Health Education Philosophy:

What? So What? Now What?

Valerie A. Ubbes, PhD, CHES Miami University, Oxford, OH

Acknowledgements

- Personal thanks to Dr. Jill Black, Cleveland State University, for inviting me to present today;
- For the record, I've been a member of Eta Sigma Gamma since the late 80's when I was at Ohio State University.
- I have the distinction of being Dr. Mary K. Beyrer's last doctoral student before she retired. MKB is a key leader in the history and philosophy of health education, so I find it an honor to be talking today about one of the philosophical perspectives of health education.
- Today, I am sharing a philosophy that I have developed and refined from my reading of the education literature, not the health education literature.

Key Assumptions

- I identify with each of the philosophical perspectives because of my need to seek connections between ideas.
- However, I am a clear candidate for the cognitive perspective because of my commitment to the <u>thinking</u> process and the role of inquiry in health education – especially body mind connections.
- I promote a *developmental*, cognitive-behavioral perspective as I work with young people who need very concrete ways of understanding (conceptualizing) health, e.g., physical activity, nutrition, sleep, safety, hygiene, relationships.

My Personal Philosophy (Beliefs)

- I am not in favor of Just Do It (or Just Say No) campaigns which give pre-teen and young adults a mindless way of responding to the world. It is one more way that disembodies who we are with what we do.
- People do not know their bodies very well. Many people only recognize their bodies when they are ill. People use clothing, piercings, jewelry, tattoos, to demonstrate and decorate their outside identities. Many do not understand their bodies below the surface. Few find awe and wonder about the <u>design</u> of the human form.

My Personal Philosophy (Beliefs)

- We need <u>thoughtful</u> learning processes that give people access to their *internal* bodies and minds instead of being distracted by the *external* "noise" of sensory overload.
- Teaching people how to <u>cognitively</u> connect to their physical, social, intellectual, spiritual, and emotional needs by attending to body cues (e.g., stomach growl) and sensory messages (e.g., sight, sound, smell, taste, and touch) is a lifelong lesson of identity development and quality of life issues.

Neuroscience is clear that

- All behaviors are mediated by the brain unless we are dealing with a reflex. Therefore, cognition (thinking) is an important place to start in understanding health behaviors – that is, what we do with what we *know*.
- Our sense organs (e.g., ears, eyes, nose, tongue, skin, and proprioceptors) send *outside* sensory information into the brain as neurochemical and neuromechanical <u>messages</u>.
- These sensory messages are interpreted by the brain to make it possible for us to hear, see, touch, smell, or taste. Without the brain, we would not perceive, respond, or attend to the world's messages.

Neuroscience is clear that (continued)

- Learning occurs at the level of the synapse when acetylcholine is dumped from one neuron to another.
- Long-term memory is encoded in the hippocampus.
- Short-term (working memory) activates the pre-frontal cortex.

Recent research shows that:

- The amygdala perceives threat or stressful situations in a preferential way before our pre-frontal cortex has a chance to "think".
- This is called an emotional hijacking because our emotional response chemically pre-empts our thoughtful responses from the "pilot" control center of our brain -- the pre-frontal cortex;
- The brain processes sensory and motor information side-by-side in the brain, depending upon whether *affective* sensory or *efferent* motor pathways are activated.

Sensory-Emotional-Motor-Cognitive Information

- We are often faced with sensory then emotional, motor, and cognitive decisions instantaneously.
- The pre-frontal cortex gives us executive control over our behaviors.
- The pre-frontal "thinking" cortex does not fully develop in young adults until mid to late twenties. This often results in poor choices and "follow the leader" MENTALities when presented with unhealthy human role models in different social contexts or in the media.
- The pre-frontal cortex has neuronal connections to the cerebellum and vice versa, which helps us "learn to move and move to learn".

So Can we teach thinking? Sure!

- Bloom's Taxonomy is one educational framework to help people think at six levels of cognition.
- The revised Bloom's Taxonomy (Anderson, 2000) is especially promising because of its focus on active thinking (active verbs) from lower to higher levels:
 - 1) remembering
 - 2) understanding
 - 3) applying
 - 4) analyzing
 - 5) evaluating, and
 - 6) creating.

Can we teach thinking? continued

- The National Health Education Standards (1995) outlines what students (K-12) should know and be able to do.
- In this context, <u>cognitive</u> (thinking) skills include:
 - Decision making
 - Goal setting
 - Communication
 - Stress management

Can we teach thinking? continued

- The National Accreditation of Health Education Credentialing (1995) outlines what health education professionals should know and be able to do regardless of settings.
- Sample cognitive (thinking) skills include the ability to
 - Assess
 - Plan
 - Implement
 - Evaluate
 - Act as a Resource Person
 - Coordinate, and
 - Communicate.

Cognitive Psychologists (Marzano et al, 1999)

divide knowledge into three types:

- 1. <u>Declarative knowledge</u> (facts, topics, concepts, generalizations, principles, models, theories);
- 2. <u>Procedural knowledge</u> (skills, processes, strategies, procedures); and
- 3. <u>Contextual knowledge</u> (based on situational cues, time, space, and place).

Cognitive (thinking) skills as Knowledge

- Both the NHES and CHES frameworks focus on procedural knowledges (e.g., skills, processes, strategies) when educating for health in different developmental contexts:
 - Grades K-12 health education, and
 - Grades 13-16 ++ health education
- Critical thinking questions: How do health-related skills become health behaviors? And how do professional skills become professional behaviors??

Challenges in Educating for Health:

- Need to help individuals negotiate which signs, symbols, and sensory patterns to pay attention to AND how to help them pay attention to their thinking skills for choosing healthful (not harmful) responses.
- In order to practice a health-enhancing behavior, individuals will need a repertoire in declarative (e.g., benefits of sleep) AND procedural knowledge (e.g., goal setting) in a particular context (e.g., when faced with homework or favorite media program)

Constructivist theory suggests

- that people build knowledge structures rather than merely receive information from experts;
- Information is transmitted in multiple forms (e.g., words, pictures, numbers, body language, rhythm, orderly or randomly), so the informaton is "constructed" and organized in the mind of the user; and
- Knowledge is socially constructed so role models and influences must model appropriate practices.
- The role of educators must help people to uncover their misconceptions and lack of background knowledge to make sense of their world.

Metacognition is

- *Meta* means change, so we need to take more time helping people understand CHANGE.
- *Cognition* is about thinking, especially thinking about thinking.
- We need to work on reflective thinking in health education, e.g., basic literacy skills of thinking, reading, writing, and speaking.
- We need to refine developmentally appropriate practices in health education.







Paul suggests that we teach

The differences between:

- Level I thinking which is factual & foundational;
- Level 2 thinking which is opinionated & biased; and
- Level 3 thinking which is based on evidence and judgement.

Paul also suggests that we:

Work toward a quality of thinking that focuses on Accuracy Breadth Clarity Depth Relevance