

## A UNIVERSITY-SCHOOL SYSTEM PARTNERSHIP TO ASSESS THE MIDDLE SCHOOL HEALTH PROGRAM

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*Abstract: University health education faculty assisted an urban school system in a southeastern state to plan and conduct an assessment of the school health program in three middle schools. A School Health Subcommittee was formed that included administrators, teachers, school nurses, parents, students, and representatives from nonprofit agencies. The Subcommittee activated three middle school wellness teams to identify program strengths and areas for improvement during the 2003-04 school year.*

The Centers for Disease Control and Prevention (CDC) identified six priority areas to improve adolescent health: (a) poor eating habits; (b) physical inactivity; (c) tobacco use; (d) behaviors that result in intentional or unintentional injuries; (e) abuse of alcohol and other drugs; and (f) sexual behaviors that result in HIV infection, other sexually transmitted infections, or unintended pregnancy. CDC supports full implementation of a coordinated school health program (CSHP) in U.S. school systems as a means to address the six priority areas (CDC, 2000). This includes classroom health instruction, quality physical education, family and community involvement, healthy school environment, health and counseling services, child nutrition program and wellness program for staff.

True CSHPs do not exist in a majority of American schools. More commonly, several components of a CSHP have been implemented, for example health education instruction, health screenings, a food service program, and individual guidance (Geiger, Mauser-Galvin, Cleaver, Petri, & Winnail, 2002). A local School Health Subcommittee, co-chaired by the superintendent and mayor, was formed in 2002 in an urban school system in the southeastern U.S. Its members charged three middle school principals with identification of the strengths and needs of the school health program.

Achieving a vision of improved school health and academic performance in elementary and secondary schools requires meaningful collaboration with com-

munity partners including institutions of higher education (CDC & Harvard University, 1995; Winnail, Geiger & Nagy, 2002). During the 2002-03 school year, two health educators employed by a state university volunteered to assist a School Health Subcommittee in an urban Alabama school system. The goal was to conduct an assessment of the strengths and needs of the middle school health program.

The impetus to assess the CSHP was growing concern about prevention of drug use and violence in schools and the community. A large citywide coalition was formed at the beginning of 2002. It included a School Health Subcommittee whose membership accepted the challenge of assessing the school health program.

Stakeholders included school administrators, teachers, two school nurses, counselors, parents, students, mayor and members of the city council, and volunteers from nonprofit health agencies. The initial perception by the Subcommittee was that middle schools accomplished little to implement CSHP. Formal health instruction varied between middle schools and classrooms.

The three middle school principals led the charge to assess the school health program through school wellness teams. Each desired to enhance her school health program. Other school personnel embraced the principals' vision of change.

University health educators: (a) recruited community representatives to join the School Health Subcommittee; (b) facilitated meetings of the Subcom-

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mittee; (c) provided an overview of CSHP components and benefits; and (d) recommended useful informational resources to assess needs and assets. Stakeholders were free to accept or reject these opinions. The health educators demonstrated competencies of Responsibility Areas I and II as defined for Certified Health Education Specialists (American Journal of Health Studies, 2003).

## PURPOSE

This manuscript presents the methods and results used to assess an urban school system's health program. University health education faculty and middle school partners collaborated to conduct the assessment and report results.

## COMMUNITY/POPULATION

The school system is located in a southeastern metropolitan area with more than 65,000 residents. It is one of the fastest growing communities in the state. There were 10,305 students enrolled in grades K-12 during the 2002-03 school year. There are 15 public schools in the system, plus an alternative and a community school. Six of these schools include secondary grades.

## METHODS

A first step was to review state and local data on youth risk behaviors, state board of education and school system policies and regulations. Next, planners identified general areas of strength and need. During a series of meetings held after school hours, members of the School Health Subcommittee considered the need for, and uses of, additional information. Several useful instruments were identified after reviewing the professional literature and discussions with university faculty (Fetro, 1998; Kane, 1993).

There were five criteria considered by the Subcommittee to select an assessment instrument: (a) low cost; (b) content clearly related to CSHP; (c) previous use in other school systems; (d) brief length; and (e) ease of administration and scoring. Subcommittee members selected items from the eight modules of the first edition of the *School Health Index (SHI) for Physical Activity and Healthy Eating: A Self-Assessment and Planning Guide, Middle and High School* (CDC, 2000).

The first edition of the SHI focused on health promotion, i.e., implementation of curriculum, programs and supportive services in schools and the community. SHI scores are intended to be used to plan improvements within schools and systems. Some actions are costly and time-consuming to implement, while others can be realized with less effort and expense.

The entire first edition of the SHI was determined to be too lengthy for use in its entirety. The Subcommittee elected to select individual items from the SHI and also emphasize other CSHP areas besides nutrition and physical activity, i.e., guidance, schoolsite safety and health services. Planners adapted items included in *Step-by-Step to Comprehensive School Health* (Kane, 1993). A larger number of items were written for the component of school-based counseling due to the Subcommittee's strong concern about preventing violence and drug use.

There were 101 total items in the Middle Level Health Education Survey. Items were grouped in seven sections corresponding to CSHP components. The survey was designed to address local concerns of the Subcommittee; therefore, there were an unequal number of items in each section.

Nearly all items (99 of 101) required objective responses. Respondents indicated their perceptions of level of implementation using a 4-point Likert-type scale: *fully in place, partially in place, under development, not present*. Following is a listing of sections and respective number of items.

<input type="checkbox"/>	Administration/Planning & Curriculum	8
<input type="checkbox"/>	School Environment	12
<input type="checkbox"/>	School Health Services	12
<input type="checkbox"/>	School-Based Physical Education	9
<input type="checkbox"/>	School Nutrition and Food Services	6
<input type="checkbox"/>	School-Based Counseling	33
<input type="checkbox"/>	School System Health Promotion	18
<input type="checkbox"/>	Summary Planning Questions	3

Selected items are presented in Table 1. University faculty prepared a single page of written instructions to guide respondents. These included an explanation of the usefulness of this information for long-range planning in the school system.

## SAMPLE SELECTION-WELLNESS TEAMS

The Subcommittee deemed it impractical to select an exhaustive sample of teachers, administrators, parents and students. They had no budget for assessment and wished to gather data more quickly. Therefore, the Subcommittee charged principals with activating Wellness teams to individually complete surveys.

Principals recruited their own respondents from classroom teachers, parent organizations, eighth grade students, and support staff. One principal used the survey as the impetus to reactivate her wellness team. The average size of a wellness team was 10 members.

**DATA COLLECTION/ANALYSIS**

Hard and electronic copies of surveys were distributed by principals. Principals allowed 75 days for each wellness team to independently complete the assessment, meet as a group to combine responses, and report consensus. University faculty prepared an overall summary report for the three middle schools. The report was submitted to principals, the school system superintendent, and the members of the system's School Health Subcommittee.

Approximately 45 minutes was required for individuals to complete the Middle Level Health Education Survey. Respondents discriminated between items, although there was a trend toward selecting positive responses. Each Wellness Team met one or more times to discuss individual scores and reach consensus about priority areas for school-level action.

Response frequencies representing consensus of each wellness team were reported to the three principals and university faculty. Team members asked university faculty to protect the identity of individual respondents. Faculty prepared a report of aggregate data and distributed it to the principals, superintendent, and assistant superintendent for curriculum and instruction.

**RESULTS**

Principals were interested in examining similarities and differences as perceived by the three school wellness teams. Most responses to the objective items of the survey were positive, indicating partial or full implementation of CSHP component areas. Perceived strengths and needs differed across schools.

Data in Figures 1 and 2 reveal that the component most often perceived as fully implemented across the three middle schools was a safe and healthy school environment (100% of responses to 12 items). This was not surprising. Many changes had been recently instituted due to heightened concerns about students' use of alcohol and drugs and schoolsite safety.

School health services were second most often perceived as fully implemented (80% of responses to 12 items). School-based counseling was perceived in third position of implementation (75% of responses to 33 items). In fourth position of full implementation was school system health promotion for faculty and staff (72% of responses to 18 items).

No CSHP component was rated by a majority as "not present." CSHP components most often rated as "under development" or "not present" were related to

Table 1: Selected Items and Sections of the Middle Level Health Education Survey

<u>Section</u>	<u>Item</u>
Administration/Planning & Curriculum	<input type="checkbox"/> Health curriculum overall addresses the seven national health education standards. <input type="checkbox"/> Routine health education inservice to strengthen teachers' skills and keep knowledge up-to-date.
School Environment	<input type="checkbox"/> Emergency procedures for taking quick action to assert control of school facilities and grounds due to drug-related situations. <input type="checkbox"/> Policies and procedures for handling possession of weapons (guns, knives, etc.)
School Health Services	<input type="checkbox"/> Providing routine vision and hearing screening for all students. <input type="checkbox"/> Ensuring rapid health care and legal response in cases of suspected child abuse.
School-Based Physical Education	<input type="checkbox"/> At least 80% of physical education classroom time is spent in physical activity. <input type="checkbox"/> School physical education program includes schoolwide activities that promote involvement and participation.
School Nutrition and Food Services	<input type="checkbox"/> Healthful foods available at breakfast and/or lunch. <input type="checkbox"/> Food service personnel involved in the nutrition education program, e.g., providing class presentations.
School-Based Counseling	<input type="checkbox"/> School counselors are included on the team that works to create healthy schools. <input type="checkbox"/> Student assistance programs identify, screen and refer students with problems related to alcohol and drug use.

Figure 1. Cumulative Frequency of Responses to Sections 1-4 of the Middle Level Health Education Survey from Three Middle School Wellness Teams, Fall 2002

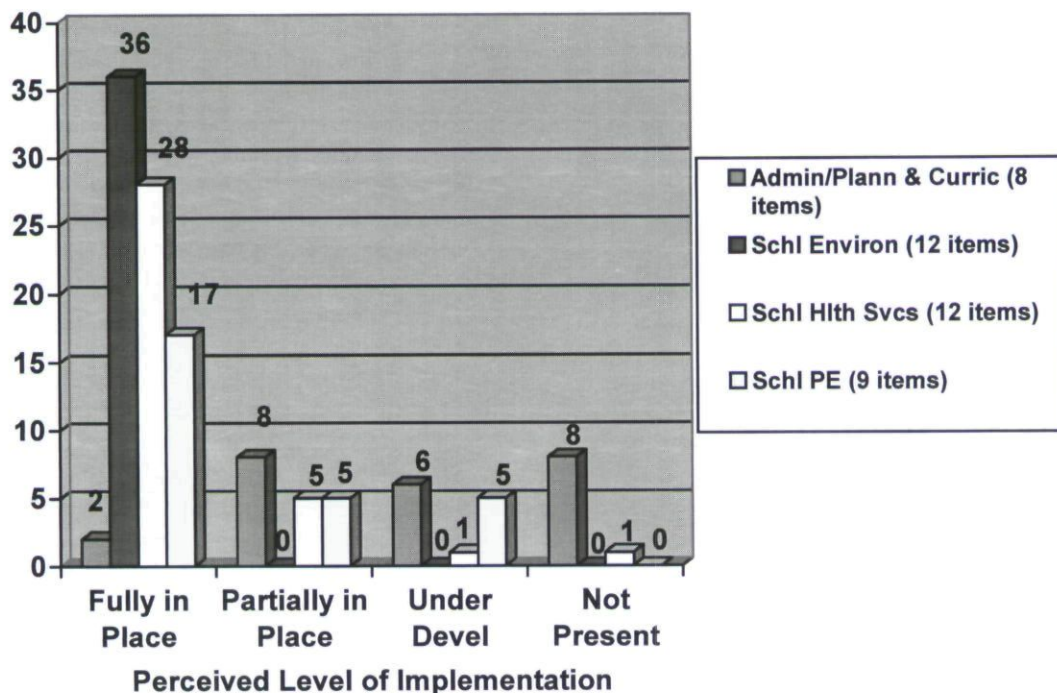
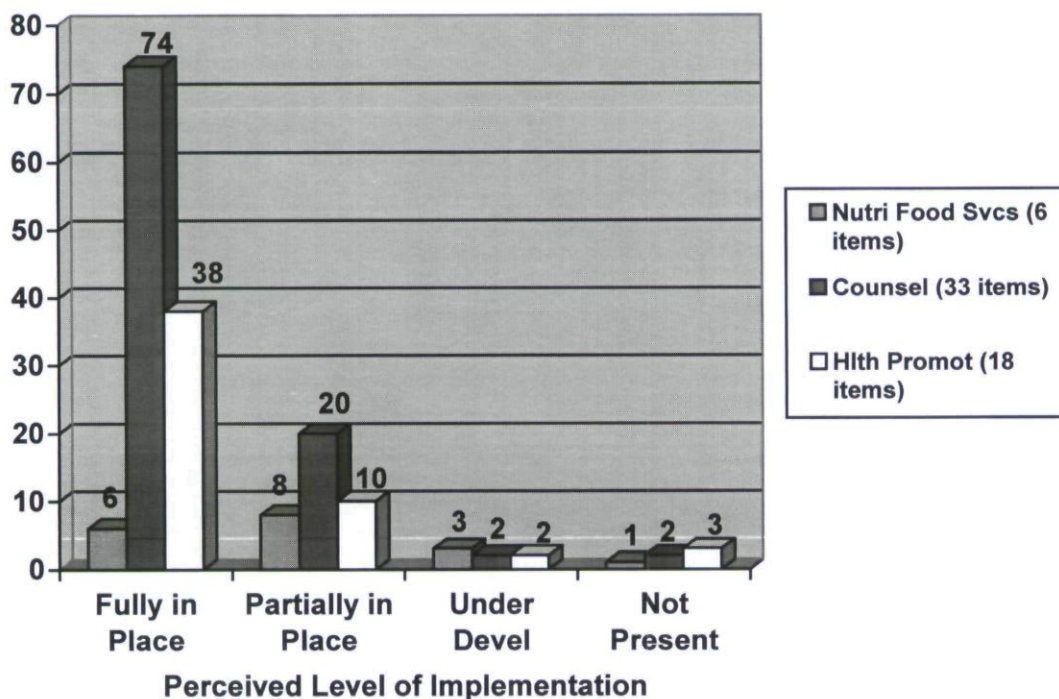


Figure 2. Cumulative Frequency of Responses to Sections 5-7 of the Middle Level Health Education Survey from Three Middle School Wellness Teams, Fall 2002



administration and planning of the health curriculum (58% of responses to 8 items). Twenty-two percent of responses to the 6 school nutrition and food services items were also rated as “under development” or “not present.” Finally, 18% of responses to the 9 items regarding school-based physical education indicated much less implementation of this important CSHP area.

### DISCUSSION

Wellness teams reached group consensus of priority areas for improvement during the next school year, 2003-04. Table 2 indicates that the two most important areas for change were the school health curriculum and the nutrition/food service program. Team members recommended: (a) hiring a full-time equivalent (FTE) professional coordinator of school health education; (b) developing a coordinated health curriculum for middle grades across the three schools; and (c) increasing the focus on specific content areas, i.e., preventing usage of tobacco and drugs, violence prevention, and skin cancer education. In addition, Teams recommended adding child nutrition program managers to their planning group and increasing the quantity of healthy food choices on breakfast and lunch menus.

Health promotion activities for faculty and staff and school counseling services were in third place. Specific recommendations included providing afterschool activities for stress reduction and peer so-

cial support and building group morale.

According to the CDC (2003), “school health programs are one of the most efficient means of shaping our nation’s future health, education, and social well being.” Rigorous studies completed during the 1990s showed that school health education was effective at reducing the prevalence of health risk behaviors among young people. Examples included: (a) 37% reduction in 7<sup>th</sup> grade students who started smoking, as a result of a prevention program; (b) decreased obesity among 6-8<sup>th</sup> graders following a school-based intervention program; and (c) Decreased use of tobacco, alcohol and marijuana among students who completed a *Life Skills Training* program.

Marx noted that coordinated programs increase efficiency, reduce redundancy and save money, as compared to non-coordinated programs (CDC, 2001). As was found in this local assessment, the three schools had implemented selected components of CSHP, however these lacked coordination. For instance, each middle school selected its own health curriculum.

One might wonder why some schools fail to implement a CSHP. Marx noted that some school personnel fail to see the primary importance of a planned CSHP (CDC, 2001). It may not be because of direct opposition of health education among teachers or parents. Sadly, other demands may be viewed as more immediate and important, for instance improving standardized test scores in other subject areas, as was the case in Alabama. The first step for improvement is

Table 2. Specific Recommendations by Priority Area for Improvement to the CSHP

<u>Priority Area for Improvement</u>	<u>Specific Recommendations</u>
<b>School Health Curriculum</b>	<ol style="list-style-type: none"> <li>1) Need a full-time trained professional to address health needs of students and staff and coordinate the health program across middle schools.</li> <li>2) Need to develop a written and coordinated health curriculum across each grade 6-8.</li> <li>3) Develop assessment tool to monitor coverage of health content standards by grade level.</li> <li>4) Summarize all health content covered across the curriculum in classes other than health education.</li> <li>5) Provide useful health lesson plans and activities organized by grade and content standard.</li> <li>6) Organize program for primary prevention of drug, alcohol and tobacco use for grades 7-8.</li> <li>7) Increase students’ knowledge of skin care and effects of over-exposure to the sun. Include activities for parent education, too.</li> </ol>
<b>Nutrition and Food Services</b>	<ol style="list-style-type: none"> <li>1) Promote dialogue with school lunchroom manager and wellness team to increase availability and quantity of healthy foods offered during breakfast and lunch.</li> <li>2) Encourage child nutrition program manager to join school wellness team.</li> </ol>
<b>School System Health Promotion</b>	<ol style="list-style-type: none"> <li>1) Provide healthful after-school activities to relieve stress through physical exercise and positive teacher peer interaction.</li> <li>2) Organize outings to promote grade-level team morale and cohesiveness among teachers.</li> </ol>

assessing strengths and needs of the school health program, as was accomplished in one urban southeastern school system described in this manuscript.

### LESSONS LEARNED

The impetus for administering the Middle Level Health Education Survey was a growing concern about prevention of drug use and violence. This led to the formation of a new School Health Subcommittee chaired by school and city officials and open to community residents. Documenting unmet needs requires active participation by multiple stakeholders, within and outside of the school building. This was a challenge, which required sharing "dirty laundry," risking criticism by parents and agency professionals.

The variety of stakeholders who participated in the assessment was unique. Ground rules clearly established the importance of reaching group consensus

and respecting all members, despite differences of opinion. Volunteer facilitators ensured that all could participate. It was essential that principals became the visible champions of quality school health programs.

The School Health Subcommittee's decision to collaborate with university faculty members and modify the first edition of the SHI added credibility to the local assessment tool. The Subcommittee realized that individual stakeholders would feel confused or reluctant to respond to a lengthy instrument.

Data from the assessment were used as a starting point to enhance the middle school health program. It may not be feasible to realize multiple changes across CSHP components. Progressive change is possible, adding improvements each school year. For instance, the three wellness teams concurred to initiate improvements in the health education curriculum and the nutrition program within a few months.

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## HEALTH EDUCATION RESPONSIBILITY AND COMPETENCY ADDRESSED

Responsibility IV: Evaluating Effectiveness of Health Education Programs

Competency A: Develop plans to assess achievement of program objectives

Sub-competency 4: Select appropriate methods for evaluating program effectiveness

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