Research Article

# The School Health Education Study + 50 Years: Scholars' Reflections on its Impact and Legacy

*Robert J. McDermott, Alyssa B. Mayer and The School Health Education Study Fifty-Year Reflection Group*

**ABSTRACT**

***Background:*** *Launched 50 years ago, the School Health Education Study (SHES) examined the health education offerings in 135 public school systems, in 38 states, and over 1100 elementary schools and 350 secondary schools. In its second year, knowledge surveys were administered to students in grades 6, 9 and 12 at many of these schools. Analysis of the results in year three led to a one-word description of the state of health education in public schools - "appalling." Subsequent years saw the SHES writing team engage in development of a conceptual approach to health education (through physical, mental and social dimensions) applied at four levels (K-3, 4-6, 7-9, 10-12) and in three learner domains (cognitive, affective and psychomotor). The SHES has been identified time and again for its pioneering effort to bring prominence to school health education.* ***Purpose:*** *We attempted to identify ways that the SHES has influenced health education practice in schools as told by school health education scholars.* ***Methods:*** *Between April and June 2011, we used a snowball sampling approach with saturation to identify individuals believed to have historiographic knowledge of the SHES; we asked them to respond to eight questions (developed by the primary authors and modified though the individual judgments of four school health scholars) about the SHES' influence and legacy, its relevance after 50 years and issues pertinent to today's practice of school health education. Twenty-eight individuals were contacted (based on having been named by at least two people as authorities) through their active email addresses; 22 agreed to participate, and ultimately, 16 responded to the questions (The School Health Education Study Fifty-Year Reflection Group). Three people did not respond to the original invitation and three others indicated they did not believe they had insights to offer. All participants did not respond to each item. Some responses have been edited for length or clarity, or because they intersected with comments already presented by other participants. However, a full transcript of all responses received can be obtained by writing to the primary authors.* ***Results:*** *We found a wide array of thoughts about the SHES. Whereas we see much consensus about the SHES' impact and legacy, we also acknowledge that some disparate opinions emerged. The details of these perspectives are contained herein, mostly in the participants' own words.* ***Discussion:*** *The importance of the SHES continues to be recognized. Participants concur that the SHES: (1) Demonstrated application of an exemplary process and set of principles for curriculum development, including a conceptual approach that minimized the potential impact of content or factual changes over time; and (2) Was the forerunner of the development of the National Health Education Standards, the School Health Policy and Practices Study, and countless other initiatives. Whereas no conclusions can be drawn, participants raised points about the SHES that we see worthy of further note, discussion and debate: (1) The SHES conceptual approach may have been too complex for some school systems to interpret or adopt; (2) It may have lacked thorough description of an implementation strategy; and (3) It may have failed to gain sufficient involvement of administrators and policymakers during development and implementation to achieve more widespread buy-in. With respect to school health education in general, some participants argue that: (1) A more sustained foothold for school health education may have failed due to reliance on K-6 teachers in a vanguard role when so many teacher preparation institutions lack requirements for school health for elementary teachers; and (2) Some academicians have abandoned*

*their advocacy role, contributing to the demise of school health in some communities. At least some participants see gains being accomplished in the future if school health education proponents consider: (1) Marketing health education as education for health literacy, thereby bringing health into better philosophical alignment with core subjects such as reading and mathematics and integrating it more fully into the curriculum, or in a similar vein, focusing more on educational and productivity outcome metrics, rather than on health outcomes alone, whose long-term effects are both difficult to trace and to measure; and (2) Viewing school health education as a component of a broader community or public health construct, thereby drawing the full breadth of health resources and health education venues into a supportive matrix. Whereas these respondents' comments likely represent mainstream historiographic reflections about the SHES and school health education, the collection of remarks is obviously limited to ones made by these 16 participants. Additional invitees may have wanted to participate, but could not because of the timing of the request, their personal obligations, and other constraints. Moreover, other scholars whose names did not surface in the sampling procedure might have different but equally valid remarks to make about the SHES. Because all responses were created independently, alternative interpretations might have emerged had these individuals been part of a face-to-face panel where a discussion ensued.* ***Translation to Health Education Practice:*** *Concerns abound that the legacy of the SHES is already being lost in the rising generation of health education practitioners, and that, therefore, the heritage brought to health education by the SHES and its key personnel needs to be transmitted via identified stewards of the profession. We leave further interpretation and the translation experience of "lessons-to-be-learned" up to readers as a dialogue building exercise related to the SHES and contemporary school health education issues. We recommend that some of these participants or other school health scholars be invited as panelists at forthcoming health education conferences over the next few years and react to questions like ones presented here. Further, we recommend that a similar project be pursued on a recurring basis so that future generations of health educators can glean insights from their historic heritage.*

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## QUESTION 1

***Fifty years after the initiation of the study, describe the relevance of the original research; and the 10 concepts that served as the "major organizing elements" of the conceptual approach used during the curriculum development project phases of the SHES. These concepts included: (1) Growth and development influences and is influenced by the structure and functioning of the individual; (2) Growing and developing follows a predictable sequence, yet is unique for each individual; (3) Protection and promotion of health is an individual, community and international responsibility; (4) The potential for hazards and accidents exists, whatever the environment; (5) There are reciprocal relationships involving man (humanity), disease and environment; (6) The family serves to perpetuate man (humanity) and to fulfill certain health needs; (7) Personal health practices are affected by a complexity of forces, often conflicting; (8) Utilization of health information, products, and services is guided by values and perceptions; (9) Use of substances that modify mood and behavior arises from a variety of motivations; and (10) Food selection and eating patterns are determined by physical, social, mental, economic, and cultural factors.***

**Robert S. Gold, University of Maryland:** With the publication of *Health Education: A Conceptual Approach to Curriculum Design* in 1967 there was an immediate impact. Most of the leaders in the field at the time "knew" that something significant had happened; that for the first time we had a broadly-based national study that could and should impact the training of health educators, as well as the planning and delivery of health instruction in the nation's schools; and perhaps most importantly, everyone (as I remember it) thought this was so well done that there was consensus that its results should be utilized.

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The Bronfman Foundation, the 3M Corporation, and other sponsors made it possible to distribute the results of the study and the subsequent curriculum development efforts in several different formats and these materials were well regarded. And, the writing team became health education "rock stars."

What is sometime lost are the principles identified by the writing team that served as the guideposts for all subsequent development, and perhaps they should be recollected. In short: (1) Well-planned curriculum development is time-consuming, is costly and requires participation across many different disciplines. It should not be limited to "health experts" and should not be done piecemeal. (2) Because of competing demands, and because most school systems could not afford otherwise, curriculum development in health education had, to that time, received little attention or support. (3) Scope and sequence decisions for health instruction were never afforded the substantive attention required in a comprehensive approach to health instruction; thus, the quality of health education materials suffered in comparison with other subjects and our own wishes. (4) Materials and planning for content-based health instruction is rarely able to keep up with the pace of science – the lag time between discovery, updating the workforce, and influencing curricular content was, and still is substantial. As a result, a conceptual, rather than content orientation is critical. (5) Change in thinking about curricula should not be fragmented or piecemeal – which challenges individual school systems and teachers to make changes needed. (6) Even a nationally developed conceptual approach by a "rock star" writing team with significant financial support and research backing should not be seen as a national curriculum, but rather, a set of materials that should be adapted to local context, local capacity, and local need. (7) The conceptual framework was intended to provide direction for learning experience opportunities at any level of learning.

If we were to re-examine these principles, they probably could have been written last week by the greatest minds in health education – or any field. For me, that is both the brilliance and the sustaining impact of the writing effort.

Perhaps as importantly, the 10 areas may change, but the conceptual approach and its underlying components remain a crisp model for visualizing multiple factors influencing health, the variety of potential responses to those factors, and the variety of levels (individual, family, and community) that are involved in health.

**Clint E. Bruess, Birmingham-Southern College:** There are so many reasons the SHES was relevant that they are hard to count. However, among them are: (1) It focused attention on the state of the art in school health education, (2) It helped promote a broader concept of what health is, what school health education is (and could be), and why it is important to have health education programs in schools, and (3) It helped unify the thinking of health educators of the time and for many years to come.

The 10 concepts contributed to a broader understanding of the goals of school health education and what it is—or at least is supposed to be. Although they are all important, in my mind, concepts 3, 7 and 10 are the most important because collectively they emphasize the importance of a broader concept of health (not just absence of disease), point out the broad responsibility for health promotion, and set up thinking for broader study of the many factors that influence health behavior. These points were not considered much before that time, and continue to be emphasized today. For example, much research through the years has focused on factors influencing health behavior.

**Marlene K. Tappe, Minnesota State University-Mankato:** One of the fascinating aspects of the SHES research is the fact that many of its elements can be found in present day surveillance activities conducted by the Centers for Disease Control and Prevention (CDC). The SHES Committee examined instructional practices in health education as well as students' health-related knowledge, attitudes and behaviors. Similarly, the CDC's School Health Policies and Practices (formerly Programs) Study (SHPPS) and School Health Profiles (SHP) monitor instructional practices in health education while the CDC's Youth Risk Behavior Survey (YRBS) monitors students' health-related behaviors. An optimistic comparison of the results may suggest the status of health education as a required subject in secondary schools has improved since the SHES. Unfortunately, there remains a ring of truth to the observations of the SHES Committee that "…there certainly are a majority of situations where health instruction is virtually non-existent, or where prevailing practices can be legitimately challenged. What passes for a program of health education in far too many instances is dubious." Further, many of the categorical problems related to health instruction that were identified through the use of open-ended questions in the SHES may be similar to those that would identified by respondents today: "*Provision of health education in the curriculum* (lack of time to teach, an overcrowded curriculum, lack of continuity in course as offered, and neglect of course when combined with physical education);" "*Health instruction and specific content areas* (parental and community opposition to controversial health areas, lack of family support to reinforce good health habits, need to improve instruction in certain content areas, need for an enriched and more specific health curriculum, and student disinterest);" "*Staff assigned to health instruction* (inadequate professional preparation of teachers, inability to secure qualified personnel, and weak specialized preparation of teachers with a combined major in health and physical education;" "*Facilities and instructional materials* (inadequate classroom facilities and lack of high quality instructional materials); and "S*upport and recognition of health education* (attitude of indifference toward health education, lack of status accorded the subject, and need for parental support and community education)." One distinct example of how the findings of the SHES research are not relevant today relates to the instructional practice of

grouping (i.e., separation of) boys and girls for health instruction.

The SHES Committee applied the work of Bloom, Krathwohl and others to identify the three classifications of health behavior as the ways in which people think (cognitive domain), feel (affective domain) and act (action domain). The SHES Committee's dimensions of health, key concepts, and classifications of health behavior remain relevant today when compared to the *National Health Education Standards: Achieving Excellence* (*NHES*) and the *Health Education Curriculum Analysis Tool* (*HECAT*). The *NHES* and *HECAT* serve as the primary tools for contemporary curriculum development in health education and are based on CDC's *Characteristics of an Effective Health Education Curriculum*.

**David K. Lohrmann, Indiana University:** The findings garnered the attention of health groups such as the American Medical Association (AMA) and education groups such as the National Education Association (NEA) and the Association for Supervision and Curriculum Development (ASCD). All of these groups participated in an advisory capacity following release of the research findings. The late 1960s witnessed the first of several education reform movements to the present time. This initial reform was stimulated by the National Defense Education Act of 1958 which focused on science and technology but which also spurred curriculum projects in numerous other subjects. Though not supported by federal funds, health education was "in the mix" due to the SHES. Additionally, the SHES was the first program surveillance initiative in health education and could be considered the forerunner of CDC's biennial School Health Education Profile (SHEP) survey and the SHPPS. Unfortunately, many of the SHES findings such as ineffectiveness of instructional methods, insufficient time in the school day for health instruction, and parental and community resistance to certain health topics, to name a few, still apply 50 years later.

The SHES is relevant today in four ways. First, the national research study was the forerunner of several ongoing school health surveillance systems in place today. Second, it clearly influenced the final product of the committees that developed the National Health Education Standards. These standards serve as the framework for curriculum content, assessment tools, materials, and textbooks today. Third, the process of developing the standards was guided via "lessons learned" by health educators who served on both the SHES Writing Group and the Joint Committee on National Health Education Standards. Finally, and I'm not sure health education leaders of today fully appreciate this, the SHES study was clearly imbedded in curriculum theory and practice so that its work was viewed as a model for the education community.

**Kathleen Middleton, ToucanEd, Inc:** I think the concepts are still as comprehensive today as they were 50 years ago. They were written in a way to withstand time. However, now, we would need to link the concepts to standards and to skills. Whereas the concepts imply the use of skills, on the surface they look like content.

**R. Morgan Pigg, Jr., University of Florida:** The original 10 objectives (Level 3) from the SHES require no substantive changes. Neither does Level 1, which identifies "health" as a unified comprehensive concept, nor Level 2, which specifies three key concepts: growing and developing, decision making, and interacting. However, the lower levels of the model (i.e. 3, 4 and 5) must adequately incorporate substantial new content related to evolving developments in information technology, health behavior genomics and the contemporary social morbidities of youth. Changes in content and method should occur primarily at Level 4, which includes 33 sub-concepts that address health content, and Level 5, which sets goals and behavioral outcomes in the cognitive, affective and practice domains of learning.

**Chet Bradley, Wisconsin Department of Public Instruction (retired):** A significant finding in this study, along with other studies that followed, was *that in our schools health education is not taught at all or it is tacked on to other subjects and taught by teachers who are not professionally prepared in health education.* Unfortunately, I think this is still the case today in many of our school districts.

This research was a driving force in motivating the University of Oregon's Department of Health Education to request and receive a major grant to fund an *Experienced Teacher Fellowship Program* [ETFP] in 1966–1967 to prepare selected experienced teachers as Master Health Educators, under the direction of the late Dr. Darwin Gillespie and Dr. Robert Kime. I was a fortunate recipient of one of those fellowships and this experience changed me from a high school history and physical education teacher, assigned to teach health, into a competent and confident health educator. In this fellowship program, the SHES was one of the most critical documents studied in the professional preparation of the Teacher Fellows and significantly influenced what we did with this background when we returned to the schools.

In addition, from 1990 to 1995, while I was still Health Education Consultant for the Wisconsin Department of Public Instruction, [DPI], I wrote and received a significant grant from the U.S. Department of Education and Metropolitan Life Foundation to fund a project designed to prepare successful elementary teachers as master health educators. This program was modeled after the ETFP that I had completed in Oregon. The participating Wisconsin elementary teachers in this project earned a Master of Science degree in school health education and demonstrated effective health instruction at the elementary level. In addition, they were prepared to create leadership teams to implement meaningful health instruction infused by all teachers in their elementary school. This five-year project successfully demonstrated that professional preparation is critical to successful health teaching and leadership at the elementary level.

Finally, from 1999 to 2002 the American Cancer Society [ACS] created and

implemented the *National School Health Coordinator Leadership Institute* to prepare school health personnel to become successful leaders as district-wide school health coordinators. Over 40 school health coordinators were prepared through this national institute which represented 34 states. This program also was both modeled after the University of Oregon ETFP and influenced by the SHES. The SHES concepts framed the knowledge, attitudes, and skills necessary for one to become health literate. This study was instrumental in framing the Health Education Curriculum initiatives and guidelines developed and undertaken by state departments of education and universities/colleges since 1967 when the 3M Company published the SHES curriculum documents. When I served as Health Education Consultant for the Wisconsin DPI (1972-2000), the SHES curriculum initiative was important in guiding my work with school district curriculum committees and in writing future DPI health education curriculum guides.

**Susan K. Telljohann, University of Toledo:** The SHES was a groundbreaking study to determine the status of school health education in the US. Because of the "appalling" results, many noteworthy school health education professionals participated in writing a health education curriculum. Many of the original concepts are still used today in modern health education curricula; however, additions and changes have happened in health education curriculum development over the past 50 years. First, the NHES were developed. The NHES are based on theory, school health curriculum evaluation that has been conducted over the past two decades, best practices and input from school health professionals. Most states have adopted or adapted the NHES, thus allowing for consistency in the delivery of health education. Although there is some overlap in the NHES and the majoring organizing concepts from SHES, there are significant differences. For example, the NHES are primarily skill focused (e.g. communication, advocacy, etc.) whereas the SHES organizing concepts have more of a health content focus (e.g., nutrition, injury prevention, drug prevention).

The advantage that health education curriculum developers have today is that there has been significant curriculum evaluation conducted over the past two decades, which has resulted in identifying common characteristics of effective health education curricula. If these common characteristics are included in health education curricula and teaching, the results should be an improvement in health outcomes for today's youth.

**Larry K. Olsen, A.T. Still University of Health Sciences:** What is interesting is that the 10 conceptual areas that emanated from the SHES still are appropriate today. The original research that was done was, at the time, cutting edge, and if it were to be repeated today, my guess is that many of the same concepts from the original research would again emerge. Yes, there would be nuances (e.g., more related to violence issues) but if we take an overview of the totality of the health issues we face today, all of them could "fit" into one of the original 10 concepts that were developed by this wonderful team of health educators.

**Becky J. Smith, Former Executive Director, American Association for Health Education:** To my knowledge – the SHES was the first time that research was undertaken to gain a "national picture" of the status of health education in schools. Although there have been several attempts to get a national picture of health knowledge, attitudes, and behaviors of adolescents since the 1980s, including the National Adolescent Student Health Survey (NASHS) – which transitioned from the Office of Disease Prevention and Health Promotion to the CDC as the biennial YRBS, it was not until the CDC conducted the first SHPPS in 1994 that an attempt was made to get a national picture of the status of school health education. The SHPPS includes health education as one of the 8 components of coordinated school health. The SHES also provided substance for the need and value of the curriculum project both to the Bronfman Foundation and the 3M Company in funding various activities over the years of the SHES.

**Elaine M. Vitello, Southern Illinois University-Carbondale:**

A modern-day team should read, review and reflect upon all the multidisciplinary background material as Elena [Sliepcevich] did and shared with her team members. The SHES was designed and written to be adaptable regardless of time or place. In reviewing the 10 concepts it is difficult to challenge that guiding principle. Obviously, because of the way in which local schools are organized, it is necessary to understand the social, economic, political and social cultures of the area. [Getting] challenges from sub-groups is a given and knowing which ones they are and what their perspectives are is important. Additionally, school boards, administrators, parents, and other significant community entities (including teachers) must all be kept apprised and on board with implementing any curriculum, but especially this one due to its potential controversial topics. The "buy-in" is critical to success.

## QUESTION 2

***When it entered the curriculum development stage beginning in 1963-64, the writing team developed the 10 curriculum concepts shown above. If you were advising this team today (or a modern day team, if you prefer), given the passage of 50 years, and your many years of experience in the field of school health education, what would you recommend to them in terms of organizing health education curriculum guidance for schools?***

**Susan K. Telljohann, University of Toledo:** Since the SHES organizing concepts were developed, significant curriculum evaluation research has occurred. If I were advising a team of school health curriculum developers today, I would make the following recommendations: (1) Determine the healthy behavior outcomes that are desired for students by the time they graduate from high school. Next, the concepts and skills that are most likely needed to help students

practice those healthy behavior outcomes should be identified. These concepts and skills should be the underpinning of any health education curriculum. (2) Base the health education curriculum on "Characteristics of Effective Health Education Curriculum" summarized by the CDC's [former] Division of Adolescent and School Health (DASH). These characteristics were created through a synthesis of school health curricula evaluation studies. If these characteristics are incorporated into the health education curriculum and teaching, the results should be an improvement in health behavior outcomes among youth. (3) Base the curriculum on the National Health Education Standards.

Having identified these three steps, the CDC's DASH created the HECAT to help ensure that the three steps listed above are incorporated when either selecting a curriculum or writing a curriculum. If the steps in the HECAT are followed, school districts can create or select a curriculum that is based on research, best practices, and input from many school health professionals.

**Robert S. Gold, University of Maryland:** If we were able to re-charge the writing team for today, I would ask them to consider an expansion of the scope in three ways. First, I would ask them to consider the significant developments resulting from CDC/DASH efforts to define the coordinated school health education program. The conceptual approach as originally written has built-in hooks to the important elements, but they should explicitly examine how the connections provide new opportunities. Second, I would ask that they consider the schools to be an agency in the community just as any other agency – and that in the end school health education is public health education in a particular setting in the community. With that assertion there may be an expansion of the conceptual and theoretical foundation both for what is expected and for what might be done. Finally, I think the three-pronged individual/family/community approach needs to be expanded in both directions. The science base today is clear enough to suggest attention to cellular and sub-cellular implications on the one side, and policy (institutional; organizational; geopolitical) on the other side.

**Chet Bradley, Wisconsin Department of Public Instruction (retired):** First I would recommend that we start referring to the old historical name of *school health education* as *education for health literacy*, or *health literacy education*. Health education, for too long, has been seen by most people in the general public as something attached to physical education. I think using *instruction for health literacy* as a change of name could help break that stereotype in our country.

Concerning the curriculum, I would emphasize the importance of articulating what it means to be health literate at different stages in a student's life. This curriculum should focus on the *most critical knowledge, attitudes and skills* necessary for students to demonstrate personal, family, and community health literacy skills appropriate for their age group. At the elementary level this should be part of the total school curriculum and not tacked on to science or some other discipline. At the middle school and high school this instruction should be *in-depth* rather than just touching superficially on a long list of health issues. A focused health literacy curriculum should *not* be a mile wide but only an inch deep. Less means more to me here.

**Evelyn Ames, Western Washington University:** SHES was an excellent curriculum concept for school health education; but when it came to organizing and developing curriculum at the local and/or district level, it didn't "fly" because teachers were usually not prepared in school health and had vague ideas of what should/could be included in school health education. When teachers were given two to three days to develop their school's curriculum, they usually wanted to spend time writing objectives rather than figuring out what students should know, learn, or do as a result of health instruction. The classroom teacher had a difficult time interpreting SHES. Hence, SHES was less likely to be used. It is imperative to bring on board classroom teachers who are professionally prepared in school health education. Because health issues do not exist in isolation from one another, planners must explore various approaches that can be used to link health areas. What occurred and still occurs is that there are "captains" (local/district/state health education curriculum coordinators) who may have professional preparation in school health but the "soldiers" have little or none. A helter-skelter kind of curriculum is developed, often by physical educators. Several states have combined health/physical education endorsements. If a similar survey [to the SHES] were to be conducted today to find out the extent of school health education in the public schools, the results would again be "appalling."

**David K. Lohrmann, Indiana University:** First, I'd like to recognize that many of the points the SHES Writing Group made in are as timely today as they were when first written. One aspect of their work that I really appreciate is their emphasis on growth and development, especially Concept 1 which deals with knowing and understanding how structure and function influence health. Like the Writing Group, I've come to believe that to value health and choose to behave in healthy ways, individuals have to know and appreciate how their bodies function. Young children especially have a natural and strong interest in this.

I also appreciate that the Writing Group made the point that "Health education is not just superficial biology, nor watered down anatomy and physiology, nor is it the classroom extension of physical education. Rather, it is an important entity among the subject areas of the curriculum which, through organization of health knowledge, is primarily concerned with the well-being of individuals and groups." Even though not always presented as "conceptual" since originally proposed, the 10 health topics identified still influence the content of the PK-12 health curriculum and created a structure that clearly defines the meaning of health education.

My advice to the Writing Group is based, more than anything, on information we have learned in the intervening 50 years and pertains to how to conceptualize health skills, thinking differently about the action domain of learning, and more extensive use of the application dimension of the cognitive domain of learning. Regarding skills and practices, the Writing Group identified essential health skills very cognitively as "critical thinking, student involvement and discovery, concern for value development and conceptual thinking." In the long-range goal sections accompanying the definition and explanation of each concept, they included long-term health outcomes in the "action domain" of learning. Additionally, they seldom used verbs that relate to the application aspect of the cognitive domain in the behavioral [learning] objectives they presented for each concept. In keeping with their very cognitive understanding of skills, they utilized numerous verbs associated with analysis, synthesis and evaluation. My recommendation would be to limit skills in the "action domain" to psychomotor skills (e.g., proper brushing and flossing, picking up objects safely, performing CPR, putting on a condom correctly, etc.) and, for other skills, to focus more on the application aspect of the cognitive domain involving communication, refusal, conflict resolution, stress management, planning, advocacy, and so on.

The emphasis the Writing Group placed on the affective domain is noteworthy and something currently overlooked for the most part. The assumption today is that affective learning occurs indirectly as a bi-product of cognitive and psychomotor learning. As the Writing Team specified, the affective domain has five levels culminating with characterization. That is, when individuals value something, their behavior will characterize them as holding that value; others can discern someone's values by observing their actions. My advice to the Writing Team would be to emphasize health as a value in and of itself and the point that those who value health are characterized by their healthy behaviors. Too often today, we hear lip service about the importance of health from individuals, including health educators, who obviously are not characterized as valuing health because they do not behave in ways that promote health. The Writing Team got at this to an extent through delineation of observable health behaviors in the school setting, behaviors not observable in school and delayed behaviors, but could have made a much more direct connection to the affective domain and health as a characterizing value.

**Clint E. Bruess, Birmingham-Southern College:** Today we could easily collapse the list of 10 concepts into 3 -5 major ones emphasizing factors influencing health behavior, personal and community responsibility for health status and behavior, and the importance of viewing health in a qualitative way – and as having physical, mental, social, ethical, aspects and perhaps, others.

**R. Morgan Pigg, Jr., University of Florida:** In the 1960s, contemporary curriculum theory sought to achieve specified outcomes (or goals) through two main approaches to curriculum development. The *developmental tasks* approach focused on the learner mastering key tasks considered essential to achieving the expected outcomes of instruction. In contrast, the *conceptual approach* proposed that individual perceptions form the basis of learning, and thus, should provide a basis for determining objectives, content and methods of instruction. Using the conceptual approach to curriculum development, the SHES team created a complete model of health instruction. The underlying assumptions remain valid today. For example, the SHES conceptual model showed sensitivity to individual differences essential to behavior change; receptivity to community needs and priorities; adaptability to multiple grade levels and groupings; and flexibility to incorporate and update scientific information while maintaining the basic scope and sequence framework.

**Larry K. Olsen, A.T. Still University of Health Sciences:** The concepts are appropriate. The issue is one of time to include health education across the curriculum. I would have included more educational administrators in the developmental process so the concept of ensuring that the time necessary to do a credible job of including health education in the curriculum would be there. It is interesting that school superintendents tend to listen to school superintendents, so having some of these types of individuals included on any curriculum development project would probably have paid dividends. I also think I would have tried to show more of the integrative nature of health education as a topic that could cut "across the curriculum" in much the same way as we currently talk about "writing across the curriculum." What makes this even more important is the fact that they considered major learning theories prior to those learning theories actually having a name. I seem to recall that some of the early references to learning styles were made in the 1970s. The SHES pioneers developed materials that cut across the three major learning theories of visual, auditory, and kinesthetic (VAK), learning as well as into the multiple intelligences that were espoused by Gardner in the early 1980s. These pioneer thinkers in health education may well have laid the foundation for the work of the educational theorists that followed, but they were not acknowledged for this contribution to the furtherance of education in the U.S.

**Marlene K. Tappe, Minnesota State University-Mankato:** As a member of the both the original and the second Joint Committee on National Health Education Standards as well as member of the CDC's *HECAT* training cadre, my recommendation, albeit biased, is to use the *HECAT* and the *NHES* as tools for curriculum guidance. My students are currently using instruments based on the *HECAT* and the *NHES* to develop a scope and sequence for health education curricula as well as select or develop lesson plans for these curricula.

**Becky J. Smith, Former Executive Director, American Association for Health Education:** I would recommend that they

stay with the conceptual design although nearly no one understood the conceptual design well enough to really contribute in its development and implementation in schools. Therefore, the educators at the time took from it what they could understand and utilize – and that was to interpret the 10 concepts into 10 topic areas. Concept 10 became nutrition education, concept 9 drug education, concept 8 consumer health education, and so on—all relevant and important—but we might say there was much "lost in translation."

Having seen that happen, I would now recommend a national training-of-trainers project occur to accompany the roll-out of the curriculum through every state department of education that would explain how to work toward the attainment and assessment of concepts in a school curriculum environment. This was done in 1995 when the first national health education standards were presented asking people to transition from 10 content areas to seven skill standards and assessment around skills. I believe that shift was at least two-thirds successful – however, it took nearly as much time and more money to develop and deliver training to nearly every state. It was then reinforced with the roll-out of the 2007 National Health Education Standards a bit more than 10 years later—that transition into the next decade—"sealed the deal" in helping health education professionals understand the value of teaching and assessing skills (although non-health education trained people who teach health still reverted to simple content knowledge areas for the most part). In truth, in 1995 we knew we needed to teach skills and had fairly good strategies for teaching them; however, it took the next 10 years and research from a variety of professionals to demonstrate how to assess the teaching of skills – thereby being able to determine whether or not students attained the skills. I am confident that now we have that pedagogy (at least a small group of people in the country know how to do it).

The SHES theory of concepts was way ahead of its time in both theory and the ability of health educators to implement. After 2007, I believe we could and perhaps should go back to trying to enhance the student understanding of the underlying concepts of health especially for high school students – and for college students. Why, you ask? Because we now have the underpinnings necessary to carry it off – within strong programs (where they exist) we could ensure that students have the skill set to obtain and utilize health information for personal, family, and community health decision-making and behaviors and that would provide the basis for a higher level of study to delve into the theoretical concepts underlying health. This could lead to a very rich study of the human potential for health including environmental, genetic and human made factors. I know I have very much enjoyed helping university students explore the impact and potential for health from within the framework of all of the dimensions of human functioning. There are wonderful sources of research for health education professionals to explore with their students stemming from psychology, anthropology, biology, religion and other areas.

## QUESTION 3

***To what extent did the SHES team and the conceptually-based curriculum that followed impact the practice and delivery of school health instruction at the classroom level in the U.S., or in specific schools or school districts? What empirical or anecdotal evidence can you offer and is this evidence still valid today?***

**Clint E. Bruess, Birmingham-Southern College:** In 1978, I had the opportunity to become the Director of the School Health Education Project (SHEP) for the National Center for Health Education (NCHE). While I don't think I realized this at first, it now seems clear that the NCHE efforts came about because of SHES. Although there were originally some controversies about what should be involved and what kinds of curricular models should be promoted, the involvement of the public sector (CDC) and the private sector (NCHE) working together to promote better school health around the country in many ways probably would not have happened without the SHES coming earlier. Ann Nolte and Elena Sliepcevich served on our advisory board and we also had opportunities to learn from and work with others who had been active with SHES. Bob Russell, Gus Dalis and Peter Cortese were helpful advisors to us in many activities. Our SHEP staff included Lloyd Kolbe, Kathleen Middleton and Dave Poehler, each of whom had major impacts on school health education in the years following their NCHE activities. In addition, Lawrence Green and Godfrey Hochbaum became active in our efforts to promote better evaluation of school health education activities and this helped give credibility to what was happening. Again, perhaps this would not have happened without the SHES influence earlier.

**Marlene K. Tappe, Minnesota State University – Mankato:** The best evidence that I have regarding the impact of the SHES team and the conceptually-based curriculum on the practice and delivery of school health instruction is my observation regarding the evidence-based, but now out-of-date, curriculum *Growing Healthy*. My first exposure to the conceptual framework of the SHES was in a health education curriculum course taught by Dr. Paul Schuster at Mankato State University (now Minnesota State University – Mankato). I learned about the triad of health education, the three key concepts related to health behavior, and the 10 concepts related to the scope of the health education curriculum. I must confess, however, as a student and beginning teacher, the contributions of the SHES that I relied on the most were the multitude of transparencies distributed by 3M to support health instruction.

**Robert S. Gold, University of Maryland:** It had tremendous impact on practice, on subsequent curriculum development, on the importance of evaluation, and on the discipline and field. The SHES and subsequent curriculum materials became a focal point on the 300+ training programs

in health education in the late 1960s and 1970s. Several of the major curriculum development efforts and their subsequent evaluations that followed both benefitted from the groundwork done here, but also were held to a higher standard. One example might be the *Teenage Health Teaching Modules* that were developed and evaluated with CDC/DASH support. The National Health Education Evaluation Study conducted by ABT Associates verified what SHES told us, but also used a broadly-based set of curricular materials built on the same mold as SHES. Finally, I think the DASH itself, and the coordinated school health program was a natural outgrowth of this work.

**Elaine M. Vitello, Southern Illinois University:** In my opinion we have assessed this to the "Nth degree." Implementation, especially on a long-term basis, is the key. At the time of the SHES, other curricula also were being developed in areas such as science and math, as well as some local health-related ones (e.g., the New York Strand). [Having] competing curricula is similar to when health education had more than one ethical code. Issues, discussion and debates, in many instances, overshadowed the real topic – the ethical code itself. Even though the SHES team was represented by a diverse group of professionals, health education was still in the process of "finding itself." SHES occurred before the Bethesda conferences [that helped bring more unity to professional preparation and the profession itself]. Having said this, an important initiative for us is to get faculty and students in professional preparation programs to learn about, understand, and embrace the SHES for its many aspects of learning and to appreciate its worth. Sometimes I believe that faculty and students thought it was too complicated and cumbersome. So often I have heard the phrase: "Teaching the concept versus teaching toward the concept." So, the trainers-of-trainers were not always on the same page and maybe not as informed about the SHES.

Also, state boards of education should be informed, educated and encouraged to work with local school boards to understand and act on the importance of teaching health. Currently, we still do not have enough qualified health teachers and too few policymakers who support the value and importance of health. Prevention is not a priority…still. Just think, in an ideal school curriculum world, with qualified health teachers and health viewed as an essential subject, would we be dealing with the current epidemic of obesity and type-2 diabetes among children – concept 10?

**Kathleen Middleton, ToucanEd, Inc:** I do think the concepts influenced the NHES. But, again, they largely describe the content to "cover" in health education. I do not have data to provide, except that since SHES, almost every major curriculum (and textbook) used an interpretation of SHES to define the scope of the work.

**Chet Bradley, Wisconsin Department of Public Instruction (retired):** This study was instrumental in framing the health education curriculum initiatives undertaken by state departments of education and universities/colleges throughout the country since 1967. The SHES indirectly influenced the development of the NHES in cooperation with AAHE and the national office of the American Cancer Society.

**Larry K. Olsen, A.T. Still University of Health Sciences:** The developers did not see this project as a national curriculum project. They envisioned this as a beginning point and knew full well that school districts would adapt this information to fit their local situation. I think we can see the remnants of this study in the still operational *School Health Curriculum Project*, the *Teenage Health Teaching Modules*, the *Michigan Model* and perhaps even some in the *Mariner Model*. I don't have specific empirical evidence, so maybe there is a need to get the developers of these other programs to comment on the effect or impact of the SHES on what they developed. The central tenet that the specifics of the content may change but that the concepts go on forever was prophetic in its own right. It would be difficult to show that any of the concepts included in this study are "out of date."

**Evelyn Ames, Western Washington University:** Various curricula developed in the state of Washington (at the state level as well as in Seattle and Tacoma school districts) incorporated concepts from SHES, as well as from other resources. Over the years, a lot of curricula were developed in Washington and implemented through Educational Service Districts that employed professionally prepared health educators. This is not the case now.

**David K. Lohrmann, Indiana University:** The most important impact of SHES was to provide a clear definition of health education and to specify, through the topics identified in the 10 concepts, the scope and sequence of the modern health education curriculum. Whereas health instruction still too often relies on memorization of health facts, a point the Writing Team lamented, health education today is closer to what they envisioned than it was prior to publication of its report. The evidence for this can be found in most any health education textbook through the topics covered therein. It can also be found in the NHES document which contains a diagram illustrating that health education curricula should be constructed by combining the standards with the topics first delineated in the SHES document.

**Becky J. Smith, Former Executive Director, American Association for Health Education:** The SHES had a huge impact on the development of school health education which lasted 30 years with nearly no changes – is still a major influencing factor when you examine the school codes and legal mandates for health education in those states that have them on the books (nearly all states have a mandate or school code defining what should be taught in school health education). The SHES was nationally recognized and supported by the NEA, the AMA and all the most active school health voluntary health organizations of the time

– especially the American Lung Association and the American Cancer Society. (They were also two of the largest voluntary health organization – and the ACS has been the largest for the past several decades). The SHES staff members were conscious of involving experts and consultants on the development teams from educational theory, school administrators, physicians, voluntary health organizations and professional societies such as NEA, ASCD, AAHPERD, and so on. This process built a level of support that translated back to states calling for improved legislation around school health education. The only significant state level school health education legislation prior to SHES was the mandate to include education about alcohol in schools – which dated back to the Women's Temperance Movement.

The 10 concept areas – became translated into the 10 content areas and in state after state, educators, physicians, medical auxiliary societies and PTAs lobbied for legislation. Much of that effort was led by university-based health education faculty – persons such as William Creswell, John Cooper, and Robert Blackburn. Although I know there were many other faculty members working in states across the country, these are three of the prime movers with whom I had the pleasure to work directly – and in each case they were able to develop statewide support for very robust legislation for school health education using the SHES as the basis for that support. I was a doctoral student at the University of Illinois at the time the legislation in Illinois was passed and I attended some of the organizational strategy meetings with William Creswell, my academic advisor.

I must add that it has been my sad observation that at no time since the 1970s and 1980s have I seen university faculty systematically take on responsibility for legislative leadership in any area of health education – and concurrently I have seen the level of legislative support for health education in both the public and school sectors continue to erode since the end of the 1980s. I do not know whether faculty do not see advancing or even protecting the profession as part of their responsibility – or they do not understand the skills and potential influence they have. In the few cases where they have been engaged, they have generally had positive outcomes.

## QUESTION 4

***Given the often rather discouraging findings from the CDC's Youth Risk Behavior Survey and similar assessments of health risk taking by youth, if a foundation today (as the Bronfman Foundation did in 1961) offered us money to examine the nation's schools ($1.44 million in today's dollars vs. the $200,000 provided in 1961) what should we do?***

**Becky J. Smith, Former Executive Director, American Association for Health Education:** There is one major area that has had nearly no successful impact in the implementation of school health education and it is one of the most important factors in the failure of health education to have a more significant impact on youth health behavior. It is in the preparation of elementary teachers and delivery of health education in the elementary schools. We have failed again and again in this area. I am ready to say that the health education profession made a tactical and theoretical error in believing that elementary teachers are the best teachers to deliver health education at grades K-6. The theory was that elementary classroom teachers see their students more than any other adult other than primary caregivers, and thus, have the opportunity to really know the health education needs as well as learning styles of their students – thereby making them the "best" provider of health education for those grades. However several factors have severely damaged the implementation of this theory. First was university politics that created curriculum fights and barriers in nearly all universities which limited the pre-service preparation of elementary teacher to take on the health education role. Nearly no universities give any pedagogical training to elementary teachers in the delivery of health education. Remember also that more than 700 accredited universities prepare elementary teachers and only 250 universities have health education professional preparation programs on campus – how did we think the elementary teachers from the other 450 universities were going to get any training? The second major factor that intervened to create an even stronger barrier to strong health education implementation at grades K-6 was the *No Child Left Behind Act* and subsequent high-stakes testing. Although state departments of education had been trying to impact assessment in health education prior to the *Act*, once it was passed with a focus on math, science and reading/language arts – the state-mandated assessments of health education disappeared completely. Examples of two states that had decided to mandate assessment in health education prior to the *Act* were Maine and Rhode Island. After the *Act* they lost their health education mandated assessment.

The problem of how to impact the delivery and quality of elementary school health education has never been systematically focused upon. Unless it is resolved in significant ways, we will always be fooling ourselves as professionals, other educators, legislators and the public when we try to say that health education will have a significant impact on the health of children and youth. So – we have two choices: (1) either every available idea and resource we can muster should be directed to giving high quality pre-service and in-service training in health education standards skill development to elementary teachers; or (2) we need to find a way to take the elementary teacher out of health education delivery system for grades K-6, perhaps by legislating elementary health education specialists, or some other yet-to-be-thought-of approach.

**Elaine M. Vitello, Southern Illinois University-Carbondale:** A unique feature of the SHES and its development was its private funding. Many, if not most of the other curricula being developed emanate from tax dollars. Having private funding gave the SHES team much flexibility to engage in this scholarly initiative without

political strings attached. To the credit of a few of our colleagues employed in political positions, SHES did receive well-deserved acknowledgement and recognition. SHES represents one of the most comprehensive endeavors conducted by health educators for health education. If SHES were a dissertation, it would rank #1. I hope it does not disappear from our shelves and that graduate programs still include a question on [their] exams related to the SHES.

**Kathleen Middleton, ToucanEd, Inc:** Establish a baseline of how many minutes students get of health education per grade grouping. Then make recommendations for minimums. Compare the state data (minutes) to the YRBS data for that state.

**Clint E. Bruess, Birmingham-Southern College:** Perhaps it would be helpful to find school administrators and teachers who are believers and are willing to work to support comprehensive school health programs in their schools and districts. The funders could help support their activities and over a period of time (maybe 3-5 years) track the results in terms of the YRBS data and other logical and important measures. We all know it is difficult, if not impossible, to show short-term effects on something as complicated as health behavior. Maybe it would be helpful to show that health behaviors can improve significantly over several years and that it is worth it to make that investment.

**R. Morgan Pigg, Jr., University of Florida:** Replicate the study at an appropriate national level to re-establish a baseline; then, combine these data with existing data that confirm the relationship between health status and learning. Use this approach to produce a cost-benefit analysis showing a positive return on investment in prevention through education. Given the current political and economic environments, cost savings—rather than a rationale based on philosophy or child health status—may offer a potentially viable option for increased health instruction in schools.

**Larry K. Olsen, A.T. Still University of Health Sciences:** *School Health in America* was a study that was done to examine what is happening in the schools. This evolved into the YRBS and the SHPPS. I would think having a "champion" in each state to replicate what was done by these eight pioneers would really provide some interesting data. The "dismantling" of DASH has largely precluded this possibility, but I was hopeful that there would be remnants that could conceivably do this type of study again. I don't know that we will ever be able to amass a group that could do what was done in 1961 and I doubt that we will ever have a champion such as was available through the Bronfman Foundation. However, it may well be worthwhile to do a major proposal to Ted Turner, Bill and Melinda Gates, or others to "test the water" for we know that if children don't engage in negative behaviors by the time they leave high school, there is a good chance that they won't engage in these negative behaviors when they become young adults and parents.

**Evelyn Ames, Western Washington University:** [We should]: (1) Find the professionally prepared school health educators holding curriculum coordinator positions in several states (if there are any) and bring them together. One of their tasks would be to identify excellent teachers of school health in their K-12 systems. (2) Bring the above health teachers together to review, revise, or update the SHES conceptual approach. (3) Use a team approach to develop workable, logical and understandable content, strategies, and resources that could be easily disseminated to various school districts – urban versus suburban versus rural, small versus large and by socio-economic status, i.e., poverty level versus middle class level. (4) Identify higher education teacher education preparation programs that prepare school health teachers and utilize their knowledge of how to move school health into the mainstream of university teacher preparation programs.

**Marlene K. Tappe, Minnesota State University – Mankato:** There is a fair amount of "good news" with respect to school health education. The CDC conducts surveillance activities related to instructional practices in health education and youth risk behavior. We have the *HECAT* and the *NHES* to select and develop health education curricula. Additionally, we have some evidence-based categorical curricula. Although some might argue that these funds should be used to develop evidence-based comprehensive health education curricula, the amount of money available would only be seed money for such a project. Further, even with the best insight regarding the status of instructional practices in health education and youth risk behavior, tools for selecting and developing curricula, evidence-based curricula, and improved professional preparation of classroom teachers, and health education teachers in middle and secondary schools, the status of health education in our schools remains dismal. Therefore, the money would be best spent on activities to determine, develop, implement and evaluate strategies to effectively advocate for comprehensive school health education. An emphasis on advocacy for health instruction in schools is the first step toward addressing past and present concerns related to health education in schools.

**David K. Lohrmann, Indiana University:** I definitely would not recommend use of funding from a foundation to conduct another study on the status of health education in the U.S. For one thing, we can rely on both SHEPS and SHPPS results for that information. Furthermore, many of the health indicators tracked by the YRBS including seatbelt use, sexual behavior, tobacco, and alcohol and drug use are trending in a positive direction. Additionally, we have numerous surveys over more than 20 years which demonstrate strong support for health education among parents, students and school administrators and, perhaps like no other subject in the school curriculum, much research evidence to demonstrate that children and adolescents who participate in quality health education achieve the intended learning outcomes.

The conundrum is, given all this positive support, why is health education not being taught in the ways and to the extent it rightfully ought to be? In this regard I've come to the conclusion that health education just does not have the support base within public education or the external support of powerful champions required to make this happen. Take for example, art education and music education, both of which are accorded much more instructional time than health in most elementary schools. Why? Because they are taught as "specials" and, consequently, there are many art and music educators who have formed large and influential professional organizations. No such counterpart, especially at the elementary school level, exists for health education. Second, influential organizations (my understanding is that these are led by the Rockefeller Foundation and Kennedy Center) conduct social marketing campaigns in support of the arts in schools. Haven't we all seen billboards and heard PSAs to this effect? Have you seen or heard anything like this for health education? Which gets me to my recommendations—I would encourage a foundation do three things. First, identify potential external champions for health education (e.g., AMA), and second, motivate them to publically and vocally support high quality, standards based health education. Then, in collaboration with champions, devote funding to mount a sustained social marketing campaign on behalf of health education so that parents and others see and hear the question: "Has your child had health in school today?"

Whereas others have called for health education specialists at the elementary level, I don't think this is a realistic expectation (but who knows?). I perceive one of our problems to be lack of frequent high-quality professional development opportunities for teachers expected to teach health. Therefore, I'd encourage a foundation to fund a massive professional development effort for elementary classroom teachers and secondary teachers of health education with the goal of preparing them to deliver skills-based health education that is consistent with the National Health Education Standards. We have excellent past examples of highly effective professional development programming for teachers such as that which was provided for *Growing Healthy* in the 1970s and 1980s and by CDC/DASH for HIV education in the 1990s. These should be resurrected and replicated across the U.S.

**Chet Bradley, Wisconsin Department of Public Instruction (retired):** I would *not* do another study because I believe we already know what we need. However, I would invest the money in the advanced professional preparation of elementary teachers, who are responsible for including health instruction as part of their total curriculum. If instruction toward health literacy was as important as math, reading and science in the early years of a child, young people would make better decisions that affect their personal health as well as that of their family and community in which they live. In addition, I would invest in the advanced professional preparation of middle and high school health instructors. For better or worse, teachers make a difference in the lives of their students, including health decisions that young people make on a daily basis.

## QUESTION 5

***Given national school reform movements such as the No Child Left Behind Act and other initiatives that have created a school environment that emphasizes reading, language arts, mathematics and science achievement as "core academic subjects," to the detriment of other subject areas (e.g., health education and physical education) what can we learn from the SHES?***

**Kathleen Middleton, ToucanEd, Inc:** It was too much for most schools. It was not possible to a lot the time required to teach the curriculum. We have learned that we must show empirically how health contributes to "test scores" in the core areas.

**Clint E. Bruess, Birmingham-Southern College:** We continue to battle the same narrow thinking that was present when the SHES was done. People in general tend to give lip service to the importance of health, but then put all the emphasis (and most of the funds) into educating students about math and science, etc. It is true that we need some people who are strong in math and science, but we need all people to be strong related to their health behavior. This is still a difficult selling job, but the SHES gave us the foundation upon which to develop the selling job. We now have so much excellent information about health behaviors, about comprehensive school health programs, and about the results of good programs that we need to do all we can to use this information to develop and promote programs that will be considered important for the well-being of individuals, the community and the nation.

**Chet Bradley, Wisconsin Department of Public Instruction (retired):** We learned that even though the SHES documented what was wrong with health education in our schools, along with several other studies that followed, our national leaders have just given lip service to making the changes necessary to make quality health literacy instruction in our schools a reality. During my 47 years in education, I have always heard that we believe in the value of education in preventing health problems. Unfortunately, we haven't walked the talk.

**Robert S. Gold, University of Maryland:** I think we should have two takeaways: SHES talks about effective evaluation of our efforts. That cries out to evaluate the impact of the coordinated school health programs, not in terms of health outcomes, but in terms of educational productivity. If we could actually provide substantive evidence (as is available in many disparate studies) that healthy kids are better learners, the *No Child Left Behind Act* would require health and PE to ensure success.

We need to reexamine our thinking about school health. Stand-alone courses with enough time-on-task to produce real benefit are probably unlikely in many schools. So, we need to begin once again to think about the opportunities that would come from

integrating course content and concepts in other academic areas—mathematics, social sciences and reading.

**R. Morgan Pigg, Jr., University of Florida:** At the time of SHES, national consensus accepted the Total School Health Program as consisting of three components—health instruction, health services and the healthful environment—with tacit recognition of administration as a necessary adjunct area. Such programs existed in many states with funding coming directly from a combination of local and state resources, with limited support from the federal level. The SHES provided a catalyst for increased national interest in health education, particularly in schools. Several key developments, which represent at least indirect outcomes from SHES, occurred in the 1970s: (1) Publication of the *Report of the President's Committee on Health Education* in 1973 which led to establishing the Bureau of Health Education in 1974 at CDC; (2) Establishment of the private-sector National Center for Health Education in 1975; (3) Creation of the Office of Health Information, Health Promotion, and Physical Fitness in 1976 following passage of the federal National Consumer Health Information and Protection Act; and (4) Establishment of the Office of Comprehensive School Health in the U.S. Department of Education.

The landmark publication, *Healthy People*, released in 1979, moved public health toward recognizing the role of lifestyle in personal health status, with implications for health instruction, as well as a corresponding interest in behavioral interventions focusing on the principal negative health risk behaviors of children and adolescents. However, the release in 1983 of *A Nation at Risk* drew attention away from child and adolescent health to a focus on academic skills in science and mathematics. Propelled by an economic downturn and growing concerns over declining international competitiveness, the emphasis in school curricula shifted toward formal preparation in science and mathematics, and corresponding high-stakes testing, all to the detriment of school health instruction.

As a rebuttal to *A Nation at Risk*, health educators countered with the proposition that health status directly affects learning in all academic subjects. Reaction to *A Nation at Risk* drew national visibility when the 1992 Phoenix Conference, sponsored by the American Cancer Society, assembled representatives from the private sector as well as public health and public education, in a re-commitment to the value of school health instruction. Competing with continuing economic decline and inadequate political influence, school health instruction continued to lose leverage to the ascendency of science and mathematics as central to the school's mission. Ironically, a time of great national need for school health instruction also became a time of declining support and receptivity to meeting that need. The situation remains unchanged today. Given the current political and economic environments, proponents for school health instruction may achieve the greatest success through advocacy at the local level. Using local data related to youth health and learning, advocates can focus on a school at a time, and a district at a time, thereby building support from the bottom up.

**Larry K. Olsen, A.T. Still University of Health Sciences:** [We can learn] not just from SHES but also from Delbert Oberteuffer's concept that healthy people simply learn better than unhealthy people. People who are unhealthy just don't get as much out of their education as those who are healthy. The foundation of all learning is having a healthy organism that is capable of making decisions and internalizing that which he sees, hears, and does to optimize his or her capacity as an individual, was really laid by the framers of the SHES. We all owe them a debt of gratitude.

**Evelyn Ames, Western Washington University:** Anti-school health individuals and organizations, as well as anti-public school individuals and organizations have got to be brought on board as to the importance and necessity of school health and its importance to the family and community. How to do that? I wish I had the answer.

**Marlene K. Tappe, Minnesota State University – Mankato:** The most important thing we can learn from SHES is to address problems related to health instruction. This emphasis on health instruction is based on two observations related to original SHES data. First, the comparison of the SHES results with SHP 2008 results reveals, at best, a modest improvement in school health instructional practices. Second, a review of the respondents concerns related to health instruction in schools reveals that many of their concerns continue to be valid today. Advocacy for school health education may help to address concerns such as "lack of time to teach," "an overcrowded curriculum," "parental and community opposition to controversial health areas," "lack of family support to reinforce good health habits," "attitude of indifference toward health education," "lack of status of the subject," and the "need for parental support and community education."

**Becky J. Smith, Former Executive Director, American Association for Health Education:** My response is tied into the two responses above—what we need to learn is that university faculty and all health education professionals must increasingly "own the problem" and be advocates at every level—if health education professionals do not provide the leadership for putting health education back into schools I do not think it has much chance. You may ask –what about leadership from physicians, such as Dr. Oz, who recently started Health Corps and other such groups. They may have some success and some impact, but they will be (and are) doing it without the decades of expertise that health educators can bring to the table. We have a rich background of knowledge and the best national standards, bar none. What a terrible shame if this background goes to waste because health educators are not organizing and building partnerships to achieve political action as the SHES study personnel did.

**David K. Lohrmann, Indiana University:** The only lesson I can think of is that health education must be seen as part of the fabric of public education and as a major contributor to the mission of education. The SHES Writing Team clearly realized this and, while incorporating sound public health practice, engaged important education leaders and professional organizations in their work. Furthermore, it based its work on sound curriculum development theory. We need to continue to follow its example today. Though by its own admission that the SHES document was not historically as effective as it could have been, the SHES Writing Group did involve influential health and education organizations in its work.

## QUESTION 6

***What is the legacy of the SHES to the health education profession in general and to school health education in particular - in terms of research and practice that should be shared with students in health education professional preparation programs today and in the future?***

**Becky J. Smith, Former Executive Director, American Association for Health Education:** That it is possible for a small group of professionals who are carefully selected for traits such as professional knowledge, creativity, dedication to a cause and perseverance that has a lead orchestrator, to make a huge impact on the future of the profession. I have seen three examples of it in my professional life: the SHES study (lead orchestrator, Elena Sliepcevich), the National Task Force on the Preparation and Practice of Health Educators (lead orchestrator Helen Cleary), and the 1995 Joint Committee on National Health Education Standards (with me as lead orchestrator).

**Marlene K. Tappe, Minnesota State University–Mankato:** Over time I discovered that the legacy of the SHES Writing Group was more than the SHES. The Writing Group used scholarship and evidence to inform its decision making; it had a record of extensive involvement in professional organizations and activities as well as mentoring of young professionals; and, it had a passion for the historical and philosophical foundations of health education. Therefore, I show students pictures and graphics related to the people and products of SHES, describe the SHES Writing Group's contributions to health education professional organizations and activities, draw for the students their health education "family tree," and describe the influence of the SHES framework and of Ann Nolte and Gus Dalis on the development of the NHES, their revisions, and the development of the *HECAT*.

**R. Morgan Pigg, Jr., University of Florida:** The SHES set a precedent—an enduring standard—for conducting a national, cross-sectional status study, particularly given the context and conditions existing at that time. The study achieved success in six areas related to the technical and organizational aspects of conducting a large-scale national study: (1) Secured funding primarily through a professional/private sector foundation partnership without substantial government resources; (2) Assembled an effective leadership team; (3) Ensured buy-in of essential stakeholders at all levels during the planning phase; (4) Modeled accepted principles of planning and evaluation; (5) Satisfied the critical design components of representative samples, and valid and reliable instrumentation; and (6) Achieved an effective plan for national dissemination of findings.

Regarding the research team, colleagues correctly credit the team for its vision, leadership, knowledge, dedication, stamina and tireless pursuit of project goals. Yet, over the past 50 years, one characteristic has emerged as pre-eminent: the team never questioned the potential of school health instruction to improve the quality of life and health for every American child. Its members were "true believers" in the best sense of the term. We should consider the SHES team as folk legends in the profession. We should tell their story to each succeeding generation of health educators.

**Clint E. Bruess, Birmingham-Southern College:** Whereas the quality of what was done allows the SHES to stand on its own two feet, it may help to show the profession and appropriate decision makers just how the SHES products have evolved into much of what we have today. There is important historical and practical information here for use in professional preparation programs.

**Robert S. Gold, University of Maryland:** I referred previously to the National Health Education Evaluation Study; the *Teenage Health Teaching Modules* and its national evaluation funded by CDC. There are other illustrations of the impact of SHES. The problem I have is that no one had effectively created a family tree of legacy – both people and events, milestones and impacts that have resulted. There are each year, fewer and fewer people who recognize and can trace those things we do now as a matter of course because of the foresight, that hard work, creativity and brilliance of that original work. And, I am sorry to say these things but I think they are true.

**Chet Bradley, Wisconsin Department of Public Instruction (retired):** Future health education professionals need to be well prepared and actively practice dynamic leadership in *articulating what they are teaching and why they are teaching it.* In addition, they must provide the leadership to constantly gain the active support of parents, teaching colleagues and school administrators along with local medical professionals especially physicians. Support from the local district medical professionals is critical to having meaningful health literacy instruction in our schools.

**Larry K. Olsen, A.T. Still University of Health Sciences:** Many of us feel we are "losing" our history. It would be a very interesting project for a group of doctoral students to compile the collective works of these eight individuals, in much the same way as Allegrante, Sleet and McGinnis compiled the works of Mayhew Derryberry. That would be an interesting compendium that would be thousands of pages I would

think. One can't help but wonder if the *Role Delineation Project* wasn't, in part, driven by the conceptual models that were developed through the SHES. I would think that students of today should review the research that was conducted back in 1961 that led to the publication of the material from the SHES and see if those processes could be replicated today. Remember the comment: "The past is prologue."

**Evelyn Ames, Western Washington University:** How many of the current leaders in AAHE, SOPHE, AAHE and ACHA know the history of the SHES? Professional preparation programs for undergraduate and graduate levels probably do not mention SHES.

**Betty Hubbard, University of Central Arkansas:** The SHES was a seminal event in the evolution of school health education. As the first in-depth study of school health in the U.S., the SHES helped to qualify and quantify answers to questions that continue to guide the work of contemporary practitioners. The efforts of the individuals who coordinated the research, analyzed the results, and developed the curriculum framework provided a template for the actions we continue to employ to move school health education forward. These actions are accomplished through three mechanisms: collecting data on the status of school health education; surveying students; and developing curriculum frameworks.

For example, compare the first phase of the SHES with the SHPPS. In 1961, the SHES examined the health education offerings in public school systems across the nation. Currently, we rely on the SHPPS to provide a comprehensive assessment of school health policies and practices in the US. In contrast to the more narrow scope of the SHES, SHPPS has an expanded focus that includes not only health instruction, but the seven additional components of the coordinated school health program.

In the second phase of the SHES, knowledge surveys were administered to students to determine their understanding of health information. Today, current data about students is gathered through the YRBS. However, in contrast to the SHES, which focused on the cognitive domain, the YRBS provides comprehensive information on youth behaviors.

A similarity can also be shown between the last phase of the SHES and the development of the NHES. The SHES writing team produced guides or frameworks that were designated by four levels. The guides were designed to allow "for the necessary flexibility and adaptability" to accommodate the differences in school districts' needs. In comparison, the NHES are designed to be "broad and flexible to accommodate the strengths and needs of students, families, and local communities." Like the SHES guides, the NHES address four levels. In contrast to the SHES document, which focused on concepts, the NHES concentrate on the skills necessary to achieve optimum health. The NHES consist of eight standards. One of the standards focuses on the concepts related to health promotion and disease prevention while the remaining seven describe the skills necessary to enhance health.

## QUESTION 7

***Elena M. Sliepcevich, William H. Creswell, Jr., Edward B. (Ned) Johns, Marion B. Pollock, Richard K. Means, Robert D. Russell, Ann E. Nolte and Gus T. Dalis were all involved intimately in the development of the School Health Education Study and/or the curriculum that sprung from the original research. If you knew any of these individuals well, or worked closely with any of them, an insightful anecdote would be appreciated.***

**Elaine M. Vitello, Southern Illinois University – Carbondale:** I had a special friendship with Elena. Besides being brilliant, her sense of humor was second to none. She never talked about politics and I never knew how she voted. She was such a great role model and she always talked about the positive characteristics of an individual even when she edited papers. In my heart, I know she was proud of SHES and her team.

**Kathleen Middleton, ToucanEd, Inc:** I met all of the authors, but am most familiar with Marion Pollock and Gus Dalis, as well as Peter Cortese. Pollock and Cortese were both graduate professors for me. They both had huge influences on me and my professionalism. Both held each of their students to the highest standards. I was part of the first master's degree class at California State University – Long Beach. We did PhD level work for that master's degree! Peter knew *everyone* in health education – and I do mean *everyone*. He had stories about most of them as well. He made it clear that we needed to know the players and the contributions of the players. He also made it clear that we needed to give back to the profession by joining professional organizations, volunteering and acting in an exemplary way. He was an amazing diplomat. Peter once owned a *Chick Delight* franchise before he went into health education. It was a chicken delivery store in Los Angeles. It motivated him to get a degree and get out of the chicken grease. Peter had a trademark – he almost always wore a blue blazer with a tie.

Dr. Pollock (I still can't call her by her first name), used the Socratic method in class. It scared the hell out of most of us. We had to defend any activity we wrote. *Nothing* went out without an objective *properly* written. She held our feet to the fire that the instruction included appropriate practice for students to meet the objective. If the objective had students "describing," then the practice and the evaluation better also have students describing. She molded me in a way that Bloom's Taxonomy is second nature to me. We do understand the levels of Bloom (and now Bloom's Revised). I can write an objective, evaluate an objective. Each one of my staff can write an objective as well. Dr. Pollock drove an orange Porsche with a license plate "SHES 64" referring not to her age – but to the year she worked on the SHES. If you wrote a letter to her, you expected it to come back edited with red ink. [Before her health education days] she was a writer on the Groucho Marks TV show. She wrote the "question of the day." You can still see her name in the credits of reruns.

**Chet Bradley, Wisconsin Department of Public Instruction (retired):** Fortunately for me, I did know all of these outstanding health education professionals. The person I know the best is Dr. Gus Dalis. I first met Gus in 1978 when the National Agency for Instructional Television [AIT] was developing a new middle school level instructional television series for health education entitled *Self-Incorporated*. Since that time I have worked with Gus on numerous projects including the Health Education Subcommittee for the National Office of the American Cancer Society, which Gus chaired, and the Committee that developed and published the National Standards for Health Education in 1995. He is truly one of the most outstanding national leaders in school health education, and even after his retirement, he continues to volunteer with the California Division of the ACS in promoting quality health education programs in our schools. He has been a valued health education colleague to me and a trusted friend with a great sense of humor.

**Larry K. Olsen, A.T. Still University of Health Sciences:** If we look carefully at these individuals, it wouldn't take too long to realize the "ties that bind" these individuals. This is why I think we should be working hard to develop what might be called a school health education family tree. The influence of these eight individuals goes far beyond their singular lives to the lives of those individuals who had the privilege to have these individuals as professors and mentors. There is no doubt in my mind that those who may be considered the "third generation of health education leaders" were highly influenced by the teachings of these eight individuals and I am sure that those philosophies have been passed to the "fourth and fifth generations" of health educators as well. If we look at the leaders of today in this field and begin tracing their "roots" the names of these eight prominent educators will clearly emerge.

**Clint E. Bruess, Birmingham-Southern College:** Elena Sliepcevich and Ann Nolte served on the advisory board of our NCHE School Health Education Project. It was like being with royalty and people who knew everything there was to know about school health education. We knew they were that good. Yet, there was never any hint of feelings of superiority from either of these two fine ladies. They continually went out of their way to be helpful and never referred back to the way things were done before or told us what we should be doing now. We learned a lot from both of them, used a lot of their creative ideas, and did a much better job because of our interactions with them.

During all my active years with ASHA and AAHE, I always went out of my way to attend presentations involving Bob Russell. Whether he was serving as a member of a distinguished panel dealing with some important philosophical or professional issue, talking about what might be done in future health education programs, or playing his guitar and singing songs about someone who had "beans in his ears," he was down to earth, a forward thinker, and just lots of fun and interesting to be around. He was a giant throughout his professional career and contributed so much to so many students.

**Robert S. Gold, University of Maryland:** I had the good fortune to work directly at one time or another with each of them other than Dick Means – though I burned several of his history books on school health as a graduate student. I will comment on only a few. Elena Sliepcevich was one of the most brilliant and effective academicians I have ever had the good fortune to work with or to hear about. Her office was a virtual repository of materials crucial to the field – many original documents from her direct engagement with those efforts. As many documents as she had, and as many journals as she collected, it was remarkable how she could find anything in response to almost any question. But the anecdote I want to share is quite different. It has to do with the quality of doctoral student research. Elena used to say that for more than 90% of the PhD students in health education, their dissertation will be the best research they will ever do in their careers, because it will be the *last time* they are actually required to listen to people who have more experience than they. Ann Nolte was the consummate historian who was able to connect current thinking, events, and activities to historical origins. Bob Russell is best described by the contents of one of his best published articles – "Are health educators warriors against pleasure?" Bob had a wonderfully rich personality, and loved his farm and his guitar. Bob know more drinking songs than anyone had a right to know. And he loved singing them whenever possible with his quite engaging voice and style. Gus Dalis really loves education and served his job well. Few health educators have had the personal experience in school districts that Gus has; and it has served him *and us* well.

**Judy C. Drolet, Southern Illinois University – Carbondale:** Lessons Learned from Elena [Sliepcevich] - put names and dates on everything; sunsets and purple irises are important things to appreciate in life. Lessons learned from Bob [Russell] - Check your "chicken" dinner, it may be rabbit; the best job in the whole wide world is a tenured, full professor.

**Evelyn Ames, Western Washington University:** Comment about Peter Cortese - I served on several committees with him, and from the start (an AAHE committee in 1974) Peter always promoted health education and school health in particular. He was always supportive of undergraduate preparation in health education. Comment about Marion Pollock - when she and I were writing/editing the first framework for competency-based professional preparation of undergraduate health educators (1985), we frequently chatted about SHES and its relevance, and we were concerned about the status of undergraduate preparation of school health educators in teacher preparation institutions.

**Marlene K. Tappe, Minnesota State University – Mankato:** I had the great fortune to have SHES Writing Group member Dr. William H. Creswell as a professor and mentor

while a graduate student the University of Illinois. He frequently talked about his work as a member of the SHES Writing Group, showed us many of its transparencies, and was quick to introduce his students to his SHES friends and colleagues. Just as Dr. Creswell was always there to provide thoughtful advice and loving support, his SHES friends and colleagues were also swift to also mentor and support his students. Early in my career, I received an envelope containing a newspaper article about my research and a handwritten note of congratulations from Dr. Elena Sliepcevich. Later, I had the pleasure to work with SHES Writing Group members Dr. Ann Nolte and Dr. Gus Dalis on the first Joint Committee on National Health Education Standards. My first subcommittee assignment was a full day working one-on-one with Dr. Nolte to review the SHES curriculum framework and to discuss the historical and philosophical implications of SHES for the NHES. Additionally, there were many memorable moments working with my fellow "volunteer," Dr. Gus Dalis. Dr. Nolte involved me with other projects and later gave me her personal copy of *Health Education: A Conceptual Approach to Curriculum Design* which has her name embossed on its cover and a handwritten note from Dr. Elena Sliepcevich dated 7/21/1967: "To Ann - who exemplifies the insight and outlook of a creative mind, a sharp intellect, a sensitivity to others and rare sense of humor. With deep admiration, respect and appreciation for your contributions to the SHES - And your cherished friendship. EMS." I consider myself fortunate that on 8/21/2001, 34 years after Dr. Sliepcevich wrote her note, Dr. Nolte wrote a note that includes the following message: "…Thank you for your friendship personally and professionally." Dr. Nolte also entrusted me with a copy of *School Health Education Study: A Summary Report*, many other books related to health and health education, and a second copy of *Health Education: A Conceptual Approach to Curriculum Design*. Why a second copy of the SHES framework? To be honest, I have never actually seen this copy…it is still in its original 3M shipping container. Dr. Nolte proposed that this book is the last book in its original packaging and it was clear to me that she was admonishing me to ensure that it will stay in its original container. Therefore, it is imperative that we continue to preserve and protect school health education by advocating for it and by ensuring the documents from SHES continue to be safeguarded for use by future generations of health educators.

**Becky J. Smith, Former Executive Director, American Association for Health Education:** I had the extraordinary pleasure of having met and interacted at some level with all of the primary professionals involved with the SHES study listed above. I had much more personal and professional interactions with some than others due to geographic proximity, my doctoral studies and my professional roles within the American Association for Health Education (AAHE). Over the years I would definitely categorize the following people as close personal friends: Ann Nolte, William Creswell, Marion Pollock and Gus Dalis. Both Ann Nolte and Bill Creswell were prime movers on my dissertation committee; Bill was my doctoral studies advisor and a wonderful mentor. Ann was my supervisor for six years when I was on the faculty at Illinois State University. Ann Nolte and Gus Dalis were both Presidents of AAHE and Marion Pollock was on the AAHE Board of Directors and I interacted closely with all of them for years in many professional roles and as a friend.

One of the "professional maturations or learnings" that I had as a young professional interacting with this extraordinary group of professionals who were at the "top of their game" was that they had a strong set of professional ethics that provided the backdrop for their professional collaborations. They were not all close friends, as I at first assumed they would be. They knew and appreciated the strengths that each of them brought to the team and they had a wonderful sense of what Ann called "professional socialization." Although I never asked her to define that term for me (I wish I had), I understand it to be a combination of professional ethics, knowledge, dedication and a sense of purpose for enhancing both the preparation and practice of health education.

## QUESTION 8

***If there is anything else that you would like to comment on, or add as a contribution to this overall reflection on the 50th anniversary of the initiation of the SHES, (something you would like to answer about a question you wish we had asked, but didn't).***

**Clint E. Bruess, Birmingham-Southern College:** Much of what was done and written related to the SHES is not out-of-date today. In fact, like so many of us, a number of times through the years I have felt it necessary to clean out by book shelves at home and at my office. Many times I would look at the SHES publications and tell myself that they were pretty old and probably didn't serve much purpose anymore. However, then I would flip through some of the pages and realize that, although they were indeed old, they were still "pretty good stuff" that couldn't be thrown away just yet. So, I still have some of them on my office shelves because they are indeed old – but new at the same time.

**Robert S. Gold, University of Maryland:** I believe you've covered the waterfront very well – but I would also say that the ability of this team to work together was remarkable. The respect they had for each other, and the commitment they had for their field was essential to the success of the SHES and its subsequent materials and impacts. Doing this reflective project was a great idea.

**R. Morgan Pigg, Jr., University of Florida:** In the years following completion of SHES, the conceptual model and instructional materials did not achieve the level of nationwide dissemination some envisioned. This outcome led to a continuing discussion of factors such as advocacy, cost, dissemination strategies, and the nature of instructional materials produced. Examples of such questions follow: (1) What combination of organizations, agencies, and groups could have

most effectively advocated for the project? What entity could best have served as lead advocate for the curriculum? (2) What combination of organizations, agencies and groups could have most effectively accomplished optimal dissemination of the conceptual model and accompanying instructional materials? What entity could best have served as the lead source for dissemination? (3) Did academic institutions adequately incorporate the model into professional preparation programs, including materials training at all levels of elementary and secondary education? (4) Was the cost to purchase the instructional materials too high? If so, what price would schools have considered reasonable, while maintaining an acceptable return on investment for the producer of the materials? (5) Should the instructional materials have been distributed nationally at no cost to schools? If so, what funding source would pay for the "free" materials? (6) To what extent did the increasing availability of cost-free individual content area curriculum materials, primarily from voluntary organizations and sponsored agencies, detract from successful implementation of SHES as a comprehensive curriculum? (7) Did implementing the curriculum require too much staff training and supervision by schools? (8) Did the packaging of a complete instructional model and instructional materials for all grade levels look too much like a potentially unpopular nationalized curriculum? Should more emphasis have been placed on the option to use the conceptual model as a guide to curriculum development at the local level? (9) Overall, was the project just "too good"? Was the volume of information and materials more than school systems realistically would or could be expected to adopt at that time?

**Larry K. Olsen, A.T. Still University of Health Sciences:** It is important to recognize the myriad of individuals who were not the primary authors of the SHES, but if one were to look at the actual booklets, there would be names of individuals who were mentioned who helped develop the content and much of the "nitty gritty" of this landmark study. What is critical about this is the fact that the actual booklets were developed by a wide range of individuals, not simply the eight primary authors of the study. Clearly these individuals were forward thinkers and were well ahead of their time. We should have a time in all professional meetings related to school health, where we honor the magnanimous contribution of these pioneers in school health education.

**Mohammad R. Torabi, Indiana University:** In reviewing the SHES of 50 years ago, I am most impressed by some of the advanced research methods they used. I believe our 21st century researchers can learn a great deal from them considering they did not have access to the sophisticated technology we have today. Another observation, in spite of evolutionary changes in most of the disciplines and fields of study, I feel that we have not kept pace and evolved as we should have in the past 50 years. Whereas the SHES truly was groundbreaking, we have not taken advantage of the findings to improve the profession as much as we should have. Even I sense that there is some degree of regression in the field of health education as we see health education and PE hours being reduced in most of the schools throughout the country. Due to our digital age and advancement in electronics and many other factors, students today are more knowledgeable in health than 50 years ago but translation of their knowledge into practice is questionable inasmuch as we are dealing with an epidemic of childhood obesity, type-2 diabetes, poor nutrition practices and physical inactivity. As we all know, it is projected that this generation is the first generation in history that is expected to have a lower life expectancy than the previous generation. These are causes for alarm that should result in calling for a summit of leaders in the field to redefine, reinvest, and reinvigorate our profession. Consequently, our future health education/health behavior professionals and researchers will be recognized and respected by policymakers and other disciplines in the evolving health care reform related to disease prevention and health promotion for the 21st century.

**Evelyn Ames, Western Washington University:** To move ahead on curriculum development, there has to be personnel knowledgeable about school health education. How do you implement a conceptually organized curriculum when you have teachers who don't know what mental health is, or what environmental health is, or what the health meaning is in any of the areas alluded to in the 10 concepts of SHES? In reviewing the current NHES document, it seems to me that the affective domain is sorely missing or difficult to ascertain. SHES incorporated the affective, cognitive and psychomotor domains. I don't see this broad aspect in these standards. Development of integrated curricula was tried, particularly at middle school levels. For example, there was the emphasis on combining social studies, languages arts, and health education. According to one of my colleagues, a school district hired a language arts person and a social studies person but no health education coordinator was hired to be part of the team. This is like having a three-legged stool but with only two pegs to develop the curriculum.

**Becky J. Smith, Former Executive Director, American Association for Health Education:** Two interviews were completed in the 1990s that would be of interest and are available on line as part of the archives of the *International Electronic Journal of Health Education*. The relevant URLs are:

• Interview with Ann Nolte:
http://www.aahperd.org/aahe/publications/iejhe/upload/98_M_Morrow.pdf

• Interview of Peter Cortese:
http://www.aahperd.org/aahe/publications/iejhe/upload/98_R_Eberst.pdf

**Judy C. Drolet, Southern Illinois University – Carbondale:** Today's profession could benefit from the wisdom and leadership demonstrated by this generation of key leaders. Two phases of generational shift, however, have left us with similar issues and challenges. Contemporary "blue

chippers" would benefit from reacquainting themselves with the rich historical insights, methods and, of course, the conceptual magnitude of the SHES team and its contributions. These individuals were the "best of the best" whose strong personalities and intelligence guided them through creative and adversarial pathways as the process evolved. Superlatives are not wasted on this group of educators. Their vision and questions formed something that existed neither before nor since the SHES. From this process came a solid foundation that remains unshaken as the discipline itself has grown and developed. Modern technology, scientific advances, the YRBS, and other entities of today would have been useful tools for the SHES team. In our times, however, they cannot offer the "profession" [what was] created by the collaborative effort of Drs. Sliepcevich, Nolte, Russell, Creswell, Dalis, Johns, Pollock, and Means.

Colleagues of Dr. Sliepcevich have created the *Elena M. Sliepcevich Centre for Health Education Studies*, (elenamsctr.ehs.siu.edu/index.html) at Southern Illinois University –Carbondale. The Centre is preserving and cataloguing stories such as one shared by Dr. Lawrence Green about ties [of the SHES] to the PRECEDE model; and seven decades of meticulously maintained personal and professional documents of various types that capture the essence of SHES. This collection is a rich means for historical researchers and others interested in scholarly work to experience hands-on interaction with the SHES and its legacy.

**Kelli R. McCormack Brown, University of Florida:** Not only did we learn from the SHES how appalling health education was in the schools at the time, but we have learned a great deal about the health education profession since then. It seems as a profession we have learned that despite the quality data and evidence we have showing the need for health and health education in schools beginning with the SHES 50 years ago and subsequent data (i.e., YRBSS, SHPPS) and academic reports (i.e., *Health is Academic*) little action across systems has been implemented. What we have learned is we must not just be vocal and vigilant about the importance of health and health education but we also must work with others for health education to have a greater chance of being sustained in the education system. The profession needs to be of one voice and advocate as one for K-12 health education (or any other important health education/promotion issue).

Although we have partnered with the NEA and AMA as well as other organizations over the years, it has not been as the "health education profession" but as an organization or collection of organizations. If after the SHES in1961 the health education profession (encompassing school, public, worksite, health care, and college interests) was one voice with large numbers that advocated for systems change within education, we may not have seen school health education professional preparation programs closing today, or seeing ill-prepared teachers carrying out health lessons in schools. Indeed, the status of school health education today might be very different. A lesson I think I have learned is that health educators must coalesce and become one. To find solutions to the problems facing schools and communities—where we live, work and play—we must be seen as one health education profession speaking and advocating with one voice.