# EMPOWERING OUR YOUTH: USING SCHOOL-BASED PROGRAMS TO INCREASE KNOWLEDGE AND SELF-EFFICACY AMONG YOUTH TO MAKE POSITIVE BEHAVIOR CHOICES

by

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The role that schools play in the health of our youth is of public health significance because they have the ability to provide health services directly to children and affect health outcomes. Many of today's health challenges among youth are onset by behavioral choices that they make. Schools are in the unique position to make an impact on behavioral choices through the use of health education programs and services. As adolescent issue become more complex, it is essential for schools to take on a comprehensive school health education program. The comprehensive approach focuses on increasing knowledge, self-efficacy, and behavior intention, while providing an environment that is conducive to maintaining and sustaining positive health behaviors into adulthood. This paper advocates for the use of comprehensive health education programs to target adolescent problem areas and increase overall health and well-being. The main concept and theme in this paper is establishing, improving, and increasing self-efficacy using comprehensive school health programs to address the particular needs of adolescents based on theories of health behavior change that are discussed throughout the paper. Evidence from successful school-based programs suggests that the comprehensive approach is powerful in increasing knowledge, self-efficacy, and behavior intention/change. Policies need to be centered on improving school health, and

schools also need to take the initiative to implement a strong framework into their systems. An increase in morbidity and mortality among adolescents suggests the need for continued coordinated efforts in order to decrease negative behaviors that may carry into adulthood.

## TABLE OF CONTENTS

## LIST OF TABLES

## LIST OF FIGURES

## PREFACE

I would like to thank Dr. Keane, Dr. Jaros, and Dr. Songer for being a part of my thesis committee. I would also like to my family and friends for their unconditional support in my journey to complete my master's degree. You continuous encouragement has empowered me to be the person I am today.

# 1.0 INTRODUCTION

Children and adolescents spend most of their waking hours in school continually learning from their peers, educators, and environment. In the United States, 53 million young people attend nearly 129,000 schools for about 6 hours of classroom time each day for up to 13 of the most formative years of their lives (Snyder, 2002). Schools are truly in a unique position to improve both the education and health status of young people throughout the nation because they are the only institutions that can reach nearly all youth (Fisher, 2003).

Schools play a strategic role in promoting health and having the ability to provide health services directly to children and adolescents. Our youth today face different health challenges, many of which are onset by behavioral choices: sexual behavior, alcohol and other drug use, nutritional choices, and unintentional injuries. As these issues become more complex, it becomes imperative to address these issues proactively using a comprehensive approach.

## 1.1 PURPOSE

The purpose of this position paper is to advocate for more schools to provide a comprehensive approach when presenting health information to children and adolescents. Throughout this paper, I will be advocating for schools to take on a comprehensive school health program, an

approach that not only focuses on the health and physical education instruction, but also focuses on school health services and creating a healthful environment to promote healthy behaviors.

The ultimate goal of any school health program is to increase child/adolescent self-efficacy and knowledge on concerning issues so that they can make positive behavior choices that will last into adulthood. The main concept and theme in this paper is establishing, improving, and increasing self-efficacy using comprehensive school health programs to address the particular needs of adolescents based on theories of health behavior change. A portion of this paper will examine successful programs that have proven to be effective in creating positive behavior change. From the review of successful programs, a framework can be created and used as an example for other schools hoping to influence their use of similar school health education programs.

Professionals in the school arena have long since concluded that "healthy children" are in a stronger position to acquire knowledge (Simmons, 2003). It is important, from a public health perspective, that we provide our youth with the proper tools to be healthy members of society and to make positive decisions when concerning their own health behaviors. By doing this, we can make a significant impact on the health of our society.

## 1.2 SCHOOL HEALTH AT A GLANCE

School health has evolved immensely over time. Schools have been the focus of numerous and varied efforts to promote and secure the health of American children and young people since the colonial era (Allensworth, Lawson, Nicholson, & Wyche, 1997). Through the early twentieth century, school health was only beginning to gain significance within the education system. In

1850, the “modern school health era” began and there was a reorganization of the public school system leading to school programs receiving major attention as a means to promote public health and prevent disease (Allensworth et al., 1997).

World War I marked a turning point in the history of school health because the problems of poverty became more visible: malnutrition, poor physical condition, and the abysmal state of the health and welfare of many of the country’s children (Allensworth et al., 1997). New philosophies began to replace old models and many new approaches were being used to gain an understanding of health behaviors. A new image of school health programs began to surface following World War I. The Child Health Organization, one of the most active groups devoted to the health of children, conducted a nationwide campaign to raise the health standards of the American School Child (Allensworth et al., 1997). By attracting the interest of the students’, this organization was able to create an encouraging approach to positive health behaviors.

Between the 1930s and 1960s, organizations began to take a strong interest in school health improvements. Many reports and important documents emphasizing pressing health issues were published such as: (1) *Suggested School Health Policies* published by the National Committee on School Health Policies of the National Conference for Cooperation in Health Education, and (2) *Health Appraisal of School Children* published by the National Education Association and the American Medical Association Joint Committee on Health Problems in Education (Allensworth et al., 1997). During this time period, the health education curriculum became stabilized and more fully developed including topics such as nutrition, personal health habits, disease, exercise, alcohol and tobacco, family health, safety education, and sex education (Allensworth et al., 1997).

As the 1960s rolled along, more major changes to the school health system were made. An increased level of federal involvement led to more available funds and also the passing of relevant legislation including Head Start, Medicaid, the Elementary and Secondary Education Act, and the Child Nutrition Act that established the School Breakfast Program and permanently authorized reimbursements for school lunches served to needy students (Allensworth et al, 1997).

The 1980s and 1990s marked many significant activities that include the following:

- the creation of the Division of Adolescent and School Health (DASH) of the Centers for Disease Control and Prevention (CDC) in 1988;
- the launching of the U.S. Public Health Service's Healthy People 2000 initiative, which includes almost 300 national health promotion and disease prevention objectives to be achieved by the year 2000, many of which can be achieve in or through the schools;
- since 1994, a number of national conferences focusing on the importance of improving access to comprehensive health and social services for children and families as a means of improving the health, welfare, and educational achievement of children;
- the establishment of the Health Schools, Health Communities initiative by the U.S. Public Health Service;
- The development of national standards by the Joint Committee on National Health Education Standards (NHES) (Allensworth et al., 1997).

The National Health Education Standards (Table 1) were created in 1995, and then modified again in 2007 by a Joint Committee consisting of the American Cancer Society, American Association for Health Education, American Public Health Association, American School Health Association, and Society of State Directors of Health, Physical Education and Recreation (American Cancer Society 2007). According to the Joint Committee (2007), the NHES were developed to promote and support health-enhancing behaviors for students in grade levels pre-K through 12 and to also provide a framework for teachers, administrators, and policy makers in designing curricula, allocating resources, and tracking student achievement and progress. By providing performance indicators, schools can reinforce that the students are meeting the minimum standards.

**Table 1-1: National Health Education Standards**

| **National Health Education Standards** | |
|---|---|
| **Standard 1:** | Students will comprehend concepts related to health promotion and disease prevention to enhance health. |
| **Standard 2:** | Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors. |
| **Standard 3:** | Students will demonstrate the ability to access valid information, products, and services to enhance health. |
| **Standard 4:** | Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks. |
| **Standard 5:** | Students will demonstrate the ability to use decision-making skills to enhance health. |
| **Standard 6:** | Students will demonstrate the ability to use goal-setting skills to enhance health. |
| **Standard 7:** | Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks. |
| **Standard 8:** | Students will demonstrate the ability to advocate for personal, family, and community health. |

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## 1.3 COMPREHENSIVE SCHOOL HEALTH PROGRAMS

A new concept called the "comprehensive school health program" was created as a means to address the new social morbidities that are affecting our youth (Allensworth et al., 1997). As we approached a new century, *Healthy People 2010* was created and built upon the *Healthy People 2000* objectives. School health programs are now undergoing change to tackle issues that are not limited to violence, mental health, drug and alcohol use, and sexually transmitted diseases which is where the comprehensive model comes into action.

Comprehensive school health programs (CSHPs) are designed to take advantage of the pivotal position of the school in reaching children and families by combining health education, health promotion and disease prevention, and access to health and social services (Allensworth et al., 1997). Comprehensive school health education is defined as a planned, sequential curriculum of experiences presented by qualified professionals to promote the development of health knowledge, health-related skills, and positive attitudes toward health and well-being for students in preschool through grade 12 (Frauenknecht 2003). The overarching goal of comprehensive school health programs are to enable all students to achieve and maintain an optimal state of health and well-being, reach their full academic potential, and develop into healthy productive adults who take personal responsibility for their own health (Allensworth et al., 1997). A comprehensive school health program empowers students with not only the knowledge, attitudes, and skills required to make positive health decisions but also the environment, motivation, services, and support necessary to develop and maintain health behaviors (CDC, 1996).

According to the National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health (2008), Allensworth and Kolbe (1987) the comprehensive school model consists of eight interactive components that consists of:

- **Health Education:** A planned, sequential, K-12 curriculum that addresses the physical, mental, emotional and social dimensions of health. The curriculum is designed to motivate and assist students to maintain and improve their health, prevent disease, and reduce health-related risk behaviors. It allows students to develop and demonstrate increasingly sophisticated health-related knowledge, attitudes, skills, and practices. The comprehensive health education curriculum includes a variety of topics such as personal health, family health, community health, consumer health, environmental health, sexuality education, mental and emotional health, injury prevention and safety, nutrition, prevention and control of disease, and substance use and abuse. Qualified, trained teachers provide health education.
- **Physical Education:** A planned, sequential K-12 curriculum that provides cognitive content and learning experiences in a variety of activity areas such as basic movement skills; physical fitness; rhythms and dance; games; team, dual, and individual sports; tumbling and gymnastics; and aquatics. Quality physical education should promote, through a variety of planned physical activities, each student's optimum physical, mental, emotional, and social development, and should promote activities and sports that all students enjoy and can pursue throughout their lives. Qualified, trained teachers teach physical activity.
- **Health Services:** Services provided for students to appraise, protect, and promote health. These services are designed to ensure access or referral to primary health care

services or both, foster appropriate use of primary health care services, prevent and control communicable disease and other health problems, provide emergency care for illness or injury, promote and provide optimum sanitary conditions for a safe school facility and school environment, and provide educational and counseling opportunities for promoting and maintaining individual, family, and community health.

- **Nutrition Services:** Access to a variety of nutritious meals that accommodate the health and nutrition needs of all students. School nutrition programs reflect the U.S. Dietary Guidelines for Americans and other criteria to achieve nutrition integrity. The school nutrition services offer students a learning laboratory for classroom nutrition and health education, and serve as a resource for linkages with nutrition-related community services.
- **Counseling and Psychological Services:** Services provided to improve students' mental, emotional, and social health. These services include individual and group assessments, interventions, and referrals. Organizational assessment and consultation skills of counselors and psychologists contribute not only to the health of students but also to the health of the school environment.
- **Healthy School Environment:** The physical and aesthetic surroundings and the psychosocial climate and culture of the school. Factors that influence the physical environment include the school building and the area surrounding it, any biological or chemical agents that are detrimental to health, and physical conditions such as temperature, noise, and lighting. The psychological environment includes the

physical, emotional, and social conditions that affect the well-being of students and staff.

- **Health Promotion for Staff:** Opportunities for school staff to improve their health status through activities such as health assessments, health education and health-related fitness activities. These opportunities encourage school staff to pursue a healthy lifestyle that contributes to their improved health status, improved morale, and a greater personal commitment to the school's overall coordinated health program. This personal commitment often transfers into greater commitment to the health of students and creates positive role modeling. Health promotion activities have improved productivity, decreased absenteeism, and reduced health insurance costs.
- **Family/Community Involvement:** An integrated school, parent, and community approach for enhancing the health and well-being of students. School health advisory councils, coalitions, and broadly based constituencies for school health can build support for school health program efforts. Schools actively solicit parent involvement and engage community resources and services to respond more effectively to the health-related needs of students.

It is also extremely important for comprehensive programs to establish the most recent state-of –the-art health education curricula that emphasizes teaching functional health information, shapes personal values that support healthy behaviors, shapes group norms that value a healthy lifestyle, and develops the essential health skills necessary to adopt, practice and maintain health enhancing behaviors (CDC, 2008). Reviews of effective program and input

from experts in the field of health education have indentified the following characteristics of an effective health education curriculum:

- Focuses on clear health goals and related behavioral outcomes.
- Is research-based and theory-driven.
- Addresses individual values and group norms that support health-enhancing behaviors.
- Focuses on increasing personal perceptions of risk and harmfulness of engaging in specific health risk behaviors and reinforcing protective factors.
- Addresses social pressures and influences.
- Builds personal competence, social competence, and self-efficacy by addressing skills.
- Provides functional health knowledge that is basic, accurate, and directly contributes to health promoting decisions and behaviors.
- Uses strategies designed to personalize information and engage students.
- Provide age-appropriate and developmentally appropriate information, learning strategies, teaching methods, and materials.
- Incorporates learning strategies, teaching methods, and materials that are culturally inclusive.
- Provides adequate time for instruction and learning.
- Provides opportunities to reinforce skills and positive health behaviors.
- Provides opportunities to make positive connections with influential others.
- Includes teacher information and plans for professional development and training that enhance effectiveness of instruction and student learning (CDC, 2008).

Combining all of these aspects to create a strong foundation will lead to a successful comprehensive program that will enhance the school and the people involved.

# 2.0 YOUTH RISK BEHAVIORS: REVIEW OF THE LITERATURE

Children and adolescents are known for their risk taking behaviors. Throughout these years of life, youth begin to develop their own identity, values, and beliefs. Many behaviors are influenced by family, peers, friends, teachers, and also TV and media. When adolescents take risks, the consequences can be negative: car accidents can occur while driving drunk, smoking can lead to cancer, and unprotected sex can lead to unwanted pregnancies and disease (Worrell & Danner, 1989).

It is important for schools to address which behaviors contribute to the leading causes of morbidity and mortality. With this information, school health programs can then tailor their prevention programs to the corresponding issues.

## 2.1 OVERVIEW

In order for schools to determine which health-risk behaviors should be a priority, data would need to be collected either locally, state-wide, or nationally. The Youth Risk Behavior Surveillance System (YRBSS) is a national survey that monitors six categories of priority health-risk behaviors among youth and young adults that include:

- Unintentional injuries and violence

- Tobacco use
- Alcohol and other drug use
- Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including human immunodeficiency virus (HIV)
- Unhealthy dietary behaviors
- Physical activity (Centers for Disease Control and Prevention, 2008)

By determining the leading causes of morbidity and mortality, school programs will then be able to tailor their health programs and interventions to improve the health outcomes among youth.

## 2.2 PROBLEM AREAS

The four problem areas of focus-motor vehicle crashes (seat-belt use and drinking and driving), alcohol use, nutrition and dietary behaviors, and sexual behaviors (unintended pregnancy and STD's/HIV)-were chosen because of their high percentages of morbidity and mortality among youth.

### 2.2.1 Unintentional injury: motor vehicle crashes

Motor vehicle crashes are the leading cause of death among children, adolescents, and young adults in the United States (Cohn, Hernandez, Byrd, & Cortes, 2002). In this paper, I wanted to

focus on increasing adolescent seat-belt use and decreasing adolescent drinking and driving to decrease motor vehicle mortality.

In the United States, motor vehicle crashes resulted in 30% of all deaths among youth and young adults age 10-24 (Center for Disease Control and Prevention, 2008). It is important that school health education programs focus on educating students about the high prevalence of motor vehicle crashes so that they will have the knowledge and self efficacy to make proper decisions when in the car.

#### 2.2.1.1 Seat belt use

Seat belts substantially reduce the risk of motor vehicle fatalities by 38%-46%; however, many motor vehicle occupants are not consistent with seat belt use. According to the Youth Risk Behavior Surveillance Survey (2008), 11.1% of students nationwide, 6.0% to 19.4% (median 11.2%) students statewide, and 5.6% to 25.1% (median 9.6%) of students locally had rarely or never worn a seat belt when riding a car driven by someone else. According to the National Highway Traffic Safety Administration (2008), teens buckle up far less frequently than adults do and in 2006 youth (16-20 years old) were observed using seatbelts at only 76% of the time, scoring the lowest of any age group.

#### 2.2.1.2 Drinking and driving

Underage drinking continues to be a problem that often leads to negative consequences such as involvement in alcohol-related motor vehicle crashes (Elder, Nichols, Shults, Sleet, Barrios, & Compton, 2005). Data from the National Highway Traffic Safety Administration Fatality

Reporting System shows the severity of the alcohol-related fatal crash problem among youth. In 2002, 38% of young vehicle occupants (ages 16-20) were from crashes in which one or more drivers had been drinking and 32% of those killed in a fatal crash had a blood alcohol concentration above zero (National Highway Traffic Safety Administration, 2005).

The prevalence of students that had ridden one or more times in a car or other vehicle driven by someone who had been drinking alcohol is 29.1% nationally, ranging from 14.8% to 35.6% (median: 27.4%) statewide, and ranging from 18.0% to 38.4% (median: 27.0%) locally (Center for Disease Control and Prevention, 2008).

The prevalence of students that had driven a car or other vehicle when they had been drinking alcohol is 10.5% nationwide, ranging from 4.7% to 18.7% (median: 10.4%) statewide, and ranging from 2.8% to 12.9% (median: 6.6%) locally (Center for Disease Control and Prevention, 2008). From the data, this issue has reached levels of concern and needs to be addressed through educational awareness.

### 2.2.2 Alcohol use

Many adolescents start to drink at a very young age because they are encountering dramatic physical, emotional, and lifestyle changes along with increased independence and experimentation (Alcohol Alert, 2006). Once adolescents start drinking they begin to face a number of potential health risks that are not limited to alcohol dependency, obesity, depression, liver effects, and an increased risk of unintentional injury (Alcohol Alert, 2006).

According to the statistics, 75.0% of students nationally, 36.7% to 78.2% (median: 73.5) statewide, and 53.2% to 74.8% (median: 66.7) locally had at lease one drink of alcohol on at least 1 day during their life (i.e., lifetime alcohol use), while 44.7% of students nationally, 17.0%

to 48.9% (median: 42.9) statewide, and 22.3% to 44.3% (median: 36.4%) locally had at least one drink of alcohol on at least 1 day during the 30 days before the survey (i.e., current alcohol use) (Center for Disease Control and Prevention, 2008).

Schools are truly in a unique position to educated students about the risk of underage alcohol use and provide interventions that will reduce adolescent drinking and the morbidities that might follow.

### 2.2.3 Dietary behaviors

Researchers have long since concluded that healthy eating patterns in childhood and adolescence promote optimal health, growth, and intellectual development; prevent immediate health problems, such as anemia, obesity, and eating disorders; and may prevent long-term health problems such as heart disease, cancer, and stroke (CDC, 1996).

The prevalence of students that had eaten fruits and vegetables five or more times per day is 21.4% nationally, ranging from 13.2% to 23.8% (median: 17.9%) statewide, and ranging from 16.9% to 28.8% (median: 20.9%) locally (Center for Disease Control and Prevention, 2008).

When examining the percentage of students who drank three or more glasses per day of milk, the statistics showed 14.1% of student nationally, 8.0% to 25.4% (median: 14.5) statewide, and 5.1% to 14.2% (median: 8.8%) locally (Center for Disease Control and Prevention, 2008).

Lastly the YRBSS examined the percentage of students that has drunk a can, bottle, or glass of soda or pop (not including diet soda or diet pop) at least one time per day during the 7 days before the survey. There were 33.8% of student nationally, ranging from 16.9% to 47.0% (median: 29.5%) statewide, and ranging from 14.4% to 39.9% (median: 28.6%) locally (Center for Disease Control and Prevention, 2008).

School-based nutrition education is important because our youth frequently decide what to eat with little supervision, and many of the choices they make are influences by television advertisements for food with low-nutritive value (CDC, 1996) Schools play an important role in promoting lifelong healthy eating habits and also provide the setting to implement a comprehensive approach that goes beyond the classroom (CDC, 1996). The main goal is to empower the students so that their lifestyle choices and eating habits will carry long into adulthood.

### 2.2.4 Sexual behaviors

Adolescent sexual risk behaviors continue to represent one of the most serious public health issues in the United States (Alan Guttmacher Institute, 1994). Consequences of these behaviors can include unintended pregnancy, HIV/AIDS infection, and sexually transmitted diseases.

According to the YRBSS, nationally 47.8% (35.0% of students report that they are currently sexually active) of students had ever had sexual intercourse, ranging from 36.2% to 59.5% (median: 45.9%) statewide, and ranging from 26.4% to 67.1% (median: 50.6%) locally (Center for Disease Control and Prevention, 2008). When looking at condom use, the survey reported that 61.5% of students nationally, 54.2% to 69.2% (median 61.5%) statewide, and 57.0% to 74.3% (median: 68.1%) of students locally reported that either they or their partner had used a condom during the last sexual intercourse (Center for Disease Control and Prevention, 2008).

The percentage of students that are sexually active is almost half of the surveyed population, which alerts the need for more educational efforts to reduce the risk of negative consequences. School programs goals should not be limited to abstinence-only education, as

they do not include discussion of birth control aside from contraceptive failure an/or disease prevention (Kirby, 1997; Klein, Goodson, Serrins, Edmundson, & Evans, 1994).

# 3.0 THEORIES

A theory is a set of interrelated concepts, definitions, and propositions that present a systematic view of events or situations by specifying relations among variables in order to explain and predict the events or situations (Glanz, Rimer, & Lewis, 2002). Theories are not concrete concepts, instead they are abstract. They can be very useful in providing a framework on how to make an impact on people. The following theories-social cognitive theory, self-efficacy theory, health belief theory, and the theory of reasoned action and planned behavior-are able to explain behavior, suggest ways to achieve behavior change, and guide the search for modifiable factors such as knowledge, attitudes, and self-efficacy (Glanz et al., 2002).

When it comes to health education, a combination of theories is what helps shape the framework of programs. The following theories are very important in changing adolescent behavior and increasing their knowledge and self-efficacy to make positive decisions.

## 3.1 HEALTH BELIEF THEORY

This theory is a model of individual behavior change. The Health Belief Theory has been one of the most widely used conceptual frameworks in health behavior because it is used to explain change and maintenance of health-related behaviors and also is used as a guiding framework for health behavior interventions (Glanz et al., 2002).

There are six component associated with the Health Belief Theory: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. Table 3-1 gives definitions and explains each concept in greater detail.

**Table 3-1: Overview of Health Belief Theory**

| KEY CONCEPTS AND DEFININTIONS OF THE HEALTH BELIEF THEORY | | |
|---|---|---|
| **Concept** | **Definition** | **Application** |
| Perceived susceptibility | One's belief regarding the chance of getting a condition | • Define population(s) at risk, risk levels<br>• Personalize risk based in person's characteristics or behavior<br>• Make perceived susceptibility more consistent with an individual actual risk |
| Perceived severity | One's belief of how serious a condition and its sequelae are | • Specify the consequences of the risk and the conditions |
| Perceived benefits | One's belief in the efficacy of the advised action to reduce risk or seriousness of impact | • Define action to take: how, where, when; clarify the positive effects to be expected |
| Perceived barriers | One's belief about the tangible and psychological costs of the advised action | • Identify and reduce perceived barriers through reassurance, correction of misinformation, incentives, assistance |
| Cues to action | Strategies to active one's "readiness" | • Provide how-to information, promote awareness, employ reminder systems |
| Self-efficacy | One's confidence in one's ability to take action | • Providing training, guidance in performing action<br>• Use progressive goal setting<br>• Give verbal reinforcement<br>• Demonstrate desired behaviors |

*Source:* Glanz et al., 2002.

Using this theory will give program planners and instructors the framework to promote positive behavior change among the students. It is important for the instructors to allow the

students to see that they are susceptible to a condition, and then help them gain the confidence to make successful changes.

*Example*: Condom use and condom education is a great way to explain the Health Belief Theory in regards to teaching adolescents positive preventative health behaviors. Table 3-2 explains the application to the theory.

**Table 3-2: Example of Health Belief Theory**

| Concept | Condom Use Education |
|---|---|
| Perceived susceptibility | Youth believe they can get STIs or HIV or create a pregnancy. |
| Perceived severity | Youth believe that the consequences of getting STIs or HIV or creating a pregnancy are significant enough to try to avoid. |
| Perceived benefits | Youth believe that the recommended action of using condoms would protect them from getting STIs or HIV or creating a pregnancy. |
| Perceived barriers | Youth identify their personal barriers to using condoms (i.e., condoms limit the feeling or they are too embarrassed to talk to their partner about it) and explore ways to eliminate or reduce these barriers (i.e., teach them to put lubricant inside the condom to increase sensation for the male and have them practice condom communication skills to decrease their embarrassment level). |
| Cues to action | Youth receive reminder cues for action in the form of incentives (such as pencils with the printed message "no glove, no love") or reminder messages (such as messages in the school newsletter). |
| Self-efficacy | Youth confident in using a condom correctly in all circumstances. |

## 3.2 THEORY OF REASONED ACTION/PLANNED BEHAVIOR

This theory is another model of individual behavior change that focuses on motivational factors as determinants of the likelihood of performing specific behaviors (Glanz et al., 2002). This theory has a good predictive power in explaining why people decided to engage in certain behaviors. Glanz et al. explains the Theory of Reasoned Action (TRA) as "a measure of attitude and social normative perceptions that determine behavioral intentions that in turn affect behavior" and explains the Theory of Planned Behavior (TPB) as "an additional construct concerned with perceived control over performance of the behavior." Theory constructs are shown graphically in Figure 3-1.

The most important determinant of behavior is one's behavior intention illustrated in the upper section of Figure 3-1. The two direct determinants of one's individual behavioral intentions are (1) attitude towards performing the behavior and (2) their subjective norm associated with the behavior (Glanz et. al, 2002). An individual who has strong beliefs that positively value outcomes will have a positive attitude toward the behavior; whereas, a person who has strong beliefs that negatively value outcomes will have a negative attitude towards behavior (Glanz et al., 2002). In Figure 3-1, there is a link between behavior beliefs and normative beliefs to behavioral intention and behavior through attitude and subjective norms.

The TRA provides a framework for identifying key behavioral and normative beliefs affecting behavior which can then aid in designing interventions to target and change these beliefs, leading to a change in intention and behavior by affecting attitude and subjective norm

(Glanz et al., 2002). The TRA has been use successfully to predict and explain a wide range of health behaviors and intentions, including smoking, drinking, contraceptive use, seat belt use, and HIV or sexually transmitted disease prevention behaviors; and findings have been used to develop behavior change interventions (Albarracin Johnson, Fishbein, and Muellerleile, 2001; Bandawe and Foster, 1996; and Morrison, Spencer, and Gillmore, 1998).

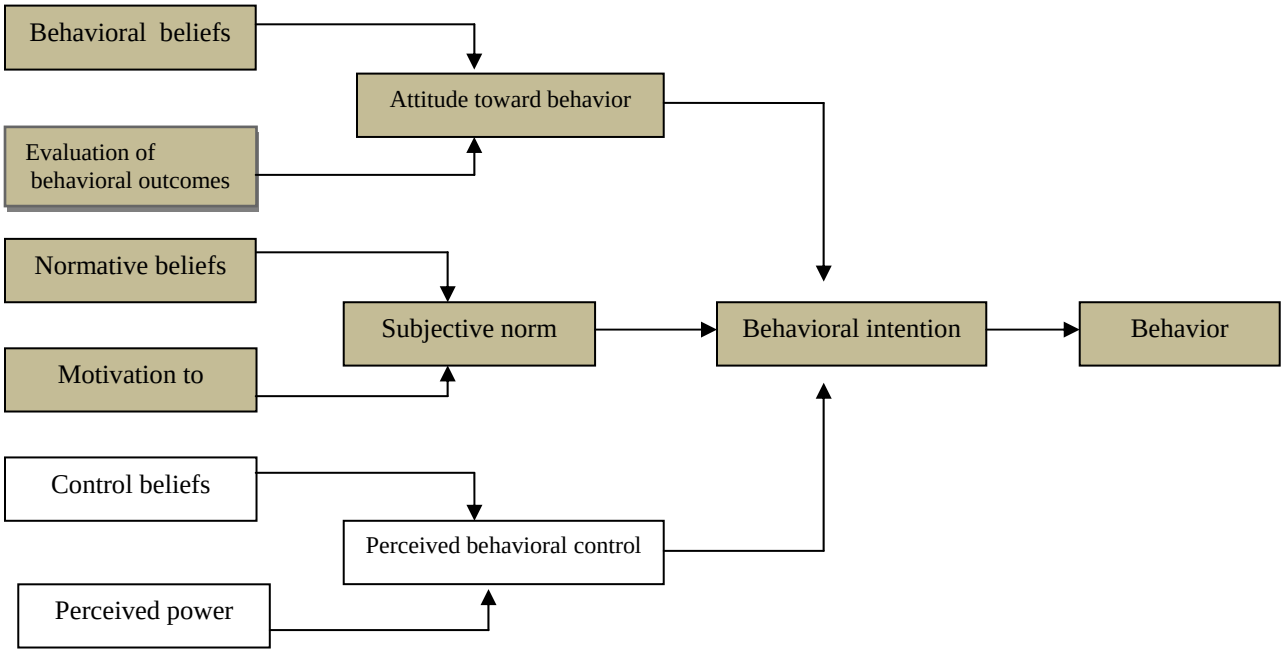


**Figure 3-1: Theory of Reasoned Action and Planned Behavior**
*Source:* Glanz et al, 2002. *Note:* Upper shaded section shows the Theory of Reasoned Action; the entire figure shows the Theory of Planned Behavior.

The TRA is not fully sufficient for predicting behaviors in which volitional control is reduced; therefore, Ajzen and colleagues proposed the Theory of Planned Behavior (TPB) to predict behaviors over which people have incomplete control due to environmental conditions that intervene (Glanz et.al, 2002). Ajzen and colleagues (Ajzen, 1991; Ajzen and Driver, 1991;

Ajzen and Madden, 1986) added perceived behavioral control to the TRA in an effort to account for the factors outside of the individual's control that may affect intention and behavior. According to the TPA and shown in Figure 3-1, perceived control is determined by control beliefs concerning the presence or absence of facilitators and barriers to behavioral performance, weighted by the perceived power or impact of each factor to facilitate or inhibit the behavior (Glanz et.al, 2002).

The Theory of Reasoned Action and the Theory of Planned Behavior provide strong frameworks for conceptualizing, measuring, and identifying factors that determine behavior (Glanz, et.al, 2002). Both of the theories provide an outline to identify factors on which interventions should focus. Focusing on positive behavior change within adolescents is important so that the adapted behaviors can be taken along with them to adulthood. The TRA and TPB are strong frameworks to making this change occur.

## 3.3 SOCIAL COGNITIVE THEORY

The Social Cognitive Theory (SCT) addresses both the psychosocial dynamics influencing health behavior and methods for promoting behavioral change (Glanz et. al, 2002). Public health professionals and health educators have used the SCT to develop many interventions that promote behavior change. The SCT first deals with cognitive, emotional aspects and aspects of behavior for understanding behavioral change and second, the concepts of the SCT provide ways for new behavioral research in health education (Glanz et al, 2002). The SCT explains how

people acquire and maintain certain behavioral patterns, while also providing the basis for intervention strategies (Bandura, 1997).

An important concept of the SCT is the relationship between three factors, (1) behavior, (2) people, and (3) environment, which are constantly influencing each other. Figure 3-2 illustrates that behavior is not simply the result of the environment and the person, just as the environment is not simply the result of the person and behavior (Glanz et al, 2002).

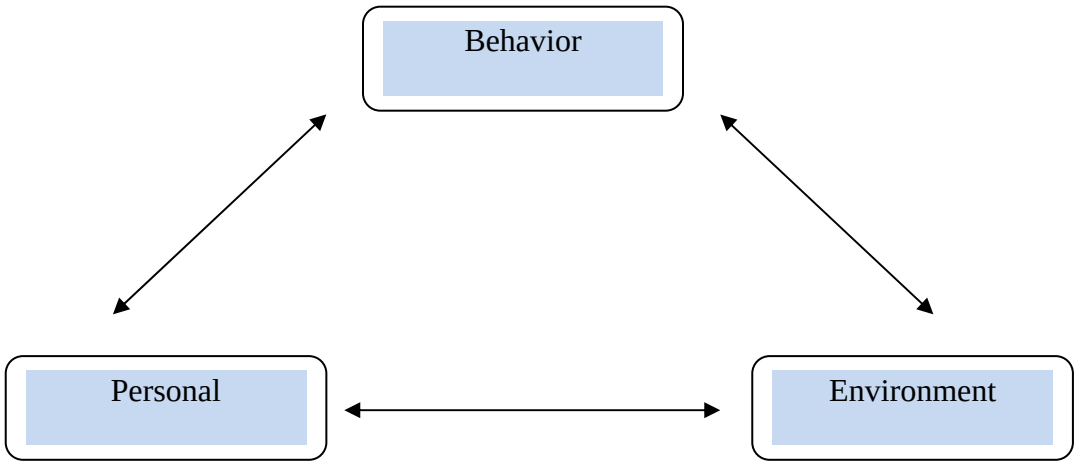


**Figure 3-2: SCT Conceptual Model**
*Source:* Pajares, 2002.

*Example:* Project Northland is a great example of a program where SCT concepts were translated into developmentally appropriate educational and environmental programs that would prevent and reduce alcohol use among adolescents in grades six through twelve. The program took three years and was based on behavioral health curricula, parental involvement and community task force activities. The conclusion was that students were less likely to say they

drank alcohol than those who did not join the program. With observational learning, negative expectancies about alcohol use and increased behavioral capability to communicate with parents, strong positive results were obtained.

A new program in the 11th grade was started to ultimatley reduced access to alcohol and change community norms of alcohol use among high-school age students. This project incorporated a combination of resources such as (1) community attention, (2) parental education, (3) support of alcohol free events, (4) media projects, and (5) classroom discussions. After the 12th grade, there was a significant decrease in the use of alcohol. Furthermore, access to alcohol was reduced and parental norms became less accepting of teen alcohol use by the end of the study.

The outcomes suggest that the application of SCT at the community level appears to have yielded results in changing the environment related to alcohol use, changing norms, and reducing alcohol use among high school students (summarized from Glanz et al, 2002).

## 3.4 SELF-EFFICACY THEORY

The Self-Efficacy Theory stands as one of the core concepts of all of theories. Self-efficacy is defined as "the conviction that one can successfully execute the behavior required to produce outcomes and one's confidence in one's ability to take action" (Bandura, 1977; 1986). According to Staples et al. (1998), self-efficacy theory suggests that there are four major sources of information (in order of strength) used by individuals when forming self-efficacy judgments:

1. **Performance accomplishments**: personal assessment information that is based on an individual's personal accomplishments. Previous successes raise mastery expectations, while repeated failures lower them.
2. **Vicarious experience**: gained by observing others perform activities successfully. This is often referred to as modeling, and it can generate expectations in observers that they can improve their own performance by learning from what they have observed.
3. **Social persuasion**: activities where people are led, through suggestion, into believing that they can cope successfully with specific tasks. Coaching and giving evaluative feedback on performance are common types of social persuasion
4. **Physiological and emotional states**. The individual's physiological or emotional states influence self-efficacy judgments with respect to specific tasks. Emotional reactions to such tasks (e.g., anxiety) can lead to negative judgments of one's ability to complete the tasks.

This theory is very important in sustaining and maintaining positive behavior choices. It is much easier to try and prevent negative health outcomes then to try and change them after they become part of one's lifestyle. Aside from the four points stated above, development of self-regulatory skills is another key to building self-efficacy. To build people's sense of efficacy, they must learn how to monitor their health behavior and the social and cognitive conditions under which they engage in it, set attainable goals to motivate their efforts, draw from an array of coping strategies, enlist self-motivating incentives and social supports to sustain the effort needed to success, and apply multiple self-influence consistently and persistently (Perri, 1985).

According to Bandura, "there are three main pathways through which efficacy beliefs play a key role in cognitive development and accomplishments: students' beliefs in their efficacy

to regulate their learning activities and to master academic subjects, teachers' beliefs in the personal efficacy to motivate and promote learning in their students, and the faculties' collective sense of efficacy that their schools can accomplish significant progress" (Pajares & Urdan, 2006). There needs to be a sense of self-efficacy from all players in the comprehensive school health education programs so that a strong sense of self-efficacy can be developed and positive health habits can be maintained.

# 4.0 RESULTS: MAKING A CHANGE-FROM THEORY TO PRACTICE

The most difficult task is usually applying theories to interventions that will produce change. The four theories stated in sections 3.1-3.4 provide a strong theoretical framework for producing effective health education and promotion efforts. A major goal of formal health education is to equip students with the intellectual tools, self-beliefs, and self-regulatory capabilities to educate themselves throughout their lifetime (Pajares & Urdan, 2006). We now need to use theoretical frameworks to create interventions and programs in schools that will enable our youth with the necessary skills and self-efficacy to manage the pressure to take on positive health behaviors.

## 4.1 OVERVIEW

Since schools play an important role in educating and promoting healthy lifestyles, a large portion of this responsibility is now placed on many of the key players to establish programs that will increase knowledge and self-efficacy among our youth. Bandura (2004) explains that there are four major components to an effective preventative program.

1. Informational: Informing youth of certain health risks and the benefits of healthy lifestyle habits.
2. Development of social and self-management skills: Developing these skills will allow adolescents to transform informed concerns into effective preventative practices.

3. Sense of efficacy: It is important to build a resilient sense of efficacy to support the exercise of control in the face of difficulties and setbacks that arise.
4. Social supports: It is important to enlist and create social supports for desired personal changes.

The next section of this paper will examine school health programs that created an increase in knowledge and self-efficacy among its participants.

## 4.2 EFFECTIVENESS OF SCHOOL HEALTH PROGRAMS

Having the opportunity to examine many school-based interventions and programs made me realize the importance of their existence. Most of the programs were effective in increasing knowledge, self-efficacy, and behavior intention to engage in positive behaviors. Many of the effective programs were measured by a change in knowledge, attitude, self-efficacy, and behavioral intention. It is also important to keep in mind that these programs and interventions are only one single part of the comprehensive health education program that we are striving for.

*RAPP Intervention:* The Rochester AIDS Prevention Project for Youth (RAPP) was a successful school-based intervention that increased participating student's knowledge, self-efficacy, and behavior intention in regards to HIV, pregnancy, and STD prevention (Siegel, Aten, Roghmann, & Enaharo, 1998). The nonrandomized intervention design consisted of 2 intervention groups and 1 control group under three conditions: (1) the control group was provided with the usual health education curriculum taught by the classroom teacher, (2) one intervention group was taught by RAPP adult health educators consisting of ethnically diverse

male-female pairs of trained educators, and (3) the other intervention was taught by RAPP peer educators consisting of male-female pairs of trained high school students (Siegel et al., 1998). This intervention was measure by a pre-test, post-test questionnaire measuring knowledge, sexual self-efficacy, and safe behavior intention (Siegel et al., 1998). The importance of examining self-efficacy and behavior intention is derived from theories of behavior change such as the Theory of Reasoned Action and the Theory of Planned Behavior (Ajzen & Fishbein, 1980; Terry & O'Leory, 1995).

The results of this intervention revealed that the health educator and peer educators increased students' knowledge significantly more than the control condition for both middle school (females, $P<.01$; males, $P<.01$) and high school (females, $P<.001$; males, $P<.001$) (Siegel et al., 1998). After a short-term follow-up, the RAPP intervention proved to have a powerful effect on knowledge for all students and a moderate effect on sexual self-efficacy and safe behavior intention (Siegel et al., 1998).

*The Sandy Lake Diabetes Prevention Intervention*: The theoretical framework of this school-based diabetes intervention combined both an ecological model and social cognitive theory (SCT) approaches (Saksvig, Gittelsohn, Harris, Hanley, Valente, & Zinman, 2005). This intervention focused on changing dietary intake behaviors by using a comprehensive approach of 5 different components: school curriculum, family, peer, environmental, and school meal (Saksvig et al., 2005). Although the school curriculum was the main component, focusing on knowledge and skill development related to healthy eating and diabetes education, the other components helps reinforce the main message of the program.

There were a total of 122 students (ages 7-14) that completed the program, resulting in a significant increase ($P<0.0001$) in dietary intention, dietary preference, knowledge,

and dietary self-efficacy between baseline and follow-up questionnaires (Saksvig et al., 2005). This program was effective as it improved knowledge related to make health dietary choices.

*Coordinated Approach to Child Health (CATCH):* This school- based program focused on supporting a positive environment to increase physical activity and improve health eating. This program used a comprehensive approach by involving players such as classroom teachers, school food service personnel, families, and administrators to aid in behavior change both in and out of school. Students focused on practicing newly acquired skills designed to improve their eating behaviors. School cafeterias served healthy, low-fat foods that were tested for appeal to the students. Participation in physical activity was also encouraged by teachers to all students. The results showed that as a results of the CATCH program, students in the intervention schools significantly increased time spent in moderate to vigorous physical activity from 40% to 50% and considerably decreased their consumption of fat from 39% to 32%.

A 3-year follow up study showed that students receiving the CATCH program have maintained a diet lower in total fat and saturated fat and participated in more vigorous physical activities than the control groups (Franks, Kelder, Dino, Horn, Gortmacker, Wiecha, & Simoes, 2007). This program used a comprehensive approach to create a strong educational curriculum and a healthy environment for the students to thrive among. By doing this, the students that participated in the program were able to maintain their behavior change.

*Not-On-Tobacco*: This program was established in West Virginia because of their strong need for an effective, user-friendly teenage smoking cessation program. This program built a strong partnership with the American Lung Association and created this school-based intervention. The goals of the program were to create a smoking cessation program that could (1) enhance adolescent health, (2) fulfill the needs of students who want to quit smoking, (3)

reduce school tobacco violations, and (4) provide an educational alternative for school violations. In addition to smoking cessation, this program also aimed to increase healthy lifestyle behaviors, improve stress management, decision making, and social support skills.

Studies have consistently shown that adolescents enrolled in the N-O-T program have significantly greater quit and reduction rates than adolescents in more conventional programs. Adolescents were also twice as likely to have quit smoking if they were enrolled in the program. (Franks et al., 2007). By involving multiple stakeholders from the community, using school resources (personnel and services), and making the program youth-friendly, this intervention was a success of a comprehensive approach to increasing adolescent self-efficacy to make positive behavior changes and choices.

# 5.0 DISCUSSIONS, RECOMMENDATIONS, AND CONCLUSIONS

## 5.1 DISCUSSIONS

The main overarching goal of this paper is to increase knowledge and self-efficacy among our youth so that they have the skills to make positive choices when faced with everyday decisions. So why should the comprehensive school health model be the standard for schools to follow? The comprehensive school health model is a great way to improve knowledge and attitudes about health and also help our youth develop related life skills including communication and interpersonal skills, decision making and critical thinking skills, and coping and self-management skills (Kolbe, 2002). Modern school health programs that use a comprehensive approach purposefully integrate the efforts and resources of education, health, and social services could be one of the most efficient means to prevent the most serious health problems among youth (Kolbe, 2002). This approach also focuses on enhancing the school environment, involving the community and parents, and strengthening the health of its employees. The comprehensive model strives to touch upon every aspect of achieving ultimate wellness.

There are no policies in place for schools to have a mandatory comprehensive health education program. The Division of Adolescent and School Health within the Center for Disease Control and Prevention (CDC) helps the nation's schools implement comprehensive school health programs by:

- Monitoring the prevalence of health risks among students and the prevalence of school policies and programs implemented to reduce those risks.
- Using applied research to identify effective policies and programs.
- Enabling constituents to help schools implement effective policies and programs.
- Evaluating the effectiveness of implemented policies and programs (Kolbe, 2002).

Although there is no formal set of procedures or policies, certain states have established their own policies on implementing a comprehensive school health approach. The Michigan State Board of Education promotes school success through a comprehensive school health program because they believe that their schools cannot achieve their primary mission of educating students for lifelong learning and success if the students and staff are not mentally, physically, and socially healthy (Michigan State Board of Education, 2003). The Michigan Model for Health® is currently being implemented in over 90% of Michigan's public schools and more than 200 private and charter schools (Michigan State Board of Education, 2003). This model curriculum uses a building block approach and is designed for students in K-12 (Michigan State Board of Education, 2003). Consisting of 43-58 instructional lessons per year, the educational material includes lessons that incorporate knowledge, attitude, and skill-based instruction as well as social and emotional learning (Yoder, 2008). This model also focuses on enhancing health through parental involvement, enhancing school health services, maintaining a strong staff, and creating a healthy school environment that allows healthy learning to thrive (Michigan State Board of Education, 2003).

The Connecticut State Department of Education also has a strong integrated comprehensive school health program that focuses on strengthening and coordinating the eight

components of a comprehensive model. The State Department of Education has released a *Coordinated Approach to School Health* (2008) which contains recommendations using language that models best practice for the development of school health policies, and also addresses issues of school connectedness through the eight components of a comprehensive school health program.

Both, the Michigan Model for Health® and the Connecticut State Department of Education have strong policies and procedures in place for a comprehensive approach. I was unable to find other models that were successful in increasing the connectedness between school health education and the other components of the comprehensive approach. These two models stand as strong examples for establishing a comprehensive model and they both also work towards maintaining the standards from the CDC. Almost all states have academic standards through their Department of Education that they adhere to, but most states do not have a comprehensive school health model implemented into their system.

Most schools already have some programs and services in place to address student health, but few have integrated or coordinated these typically discrete elements into an intentionally cohesive and coherent whole (Connecticut State Department of Education, 2008). Many uncoordinated school efforts are similar to Figure 5-1, which lacks structure to foster improvement in health. Instead, we need to focus on a comprehensive system, as in Figure 5-2, which is designed to connect health with education. Each component of the coordinated/comprehensive school health approach makes a unique contribution while complementing the other components, ultimately creating a whole that is greater than the sum of its parts (Connecticut State Department of Education, 2008).

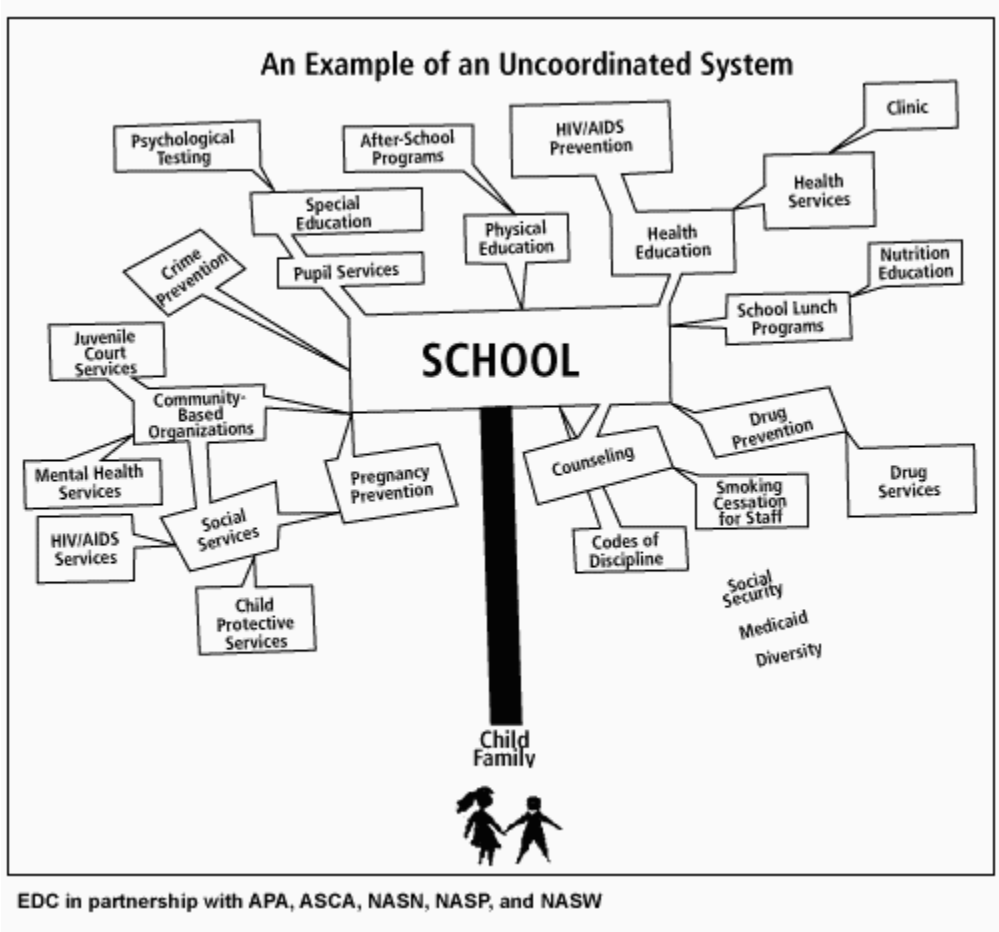


**Figure 5-1: Uncoordinated School Health Model**
Source: Connecticut State Department of Education, 2008.

There are many barriers and challenges for all schools to implement a successful comprehensive school health education program. One of the biggest barriers is funding which is a key component to implementing any sustainable program. A strong source of funding would be needed to uphold the eight components of a comprehensive program. The Division of Adolescent and School Health of the Centers for Disease Control and Prevention (CDC) has funded over 12 states and the District of Columbia to develop their own infrastructure to strengthen comprehensive school health programs (Allensworth et al., 1997). Schools need to be

aware of funding sources so that they can apply for monies to enhance their current school health education programs.


**Figure 5-2: Coordinated/Comprehensive School Health Model**
Source: CDC, 2008.

Another challenge to implementing a comprehensive approach is that there is no mandatory requirement for the program. Schools want to have justification as to why they should take on a new approach. School boards and administrators want to see data that proves the new comprehensive approach is effective.

Time is another barrier that impacts implementing a successful comprehensive health education program. Since health education is not typically tested in major assessment programs, school personnel tend to focus more on the core subjects and health education classes tend to get left out of the day. Fusing health education combined with a comprehensive approach into the school day would require restructuring of the time blocks to make health more of a priority.

The last barrier would be support to maintain the program. We all know that change can be difficult at times, especially when you have a set routine. It would be vital for teachers, parents, community members, school administration, and students to support the program in order for it to be a success.

## 5.2 RECOMMENDATIONS

First, it would be imperative to map out the positive aspects of establishing a comprehensive school health program. All players in the comprehensive model would need to see how they play a role in maintaining and sustaining a successful program. Creating a workable timeline would be a useful tool for schools to have so that they can track their goals and objectives when incorporating the eight components into their current system. Some other recommendations include:

- Creating policies within the school district to focus on incorporating a comprehensive approach.
- Creating community awareness and support for the use of comprehensive health programs.
- Recruiting health teacher that have a health educational background.
- Consider making a comprehensive health education program mandatory.

- Apply for funds that will help create and maintain a strong comprehensive program.
- Encourage all players to take an interest in school health.
- Implement a data collection system that can monitor the effectiveness of the program(s).
- Provide training to increase confidence about initiating a comprehensive program.

Since almost all schools have some health programs in place, individual school districts need to bring together its unique group of people, services and agencies representing each of the components who can identify the specific needs facing young people in their schools, assess community strengths and weaknesses, and tailor the many resources already available to support positive youth development (Connecticut Department of Education, 2008). Not every approach to creating and maintaining a coordinated/comprehensive model will be the same. Communities resources will differ from community to community, but the ultimate goal will remain the same.

It might be overwhelming for schools to try to implement the comprehensive model all at once. From the big picture, this is a difficult and daunting task for the district and community. If school districts set a clear timeline of when they want to whole model to be implemented into the schools system, they can focus more of their efforts on coordinating each component so they can eventually work as a whole. I do recommend that schools begin to phase in each individual component which might be more feasible for schools with funding issues. Making this transformational change will challenge the schools, but it is important for them to remember that this change will take time. If one component does function successfully on the first attempt, schools need to refocus their efforts on how to make the component work for the schools culture and environment. The CDC offers an expanded framework for implementing and promoting

school health programs. This framework describes a multi-layer, interconnected, coordinated system that supports the achievement of all students (CDC, 2008). Currently, only 23 states receive funds from the CDC to establish and coordinate comprehensive school health programs (CDC, 2008). Until all 50 states are properly funded, the school districts need to take the initiative upon them to move in the direction of a coordinated approach that is supported by the CDC.

## 5.3 CONCLUSIONS

Schools are the one main location where health professionals are able to target students at various developmental stages while creating an environment that addresses and prevents risky health behaviors. It is important to provide students with the necessary tools for positive decision making and to establish a strong sense of self-efficacy among them. Creating a positive environment that supports healthy behaviors will increase student's confidence to making positive choices.

The comprehensive school health program is able to address the particular needs of adolescents and implement proven health programs that are based on theories of health behavior change. It is essential to have support from school administration, parents, students, and the community to implement a successful comprehensive program. Regardless of the lack of mandatory assignment, schools should take their own stance on creating a comprehensive health program by applying for available funds.

The CDC has clearly identified high priority areas that result in premature morbidity and mortality. As a result, policymakers should focus on nation-wide policies that can improve the many areas of school health: curricula, educators, social services, environment, and community support. It is imperative that we address all of the issues that surround improving adolescent health. By doing this, we will also have an impact on future adult health if we can establish positive behaviors early in life. It is important to remember that ultimate goal of any school health program is to increase child/adolescent self-efficacy and knowledge on concerning issues so that they can make positive behavior choices that will last into adulthood.

# APPENDIX

## HEALTH EDUCATION STANDARDS: PERFORMANCE INDICATORS

### HEALTH EDUCATION STANDARD 1

#### Pre-K-Grade 2

1.2.1 Identify that healthy behaviors impact personal health.
1.2.2 Recognize that there are multiple dimensions of health.
1.2.3 Describe ways to prevent communicable diseases.
1.2.4 List ways to prevent common childhood injuries.
1.2.5 Describe why it is important to seek health care.

#### Grades 3-5

1.5.1 Describe the relationship between healthy behaviors and personal health.
1.5.2 Identify examples of emotional, intellectual, physical, and social health.
1.5.3 Describe ways in which safe/healthy school & community environments can promote personal health.
1.5.4 Describe ways to prevent common childhood injuries and health problems.
1.5.5 Describe when it is important to seek health care.

#### Grades 6-8

1.8.1 Analyze the relationship between healthy behaviors and personal health.
1.8.2 Describe the interrelationships of emotional, intellectual, physical, and social health in adolescence.
1.8.3 Analyze how the environment affects personal health.
1.8.4 Describe how family history can affect personal health.
1.8.5 Describe ways to reduce or prevent injuries and other adolescent health problems.
1.8.6 Explain how appropriate health care can promote personal health.
1.8.7 Describe the benefits of and barriers to practicing healthy behaviors.
1.8.8 Examine the likelihood of injury or illness if engaging in unhealthy behaviors.
1.8.9 Examine the potential seriousness of injury or illness if engaging in unhealthy behaviors.

#### Grades 9-12

1.12.1 Predict how healthy behaviors can affect health status.
1.12.2 Describe the interrelationships of emotional, intellectual, physical, and social health.
1.12.3 Analyze how environment and personal health are interrelated.
1.12.4 Analyze how genetics and family history can impact personal health.

1.12.5 Propose ways to reduce or prevent injuries and health problems.
1.12.6 Analyze the relationship between access to health care and health status.
1.12.7 Compare and contrast the benefits of and barriers to practicing a variety of healthy behaviors.
1.12.8 Analyze personal susceptibility to injury, illness, or death if engaging in unhealthy behaviors.
1.12.9 Analyze the potential severity of injury or illness if engaging in unhealthy behaviors.

## HEALTH EDUCATION STANDARD 2

### Pre-K-Grade 2

2.2.1 Identify how the family influences personal health practices and behaviors.
2.2.2 Identify what the school can do to support personal health practices and behaviors.
2.2.3 Describe how the media can influence health behaviors.

### Grades 3-5

2.5.1 Describe how family influences personal health practices and behaviors.
2.5.2 Identify the influence of culture on health practices and behaviors.
2.5.3 Identify how peers can influence healthy and unhealthy behaviors
2.5.4 Describe how the school and community can support personal health practices and behaviors.
2.5.5 Explain how media influences thoughts, feelings, and health behaviors.
2.5.6 Describe ways that technology can influence personal health.

### Grades 6-8

2.8.1 Examine how the family influences the health of adolescents.
2.8.2 Describe the influence of culture on health beliefs, practices, and behaviors.
2.8.3 Describe how peers influence healthy and unhealthy behaviors.
2.8.4 Analyze how the school and community can affect personal health practices and behaviors.
2.8.5 Analyze how messages from media influence health behaviors.
2.8.6 Analyze the influence of technology on personal and family health.
2.8.7 Explain how the perceptions of norms influence healthy and unhealthy behaviors.
2.8.8 Explain the influence of personal values and beliefs on individual health practices and behaviors.
2.8.9 Describe how some health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.
2.8.10 Explain how school and public health policies can influence health promotion and disease prevention.

### Grades 9-12

2.12.1 Analyze how the family influences the health of individuals.
2.12.2 Analyze how the culture supports and challenges health beliefs, practices, and behaviors.
2.12.3 Analyze how peers influence healthy and unhealthy behaviors.
2.12.4 Evaluate how the school and community can affect personal health practice and behaviors.
2.12.5 Evaluate the effect of media on personal and family health.
2.12.6 Evaluate the impact of technology on personal, family, and community health.
2.12.7 Analyze how the perceptions of norms influence healthy and unhealthy behaviors.
2.12.8 Analyze the influence of personal values and beliefs on individual health practices and behaviors.

2.12.9 Analyze how some health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.
2.12.10 Analyze how public health policies and government regulations can influence health promotion and disease prevention.

## HEALTH EDUCATION STANARD 3

### Pre-K-Grade 2

3.2.1 Identify trusted adults and professionals who can help promote health.
3.2.2 Identify ways to locate school and community health helpers.

### Grades 3-5

3.5.1 Identify characteristics of valid health information, products, and services.
3.5.2 Locate resources from home, school, and community that provide valid health information.

### Grades 6-8

3.8.1 Analyze the validity of health information, products, and services.
3.8.2 Access valid health information from home, school, and community.
3.8.3 Determine the accessibility of products that enhance health.
3.8.4 Describe situations that may require professional health services.
3.8.5 Locate valid and reliable health products and services.

### Grades 9-12

3.12.1 Evaluate the validity of health information, products, and services.
3.12.2 Use resources from home, school, and community that provide valid health information.
3.12.3 Determine the accessibility of products and services that enhance health.
3.12.4 Determine when professional health services may be required.
3.12.5 Access valid and reliable health products and services.

## HEALTH EDUCATION STANDARD 4

### Pre-K-Grade 2

4.2.1 Demonstrate healthy ways to express needs, wants, and feelings.
4.2.2 Demonstrate listening skills to enhance health.
4.2.3 Demonstrate ways to respond in an unwanted, threatening, or dangerous situation.
4.2.4 Demonstrate ways to tell a trusted adult if threatened or harmed.

### Grades 3-5

4.5.1 Demonstrate effective verbal and nonverbal communication skills to enhance health.
4.5.2 Demonstrate refusal skills that avoid or reduce health risks.
4.5.3 Demonstrate nonviolent strategies to manage or resolve conflict.
4.5.4 Demonstrate how to ask for assistance to enhance personal health.

### Grades 6-8

4.8.1 Apply effective verbal and nonverbal communication skills to enhance health.
4.8.2 Demonstrate refusal and negotiation skills that avoid or reduce health risks.
4.8.3 Demonstrate effective conflict management or resolution strategies.
4.8.4 Demonstrate how to ask for assistance to enhance the health of self and others.

### Grades 9-12

4.12.1 Use skills for communicating effectively with family, peers, and others to enhance health.
4.12.2 Demonstrate refusal, negotiation, and collaboration skills to enhance health and avoid or reduce health risks.
4.12.3 Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts without harming self or others.
4.12.4 Demonstrate how to ask for and offer assistance to enhance the health of self and others.

## HEALTH EDUCATION STANDARD 5

### Pre-K-Grade 2

5.2.1 Identify situations when a health-related decision is needed.
5.2.2 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.

### Grades 3-5

5.5.1 Identify health-related situations that might require a thoughtful decision.
5.5.2 Analyze when assistance is needed in making a health-related decision.
5.5.3 List healthy options to health-related issues or problems.
5.5.4 Predict the potential outcomes of each option when making a health-related decision.
5.5.5 Choose a healthy option when making a decision.
5.5.6 Describe the outcomes of a health-related decision.

### Grades 6-8

5.8.1 Identify circumstances that can help or hinder healthy decision making.
5.8.2 Determine when health-related situations require the application of a thoughtful decision-making process.
5.8.3 Distinguish when individual or collaborative decision making is appropriate.
5.8.4 Distinguish between healthy and unhealthy alternatives to health-related issues or problems.
5.8.5 Predict the potential short-term impact of each alternative on self and others.
5.8.6 Choose healthy alternatives over unhealthy alternatives when making a decision.
5.8.7 Analyze the outcomes of a health-related decision.

### Grades 9-12

5.12.1 Examine barriers that can hinder healthy decision making.
5.12.2 Determine the value of applying a thoughtful decision-making process in health-related situations.
5.12.3 Justify when individual or collaborative decision making is appropriate.
5.12.4 Generate alternatives to health-related issues or problems.
5.12.5 Predict the potential short-term and long-term impact of each alternative on self and others.
5.12.6 Defend the healthy choice when making decisions.
5.12.7 Evaluate the effectiveness of health-related decisions.

## HEALTH EDUCATION STANDARD 6

### Pre-K-Grade 2

6.2.1 Identify a short-term personal health goal and take action toward achieving the goal.
6.2.2 Identify who can help when assistance is needed to achieve a personal health goal.

### Grades 3-5
6.5.1 Set a personal health goal and track progress toward its achievement.
6.5.2 Identify resources to assist in achieving a personal health goal.

### Grades 6-8
6.8.1 Assess personal health practices.
6.8.2 Develop a goal to adopt, maintain, or improve a personal health practice.
6.8.3 Apply strategies and skills needed to attain a personal health goal.
6.8.4 Describe how personal health goals can vary with changing abilities, priorities, and responsibilities.

### Grades 9-12
6.12.1 Assess personal health practices and overall health status.
6.12.2 Develop a plan to attain a personal health goal that addresses strengths, needs, and risks.
6.12.3 Implement strategies and monitor progress in achieving a personal health goal.
6.12.4 Formulate an effective long-term personal health plan.

## HEALTH EDUCATION STANDARD 7
### Pre-K-Grade 2
7.2.1 Demonstrate healthy practices and behaviors to maintain or improve personal health.
7.2.2 Demonstrate behaviors that avoid or reduce health risks.

### Grades 3-5
7.5.1 Identify responsible personal health behaviors.
7.5.2 Demonstrate a variety of healthy practices and behaviors to maintain or improve personal health.
7.5.3 Demonstrate a variety of behaviors to avoid or reduce health risks.

### Grades 6-8
7.8.1 Explain the importance of assuming responsibility for personal health behaviors.
7.8.2 Demonstrate healthy practices and behaviors that will maintain or improve the health of self and others.
7.8.3 Demonstrate behaviors to avoid or reduce health risks to self and others.

### Grades 9-12
7.12.1 Analyze the role of individual responsibility for enhancing health.
7.12.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.
7.12.3 Demonstrate a variety of behaviors to avoid or reduce health risks to self and others.

## HEALTH EDUCATION STANDARD 8
### Pre-K-Grade 2
8.2.1 Make requests to promote personal health.
8.2.2 Encourage peers to make positive health choices.

### Grades 3-5
8.5.1 Express opinions and give accurate information about health issues.
8.5.2 Encourage others to make positive health choices.

**Grades 6-8**

8.8.1 State a health-enhancing position on a topic and support it with accurate information.
8.8.2 Demonstrate how to influence and support others to make positive health choices.
8.8.3 Work cooperatively to advocate for healthy individuals, families, and schools.
8.8.4 Identify ways in which health messages and communication techniques can be altered for different audiences.

**Grades 9-12**

8.12.1 Utilize accurate peer and societal norms to formulate a health-enhancing message.
8.12.2 Demonstrate how to influence and support others to make positive health choices.
8.12.3 Work cooperatively as an advocate for improving personal, family, and community health.
8.12.4 Adapt health messages and communication techniques to a specific target audience

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