

## Design of a Conceptual Model for the Study of Education, Health, and Communication: Professional Preparation Issues

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### Abstract

The purpose of our paper is to focus on the role of communication in health education, including the ways the three concepts of education, health, and communication are related. A traditional approach would be to study the integration of health and education leading to health education. However, a more progressive approach is to study communication in the context of health education in order to investigate the interdisciplinary nature of these triadic concepts. After naming three professional standards documents in preK-16 health education which highlight communication as both a concept and a skill, we will offer our schematic for how education, health, and communication interact to form the potential transdisciplinary concept of health literacy. We believe that health literacy can be explored as an integrative study of language patterns and information formats that is broader than the printed and spoken word. We conclude our paper with a review of current definitions for health literacy, and then share a description and outline of our graduate course called *Health Communication and Education*.

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### Background

The basic premise of our work is that professional identity formation plays an important role in how decisions are made for communicating health information and messages to individuals and groups. Professionals must be able to perceive and use a variety of language patterns as building blocks to multiple forms of information. Language forms as shown in Table 1 can be perceived as signs, symbols, and patterns when educating for health (Ubbes, 2004). By using the Theory of Multiple Intelligences (Gardner, 1993), health professionals can construct content messages from more than one language form, e.g., words, pictures, numbers, body expressions, rhythms, reasoning processes, and environmental cues. Ultimately, health professionals who can access information in multiple language forms will be able to adapt and tailor health-related messages for people with differentiated needs, interests, and learning styles. Public health campaigns often use different language forms and communication formats to promote a health issue or cause as shown in Table 2.

It may be important to consider how health educators serve as gatekeepers to preK-16 students when they access information, products, and services. In addition, health educators must use a variety of communication patterns (e.g., words, pictures, numbers, body expressions, rhythms, reasoning processes, and environmental cues) when educating for health (Ubbes, 2004). A novice professional becomes an expert professional when he or she has the competence to represent health-related information in multiple language forms and communication formats.

Promotion of health-related messages require health professionals to know how to assist human beings gain access to information, and then have the competence to interact and communicate effectively with individuals, groups, and organizations. If the novice professional does not learn how to do this during university coursework and internships for their own personal enhancement and professional development, they may lack the foundational skills for communicating effectively with people

from different cultures, traditions, and educational backgrounds. A lack of self identity can often lead to conflicts in communication

especially among people from diverse backgrounds (Freire, 1987; Torres, Howard-Hamilton, & Cooper, 2003).

Table 1  
Language Forms of Communication

<p>In order to communicate information about health, humans construct meaning with the following language forms:</p> <ul style="list-style-type: none"> <li>• Words as written text &amp; spoken word</li> <li>• Images, pictures, icons, graphics, light waves</li> <li>• Body language &amp; non-verbal cues and human senses</li> <li>• Rhythm &amp; sound waves</li> <li>• Numbers, formulas, sequences, procedures, brain waves</li> <li>• Human interaction within different environments</li> <li>• Signs, symbols, &amp; patterns in the natural world</li> <li>• Personal reflection, reasoning, identity formation</li> </ul> <p style="text-align: center;"><b>Generalizations</b></p> <ol style="list-style-type: none"> <li>1. A variety of language patterns serve as building blocks to multiple forms of information.</li> <li>2. Multiple intelligences theory (Gardner, 1993) identifies the signs, symbols, and patterns for eight ways of knowing.</li> </ol>
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Table 2  
Communication Formats Used in Public Health Campaigns

<p>Print formats: Posters, Pamphlets, Booklets, Brochures, Leaflets, Flyers, Magazines, Journals, Books, Newspapers</p> <p>Broadcast formats: Public Service Announcements, Documentaries, and Talk Shows on Radio and Television; List Serves on the Internet</p> <p>Technological formats: Videos, DVDs, Web sites, CDROMS, Power Points, Web casts, Pod casts</p> <p>Aesthetic formats: Paintings, Drawings, Sculpture, Music Genre, Song Lyrics, Nature, Sport, Dance, Movement</p>
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When educating for health, both novice and expert health professionals must be able to help individuals gain access to facts, topics, and concepts through multiple sources of information. Cognitive psychologists (Kendall & Marzano, 1996; Marzano, 1992) have differentiated knowledge as declarative and

procedural, that is, to know and to do, respectively. One knowledge form without the other does not build a balanced structure of knowledge. In the next section, we address communication as a concept to know and as a skill to do. We describe these two forms of knowledge in our review of three professional

documents in health education: 1) A Competency-Based Framework for Health Educators (NCHEC), 2) the Health Education Code of Ethics; and 3) preK-12 National Health Education Standards (NHES). We highlight these standards documents because each has named communication as an important knowledge element in health education.

### **Professional Standards of Practice**

Professional standards help to structure and organize a profession. As written documents, standards communicate how professionals should function in order to be responsible and competent in the profession. Solomon (2003) offers an interesting perspective for the use of professional standards:

The term *standards* has now replaced the traditional educator's term *objectives*. Both terms essentially entail a process of coming to consensus and producing explicit statements of the elements of the American culture worthy of transmission. These statements, in essence, become the structural frame of the written curriculum" (p. 3).

As Solomon alludes in the quote above, the structure of standards help to frame the course of study of a profession. In health education, our professional story emerges from seven and ten competencies at the undergraduate and graduate levels, respectively (National Commission for Health Education Credentialing, Inc. et al., 2006). In simple "verbiage", health educators are responsible for assessing, planning, implementing, evaluating, coordinating, communicating, and acting as a resource person. At the graduate levels, health educators are also responsible for applying appropriate research principles and techniques, administering programs, and advancing the profession. With professional language focused on verbs in the form of actions or skills, Certified Health Education Specialists are encouraged to study different processes that lead to the planning of effective programs, including curricula, products, and/or services, in order to meet the assessed needs of the population. Health educators are also responsible for

"communicating health and health education needs, concerns, and resources.

A second professional standards document for health education includes the Health Education Code of Ethics (SOPHE & AAHE, 2003) which focuses on "excellence in the practice of promoting individual, family, organizational, and community health" while "acknowledging the value of diversity in society and embracing a cross-cultural approach". According to this standards document, health educators are responsible to the public, profession, employers, research and evaluation, professional preparation, and health education delivery when making professional decisions. These nine standards are frameworks for action regardless of one's job title, professional affiliation, work setting, or population served. Three standards refer specifically to communication with The Public, The Employers, and The Delivery of Health Education, respectively. These standards include three sections on communication: Section 1-3. Health Educators will accurately communicate the potential benefits and consequences of the services and programs with which they are associated; Section III-5. Health Educators will openly communicate to employers the expectations of job-related assignments that conflict with their professional ethics; and Section IV-5. Health Educators will communicate the potential outcomes of proposed services, strategies, and pending decisions to all individuals who will be affected. In summary, professional standards include a Code of Ethics with a needed practice of communicating accurately, openly, and inclusively.

A third professional standards document, the National Health Education Standards (NHES), serves as a framework for preK-12 curriculum development in schools. The previous version of NHES (Joint Committee on National Health Education Standards, 1995) used the subtitle of "Achieving Health Literacy" and defined health literacy as "the capacity of an individual to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways which are health-enhancing". In the latest version of

NHES (2007), the term health literacy was removed as a subtitle and retained as one of the standards statements with a goal for students to "demonstrate the ability to access valid health information and health-promoting products and services".

We want to ensure that novice professionals will not just learn to conform to these standards of practice without thoughtful constructions of meaning making. We encourage faculty to study and promote the three professional standards in active dialogue with novice professionals so that the documents are perceived as competencies to transform theory and practice and not followed as responsibilities without thoughtful constructions of meaning making. For example, students can be asked to study the relationships between education, health, and communication. It is important that novice professionals know how their course of study and professional standards are organized around communication knowledge and skills, including the historical context for such organization. Undergraduate and graduate studies should be asked to probe the following questions about professional standards: standards for whom? by whom? and to what extent?

In summary, three different standards documents in health education were reviewed for their focus on communication. Specifically, the CHES standards indicated that health educators need to be able to Communicate Health and Health Needs, Concerns, and Resources. Within that competency, a health educator needs to be able to select a variety of communication methods and techniques in providing health information (VIII-C) and foster communication between health care providers and consumers (VIII-D). The Health Education Code of Ethics outlined three standards in communication. And the National Health Education Standards indicated that preK-12 students will demonstrate the ability to use interpersonal communication skills to enhance health. Each of these standards documents suggest that professional preparation programs in health education will assist novice professionals in their socialization into the profession by giving them ample courses, assignments, and experiences to practice the

concept and skills of communication as outlined by the discipline.

### **Discussion**

Ironically, although the CHES skills are named and practiced within accredited professional preparation programs, the content of these skills varies widely depending on the coursework, background, and experiences of the professional. For example, professional preparation programs may focus their department name, courses, and/or faculty identities around the content of health behavior, health education, health sciences, health studies, or health communication. Sometimes professional programs organize coursework by settings (e.g., classrooms, communities, clinics, and corporations) or by linkages to cross-disciplinary professionals (e.g., psychologists, sociologists, epidemiologists, medical professionals) who also have their own standards of practice and codes of ethics.

Currently, the professional standards and practices advanced by health educators are skill-based with a preference toward behavioral outcomes. Perhaps by preparing health educators to focus on the development of these professional skills and processes, they do not get adequate preparation in content knowledge, namely the signs, symbols, and language patterns that are used to craft health-related messages and prompt cues for action. In educating for health, novice professionals must be able to negotiate and analyze the different ways we represent health, wellness, and disease through words, pictures, numbers, body expressions, rhythms, reasoning processes, and environmental cues (Ubbes, 2004). Consequently, we promote language forms and communication formats as important professional content for the health education standards that are essentially skill based: assessing, planning, implementing, evaluating, coordinating, communicating, and acting as a resource person of multiple forms of information and services. As a result, health-related outcomes become integrative processes of sensory-motor signals, cognitive signs and symbols, and behavioral cues to action.

### **Professional Preparation in Health, Education, and Communication**

In this final section of our paper, we share an outline of our graduate course called Health Communication and Education. The course is taught every other semester as a required foundations course in our Health Promotion graduate program. Appendix A shows a Description of the Course; Appendix B shows the Course Outline and Required Readings; and Appendix C shows a Description of Sample Projects. As we continue to refine the theoretical and practical aspects of the course, our inquiry about the interrelationships between health, education, and communication will continue to emerge. At this time, we envision health literacy

as the intersect between health, education, and communication as shown in Figure 1. Our ongoing investigations will continue to analyze and articulate the trans-disciplinary role of health literacy in these three interdisciplinary concepts.

We believe that health educators need the ability to practice and access education, health, and communication as core themes in professional coursework. Since choices for human health and wellness are predicated on a solid foundation of health-related information and services, we must acknowledge the role that literacy plays in giving individuals access to knowledge.

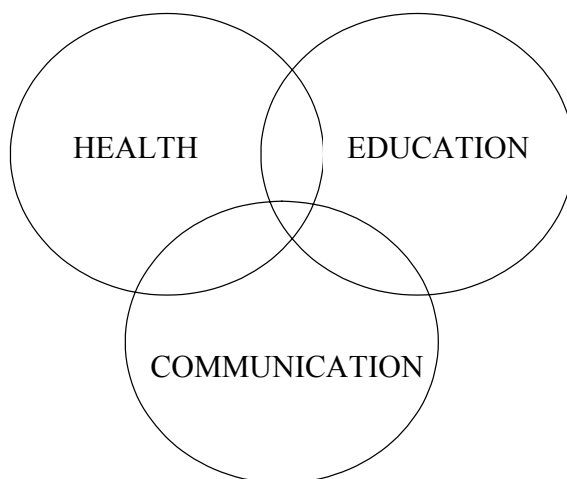


Figure 1  
Relationship Between Health, Education, and Communication With the Intersection of Health Literacy

Depending upon the context or setting, the professional literature varies in its definitions of health literacy. In the public health document, Healthy People 2010, health literacy is defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (U. S. Department of Health & Human Services, 2000). The California Health Literacy Initiative (CJLI, 2004) cites health literacy as "the ability to read,

understand, and act on health information". And the National Health Education Standards (Joint Committee for NHES, 1995; 2007) defines health literacy as "the capacity of an individual to obtain, interpret, and understand basic health information and services and the competence to use such information and services in ways that are health enhancing."

Generally, novice professionals are less inclined to study the nuances of language chosen for

professional definitions and uncover the reasons for why such differences and similarities exist. However, we believe that like in life, change and adaptations are ongoing for the organism and the

ways information is communicated and used. Consequently as professions evolve, their professional frameworks and practices adapt and change too.

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## Appendix A Description of the Course

This course has been designed to introduce health communication theory and processes for different audiences within the ecological model. It will explore evidence-based strategies when educating for health. We will use design analysis when exploring what makes current health communication programs work (or not), especially how to develop and improve them. By the end of the course, we will be utilizing the knowledge gained during your learning process to develop your own program that will advance health literacy.

The Standards for the Preparation of Graduate-Level Health Educators (AAHE & SOPHE, 1997) identifies ten responsibilities for the preparation of graduate-level health educators. A graduate-level health educator who practices in any setting (e.g., community, school & university, workplace, medical care) should be able to do these ten skills. This course will meet the following Standards for the Preparation of Graduate-Level Health Educators (AAHE & SOPHE, 1997):

- Assess Individual and Community Needs
- Plan Effective Programs
- Implement Programs
- Evaluate Effectiveness of Programs
- Coordinate Provision of Services
- Act as a Resource Person
- Communicate Needs, Concerns, and Resources
- Apply Appropriate Research Principles and Techniques
- Administer Programs
- Advance the Profession

## Appendix B

### Course Outline & Required Readings for PHS 613 Health Communication and Education

WK	TOPIC	READING	CHAPTER TITLES
1	Intro to Course Health Promotion Theory	Derryberry: p 204-242 MHCPW: Appendix B	Description of Health Educator Basics of Health Promotion theory
2	What is health communication? What is health education?	Derryberry: p 278-290 MHCPW: p 1-13 Handbook: p 35-62	Basic definitions Changing picture in public health
3	What is health literacy?	Derryberry: p 243-252 Handbook: p 583-605	Define health literacy
4	Ethics	Handbook: p 651-679	Ethics in Health Communication
	Exam 1		
5	Phases 1-2 of CDC Synergy	CDCynergy: Phases 1-2	Describing the problem Analyzing the problem
6	Stage 1 Phase 3 of CDC Synergy	MHCPW: p 15-52 CDCynergy: Phase 3	Planning a health communication program
7	Stage 2 of CDC Synergy	MHCPW: p 53-86	Developing and early testing of program main ideas and materials
8	Phase 4 of CDC Synergy	CDCynergy: Phase 4 Handbook: p 473-496, 557-582	Develop intervention
	Exam 2		
9	Special populations and social support	Handbook: p 214-262, 263-284	Developing community-based strategies; Social support, social networks, and health
10	Interpersonal Communication	Handbook: p 285-313	Everyday interpersonal communication and health
11	Phase 5 of CDC Synergy	CDCynergy: Phase 5	Plan evaluation
12	Stage 3 Phase 6 of CDC Synergy	MHCPW: p 91-103 CDCynergy: Phase 6	Implement the program
	Exam 3		
13	Stage 4 of CDC Synergy	MHCPW: p 107-121	Outcome evaluation
14	Lessons learned	Handbook: p 637-650	Lessons learned from the field
15	Class Presentations		
	Exam 4		

#### Required Reading

1. Allegrante, J.P, Sleet, D.A. (2004). *Derryberry's educating for health: A foundation for contemporary health education practice*. San Francisco: Jossey-Bass.
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## Appendix C

### Description of Sample Projects

#### **Final Project**

The main objective for the course is to help you build the content and skills necessary for designing and evaluating health communication. For your final project, develop a health campaign in your area of interest. Your grade on the project will be based on your Project Idea, Project Outline, Project Presentation, and Finished Package. Below are descriptions of the first two components:

#### **Project Idea**

Please submit the basic premise for your health communication project. You will need to include the steps taken from the book, *Making Health Communication Programs Work*. These are outlined below:

1. Write a problem statement in phase 1 of CDCynergy in which you Identify and define health problems to be addressed by your program interventions then examine necessary research to describe the problems.
2. Define your communication objectives.
3. Define and learn about your intended audiences.
4. Explore pathways and channels to reach your intended audience.
5. Identify your potential partners.
6. Draft a communication plan.

#### **Project Outline**

Please submit the basic outline for your health communication project. You will need to include the steps taken from the book, *Making Health Communication Programs Work*. These are outlined below:

1. How should we launch the program?
2. Should we use a kickoff event?
3. How should we develop and sustain media coverage? Audience interest?
4. How should we manage a press conference?
5. How can we be sure that our program operates according to plan?
6. How can we use process evaluation?
7. How can we find out whether we are reaching the intended audience with our information?
8. How can we find out whether they respond favorably to our messages and materials?