.

Greenwald, David. "Mixing Drugs, Alcohol and Mathematics." Costa Mesa, CA: Orange County Register, March 4, 1988.

APPENDIX A
EVALUATION CHECKLIST

The following checklist for evaluating a school health education program was developed by the statewide advisory committee for *A Guide to Curriculum Development in Health and Safety*. The key to the checklist follows:

A = Completely
B = Somewhat
C = Not At All

Criteria	A	B	C	Recommended Action
A. Policy and Curriculum The district has a planned health education program with identified goals, objectives and scope and sequence of instruction for grade levels consistent with the current state curriculum guidelines.				
1. A written statement of the district's policy regarding the health education program is available.				
2. The district has a health education curriculum consistent with the current state health instruction guidelines and mandates.				
a. The health education curriculum is up-to-date.				
b. The health education curriculum includes a statement about health education philosophy, grade level objectives, and scope and sequence of content.				
3. Responsibilities are defined for all persons involved in the health education program (principals, teachers, school nurses and others).				
B. Staff The district has assigned personnel to provide leadership for the implementation and maintenance of a comprehensive health education program and has provided the necessary resources.				
1. A person at the district level has been named health education coordinator and is responsible for providing leadership to the district health education coordinating team.				

Criteria	A	B	C	Recommended Action
a. The district coordinator and coordinating team are provided with time and support to carry out duties.				
2. The person with primary leadership responsibility has had professional preparation in health education.				
3. The person with leadership responsibility coordinates school health education activities with community health activities, working with representatives of official and volunteer health agencies, professional health associations and other groups concerned with health education.				
4. The district provides the resources (funding, personnel, materials) necessary to operate the health education program.				
C. Community Input and Resources Health education programs are coordinated with community health programs. Representatives of public and private agencies and organizations, as well as students and parents, are involved in the planning, implementation and evaluation of the program.				
1. An active school and community health education advisory group is involved in planning, implementing and/or evaluating the school health program, which includes:				
a. A students' program				
b. A parents' program				
2. A guide or directory is available and includes information about community and district resources which support health education.				
3. Community and district resources are screened and evaluated for possible use for in-service training programs in health education.				
4. Teachers are aware of health counseling and health service resources provided by the district and the community.				

Criteria	A	B	C	Recommended Action
D. Staff Qualifications and In-Service Training Persons who provide instruction in health education have had professional preparation in health education through preservice or in-service training.				
1. Opportunities for in-service training in health education are available to staff members, support staff and others.				
2. Teachers are involved in the planning of in-service training programs.				
3. In-service training opportunities in health education receive emphasis comparable to that given to in-service training opportunities in other academic subject areas.				
4. Teachers at the elementary and secondary levels other than health instructors have had preservice or in-service preparation in health education.				
5. The district provides and supports health activities for the staff.				
E. Instruction/Organization The educational experience of each student in the elementary and secondary schools includes identifiable health instruction.				
1. The philosophy, goals and objectives for health instruction are consistent with those included in the current state health instruction guidelines.				
2. Objectives in terms of student knowledge, attitudes and behaviors related to health have been established at specific grade levels.				
3. Specific time is allocated for health instruction to achieve stated objectives.				
4. Health instruction is integrated and correlated with other subject areas when such practice will achieve stated health education objectives.				

Criteria	A	B	C	Recommended Action
5. Credit equal to that given for instruction in other academic subjects is given for health instruction.				
6. At the elementary level, the health instruction program is coordinated within the total instructional program. Students receive health instruction that is planned, ongoing and systematic.				
7. Students in Grades 6-8 receive health instruction which is planned, ongoing and systematic.				
8. Students at the senior high school level (9-12) receive health instruction which is planned, ongoing and systematic.				
9. Students at the senior high school level have an opportunity to select elective courses in health education.				
F. **Instructional Activities** Health instruction focuses upon attitudes and skill development as well as knowledge.				
1. A balance exists between attitude and skill development and cognitive approaches to health education in the classroom.				
2. Instructional activities are planned and developed in such a way as to enable students to:				
a. grow in self-awareness; that is, develop a positive sense of identity and self-esteem;				
b. develop skills for effective decision making; and				
c. grow in coping skills; that is, apply learning in daily living.				
3. The following methods are used separately or in combination when appropriate:				
a. Problem solving				
b. Demonstration				

Criteria	A	B	C	Recommended Action
c. Laboratory experimentation				
d. Lecture/discussion				
e. Reading and writing projects				
f. Discussion (large and small groups)				
g. Student projects				
h. Research				
i. Community projects				

Criteria	A	B	C	Recommended Action
G. Instruction/Content The content of health education is designed to serve current and future student health needs.				
1. The major content includes the following; the degree of emphasis on each area is based on assessed needs of students:				
a. Accident prevention and safety				
b. Community health				
c. Consumer health				
d. Family life education (optional)				
e. Nutrition				
f. Physical fitness				
g. Disease prevention				
h. Substance abuse (every year)				
i. Human growth and development				
j. First aid				
2. Attitudes, attributes and skills necessary to develop into healthy adults are taught:				
a. Self-esteem				
b. Decision making				
c. Interpersonal skills/communication				
d. Bonding to family, peers and community				
H. Materials/Resources Materials used in health education are current and accurate.				
1. Materials are up-to-date.				
2. Materials are scientifically accurate.				
3. Materials are selected for their contribution to meeting objectives of the health education program.				

Criteria	A	B	C	Recommended Action
4. Instruction is enriched by the use of materials available from official and volunteer health agencies and professional associations.				
5. Instruction is enriched by the use of current audiovisual materials such as films, videos, models, charts, radio and TV programs, and tape recordings.				
6. Instruction is enriched by the use of materials made available through the mass media.				
I. Evaluation A plan exists for evaluating the health education program.				
1. A planned program of evaluation will appraise the effectiveness of health education in terms of student growth in:				
a. knowledge related to health;				
b. attitudes toward health and health practices; and				
c. present and future health actions.				
2. A planned program of evaluation is carried out annually.				
3. The results of evaluations are used continuously to improve the health education program.				

APPENDIX B

IMPLEMENTATION MODEL

Appendix B presents a suggested scope and sequence table which outlines the major health topics to be addressed in a particular grade. Also provided are three models for integrating the high school health curriculum.

Recommendations are made for how staffing, materials and resources in a community can be used to teach the learning objectives suggested in Chapter 5. Examples of teaching strategies are given in the areas of growth and development, disease prevention and substance abuse. These models illustrate how the concepts of the topics in all three blocks can be integrated.

After reviewing the outline of learning objectives in Chapter 5, local boards of eduction must decide what learning objectives to teach at each grade level. It is not required that all learning objectives be taught yearly; however, it is strongly recommended that all learning objectives for the appropriate grade groupings be taught by the completion of Grade 3, Grade 6, Grade 9 and Grade 12.

SUGGESTED SCOPE AND SEQUENCE

Topics	Grades												
	K	1	2	3	4	5	6	7	8	9	10	11	12
Self-Concept	X	X	X	X	X	X	X	X	X	X	X	X	X
Responsibility and Decision Making	X	X	X	X	X	X	X	X	X	X	X	X	X
Interpersonal skills/Communication	X	X	X	X	X	X	X	X	X	X	X	X	X
Bonding to Family, School, Peers, Community	X	X	X	X	X	X	X	X	X	X	X	X	X
Substance Abuse	X	X	X	X	X	X	X	X	X	X	X	X	X
Nutrition	X	X	X	X	X	X	X	X	X	X	X	X	X
Growth and Development	X	X	X	X	X	X	X	X	X	X	X	X	X
Disease Prevention	X	X	X	X	X	X	X	X	X	X	X	X	X
Safety and Accident Prevention	X	X	X	X	O	X	X	X	X	O	X	O	O
Community Health	O	O	O	X	O	X	X	O	X	O	X	E	E
First Aid and Emergency Procedures	O	O	X	O	X	O	X	X	E	X	E	E	O
Consumer Health	O	O	O	X	O	X	X	O	X	X	E	E	E
Physical Fitness	(coordinated with physical education curriculum)												
Family Life Education	O	O	O	O	O	O	O	O	O	O	O	O	O

E = Elective X = Mandatory O = Optional

INTEGRATION OF HEALTH INTO THE HIGH SCHOOL CURRICULUM

Grade	Model A	Model B	Model C
9	One half-year course in health	One quarter-year course in health	One unit (3-4 weeks in length) in social studies relating to current events
10	Biology class, including one distinct unit of not less than three weeks	One quarter-year course in health	One half-year course in health
11	One half-year course in health	One quarter-year course in health	One quarter- to half-year elective program in home economics, physical education or social studies, each class having the same learning objectives in substance abuse and AIDS prevention, including the appropriate skills
12	English curriculum, including one distinct unit of not less than three weeks addressing substance abuse and AIDS prevention, including the appropriate skills	One quarter-year course in health	One half-year course in health

APPENDIX C
LEGISLATION

The following is the text from the *Connecticut General Statutes* that a local district health committee must review before it begins to develop a curriculum:

Sec. 10-16b. Prescribed courses of study. (a) In the public schools the program of instruction offered shall include at least the following subject matter, as taught by legally qualified teachers, the arts; career education; consumer education; health and safety, including, but not limited to, human growth and development, nutrition, first aid, disease prevention, community and consumer health, physical, mental and emotional health, including youth suicide prevention, substance abuse prevention and safety and accident prevention; language arts, including reading, writing, grammar, speaking and spelling; mathematics; physical education; science; social studies, including, but not limited to, citizenship, economics, geography, government and history; and in addition, on at least the secondary level, one or more foreign languages and vocational education.

Sec. 10-16d. Family life education programs not mandatory. Nothing in sections 10-16c to 10-16f, inclusive, shall be construed to require any local or regional board of education to develop or institute such family life education programs.

Sec. 10-19. Effect of alcohol, nicotine or tobacco and drugs to be taught. Training of Personnel. Instruction in acquired immune deficiency syndrome. (a) The effect of alcohol, of nicotine or tobacco and of drugs, as defined in subdivision (17) of section 21a-240, on health, character, citizenship and personality development shall be taught every academic year to pupils in all grades in the public schools; and, in teaching such subjects, textbooks and such other materials as are necessary shall be used. Institutions of higher education approved by the state board of education to train teachers shall give instruction on the subjects prescribed in this section and concerning the best methods of teaching the same. The state board of education and the board of governors of higher education in consultation with the commissioner of mental health and the state alcohol and drug abuse commission shall develop health education programs for elementary and secondary schools and for the training of teachers, administrators and guidance personnel with reference to the effects of nicotine or tobacco, alcohol and drugs.

(b) Commencing July 1, 1989, each local and regional board of education shall offer during the regular school day planned, ongoing and systematic instruction on acquired immune deficiency syndrome, as taught by legally qualified teachers. The content and scheduling of the instruction shall be within the discretion of the local or regional board of education. Not later than July 1, 1989, each local and regional board of education shall adopt a policy, as the board deems appropriate, concerning the exemption of pupils from such instruction upon written request of the parent or guardian. The state board of education shall make materials available to assist local and regional boards of education in developing instruction pursuant to this subsection.

Sec. 10-221. Boards of education to prescribe rules. (d) Not later than July 1, 1988, each local and regional board of education shall develop, adopt and implement policies and procedures in conformity with section 10-154a for (1) dealing with the use, sale or possession of alcohol or controlled drugs, as defined in subsection (8) of section 21a-240, by public school students on school property, including a process for referral of such students to appropriate agencies and (2) cooperating with law enforcement officials.

Sec. 17-38a. Protection of children from abuse. Reports required of certain professional persons... (b) Any physician or surgeon registered under the provisions of chapter 370 or 371, any resident physician or intern in any hospital in this state, whether or not so registered, and any registered nurse, licensed practical nurse, medical examiner, dentist, psychologist, school teacher, school principal, school guidance counselor, social worker, police officer, clergyman, osteopath, optometrist, chiropractor, podiatrist, mental health professional, physician assistant, any person who is a Connecticut certified substance abuse counselor, any person who is a Connecticut certified marital and family therapist or any person paid for caring for children in a day care center who has reasonable cause to suspect or believe that any child under the age

of eighteen has had physical injury or injuries inflicted upon him by a person responsible for such child's or youth's health, welfare or care, by a person given access to such child by such responsible person, or by a school employee other than by accidental means or has injuries which are at variance with the history given of them, or is in a condition which is the result of maltreatment such as, but not limited to, malnutrition, sexual abuse, sexual exploitation, deprivation of necessities, emotional maltreatment, or cruel punishment, or has been neglected as defined by section 46b-120 shall report or cause a report to be made in accordance with the provisions of subsection (c) of this section, except that if a member of a school staff who is required to report under the provisions of this section has reasonable cause to suspect or believe that any such child has had such injuries inflicted upon him by a school employee, the member of the school staff shall report the information which is to be included in the report described in said subsection (c) to the superintendent of the school district or supervisory agent of the nonpublic school in which the school employee is employed and such superintendent or supervisory agent shall immediately notify the child's parent or other person responsible for the child's care that a member of the school staff has made such a report and shall report or cause a report to be made in accordance with the provisions of said subsection (c). When the attendance of the person who has such reasonable cause to suspect abuse with respect to such child is pursuant to the performance of services as a member of the staff of a hospital, school, social welfare agency or any other institution, such person shall notify the person in charge of such institution, or his designated agent, that such report has been made. Any person required to report under the provisions of this section who fails to make such report shall be fined not more than five hundred dollars.

(c) An oral report shall be made immediately by telephone or otherwise, to the state commissioner of children and youth services or his representative, or the local police department or the state police to be followed within seventy-two hours by a written report to the commissioner of children and youth services or his representative, except that if a school employee is suspected or believed to be responsible for the injuries or maltreatment, the superintendent or supervisory agent shall immediately make an oral report by telephone or otherwise to the state commissioner of children and youth services, or his representative, and the local police department or the state police to be followed within seventy-two hours by a written report to the commissioner of children and youth services, or his representative, and the local police department or state police. Such report shall contain the names and addresses of the child and his parents or other person responsible for his care, if known, the age of the child, the nature and extent of his injuries, together with any evidence of previous injury or maltreatment to the child or his siblings, the name of the school employee if a school employee is suspected or believed to be responsible for the injuries or maltreatment and any other information which the reporter believes might be helpful in establishing the cause of the injury or injuries and protecting the child.

Public Act No. 89-168. An Act Concerning Child Abuse and the Prevention of Youth Suicide. Sec. 1. Section 17-38a of the general statutes is amended by adding subsection (j) as follows: (j) On or before July 1, 1990, each local and regional board of education shall adopt a written policy regarding the reporting by school employees of suspected child abuse in accordance with this section.

Sec. 2. Section 10-221 of the general statutes is amended by adding subsection (e) as follows: (e) Not later than July 1, 1990, each local and regional board of education shall adopt a written policy and procedures for dealing with youth suicide prevention and youth suicide attempts. Each such board of education may establish a student assistance program to identify risk factors for youth suicide, procedures to intervene with such youth, referral services and training for teachers and other school professionals and students who provide assistance in the program.

Sec. 3. Section 10-145a of the general statutes is amended by adding subsection (c) as follows: (c) Any candidate in a program of teacher preparation leading to professional certification shall be encouraged to complete a mental health component of such a program, which shall include, but need not be limited to, youth suicide, child abuse and alcohol and drug abuse.

Sec. 4. Subsection (a) of section 10-220a of the general statutes is repealed and the following is

substituted in lieu thereof: (a) Each local or regional board of education shall provide an in-service training program for its teachers, administrators and guidance personnel who hold the initial, provisional or [standard] professional educator certificate. Such program shall be approved by the state board of education, and shall provide such teachers, administrators and guidance personnel with information as to (1) the nature and the relationship of drugs, as defined in subdivision (17) of section 21a-240, and alcohol to health and personality development, and procedures for discouraging their abuse and (2) health and mental health issues affecting children, including, but not limited to, child abuse and youth suicide.

Appendix D
Effective Drug Abuse Prevention Programs and Speakers

Appendix D contains a list of criteria and program characteristics to help school administrators make decisions about choosing effective drug abuse prevention programs and speakers. It must be stressed that short-term, "one-shot," isolated programs and speakers tend to produce few, if any, positive results. When used they should be integrated into a multistrategy K-12 drug abuse prevention effort. A "big-name" speaker is most effective when used as a kickoff for other activitics.

The following lists of high- and low-effectiveness programs and/or speakers are taken from the Connecticut State Department of Education's *Substance Abuse Prevention Education* curriculum resources packet, published and distributed in 1988.

High-Effectiveness Programs/Speakers

- Target use of any drug, including alcohol
- Target small groups of students
- Focus on life skills such as decision making, peer resistance, assertiveness, etc., as related to drugs
- Have a positive message
- Talk about positive alternatives to drug use
- Focus on health and mental/emotional wellness as positive reasons to avoid drugs
- Use positive, successful role models to talk about how their nonuse of drugs has contributed to their success
- Follow up a "name" speaker with small group discussions, classroom exercises and other activities
- Stress that each individual has a choice; no one has to use drugs
- Create opportunities for interaction such as discussing, brainstorming, role-playing, etc.
- Encourage student analysis of pro-use messages as promoted by TV, movies and advertising
- Familiarize students with short- and long-term effects of drug use
- Explain stages of abuse
- Encourage students to seek help for their friends and themselves
- Familiarize students with helping resources in the school – for drugs or any other problem
- Address the issue of family alcoholism/drug dependence and encourage students from such families to seek help for themselves
- Educational materials should:
    1) be culturally specific and sensitive;
    2) be age appropriate;
    3) use a variety of learning models – discussion, reading, audiovisual, etc; and
    4) be graphically appealing.

Low-Effectiveness Programs/Speakers

- Assemblies/large groups of students
- Former drug addicts, especially those who tell "horror stories" about what drugs did to them
- "Glamorous" former users such as sports figures who obviously are successful in spite of their former use
- Drug information/pharmacology alone (not connected to life skills)
- Negative messages; scare tactics
- "One-shot" programs with no follow-up
- Assume that kids will use drugs
- Lectures; no interaction with students
- Focus on drugs as the problem rather than on the individual's choice to use or not use drugs
- Don't "build bridges" with existing programs, or provide information on helping resources
- Focus on a "hot topic" such as crack without mentioning other drugs and skills for saying no
- Show students examples of drugs and paraphernalia (this lowers inhibitions on use)

APPENDIX E
HOW TO ANSWER DIFFICULT QUESTIONS

The most difficult and frightening part of health education for teachers is not in presenting the information, but in answering the related questions that students may ask. Appendix E has been included to prepare teachers to feel confident and comfortable in answering these questions, particularly those that relate to morals and values.

The following procedures from Skerker, 1988, will serve to assist teachers in developing skills to help overcome these problems:

1. **Listen Carefully**
   Students often ask long, sometimes convoluted questions about sex, illness, death or emotional issues. Adults may "tune out" or become embarrassed themselves. During this process, both child and adult can be drawn away from the main issue. Developing good listening skills will help the adult answer the child's question.

2. **Take A Deep Breath**
   Taking a deep breath serves two functions:
   - It gives you time to think.
   - It brings extra oxygen to the muscles, allowing you the chance to relax before answering a difficult question.

3. **Question Yourself**
   Ask yourself what question the student is really asking.

4. **Restate The Question**
   If you believe you understand the question, restate the question as you understand it before you attempt to answer it. If you are unsure about the question, ask the student to restate it. This technique allows the student to clarify the issue in his or her own mind and restate the question in his or her own words.

5. **Answer The Restated Question**
   Once you understand the question, answer it briefly, honestly and directly. Do not add related information. Remember that teachers should never feel they must answer every question. Teachers should acknowledge the importance of the question and praise the child for asking the specific question. However, teachers should not feel that they must be experts on everything or feel compelled to take a stand on all issues. Referring students to other resources on specific issues is not only acceptable but also an important teaching technique. By identifying a variety of other resources, the teacher helps students understand that they are not alone, that there are a variety of "helpers" available. Key resource people to mention are parents, clergy, school personnel such as nurses, counselors, social workers, administrators and community "helpers" or agencies.

6. **Ask The Student, "Do You Understand?"**
   Never assume that simply because you have answered the question correctly, the student has understood the information.

7. **Check The Student's Comprehension**
   Ask the student to explain to you what he or she learned or understood from your discussion.

8. **Correct Errors Or Omissions**

9. **Praise The Student**
   Students may ask questions that are important or silly. Regardless of the nature of the question, always praise the student for asking the question.

This process may seem awkward at first, but with practice these steps make answering students' questions easier for adults. More importantly, it allows the teacher to present information in a manner that is helpful to the student.

From "AIDS: What Every Teacher Must Know;"
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