
Towards Defining Interprofessional Competences for Global Health Education: Drawing on Educational Frameworks and the Experience of the UW-Madison Global Health Institute

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Introduction

The UW-Madison Global Health Institute (UW-GHI)¹ has been engaged in programs for interprofessional and interdisciplinary global public health education for the past seven years.² During that period, the Graduate Certificate in Global Health has graduated 123 students from medicine, nursing, pharmacy, public health, veterinary medicine, and other fields. The recently developed (2010) Undergraduate Certificate/Minor in Global Health, which is offered through the College of Agriculture and Life Sciences, has graduated 187 students from a variety of majors. Both programs embrace a broad understanding of health to include the health and well-being of people, animals, and the environment. Thus, as well as fulfilling curricular requirements related to global health discussed below, the programs reflect UW-Madison strengths in environmental health, nutrition, and agriculture as well as the health professions.

UW-GHI programs emphasize interdisciplinary inquiry, place-based study, and immersion learning through required faculty-mentored global health field experiences. This interdisciplinary integration occurs in core and elective courses as well as the field experiences, with the undergraduate program including the various college majors, and the graduate program bringing together the health science professions. Stu-

dents can participate in international field experiences in a variety of international settings (Uganda, Kenya, Ethiopia, Ghana, Sierra Leone, South Africa, Ecuador, Mexico, Thailand, Nepal, Sri Lanka, China, and Germany), and with global organizations such as the Peace Corps, USAID, or the World Health Organization (WHO).

Also, importantly, UW-GHI defines global health work as work that addresses the global root causes and global impacts of health challenges and disparities, wherever they occur. Global health study at the UW-Madison includes health disparities and challenges within Wisconsin as topics for study and fieldwork, so that, in addition to understanding international challenges, local problems can be understood in a global context and from a comparative systems perspective. Students are strongly encouraged to conduct “engaged learning” that allows them to see the connections between health, behavior, and environment at the personal, local, and global level. This is consistent with the UW-Madison mission as a land grant university, and anticipates the coming era of global health convergence, where improvements and innovations in well-being will be generated from two-way learning across cities, states, and the globe.

Preliminary Impacts

In order to evaluate the preliminary impact of these relatively new global health certificate programs, and to inform program improvement, online surveys were administered to both the undergraduate cohort³ and the graduate/professional cohort.⁴

An exit survey of 187 students who completed the Undergraduate Certificate (response rate 60%) showed that respondents overwhelmingly planned to work in health care, with 31% intending to go to

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medical school. Thirty respondents were accepted into graduate schools in public health (50%), medicine (20%), nursing (10%), and other fields (12%). Of the 34 respondents who already had jobs at the time of the survey, nearly all employed students were in public health-related jobs in which they addressed health disparities. Four had joined the Peace Corps, five had joined Teach for America, several others had joined AmeriCorps, and 13 (38%) were applying their public health skills in Wisconsin in various job settings. Fully 82% of respondents reported that the certificate was either “important” or “very important” in shaping their view of health and well being in the world.

cated that they especially value field experiences as a way to explore meaningful engagement in global health, to gain deeper understanding of course content, and to explore their own cultural and personal boundaries and perspectives.

Global Health Competency Frameworks

The UW-GHI graduate program, which was developed in 2005, was based on a competency framework developed by an interdisciplinary team of faculty experienced in global health.⁵ The learning objectives defined in the early years of the program included: (1) expansion of knowledge of major themes and trends

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The Graduate Certificate in Global Health revealed similar impacts. A follow up survey was sent to 97 students who had completed the program at some point in the past five years. The survey asked graduates for information about current engagement with global health and service in culturally diverse populations and their perception about the value of the certificate. Results (response rate 29%) showed that 92% of students worked with populations from other cultures in their primary employment, and 37% had gone on to do further global health work. Overall, students believed the certificate to be valuable, with high percentages saying that they agree or strongly agree that the certificate “increased my interest in working with diverse populations” (88%), “improved my inter-professional skills” (72%), “had a major impact on my life” (83%), and “should be recommended for all students in my profession” (88%).

In summary, surveys with program graduates suggest that global health certificate programs, which are intended to complement rather than supplant the student’s primary course of study, are highly valued by students, and support their efforts to pursue related graduate education or jobs that address health disparities, both locally and globally. Student comments in both the undergraduate and graduate surveys indi-

in global health; (2) enhancement of communication skills for cross-cultural health practice; (3) demonstration of effective collaboration with colleagues abroad; (4) analysis of health system infrastructures at local and national levels; (5) discussion of ethical standards for conduct of research in international settings; (6) integration of disciplines to promote effective team practice; and (7) use of evidence-based principles in practice settings. A series of specific activities that required students to demonstrate these skills were incorporated into the core courses and field experiences, to assure mastery of competencies.⁶

The Undergraduate Certificate was developed in 2010, and drew heavily on the graduate certificate, as well as the recommendations for public health education published by the Association for Prevention Teaching and Research and the Association of American Colleges and Universities.⁷ Since the inception of the certificate, several other important recommendations that are germane to interprofessional education and competencies have been published. Among them are the ASPPH Global Health Competency Model,⁸ the Interprofessional Education Collaborative Core Competencies for Interprofessional Collaborative Practice (IPEC Competencies),⁹ and the Framework for 21st

Century Civic Learning and Democratic Engagement published by the National Task Force on Civic Learning and Democratic Engagement.¹⁰

The ASPPH Global Health Competency Model goes beyond the academic core disciplines and the crosscutting program management competencies as defined for the public health profession¹¹ to make the connection with more systemic issues such as justice, equity, ethics, and socio-political awareness. These additional skill sets are necessary, both locally and globally, if transformative change is to occur and should be considered when striving toward interprofessional global health competencies.

The IPEC Competencies provide another important guidance for future global health competencies. While previously, interprofessional courses at UW-Madison focused mainly and simply on putting different professionals together in a classroom or an experiential learning situation, this framework provides guidance on *how* professionals should share these spaces in terms of role clarification, team work, communication, and effective team practice.

The Framework for 21st Century Civic Learning and Democratic Engagement provides a very important complement to the frameworks previously discussed, which are designed for the health fields or professions. The civic learning framework focus includes history, social science, and the arts, as well as analytical skills and perspective taking. Where global health is concerned, these skills are crucial. Further, many students who are pursuing majors to prepare themselves for health professional schools may forgo coursework that would develop these skills in favor of advanced and rigorous science classes. Thus, it may be necessary to offer a chance to master some of these undergraduate competencies at the graduate level.

In addition to the competency frameworks highlighted here, the individual professions have their own competency recommendations related to interprofessional practice, which should also be taken into account as a common core for interprofessional global health practice as it is explored.¹² Further, insights about complementary competencies can be gained from other health systems¹³ and international global assistance agencies such as USAID's Global Health Fellows Program which identified a set of competencies to guide professionals at all levels in global health work.¹⁴ This list includes resource optimization, professional skills, interpersonal effectiveness, knowledge management, and health expertise.

Recommended Competencies

The following recommended competencies were prepared by the author in preparation for a roundtable

on interprofessional global health competencies at the University of Maryland Baltimore October 25, 2013. These recommendations are based on the UW-GHI experience to date in the undergraduate program,¹⁵ the graduate program,¹⁶ field experiences related to these programs,¹⁷ and the frameworks noted above, along with insights from teaching and working with interprofessional teams in courses and field experiences. They are offered with the recognition that both the inventory of conceptual frameworks and the lessons from experience are partial. They are intended to serve as a starting point for a broader national discussion, and also to serve as a starting point for UW-Madison faculty as they review and revise competencies in 2014-2015. The following statements are not set forth in the formal language of competencies (e.g., as knowledge, skills, and attitudes) but rather as critical focus areas upon which to build a more formal, vetted list of competencies that can be adapted to a particular global health program as needed.

To identify contextually relevant qualitative and quantitative information from the sciences, social, sciences and the humanities, to inform global health work. This refers to research skills to gather information from a variety of sources. Students should be able to conduct a basic interdisciplinary study of a topic, with place-based and relevant sources, and students should know how to access assistance for more expert research needs.

To read and interpret relevant literature from the sciences, social sciences, and humanities. This implies basic proficiency in fields outside one's own specialty that include the ability to summarize basic points, ask practical questions related to the material, explore implications for practice with a team, and understand when an expert reading, interpretation or consultation is required.

To practice ongoing discernment in relation to one's own interests, strengths and values. In addition to being able to apply knowledge and skills, students should be engaged in an ongoing process of discernment and self-discovery, so that they can identify their preferences, strengths, values and passions as they pursue global health work.

To appreciate natural, cultural and human diversity. To be successful in global health work, students must go beyond tolerance of differences to embracing and appreciating different ways of living and interacting. This does not mean that students ignore danger, discomfort, injustice, or harmful cultural practices. However, even when these elements are present, they should be able to identify assets, personal strength and character, beauty, and the richness of historical and cultural traditions.

To be able to take the perspective of others (both other professionals and persons from other cultures or contexts). Cross-cultural experiences wherever they occur offer students the opportunity to see the world and health and well-being from another point of view. The ability to discern the nature and meaning of differences, and to see the value in cultural pluralism, is an important skill for global health.

To be able to compare and contrast systems of care and the social production of health and well-being in different settings. Students should be able to describe and compare and contrast health systems and how they function. Comparative perspectives foster creative problem solving and two-way learning whereby global health endeavors enrich local practice and vice versa.

To translate research into practice. Students should possess the skills to collaborate with partners to identify and use appropriate best practices to plan, implement, and evaluate global health activities that make measurable improvements to well-being.

To practice leadership and effective teamwork. This includes being comfortable and understanding role fluidity, possessing organization, communication, leadership, and conflict resolution skills, as well as skills in problem analysis and problem solving.

To effectively communicate ideas about health and well-being to other professions, community leaders, and the general public. This includes understanding key messages and explaining them with the appropriate level of detail depending on the nature of the encounter, the purpose of the communication, and the kind of background that the listeners may have. It also includes foreign language skills and/or appropriate skills for working effectively with translation.

To optimize the potential of one's scope of practice within the context of a team. This implies operating within the full range of one's scope of practice, without overstepping areas of expertise on the one hand, or failing to operate fully within it on the other. This requires a deep understanding of one's scope of practice and, conversely, its limits and the implications, in terms of ethics and risk, of inappropriate practice. It also involves communicating one's scope to other team members and both respecting the expertise of others and asserting one's own expertise with confidence as a moral obligation.

To be able to articulate shared goals, ethics, and values within diverse teams. Effective interdisciplinary and interprofessional collaboration must be grounded in shared goals, ethics, and values. While these may be implicit in groups that have the same professional formation who have taken the same oath, it may be necessary to be intentional and explicit about shared

goals, ethics, and values within diverse teams. Professionals from all fields should be prepared to be leaders and followers in these articulations, so that the team can come to a common understanding of its goals.

To demonstrate established habits for self-guided, ongoing learning in relation to global health policies, focus regions or countries, and topical areas of interest. Students should identify preferred news sources, journals, professional associations, and cultural resources, and develop the practice of regular reading and engagement so that they can remain current in their profession, in their specific area of focus, and maintain their general awareness of matters important to global health.

Challenges

Consensus about competencies is challenging because of the many frameworks that must be integrated and the tensions that can be associated with working across different professional cultures. A number of additional challenges are present with respect to interprofessional global competencies.

Scopes of practice are changing. As global policy initiatives attempt to address gaps in access to health care and other services through task shifting and other strategies, the scopes of practice for different kinds of professionals and paraprofessionals are changing. How will interprofessional issues be addressed if the scopes of practice are considerably different in different settings and fluid over time?

Interprofessional and interdisciplinary skills are new for both faculty and students. How can faculty members foster development of these skills effectively when they may not have interprofessional or interdisciplinary training themselves? This seems to underscore the need for common curricula, master teachers, and learning networks to help scale up educational capacity. It also may mean that a different educational model is used, where faculty facilitate learning rather than impart knowledge, and where they are open to learning from a younger generation of professionals that may have more interprofessional experience.

Developing and sustaining international engaged learning partnerships is difficult. Global health education requires a steady supply of field learning opportunities for students. As standards are raised, graduate and professional programs will want access to a range of mutually beneficial ongoing partnerships. This is costly to develop and difficult to maintain for many universities, especially for programs that are small, and for public universities that depend on state funding where the logic of financing global work may not be apparent. Partnerships that include education, research and ongoing joint learning will be essential

to ground interdisciplinary and interprofessional education.

Power and hierarchy. Both interprofessional and interdisciplinary dialogues involve learning to speak courageously and listen respectfully across hierarchies and inter-sectionalities related to race, ethnicity, gender, sexual orientation, income, professional status, age, perceived intelligence and ability/disability among other things. Guidelines for interprofessional collaboration to date have not made the importance of the harms of bias or discrimination a prominent issue. The importance of identifying practices to address bias effectively is not included in current frameworks.

ary education efforts, engaged learning programs, and would highlight the importance of offering students the opportunity for comparative and globally contextualized study. Once there is consensus about the importance of these approaches, university programs at all levels will be positioned to translate these interprofessional competencies into successful, measurable components of professional global health education.

For large public universities like UW-Madison, a systematic and intentional focus on interdisciplinary competence at the undergraduate level and interprofessional collaboration for students preparing for the professions, could increase faculty and student

A common guiding document that articulates an interprofessional skills competency domain for graduate global health education and is endorsed by professional organizations and academic leaders would be a catalyst for change in graduate and professional education. It could direct attention toward interdisciplinary education efforts, engaged learning programs, and would highlight the importance of offering students the opportunity for comparative and globally contextualized study. Once there is consensus about the importance of these approaches, university programs at all levels will be positioned to translate these interprofessional competencies into successful, measurable components of professional global health education.

Without an explicit and evidence-based approach, it will be difficult to change these pervasive challenges to interprofessional and interdisciplinary dialogue.

Ground rules for a complex adaptive system. The elements of society that produce health and well-being form a complex adaptive system. Such systems are impacted by emergent paradigm shifts rather than change that is designed and deployed. As we articulate competencies, it is crucial to identify the critical attitudes or principles of action that can create an effective interprofessional culture. While protocols for teamwork, implementation, and other aspects of collaboration might be codified, there may be overriding values that must be in place to go beyond a mechanical process-oriented exercise to real system change.

Next Steps

A common guiding document that articulates an interprofessional skills competency domain for graduate global health education and is endorsed by professional organizations and academic leaders would be a catalyst for change in graduate and professional education. It could direct attention toward interdisciplin-

engagement in innovative and meaningful research and practice aimed at improving health at the local to global levels – providing a global context to address needs and disparities in our home state, as well as the perspectives and skills needed to improve the health and well-being of populations around the world.

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