

Applying the National Health Educator Competencies Update Project Model to Health Education

Gary D. Gilmore¹, Larry K. Olsen², and Alyson Taub³

¹University of Wisconsin at La Crosse

²New Mexico State University

³New York University

Abstract

A brief overview of the six-year National Health Educator Competencies Update Project (CUP) research is provided as an introduction to a discussion of applications of the resulting CUP Hierarchical Model. Considerations for application of the model to the professional preparation, credentialing and professional development of health educators are explored. In addition, examples of the applicability of the CUP Hierarchical Model to three different work settings are presented at the Entry, Advanced 1, and Advanced 2 levels of professional practice. The benefits of being guided by a validated practice model are discussed with implications for future research endeavors.

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Introduction

The National Health Educator Competencies Update Project (CUP) was a landmark national study of the health education profession that produced the largest national dataset of its kind. Responses from more than 4000 entry and advanced level health educators working in a variety of settings from every state in the USA and the District of Columbia verified the current role of health educators at three levels of practice. Detailed discussions of the planning, conduct, and results of the National Health Educator Competencies Update Project (CUP) have been published elsewhere (Gilmore, Olsen, & Taub, 2004; Gilmore, Olsen, Taub, & Connell, 2005).

The CUP National Advisory Committee (CUPAC) included representatives from 12 national professional groups with interests in health education. This 24-member Advisory Committee guided the project. The American Association for Health Education (AAHE), National Commission for Health Education Credentialing, Inc., (NCHEC) and the Society for Public Health Education (SOPHE) jointly

own the results of the research on behalf of the health education profession.

The purpose of this article is to explore applications of the CUP research that can take place in professional preparation, credentialing, and professional development. Specific examples in school health education, community health education, and patient education are provided. We also present selected application examples in each of these three areas in order to provide some recommended next steps drawn from the research findings. The intent is to stimulate meaningful discussion within the profession of health education, but not to attempt to be all inclusive. Full investment in, and use of, the CUP Hierarchical Model in any appropriate work setting will need to take place over time.

CUP Research Process

The research that produced the CUP Hierarchical Model occurred over a six-year period of time (1998-2004). Care was taken not to sacrifice sound research practices for the sake of expediency. Time was required to secure funding on an ongoing basis to support the

research and engage volunteers to assist with the project. We are confident that the model that emerged from the research is truly representative not only of what health educators do in a multiplicity of settings, but also the relative importance of each of the skills performed. A detailed presentation of the research process can be found in Gilmore, Olsen, and Taub (2004), and Gilmore, Olsen, Taub, & Connell (2005). What is presented in this paper is a brief overview of the research process to provide the reader with the backdrop for the development of the CUP Hierarchical Model.

The CUP research was guided by four overarching research questions, all of which were endorsed by the Advisory Committee:

1. What is the current generic role of the entry-level health education specialist as compared to the role previously defined?
2. What are the generic areas of responsibility, competencies and sub-competencies of advanced level health education specialists?
3. Are there commonalities in the roles of entry-level and advanced health education specialists across practice settings?
4. Are there differences in the roles of entry and advanced level health education specialists based on degrees held and years of work experience in health education? (Gilmore, Olsen, & Taub, 2004; Gilmore, Olsen, Taub, & Connell, 2005; NCHEC, SOPHE, & AAHE, 2006).

The research was conducted in several phases. During 1998-1999, three fact-finding work groups were formed. These work groups consisted of National CUP Advisory Committee members who focused on levels of practice, proposed new competencies, and resource development. During 2000-2001, a four-state pilot (Oregon, Idaho, Texas, and New York) was conducted in order to assess the clarity,

completeness, and the most desirable mode of data collection (e.g., hardcopy via postal mail versus electronic mail) for the proposed survey instrument. Based upon the results of the pilot study, a 19-page hardcopy questionnaire was produced for use with the main study. The major research phase took place during 2001-2004, with a representative sample of health educators from a variety of professional settings in all 50 states and the District of Columbia. A total of 4,030 respondents completed and returned the questionnaire resulting in an adjusted response rate of 70.6%. A review of the overall research process can be found in A Competency-Based Framework for Health Educators - 2006 (NCHEC, SOPHE, & AAHE, 2006, pp. 6-8), with detailed discussions of each phase presented in Gilmore, Olsen, and Taub (2004), and Gilmore, Olsen, Taub, & Connell (2005). The critical feature of this research process was that data were collected from a representative sample of professionals from all 50 states and the District of Columbia, who indicated they were currently working in the field of health education and who self-identified as health educators (Gilmore, Olsen, & Taub, 2004).

The hierarchical model, which resulted from the extensive data analyses of the responses from practicing health educators and the careful review and commentary by the National CUP Advisory Committee, provided realistic insight into what health educators do as differentiated by academic degree level and years of experience. This is notable because neither the Advisory Committee nor the Steering Committee entered into the research with any preconceived idea about the type of model that would emerge.

CUP Hierarchical Model

The hierarchical model that emerged from the qualitative and quantitative data analyses is depicted in Figure 1.

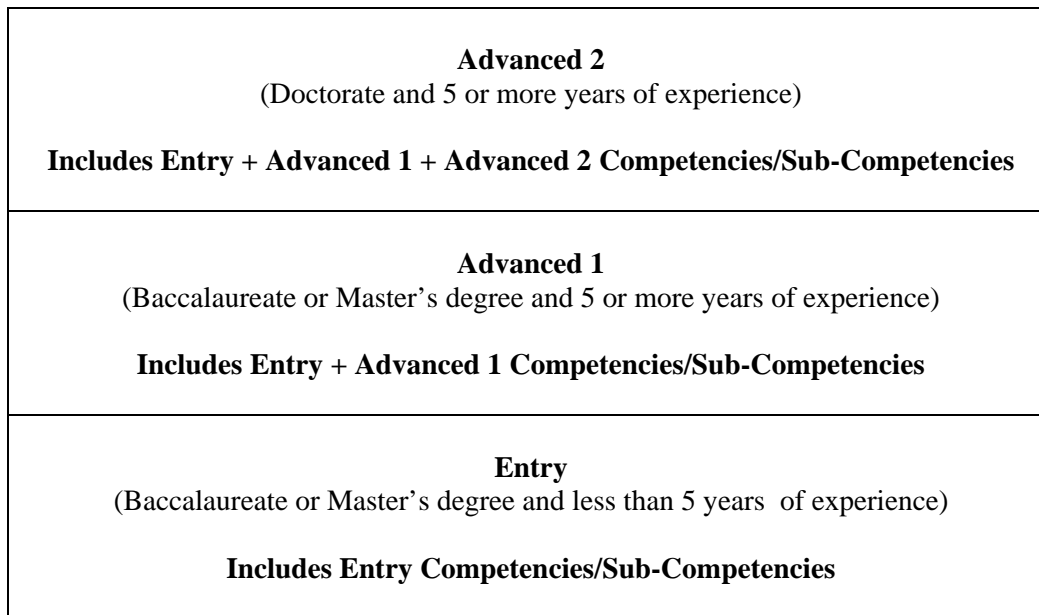


Figure 1
National Health Educator Competencies Update Project (CUP) Hierarchical Model
(Source: Adapted from Gilmore, Olsen, & Taub, 2004)

Seven major aspects of the role of the health educator were identified through a comprehensive data analysis process. These seven Areas of Responsibility are:

- I. Assess Individual and Community Needs for Health Education
- II. Plan Health Education Strategies, Interventions, and Programs
- III. Implement Health Education Strategies, Interventions, and Programs
- IV. Conduct Evaluation and Research Related to Health Education
- V. Administer Health Education Strategies, Interventions, and Programs
- VI. Serve as a Health Education Resource Person
- VII. Communicate and Advocate for Health and Health Education (Gilmore, Olsen, & Taub, 2004; Gilmore, Olsen, Taub, & Connell, 2005; NCHEC, SOPHE, & AAHE, 2006).

Within these seven Areas of Responsibility, 35 Competencies and 163 Sub-competencies were identified (NCHEC, SOPHE, & AAHE, 2006).

A “competency” was defined as a “broadly defined skill or ability . . .” while a “sub-competency” is a “specific ability or skill subordinate to and expected to contribute to accomplishment of a competency” (NCHEC, 1985, p. 120).

There were more similarities than differences when comparing the CUP model with the original entry-level model (1985) and the graduate level model (1999). For more discussion of this comparison, see Gilmore, Olsen, Taub, & Connell (2005), NCHEC, SOPHE, & AAHE (2006), and NCHEC (2007). It is important to note that some of the Sub-competencies are performed more frequently and with greater importance based on years of experience than on the degree held. To this end, three levels of practice emerged from the research:

Entry: Health educators with a Baccalaureate or Master’s degree and less than five years of experience.

Advanced 1: Health educators with a Baccalaureate or Master's degree and five years or more of experience.

Advanced 2: Health educators with a Doctoral degree and five years or more of experience. (Gilmore, Olsen, & Taub, 2004; Gilmore, Olsen, Taub, & Connell, 2005; NCHEC, SOPHE, & AAHE, 2006).

Overall, the CUP Model is hierarchical, rather than linear, meaning that there are three distinct levels of practice, each one building upon the other in terms of the Sub-competencies incorporated into one's roles and responsibilities. Additional details regarding the model, including the specific Competencies and Sub-competencies can be found in A Competency-Based Framework for Health Educators-2006 (NCHEC, SOPHE, & AAHE, 2006).

Application to Professional Preparation

The CUP research has several implications for the professional preparation of health educators.

Use of Sub-competencies in Curriculum Development. To facilitate the use of the CUP Sub-competencies in curriculum development, AAHE, SOPHE, and NCHEC have jointly published A Competency-Based Framework for Health Educators (NCHEC, AAHE, & SOPHE, 2006). This document contains the new hierarchical model for health education practice, and provides an assessment tool to determine the extent to which an academic program addresses the sub-competencies.

Recommendations of AAHE, SOPHE, NCHEC regarding CUP findings. AAHE, SOPHE, and NCHEC have jointly made recommendations regarding the findings of the CUP research (NCHEC, 2005). These recommendations provide clear direction for undergraduate and graduate programs of study in terms of the competencies to be addressed to prepare graduates for the job market. Additionally, the CUP Hierarchical Model provides guidance for individuals preparing to be credentialed as Certified Health Education Specialists (CHES) at the entry level. Programs

preparing baccalaureate-level health educators should focus on the 82 Sub-competencies of the Entry level in professional preparation. In some instances, a baccalaureate graduate may be the only health educator in a given employment setting. Therefore, it is important that he or she review and be exposed to the sub-competencies that were identified both as Advanced 1 Sub-competencies, as well as those identified as Advanced 2 Sub-competencies. In like manner, those who are in professional preparation institutions that prepare master's level health educators should review the 82 Entry-level Sub-competencies, focus on the 48 Advanced 1 Sub-competencies, and provide an introduction to the Advanced 2 Sub-competencies. Doctoral institutions should review Entry and Advanced 1 Sub-competencies, and put major emphasis on those Sub-competencies identified as Advanced 2 Sub-competencies. The results of the research appeared to emphasize years of experience rather than degree level, as critical to one's position, in terms of relative importance and frequency of performance, of any given set of sub-competencies. It is not known if the number of health educators employed in a given agency would affect this emphasis, thus revealing an area that needs additional research.

Professional development activities by colleges/universities. The Areas of Responsibility, Competencies, and Sub-competencies identified through the CUP research have equal importance for professional development activities. Colleges and universities are uniquely qualified to provide continuing education for professionals in a variety of work settings in the community. Many accrediting groups require colleges and universities to be engaged in these activities as a criterion for accreditation of academic programs. Specific continuing education programs can be offered by professional preparation institutions, either as traditional, campus-based courses, or through more non-traditional, distance education-focused activities.

Application to Credentialing

The national credentialing system for the health education profession is administered by the National Commission for Health Education

Credentialing, Inc. (NCHEC). This system includes the certification of health education specialists through an examination and a requirement for continuing professional development to maintain certification. The results of the CUP research are being used to update the national certification examination for entry-level health educators. The item bank for the examination has been reviewed and expanded to include test items to address the sub-competencies at the entry-level in the CUP Model.

Since three levels of practice (Entry, Advanced 1, Advanced 2) were identified through the CUP research, the NCHEC is now exploring the possibility of offering advanced levels of certification. Profession-wide discussions have been ongoing about the desirability of advanced levels of certification for health education specialists.

Efforts are also underway in related fields (e.g., public health credentialing) to use competencies for credentialing purposes. The strength of the CUP research is that findings are based on responses from practicing health educators which gives validity to the use of the sub-competencies for credentialing purposes. Further, the findings are applicable to health educators in a variety of work settings due to the sizable sub-groups included in the research who were drawn from these settings.

Many of the accrediting agencies (e.g., CEPH, NCATE, Teacher Education Accreditation Council [TEAC]) are requiring evidence-based assessment and require institutions to show how programs meet national standards in their fields. The CUP Hierarchical Model provides a national standard for health education practice at three distinct levels. In particular, these Areas of Responsibility, Competencies, and Sub-competencies are used by the learned society given the responsibility to review health education programs. For the National Accreditation Commission for Teacher Education (NCATE), AAHE is the learned society that has been designated to review health education programs. The Council on Education in Public Health (CEPH) and the Society for

Public Health Education/American Association for Health Education Baccalaureate Program Approval Committee (SABPAC), which accredit or approve professional programs that prepare health educators, also use the Areas of Responsibility, Competencies, and Sub-Competencies endorsed by the health education profession as criteria for program accreditation or approval.

Application to Professional Development

Professional development opportunities can be directly aligned with the Areas of Responsibility, Competencies, and Sub-competencies in keeping with the continuing education requirements established by the National Commission for Health Education Credentialing (NCHEC, SOPHE, & AAHE, 2006). In order to stimulate professional development for health educators, it is important to consistently assess the continuing education needs of these professionals, and their capacity to engage in professional development activities. These assessments can be used to “guide more effective planning and implementation strategies” (Gilmore & Campbell, 2005, p. 4). This type of assessment can be accomplished at many levels. As an example, plans are currently underway in Wisconsin to implement a statewide needs and capacity assessment of this nature so that continuing education offerings can be guided appropriately (G. D. Gilmore, personal communication, May 13, 2007). Undergraduate and graduate credit, as well as non-credit opportunities will be assessed, with future offerings guided by the feedback. The educational objectives and activities can be aligned with the Areas of Responsibility, Competencies and Sub-competencies, with examples provided in the Competency-Based Framework for Health Educators (NCHEC, SOPHE, & AAHE, 2006). In addition, practitioners can become more self-directed by assessing the competencies and sub-competencies that align well with their current and projected career activities. These professionals can then seek appropriate skill development opportunities to enhance their current skills. In doing so, the individual assumes a more proactive role in reviewing needs, to be followed by accessing available

training experiences or recommending creative learning options.

University Extension Services working in partnership with academic institutions can develop and provide continuing education opportunities based upon more informed decision-making using the above-mentioned assessment process. In addition, distance education opportunities can be developed relying on the Internet, such as is done with the Health Education and Promotion (HEP) Network. Professional development workshops can be offered in conjunction with local, state, regional, and national conferences. With appropriate planning, Continuing Education Contact Hours (CECH) can be applied for and, with approval, counted as CECH for Certified Health Education Specialists. Professional associations, such as AAHE, SOPHE, the American Public Health Association (APHA), and the American School Health Association (ASHA), are NCHEC designated providers of CECH, and can facilitate the approval process of jointly planned events. Additionally, professional organizations can provide these professional development activities through conference sessions, workshops, and journal readings.

Evaluation of these professional development opportunities is essential. Assessments should include both formative (e.g., process evaluations) and summative evaluations (e.g., impacts or outcomes over longer periods of time). The development and implementation of the educational opportunities will be assisted by reviewing the results of the formative evaluations, while summative evaluations can be used to assess changes over time in knowledge, attitudes, skill development, and behaviors.

Applications to Work Settings

In terms of professional practice, we have developed some examples to demonstrate the applicability of the CUP Hierarchical Model (Taub, Gilmore, Olsen, & Connell, 2005). The examples illustrate what health educators might do in practice in three work settings. We have

selected Area of Responsibility IV, "Conduct evaluation and research related to health education," Competency A, "Develop plans for evaluation and research," and Sub-competency 1, for the Entry, Advanced 1, and Advanced 2 levels (NCHEC, SOPHE, & AAHE, 2006, pp. 64-65) as the basis for the examples we provide.

Table 1 contains examples of professional practice activities at each Sub-competency level by health educators in three practice settings. The activities of health educators in the various work settings are quite distinctive based upon their respective employment responsibilities. Additionally, in each job title, the increasing level of skill should be noted as one goes from Entry to Advanced 2 Competencies and Sub-competencies. It is important to note that the CUP Hierarchical Model reflects these distinctions because it was developed based upon responses from practicing health educators.

Discussion and Future Implications

The hierarchical model that emerged from the CUP research provides a competency update for the health education profession based upon empirical research involving practicing health educators. The present project took place approximately two decades after the inaugural research resulted in the original model (NCHEC, 1985). Just as the original model guided the three areas of professional preparation, credentialing, and professional development in health education, the CUP Hierarchical Model is intended to be used in like manner during the present time for up to one decade as recommended elsewhere (Gilmore, Olsen, & Taub, 2004). In this article, we have reviewed specific examples of application for the CUP Hierarchical Model. Various means of application not only benefit the profession of health education, but also demonstrate to other disciplines that a set of competencies validated by practicing professionals guides professional practice. It was decided that this would be a more representative and scientifically valid approach to identifying roles and responsibilities than other processes (e.g., use of expert panels) that might have been used.

Table 1
 Examples of Health Education Activities Based on the CUP Hierarchical Model

Area of Responsibility IV - Conduct evaluation and research related to health education
 Competency A - Develop plans for evaluation and research

Sub-competency 1

Level	School Health Educator	Public Health Educator	Patient Educator
Entry	Teacher uses 2006 YRBS data for lesson planning.	Public health educator identifies trends from journals: Health Education and Behavior; American J. Health Education, & Amer. Journal of Public Health	Patient educators compare their current educational data with website data.
Advanced 1	Teacher compiles list of wellness inventories.	Public health educator updates needs and capacity assessments.	Patient educators develop list of viable HRA and wellness inventories.
Advanced 2	School health education faculty member tests utility of self-assessments.	Public health education faculty review utility of NHIS data for local use.	Patient education supervisors use demographic variables for patient data analysis.

Certain key summary points need to be made. First, in this article we have reviewed only a sampling of possible applications of the health education competencies and sub-competencies. We used the roles of school health educator, public health educator, and patient educator as examples because of the variety of settings and unique roles they reflect. However, it must be remembered that the CUP research process was designed to have all major work settings represented in the research as reflected in the major categories of community, school, business, health care, university/professional preparation, and other. We encourage health educators in any of these settings to continue to identify clear examples of their involvement in the responsibilities, competencies, and sub-competencies.

Secondly, during the next few years, application examples should be solicited to better characterize the manner in which health educators are using the CUP Hierarchical Model. Research endeavors and professional sharing through conference presentations,

continuing education opportunities, and professional development activities would enable health educators to more fully envision and augment their roles and responsibilities.

Thirdly, careful preparation will need to be made early to develop the necessary capacity (especially funding) to initiate the third national research effort in health education competency development. We have recommended that the research be conducted every 10 years (Gilmore, Olsen, & Taub, 2004). Planning and preparation to do so will need to begin at least five years in advance of the research start date. It is not realistic to plan to rely on the same amount of in-kind contributions that were necessary for the CUP research (over 10,000 volunteer hours). It is highly recommended that staff support be built into any grant-related efforts. Planning now not only for the use of the current CUP model in the three areas addressed in this article, but also for the next research endeavor would be realistic and prudent.

Overall, the CUP research endeavor followed a carefully-developed research protocol derived from the original research during the 1970's-1980's, and refined during the six years of deliberations, planning, and research by the National CUP Steering and Advisory Committees. Following the formal unveiling of the empirically-based hierarchical model through an overview publication (Gilmore,

Olsen, Taub & Connell, 2005) and dissemination and discussion at a national health education congress (NCHEC, SOPHE, & AAHE, 2006), use of the model now must be amplified. The value of the resulting hierarchical model to the profession will only be maximized through its continued use as appropriate in professional preparation, credentialing, and professional development.

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Author Information

Gary D. Gilmore, MPH, PhD, CHES*
Professor and Director
Graduate Community Health Programs
University of Wisconsin and University of Wisconsin-Extension
201 Mitchell Hall
La Crosse, WI 54601 USA
Ph.: 608-785-8163
Fax.: 608-785-6792
E-Mail: gilmore.gary@uwlax.edu

Larry K. Olsen, MPH, DrPH, CHES
Professor of Health Science and Associate Dean for Academics
College of Health and Social Services
New Mexico State University

Alyson Taub, EdD, CHES
Special Assistant to the Dean
Professor of Health Education
Steinhardt School of Culture, Education and Human Development
New York University

* corresponding author