

Transforming Individuals and Organizations For the 21st Century: Implications for Health Educators

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Transformation happens at different rates for people and for organizations. Transformation implies that a change will take place in external form or internal nature. Some people may sense a heightened purpose when there are critical points around which the world turns. For example, the 21st century will begin in less than four years. Will the profession of health education suddenly become different and reach consensus around issues, problems, and agendas? Hopefully so. Such transformation will need a renewed sense of tolerance for a free exchange of ideas; this tolerance should allow for ambiguity and flexibility among a diverse community of leaders and learners in health education (Ubbes & Watts, 1996). Since health educators are members of several health organizations within a wide variety of work settings (schools, universities, agencies, clinics, and corporations), our issues, problems, and agendas can sometimes lack clarity. When we afford ourselves the time and space to really think about the implications and assumptions for our individual work agendas, we can gain clarity in how we fit within our organizations. In the space of meetings, conferences, and informal conversations, we pick up information which has the potential either to clarify or to complicate our understandings (and misunderstandings) of our purpose in health edu-

cation. Our professional work needs continuity with our personal lives, and vice versa, in order for there to be transfer between what we say and do. This is also true for our students and clients. How can we assist in their understanding of personal health within broader community and global contexts? How can we help them make meaning in what they know and do about their health as participants in a changing environment?

This article will attempt to advance some generalizations about how leaders and learners in health education will recognize and come to understand transformations in their personal and professional agendas. Since health education aims to facilitate voluntary actions conducive to health (Green & Kreuter, 1991) and to improve the health status of individuals through health promotion and disease prevention concepts (USDHHS, 1995), we might be able to identify some common markers for recognizing certain patterns and changes in our profession. Ideally, if we can recognize these generalizations in our work and personal lives, we may be more able to assist others. This article is grounded in the assumption that individuals are part of a larger socioecological context and should not be isolated from their environments. Additionally, it identifies one or two health-related examples for each generalization. Ultimately, the goal is to lead you to generate more ideas for continued dialogue with your colleagues and learners within your organizations.

The following three generalizations will be discussed: (1) systems thinking requires a network of relationships among

people and their ideas; (2) solutions to problems are temporary events; and (3) learner-generation of new information leads to knowledge and understanding.

Systems thinking requires a network of relationships among people and their ideas.

This section will describe systems thinking and give two examples of people-centered models in health education. Betts (1992) characterizes systems thinking as "a paradigm that illuminates the whole, not just the parts; one that is synthetic, rather than analytic; one that integrates, rather than differentiates." When systems thinking is used in health education, understanding the whole takes on a new meaning. Wheatley (1994, p. 34) suggests that "none of us exists independent of our relationships with others. Different settings and people evoke some qualities from us and leave others dormant. In each of these relationships, we are different, new in some way. What is critical is the relationship created between the person and the setting. That relationship will always be different, will always evoke different potentialities. It all depends on the players and the moment . . . Each of us is a different person in different places." When we view a system from this whole perspective, we enter an entirely new landscape of dynamic processes, connections, and phenomena that cannot be reduced to simple cause and effect (Wheatley, 1994).

Barr and Tagg (1995, p. 21) claim that "seeing the whole of something—the forest rather than the trees, the image

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of the newspaper photo rather than its dots—gives meaning to its elements, and that whole becomes more than a sum of component parts.” One example of this in health education is the Comprehensive School Health Program (CSHP) model. CSHP is a people-centered model with eight components characterized by an interrelationship and interdependency of its parts (Ubbes & Watts, 1995). In recent years, health educators have worked in various parts of the model to improve the health status of children and youth. Some examples include: *integrated instructional programs* among and between components, e.g., health education, physical education, faculty and staff wellness, and *integrated health services* among and between components, e.g., counseling and psychological services, food service, and health services. Unfortunately, many of these separate interventions, though well intended, have sometimes decontextualized children from their families and their communities because we have treated them as separate components in the whole model. We can no longer separate people from their environments and social contexts (Travers, 1997; Hooper-Briar, & Lawson, 1994). Future systems work should place children, youth, and their families as central to the CSHP model, so we can offer instructional and service interventions that make more contextual sense. McKinlay (1992, p. S12) has a similar argument with public health interventions at the individual level because “they decontextualize at-risk behaviors and fail to take into account the ways in which such behaviors are culturally generated and maintained.”

Leadership in health education is *always* dependent on the context, and the context is established by the *relationships* we value. We cannot hope to influence any situation without respect for the complex network of people who contribute to our organizations (Wheatley, 1994). This means that *all* eight components of the CSHP model need to have interconnections to each other in order for the system to function effectively. In

practice, the theoretical principles of collaboration and teaming still needs great nurturing among and between the professionals in school and community health education. Betts (1992) reminds us that “systems are characterized by synergy—the whole (system) is greater than the sum of its parts (elements), because the relationship among the elements adds value to the system.”

So how does our systems work begin in health education and how can we make a difference? Using a human development-potential perspective, Kimiecik & Lawson (1996) suggest that professionals begin by asking people about their dreams, aspirations, and life goals, then work backward to plan programs. This “bottom up or backward mapping approach” allows “programs to be tailored to the uniqueness of individuals, families, cultures, and contexts.” In a human development-potential perspective, professionals serve more as resource collaborators and facilitators than as dictators of people’s lives and lifestyle choices (Kimiecik & Lawson, 1996). Understanding how to facilitate in this model often requires that we enter into relationships without bringing our own agendas to the discussion, and instead let our mutual agendas evolve from collaboration with each other.

Another example of a people-centered model exists in classrooms wherein constructivist theory serves as a basis for learning. Student-centered classrooms are dynamic systems with changing contexts. In constructivism, learners explore health education through collaborative discourse and reflection; they construct meaning through conversation with each other and with the teacher (Brooks & Brooks, 1993). The classroom community is shaped by ways in which the teacher encourages learners to interact with each other and with the content. Both are intertwined and interdependent (Osborne, 1997). Health educators should “. . . create environments and experiences that bring learners to construct knowledge for themselves and to make them members of communities of learn-

ers that solve problems and make discoveries (Barr & Tagg, 1995). Brooks and Brooks (1993, p. 30) state that “a constructivist framework challenges teachers to create environments in which they and their students are encouraged to think and explore. This is a formidable challenge. But to do otherwise is to perpetuate the ever-present behavioral approach to teaching and learning.” As a pedagogical framework, constructivism aims to pose problems of emerging relevance to the learners and to structure curriculum around concepts and skills. This learning theory uses systems thinking as a network of relationships among people and their ideas.

Solutions to problems are temporary events.

The second generalization in this article is that solutions to problems are temporary events. Albert Einstein once said that “the significant problems we face cannot be solved at the same level of thinking we were at when we created them” (in Barr & Tagg, 1995, p.13).

Our profession promotes two conceptual frameworks for use with learners in schools and learners in universities. The first, the *National Health Education Standards* (1996), serves as a framework for organizing health knowledge and skills into school curricula at the state and local levels, leaving teachers and curriculum specialists to design lessons for implementation. The Standards recognize the evolving nature of teaching and learning based on state and local needs. The second, the *Competency-Based Framework for Professional Development of Certified Health Education Specialist* (NCHEC, 1996), encourages professionals to develop skills (competencies) across different practice settings in health education. Implicit in this framework is the responsibility of health educators to become skilled in seven (and now 10) responsibilities, along with multiple competencies and subcompetencies. A portfolio of skills gives health educators more flexibility in responding to the immediate needs

of the people (learners) who have challenges and problems with their health.

When we assist, facilitate, inform, or nurture people in health education, we will not find balance and order—though that is what most of us seek in our professional and personal lives. Learning is more often found in imbalance and disequilibrium for learners and educators alike. As educators we need greater appreciation for the dynamic interplay between three variables: learners, techniques, and strategies.

Health educators need to know when, how, and with whom to use a technique through a series of strategic planning steps and decisions. A strategy evolves when the environment is organized (accommodated), learners are facilitated, and one or more techniques are implemented within a particular setting or context. The *techniques* are the tools that are used in the application of a *strategy*. In the process of making ongoing assessments of its utility with specific learners, the strategy may be found to be effective or not effective. If environmental conditions remain unchanged for the next intervention with the same population (does this even exist?), a successful strategy could be replicated. However, learners are dynamic beings within a changing environment. Therefore, strategies are created and recreated within new and evolving contexts.

If Einstein was right about solving problems at new levels of thinking, educational strategies become one vehicle for moving us to higher-order understanding in health education. A strategy might even be defined as an educational method that is localized in time and context with selected learners. Gardner (1991, p. 7) defines a disciplinary expert as an "individual of any age who has mastered the concepts and skills of a discipline or domain and can apply such knowledge appropriately in new situations." When the changing needs and interests of learners within a specific setting or context are explicitly met, the health educator and the learners move beyond tools and techniques into under-

standing an educational strategy. The techniques are secondary; they serve as a medium to planning and implementing the overall educational strategy. A metaphor may prove useful here: local tactics and techniques may win a battle, but an overall strategy will win a war. Within a learning environment, techniques may facilitate a lesson, but an overall strategy will facilitate learning, and hopefully understanding.

How will we know if learning is taking place? Health educators should continually assess their learners and clients during the educational intervention. Ongoing assessment should be seen as a tool in service to the learner rather than as an accountability device at the end of the lesson or session. Brooks and Brooks (1993, p. 96) claim that "differentiating between teaching and assessment is both unnecessary and counterproductive. Assessment through teaching, through participating in student/teacher interactions, through observing student/student interactions, and through watching students work with ideas and materials tells us more about students learning than tests and externally developed assessment tasks."

What determines if we will repeat an educational strategy in the future? This question is incongruent with constructivism because it is framed from a predictive empirical research perspective, which is derived from positivism, the dominant philosophical influence during the 20th century (Travers, 1997). More promising research questions are to be found in a postpositivism approach which uses more interpretative epistemologies, e.g., phenomenology and hermeneutics, to focus on the understanding of meaning. When using a postpositivism approach, questions and problems related to the conceptualization of health (with its multiple dimensions) are established first, then the research methodology (Fahlberg & Fahlberg, 1994). Postpositivism will continue to have an important philosophical influence on the health professions with its broader conceptualization of knowledge and its interpretive inquiry

toward understanding meaning. Knowing the cause of disease and the effects of healthful choices derived from empirical research is one form of problem solving. However, it is also important to explore the meaning that people give to learning about their health by using interpretive (and not solely empirical) research (Lincoln, 1992; Travers, 1997).

Learner-generation of new information leads to knowledge and understanding.

Wheatley (1994) claims that information—freely generated and freely exchanged—is our "intellectual capital." Have we had a proliferation of intellectual capital in health education? How will generation of new information by our learners and clients lead to their increased knowledge and understanding about health and wellness? How will generation of new information by health educators lead to our increased knowledge and understanding of theory and practice in health education? Problem posing (Freire & Faundez, 1989) and theorizing (Dobrin, 1997; Norton, 1985) are some ways to generate new information in our profession. Wheatley (1994, p. 98) suggests that when an open system seeks to establish equilibrium and stability through constraints on creativity, it creates the conditions that threaten its survival. She continues, "We, alone and in groups, serve as gatekeepers, deciding which fluctuations to pay attention to, which to suppress. We need to open the gates to more information, in more places, and to seek out information that is ambiguous, complex, of no immediate value" (p. 109). Banathy (1991, p. 80) suggests that when an educational system (or any organization) and its environment is designed as an open, pluralistic system, there are many results. For example, the system lives and deals *creatively* with change and welcomes—not just tolerates—complex and ambiguous situations. It also accommodates the knowledge explosion with two simultaneous events: an increase in specializa-

tion and diversification and an increase in integration and generalization. Wheatley (1994) claims that at some point the knowledge explosion in an organization self-organizes into interesting forms and ideas, leading to innovations. She claims that "innovation is fostered by information gathered from new connections; from insights gained by journeys into other disciplines or places; from active, collegial networks and fluid, open boundaries. Innovation arises from ongoing circles of exchange, where information is not just accumulated or stored, but created" (p. 113).

If health educators help their learners and clients to generate new information through collaborative discourse and interactions with health concepts and skills, knowledge will result. Research in health education has shown that knowledge effects are greater than attitudinal and practice effects among learners (Connell, Turner, & Mason, 1985). But how much of this knowledge is really higher-order understanding? Siegler (1987), Siegler and Campbell (1990), and Bouffard (1997) highlight the unfortunate results of aggregating data over groups of people when studying individual differences in the cognitive processes (thinking). Bouffard (1997) suggests the need for idiographic studies (limited to one person) such as case studies and their replication, much like medical science has used (Valsiner, 1986b). Bouffard (1997) suggests "replication-across-people logic instead of sampling logic" to generate nomothetic knowledge (based on more than one person). Nomothetic knowledge uses more traditional group-design research methods. Since health education research has generalized knowledge change scores among and between populations, we have not truly understood how people *really* solved problems about their health. Additional information has been lost about the ways in which people *creatively* solve problems about their health when obtaining aggregate data from groups of people. This observation is not meant to debate the relevance of the research focus on behavior change to

date. Instead it may be time to take another look at knowledge and the role of understanding and meaning making in the cognitive aspects of health behavior (Airhihenbuwa, 1995; Shirreffs, 1990; Gold & Kelly, 1988).

Some thinking skills have been identified and used in health education curricula with good success. Fetro (1992) identifies how four generic skills, i.e., decision making, communication, stress management, and goal setting, can be integrated across all health content areas. She supports her skill-based model with the foundation of self esteem and offers instructional strategies (see Note 4) for building skills in four broad ways: (1) strategies for providing key information, (2) strategies for encouraging creative expression, (3) strategies for sharing thoughts, feelings, and opinions; and (4) strategies for developing critical thinking. How many health educators have actually made the connection between the title of Fetro's book, *Personal and Social Skills: Understanding and Integrating Competencies Across Health Content*, and its implicit development of the cognitive domain in personal and social contexts? Perhaps each of the four generic skills, though not an exhaustive list, can result in modifications, adjustments, and changes in health-related behavior. However, the skills are not the behaviors themselves. The skill of decision making is a *thinking* skill which gets demonstrated through different health-related behaviors of eating, sleeping, exercising, and drugging, to name a few. The behaviors are the contextual actions resulting from the skills. The skill of goal setting is a thinking skill that takes the individual from the present context of his or her health status to a future context of health status. The individual chooses to modify, adjust, and/or change one health-related behavior by using a combination of skills and techniques. A skill technique becomes a strategy when it is used in a specific context.

For example, a person wishing to decrease the number of cigarettes smoked after dinner employs a thinking skill of

goal setting, e.g., no more than two cigarettes, and a social support skill of communicating her plan to a family member. The person then uses a thinking skill of decision making during the stressful situation to exchange one health-related behavior with another, e.g., walk instead of drug. When the individual cognitively plans an alternative behavior in a new context, a coping strategy results. The degree of success for using this coping strategy again depends upon many different conditions. Understanding this process requires both critical and creative thinking skills. How this understanding gets translated to behavior is a topic for further discussion. Wheatley (1994, p. 7) addresses the need for creative solutions: "I know longer believe that organizations can be changed by imposing a model developed elsewhere. So little transfers to, or even inspires, those trying to work at change in their own organizations. Second, and much more important, . . . there are no recipes or formulae, no checklists or advice that describe "reality." There is only what we create through our engagement with others and with events. Nothing really transfers; everything is always new and different and unique to each of us."

In closing, this discussion has identified three generalizations for transforming individuals and organizations for the 21st century. These generalizations serve us now—in the present tense. However, if we assume that the profession needs to work toward "education for understanding," health educators will have to seek "a sufficient grasp of concepts, principles, or skills so that one (we) can bring them to bear on new problems and situations, deciding in which ways one's (our) present competencies can suffice and in which ways one (we) may require new skills or knowledge" (Gardner, 1991, p.18). To do otherwise will ground health education in linear thinking as we move toward new transformations of individual and organizations.

Notes

1. Consensus is an opinion held by all or most.

2. Erickson (1995, p. 87) defines a generalization as "two or more concepts stated in a relationship." Generalizations should not be written in past, past perfect, or present perfect tenses because they are then set in time as a fact. When there are two or more concepts placed into an interdependent relationship, a generalization results which may change over time. In fact, generalizations of health often do change. We are continually verifying conceptual relationships as new facts are being discovered or advanced. Erickson also instructs that universal generalizations should not contain proper and personal nouns, because they create facts with specific examples. A well-written generalization should provide a framework for numerous examples and contexts.

3. Wheatley (1994) claims that information can be created every time we bring people together in new ways as long as we don't restrict their access to information or constrain them by rules and preset expectations.

4. Based on the current discussion, Fetro's instructional strategies would be called techniques.

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