Feature Articles

Are Health Educators in Denial or Facing Reality? Demonstrating Effectiveness Within a School Accountability System

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We read with interest the article by Governali, Hodges, and Videto[1] in which they proposed that school health educators engage in "critical dialogue" on school health education philosophy to focus their rationale. They outlined a framework for an integrated-ecological-behavior philosophy. We agree that professional dialogue is critical to the field and applaud this suggestion. In the spirit of professional debate, we would like to offer some alternative views.

It is the authors' position that the goal of health education is to influence students' health-related behavior. They stated, "K–12 school health educators are denying the importance of their role in influencing youth behavior, ignoring the needs of students, and failing to address the expectations of parents and communities" (p. 211). We maintain that classroom health educators are not denying their important role of primary prevention for public health—influencing students' health behaviors. However, they have to contend with the real world of education reform that challenges them to teach to health education standards and formally assess student learning. Our premise is that health educators are contributing to our nation's health as never before: They are providing students with the health knowledge and health skills that are prerequisites for becoming health literate and using assessment tools to demonstrate effectiveness. In the school health educators' world, accountability equates to improved student knowledge and skills. To expect them to be held accountable for students' behavior would be professional suicide. Imagine, for example, a civics teacher being held accountable for voter turnout, or the mathematics teacher being held accountable for her students bouncing checks (because they failed to balance their checkbooks), instead of being accountable for students' demonstrating mathematics operations and computation skills. Are the civics and mathematics teachers failing to meet parents' and communities' expectations for behavioral outcomes as Governali and colleagues are accusing classroom health educators of doing? We think not. In this paper we intend to show how and why educators have adopted a standards-based philosophy of health education and how this philosophy provides the foundation for achieving public health goals. We will also demonstrate similarities and differences in the integrated/ecological/behavior philosophy promoted by Governali and colleagues and the standards-based model adopted by many school health educators. Finally, we will propose that the field of health education acknowledge the differences that exist between public health and education goals and develop new strategies for meeting today's requirements for school health education programs.

CONTENDING WITH THE REAL WORLD OF EDUCATION REFORM

Although not mentioned in the article, a discussion of education reform is difficult without mentioning the No Child Left Behind (NCLB) legislation,[2] given its dramatic impact on today's education philosophies and practices. Governali and colleagues state that "the purpose and goals of health education is to influence the health-related behavior of students," and health knowledge and skills should not be viewed as "ends in themselves but as integral mediators of behavioral outcomes" (p. 212). In contrast, current school reform initiatives identify

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increases in student knowledge and skills as the purpose and goals of education. Title I, Section 1111 of the NCLB act requires schools to offer curricula that are aligned to rigorous state standards that delineate what students must know and can do, and schools are accountable for their success in meeting those standards. One might argue that lawmakers should not determine education program requirements, and we agree. However, the reality is that lawmakers have identified the outcomes for which academic programs are held accountable, and those are outcomes that can be reliably and objectively measured. Instead of measurements of behavior, increases in students' skills and knowledge are the indicators of academic success. Kolbe[3] suggests that these goals are "a fundamental purpose of schools, irrespective of whether measured health behaviors or health outcomes also improve as a consequence" (p. 6).

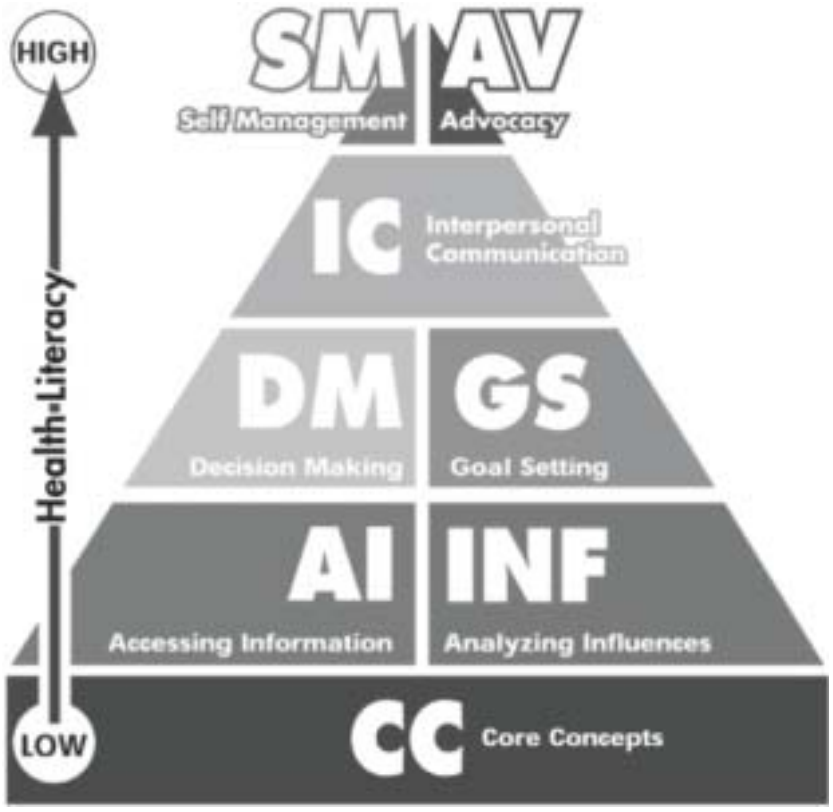
In his framework for modern school health programs, Kolbe[3,4] differentiates between the goals for health education (i.e., the academic content for which health educators are held accountable) and goals for the broader school health program. Type I goals capture the essence of the standards-based health education curriculum (e.g., knowledge and skills). (Kolbe also includes attitudes in the Type I goals. For the purpose of this discussion we have chosen to adhere to the NCLB definition of standards; that is, what children know and can do, in defining standards-based health education. As such, attitudes are not included as measurable outcomes within state accountability systems). Type II goals focus on improving health behaviors and outcomes, while Goals III & IV include improving educational and social outcomes. These goals are sequential and hierarchical in the sense that each subsequent goal is grounded in the previous one. Based on this framework, school health education is critical, and possibly precursor, to the achievement of Goals II–IV; but it is the broader school health program that is responsible for outcomes like improving health behaviors and health outcomes. This broader program is commonly referred to as coordinated school health, or CSHP. (A detailed description of CSHP can be found elsewhere.[5])

Figure 1. A Comparison of Public Health and Health Education Goals

There is an interesting parallel between the traditional philosophies that Governali and colleagues identified as the foundation for school health education (i.e., cognitive-based philosophy, skills development philosophy, behavioral approach, and social change philosophy) and the modern school health goals outlined by Kolbe. Along with attitudes, the cognitive-based approach and the skill development philosophy are embedded in Goal I. Influencing health-related behavior is the focus of Goal II, and social change philosophy is apparent in Goals IV. Governali and colleagues state that an integrated and ecologically based behavioral philosophy is the most reasonable and supportable position for school health education. In contrast, we believe that a philosophy that integrates all of these perspectives and emphasizes behavior change as its purpose is more aligned to CSHP than strictly the curricular area of school health education, one component of CSHP. A behavior-based philosophy is reasonable and supportable for CSHP. However, we do not believe that philosophies or goals inherent to the broader school health program should drive the curricular area of school health education.

Healthy People 2010,[6] the cornerstone document for public health outcomes in the U.S., sets forth two important goals: (1) increase the quality and years of healthy life, and (2) eliminate health disparities. In essence, public health goals focus on reducing mortality and morbidity (see Figure 1). In contrast, health education goals focus on increasing health knowledge and skills to enable students to achieve these public health goals. *Health Literacy: A Prescription to End Confusion*,[7] a report published by the Institute of Medicine (IOM) in 2004, illustrates how these goals are related and interdependent. The IOM calls for public health systems not only to develop and support programs that reduce the negative effects of limited health literacy (a public health concern), but also to support school health curricula that incorporate health knowledge and skills (a school health education concern). Thus, education reform goals and public health initiatives reinforce one another, just as the CSHP is strengthened by

Figure 2. SCASS-HEAP Logic Model for Achieving Health Literacy



each of its components, including effective health education. It is important to remember, however, that although health education teachers can and should play a public health role (e.g., in supporting CSHP efforts), stakeholders will hold them accountable for student learning that is connected to the knowledge and skills outlined in the standards.[8]

THE STANDARDS-BASED PHILOSOPHY OF HEALTH EDUCATION

Governali and colleagues report that the skill-based philosophy is gaining popularity. We agree, although we think the paradigm shift is not just toward skill-based instruction. Instead, it is an integrated approach that recognizes the need for students to increase knowledge within the context of health skill instruction. It is grounded in a developmental standards-based philosophy that posits health knowledge and skills to be a precursor to health literacy, which in turn enables learners to engage in behavior that leads to improved health. The process of health education includes the same characteristics that the authors identified for their integrated/ecological/ behavioral philosophy, including:

- Encourages the adoption of health-enhancing lifestyles.
- Focuses on content and experiences designed to affect understandings, beliefs, attitudes, values, practices, and behaviors.
- Identifies consequences of health-threatening behaviors.
- Provides class activities to develop health-related skills.
- Works to create an environment that supports and promotes health-enhancing behavioral choices (p. 212).

In the standards-based classroom, students engage in learning experiences that emphasize the sequential, progressive, and dynamic nature of the health skills outlined in the National Health Education Standards (NHES).[9] Figure 2 contains a visual representation of how the skills build upon one another. Core concepts associated with health, healthy behavior, and health risks serve as the foundation, and are embedded in the skill-based instruction. Initially students are taught how to determine if a source is valid (AI) and then they examine how factors like peers, family, technology, and culture influence their health behavior (INF). After determining what factors can influence their decisions, they engage in activities that focus on the process they use in making health-related decisions (DM). Goal setting instruction comes next so that the student can learn how to set appropriate goals that are based on their healthy decisions (GS). Communicating their needs, wants, and desires related to their decisions and goals (IC) comes next in the progression of health skills. Their academic experience culminates with instructional activities that teach them how to go about carrying out the healthy behavior (SM). Once achieved, the student develops the skill to advocate to others about living a healthy lifestyle (AV). This perspective directly incorporates at least two traditional philosophies (cognitive-based and skills development) and embraces the importance of influencing health behavior, while recognizing the intended outcomes espoused by education reform (e.g., knowledge and skills). It is also multi-dimensional, ecologically based, and dynamic.

It seems that the primary difference between the integrated/ecological/behavioral philosophy and the standards-based approach is in the intended (and measured) outcome. Governali and colleagues maintain that the goal of health education is to influence students' health-related behavior. If change in behavior is the intended outcome of school health education, then students' behavior would be assessed to determine instructional and curriculum effectiveness. Since school health education is an academic subject with academic goals, is it realistic that student and school success be determined by the behaviors that occur outside the classroom? NCLB re-

***Figure 3.* Terms Used in Public Health Program Development and School Health Education Curriculum Development**

Public Health	School Health Education
Measurable goals	Standards
Measurable objectives	Performance indicators, benchmarks
Implementation steps	Instructional activities
Evaluation	Assessment
Results analyzed for program effectiveness and improvement	Evidence of student learning analyzed to provide student feedback, evaluate increases in students' knowledge and skills, and guide instructional improvements

quires states to develop and administer assessment systems that are aligned with state standards to determine student progress in learning. These assessment systems must be grounded in sound assessment design principles such as alignment, consistency, fairness, and standard-setting.[10,11] The goal of standards-based health education is to improve students' knowledge and skills so that they will engage in healthy behaviors. However, the measure of success is not behavioral change, which is influenced by many factors beyond those experienced in the classroom. Instead, success is determined through valid and reliable measures of student learning. School health education using a standards-based framework enables educators at the state, district, and classroom levels to develop accountability systems that meet NCLB requirements and that prove effectiveness.

A CALL TO ACTION

The field of health education needs to more fully address the professional development needs of teachers. Health education teachers who design their instructional practices to align with NHES[9] or state health education standards are doing exactly what they are hired to do. Like their colleagues across all academic disciplines they are responsible for designing and implementing curricula that will enable students to improve their knowledge and skills. In addition, they are responsible for assessing learning. Yet, how ready are they to teach standards-based health education and assess student learning? Do health teachers understand the intent of the standards and do they know best practices for teaching the skills and knowledge needed for students to become health literate and, thus, influence their health behaviors? Are health education faculty sufficiently literate in assessment practices to confidently determine whether students are proficient in health education? We suggested earlier that holding teachers responsible for student behavior (particularly outside the classroom) is professional suicide. Popham[12] goes one step further, warning that the demands for education accountability are not going to disappear and that assessment illiteracy is also professional suicide. We urge leaders in the field of health education to consider this issue and help develop effective, research-based practices for preparing health educators to assess student learning. We believe that the first step toward achieving this goal is to expand the boundaries of health education to learn from other academic content areas.

The Council of Chief State School Officers (CCSSO) State Collaborative on Assessment and Student Standards (SCASS) Health Education Assessment Project (HEAP) has taken this step by helping its members (23 education agencies) develop accountability systems based on standards and sound assessment principles similar to, or even providing models for, other academic content areas. The HEAP's mission is to develop effective health education assessment resources through a collaborative process, and to increase members' capacity to align curriculum, instruction, and assessment to improve student health literacy through improved health instruction.[13] To date, the HEAP has developed approximately 1,900 health education assessment items that are aligned to the NHES. These items enable states and school districts to determine whether students improve their health knowledge and skills. At the same time, the collaborative has drawn on the works of education assessment experts such as Popham,[12] Marzano,[14] Stiggins,[15] Webb,[16] and Wiggins and McTighe[17] to design professional development resources for health education. HEAP members (and nonmembers, including national organizations) use these resources to align health education curriculum, instruction, and assessment in their states, and to design and implement professional development programs that meet NCLB requirements.

In addition, the collaborative is beginning to work with higher education health pedagogy faculty to better align pre-service teacher education and in-service professional development so that the transition from university to the K–12 system, and visa versa, is a seamless one. We believe that an important component of this process is to educate undergraduate (and graduate) students in the program development language of both public health and school health systems. Figure 3 outlines some similarities and differences in accountability terminology that both school health educators and public and community health officials will need to understand if they are to work collaboratively to increase our nation's health literacy.

We urge researchers in the field to examine the effectiveness of standards-based health education. Are there differences between the health knowledge and skills of

students in a standards-based program and a traditional or behavior-based program? Is there a relationship between students' health knowledge and skills and their health-related behaviors? The SCASS-HEAP has designed and is currently pilot testing a web-based assessment system that will enable us to use the SCASS-HEAP database to create instruments that will examine these very important questions. Health educators will have the capacity to conduct on-line assessments, disaggregate the results based on multiple factors, compare these data to other measures recorded by their schools, and report the results. We hope that this system will enable the field to begin evaluating the effectiveness (and appropriateness) of the standards-based philosophy.

THE LITERACY CONNECTION

Governali and colleagues suggest that current education reform has limited the focus of health education because it requires health educators to focus on academic measures (e.g., skills and knowledge) instead of behavioral outcomes. They conclude that this narrowing in focus will increase pressure on health education programs to justify their existence. We disagree. Education reform, and the emergence of standards-based education, has helped to clarify our focus. Health education is an academic subject and should have an academic focus. Thanks to the clarification of academic standards, school health educators are not held hostage by behavioral outcomes that can be influenced by mediating factors beyond teachers' control. Instead, they can demonstrate their accountability (and thus justify their existence) by demonstrating improvement in student health literacy.

One way to improve health literacy may be to connect existing literacy instruction and health literacy instruction.[7] Health concepts and skills can provide authentic content and meaningful messages (a research-based best practice in literacy instruction) to children who make daily decisions about their health and well-being. SCASS-HEAP has taken a preliminary step toward implementing this strategy in developing a resource called "Aligning Health and Reading with a HEAP of Books." The resource contains a matrix of 150 fiction and non-fiction children's books that are aligned to the NHES and the SCASS-HEAP Assessment Framework. A blueprint for extending some of the books into the health education classroom and across the curriculum is included in the document. This collaborative approach to integrating language arts and health education holds promise and we urge researchers in the field of school health education to empirically examine its effectiveness.

CONCLUSION

School health educators have adopted a clear and defensible philosophy to guide the field in the 21st century. This philosophy is based on standards that outline what students should know and be able to do in order to become health literate. Health educators should not deplore living in the world of education reform. Education reform has helped to clarify the standards to which stakeholders can hold educators and education systems accountable. This is not denial. It is reality.

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