Until the late 1900s, school health programs traditionally consisted of some type of a relationship between health instruction, health services and a healthful school environment. Not until the 1980s did a more sophisticated model emerge. Today's eight-component coordinated school health (CSH) model serves not only to implement and integrate programs and strategies, which impact the complex issues associated with the high-risk behaviors of youth, but also has the potential to establish a sound foundation for academic success.

Allensworth provides a functional definition for coordinated school health as a comprehensive model focusing on priority behaviors that:

- Interfere with learning and long-term well-being;
- Foster the development of a supportive foundation of family, friends, and community;
- Use interdisciplinary and interagency teams to coordinate programs;
- Use multiple intervention strategies to attain programmatic outcomes;
- Promote active student involvement; solicits active family involvement;
- Provide staff development; and
- Accomplish health promotional goals via a program planning process.

In 1995, the School Health Policies and Program Study suggested that appointing an individual to be responsible for coordinating health education could improve health outcomes and strengthen school health programs. Numerous other reports also support the notion that an individual be identified to accept the responsibility and authority for coordinating the components related to school health programs.

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DEFINING SKILL SETS FOR EFFECTIVE SCHOOL HEALTH LEADERSHIP

The literature does provide some guidance for development of knowledge and skills for effective leadership in coordinating school health programs. These include skills in program advocacy, assessment,
planning, engaging partners, administration, program implementation, resource identification, and evaluation. Only recently, however, has there been professional development opportunities for health coordinators to formally explore and develop the skills needed to put the healthy schools concept into practice. In 1999, the American Cancer Society conducted the first National School Health Coordinator Leadership Institute. To achieve the goals of the institute, five outcomes were identified. These included:

- Demonstrating the ability to develop organizational capacity for promoting school health programs,
- Demonstrating skills as an effective advocate for school health programs,
- Identifying and using multiple strategies to assess program status and evaluate program outcomes,
- Teaching and motivating others responsible for school health programs, and
- Demonstrating competence in resource development and project management.

As reported by Winnail, Dorman, and Stevenson, the expected Institute outcomes established the foundation for the acquisition of knowledge and the development of skills needed to support individuals in the coordinator position. The skills and abilities identified to achieve the outcomes were consistent with those reported in the literature and served to guide the Institute workshops as well as establish the questions used in the data collection instrument used in this study. While there are volumes written about each of the skills identified below, the following definitions are most applicable to the role of the school health coordinator.

**Skills in Building Organizational Capacity for CSH**. These skills include gaining administrative support at the district and school level, and having a good relationship with faculty and staff so that there is a degree of trust that the work being done through a CSH approach benefits students. It also includes an established network of community agencies and organizations willing to work with the schools, and a set of policies and procedures supportive of a healthy school environment.

**Advocacy Skills**. Advocacy skills include the ability to promote or speak on behalf of the school, program, or profession. Through written and spoken words, the advocate must have the ability to articulate to the key stakeholders and decision makers, the successes and positive impacts of the program, as well as the needs, issues, challenges and threats to the program.

**Skill Required for Conducting Needs Assessments of CSH**. The skills of conducting a district or school needs assessment include the ability to identify or create an instrument to assess the status of health programs in a school or district. It also requires skill in identifying and motivating the target population to complete the data collection process. Additionally, it includes the ability to adopt and communicate protocols for implementing the instrument as well as the ability to interpret and communicate results.

**Leadership Skills**. While definitions of leadership vary greatly, leaders generally have the ability to articulate a specific vision or mission clearly. They are keenly aware of the potentials of and challenges to issues, they listen to others, and include others in the decisions that are made. They work hard to bring out the best in others and are often one of the “early adopters” of new ideas and programs.

**Motivational Skills**. Having to deal with setbacks and disappointments is not at all uncommon in leadership positions. In addition to being self-motivated, the mark of a good leader includes his or her ability to promote the positive, even when success is waning. It should be noted that while there are numerous workshops and seminars available to enhance one’s motivational skills, few schools/districts would consider participation in such programs an essential professional development opportunity.

**Management Skills**. The ability to plan meetings and use meeting time effectively are among the most highly desired management skills. Additionally, these skills include effective written and oral communication skills, maintaining accurate records of decisions made at meetings, inviting the “right” people to meetings, maintaining confidences, the ability to delegate responsibilities, and being the person expected to attend meetings in the community and/or district level meetings.

**Resource Development Skills**. In addition to basic grant writing skills, coordinators need the knowledge and skills to identify potential funding sources. While there are numerous publications and websites that can be useful in helping individuals find potential funding partners, few coordinators have the confidence in their ability to find and match these sources to their needs.

**Skills in Conducting Outcome Evaluations of School Health Programs**. While many of the same skills required in program assessment carry over to evaluation, coordinators also need to consider other outcome measures. To build a strong case for CSH, outcome data need to include measures such as student attendance rates, discipline referrals, utilization rates of health-related community resources, utilization of free and/or reduced lunch programs, changes in vending machine offerings, new or revised policies, and other items of interest that work together to develop a healthy school environment.

This study’s purpose was to determine if health coordinators perceived the importance of the skills identified in the research as significantly different from their ability to perform the skills in their role of health coordinator; to assess their perceived degree of competence to perform the skills necessary for leading CSH; and, finally, to determine how coordinators kept current with developments in school health. The results of this study will reinforce the specific job skills and competencies needed to lead a comprehensive and coordinated school health program.

**METHODS**

The New York State Education Department designated the Statewide Center for Healthy Schools to review the status of
coordinated school health and the role of the district health coordinator in New York State school districts.

**Instrument Development**

The instrument developed for data collection was a modified version of the School Health Coordinator Impact Questionnaire (SHCIQ) designed by an expert panel of fellows in the American Cancer Society’s National School Health Coordinator Leadership Institute. Prior to adopting the SHCIQ, the instrument was field tested by over 50 self-identified health coordinators. The SHCIQ included 33 closed-ended items. An initial field test of the modified instrument indicated that some additional demographic data needed to be collected. After this revision the core items of the instrument were re-tested to make sure the instrument’s reliability was intact. Cronbach’s alpha was calculated for each subscale (that is, current status of CSH, skills/competencies of school health coordinators, and the importance of these skills). The Cronbach’s alpha was .86 for the five current status items, .94 for the eight skills/competencies items, and .92 for the importance scale. A coefficient of reliability of 0.70 and above is generally considered acceptable. The scales used in the study have satisfactory internal reliability.

The modified SHCIQ included questions that required district health coordinators to rate the current status of school health programs in terms of coordination, administrative support, policies, leadership teams, and links between health and academic performance using a Likert-type scale with responses of (1) doesn’t exist, (2) just beginning, (3) ongoing/in progress, and (4) achieved. District health coordinators were asked to rate themselves on their skills/competencies to advocate for school health, conduct needs assessments, conduct outcome evaluations, solicit resources, manage school health programs, provide leadership, motivate others, and their ability to build organizational capacity on a scale of (1) not at all, (2) somewhat, (3) mostly, (4) completely. They were also asked to rate how important, on a scale of (1) not important, (2) somewhat important, (3) important, and (4) very important, each of these skills is for district health coordinators. Lastly, the survey asked district health coordinators to identify their current methods of obtaining professional development opportunities.

**Data Collection**

During the spring of 2001, the New York State Education Department sent every district superintendent in the state the SHCIQ survey instrument. Superintendents were asked to identify their district health coordinator and to submit the survey instrument to that individual for completion. The fact that this request came from the State Education Department and the survey instrument was addressed directly to the district’s superintendent of schools emphasized the credibility and importance of this project. During the month of September 2001, those districts that had not returned the requested information were faxed a letter reminding them of the earlier request.

**Data Analysis**

Data were analyzed using the SPSS statistical package. Transposed data were checked for accuracy and frequencies and descriptive statistics were calculated to identify any inaccuracy that might indicate coding errors. Additionally, chi-square analysis was used to determine if differences existed between the ability to perform the necessary skills and the current status of coordinated school health in their district.

**PRINCIPLE FINDINGS**

**Coordinator Profile**

By November 2001, 512 (72%) of the 714 districts in New York State had returned the health coordinator survey. Of the 512 respondents, 465 (91%) indicated that their district officially recognized the role of district coordinator. Almost 78% (77.9%) indicated that the position of health coordinator was officially recognized in the district’s organizational structure. Over one-quarter (27.5%) indicated that their official title was that of health coordinator. An additional 22.2% indicated that their title included director of health, physical education, and athletics, while another 9.7% reported that their title included director of health and physical education (Figure 1). It is interesting to note that fewer than half (46.1%) said that a written job description existed for their role as coordinator and 53.9% said that no such document existed.

While 32.2% of coordinators indicated that they have been in the role of health coordinator for more than 10 years, 42% have been in the role for 2–10 years and a surprising 25.9% have been in this role for less than 2 years.

**Current Status of CSH**

Fifteen percent of the respondents indicated that coordination of school health programs did not exist, and another 19% indicated that they were just beginning to coordinate their programs. The majority of districts reported that coordinated school health programming in New York State was either “in progress” (52.2%), or had been achieved (13.3%). Because so few districts had actually achieved CSH, an analysis of the skills needed for successful development and implementation and the ability of coordinators to perform these skills is important for implementing a CSH approach.

The data suggests that there is administrative support for the coordination of school health in New York State. Nearly 70% of the respondents reported that they have either secured CSH (18.5%) or have strong administrative support (50.9%) for CSH. Thus, there is clear evidence that district coordinators are having success in gaining administrative support, a critical element in building the infrastructure for CSH.

In addition to administrative support, the CSH infrastructure components surveyed included policies supportive of coordinated school health and school-based health leadership teams. Approximately 62% of the districts reported that they either have (14.2%) or are in the process of adopting (48.1%) policies that are supportive of CSH. An additional 21.3% indicated that they were just beginning to explore policies that were supportive of a coordinated approach to school health. One area
that appears to be a challenge to many schools is the development of school-based health leadership teams. Fifty-one and one-half percent (51.5%) of districts reported that school-based health leadership teams did not exist. Only eight percent (8%) of districts had achieved this structural component and 40.4% reported that they were working toward developing this component.

Skill Perception and Ability

The survey assessed the skills of district health coordinators in two ways. First, district health coordinators were asked to respond to the skill based on the skill's perceived importance to coordinating school health programs. Secondly, they were asked to assess the degree to which they perceived they were currently able to perform these skills.

Leadership Skills. Leadership skills were perceived to be one of the most important skills needed in developing a CSH (94%). Leadership was also the skill that most people felt comfortable performing (56%). Nonetheless, over 40% of those who responded to the survey indicated that they either entirely lacked leadership skills (8.4%) or they were only “somewhat” able to perform this task (35.2%).

Advocacy Skills. Ninety-one percent of district health coordinators perceived that advocacy skills were either important (43.9%) or very important (47.2%). While almost 40% of the respondents indicated that they were confident with their advocacy skills most of the time, 12.2% said that they would consider their advocacy skills as completely adequate.

Skills Required for Conducting Needs Assessments. In this study, 11.8% felt highly confident in their ability to conduct a needs assessment and an additional 28.1% indicated that they would be confident with their ability to conduct such an assessment. Eighty-five percent (85%) considered this skill as important or very important, and 40% felt they were able to conduct a needs assessment adequately.

Skills Required for Building Organizational Capacity for CSH. Just under 90% of those surveyed felt that skills in building organizational capacity are important (44.0%) or very important (45.9%), yet the ability to build this capacity is a challenge, and 7.8% indicated that they were completely able to perform these skills.

Motivational Skills. Ninety-three percent (93%) of district health coordinators surveyed perceived the ability to motivate others as highly important. Fifty-four percent (54%) reported they had what it takes to motivate others.

Management Skills. Ninety percent (90%) of those surveyed perceived management skills as important, and 54% stated that they could perform these skills competently. Slightly fewer than 18% indicated that they were completely confident in their ability to manage coordinated school health programs. Another 35.9% said that they were confident in their management abilities most of the time.

Resource Development. Eighty-six percent (86%) of those surveyed perceived resource development skills as important to have. Fewer than 50% of those surveyed (48%) indicated that they could mostly (36.2%) or completely (11.8%) perform this skill.

Skills in Conducting Outcome Evaluation. Eighty-four percent (84%) thought skills in conducting an outcome evaluation were important, yet only 33% described themselves as having the skills to conduct such an evaluation. A mere 8.2% of those who responded indicated that they were completely confident in their ability to perform this task.
While the study revealed that there were significant differences between perceived importance and coordinators’ perceived ability to perform the skill, the greatest disparities fell into three areas: the coordinator’s ability to build organizational capacity, his or her ability to assess program needs, and the ability to conduct outcome evaluations. While 90% of those responding identified the importance of building organizational capacity, 52% indicated they lacked the skills needed to do this. Nearly 18% indicated that they had limited abilities in conducting needs assessments and over 28% indicated that they lacked the skills to conduct an outcome evaluation of their school health programs.

The deficiencies of district coordinators resulting from the lack of necessary skills can impede the development of the core structural components: administrative support, policy support, and school-based health leadership teams. The inability to conduct a needs assessment and assess outcomes severely limits the ability to establish a need or “make the case” to administrators for developing organizational capacity for CSH.

**Comparisons of Ability and Status of CSH**

Chi-square analyses were used to determine if significant differences existed between the current status of CSH and the skills of district health coordinators. Significant differences ($p<.01$) were observed for each skill (build organizational capacity, advocate effectively, conduct needs assessment, conduct outcome evaluation, solicit resources, manage coordination, leadership, and motivate others) by each of the five areas of CSH (coordination, administrative support, policies, leadership teams, and recognized link between health and academics). For example, there were significant differences between coordinators who rated their ability to build organizational capacity as “completely able” or “mostly able” compared to those who reported skill levels of “not at all able” or “somewhat able” and the level of implementation as “achieved” or “ongoing/in progress” compared to “doesn’t exist” or “just beginning.” There were significant differences between coordinators with higher skill levels and current status of CSH in their school.

**Keeping Current with Developments in School Health**

Within the past two years, 53.9% of district health coordinators in New York stated they had participated in professional development opportunities offered from statewide or regional health centers. Over 75% of the coordinators indicated that newsletters were the most effective tool for increasing their awareness about new developments in school health. Attendance at state meetings and conferences was reported by 52% of the coordinators. Additionally, professional journals (47.3%) also appeared to be effective vehicles for keeping professionals informed. Other avenues of communication were not perceived as especially useful.

**DISCUSSION**

This study targeted district health coordinators in New York State. Since 1986, all districts in New York State have been required to identify a district health coordinator. Given that this is not the norm in most states, the findings of this study may have limited external validity. Additionally, it should be noted that while a 72% response rate is quite good, it is unknown whether non-responders to the survey possess the knowledge and skills identified to be effective school health coordinators. Surveying non-responders and comparing the results to the population data already gathered can accomplish this. However, there is an adequate sample size and statistical power to generalize to school health coordinators since the entire population of 700 school health coordinators in NYS was mailed surveys and over 500 completed surveys, which represents a sampling error of +/- 3%. It should be noted this study did not assess whether there were differences in health coordinators in suburban, rural, and urban settings, particularly related to the allocation of time, administrative support, and resources. Lastly, although a panel of experts established content validity and internal reliability was statistically confirmed using Cronbach’s alpha, the survey instrument could be strengthened further by having completed a one-group test-retest design.

This study has identified the perceived gaps that exist between the skill set needed...
for successfully implementing a coordinated approach to school health and the ability of coordinators to perform those skills. The relationship between the current status of CSH and the coordinators’ perceptions about the importance of the skills needed to be an effective coordinator revealed significant differences. For example, there were significant differences between the current status of school health programs and the district health coordinators’ perceptions about the importance of the ability to build organizational capacity, the ability to advocate for school health, management skills, leadership skills, and motivational skills. That is, coordinators rating the current status of their programs as “ongoing/ in progress” or “having achieved” coordination of school health were more likely to rate their ability to build organizational capacity, advocacy skills, management skills, and leadership skills as “very important.” Likewise, coordinators ranked these skills highly for gaining administrative support for CSH, policy development, school health leadership teams, and recognizing the link between health and academic performance. The exception was for the importance of the ability to conduct needs assessments and the importance of their ability to conduct outcome evaluations. This is probably due to the fact that 47.3% of district health coordinators are directly responsible for conducting their programs’ needs assessment or outcome evaluation.

The fact that 32% of those responding indicated that they have been in the role for 10 or more years, and another 26% of those who currently hold the position of district health coordinator have been in the position for two years or less, suggests that the first generation of district health coordinators in New York State are approaching retirement and will be transitioning out of the system before long. During this transition period there will be an opportunity to further refine the role of the district health coordinator while concurrently developing and delivering professional development activities that promote or reinforce the critical knowledge and skills needed by today’s district health coordinators.

Although many health coordinators acknowledge that certain skills are important in developing a coordinated approach to school health, the extent to which they feel comfortable or able to perform these skills is limited. This makes it essential to address the skills and competencies that district health coordinators consider important but are not able to do well. Professional development programs to expand the skills and competencies of district health coordinators need to occur often and employ a multifaceted training approach to enhance their ability to implement a comprehensive and coordinated approach to school health.

Furthermore, the New York State Department of Education, as well as national organizations such as the Centers for Disease Control and Prevention, which have a vested interest in school health programming, need to channel new funding initiatives through existing infrastructure dedicated to improving the skills of health coordinators. It is these organizations that need to help develop the competencies of district health coordinators.

In addition, collaborative efforts between organizations with a commitment to improve coordinated school health need to be encouraged. Voluntary health organizations such as the American Cancer Society, American Heart Association, and American Lung Association, in collaboration with state and national professional groups, can work together to increase the effectiveness and improve the competencies of health educators including district health coordinators. The objective of such collaborative efforts is to increase quality and improve the status of CSH so that the health of our nation is improved.

This study has identified the gaps that exist between the skill set needed for successfully implementing a coordinated approach to school health and the ability of coordinators to perform those skills. While some institutions of higher education have created courses that introduce students to the CSH concept, few, if any, have developed a graduate-level course of study leading to a degree. Perhaps the time is right to develop
a curriculum and degree program that provides students who wish to pursue the role of district health coordinator with the knowledge and skills to increase the likelihood of success.

REFERENCES


