Transformative learning model and its application to a global master’s program in health and sustainable development


Background: New methods of learning and teaching are critical to prepare professionals with the knowledge, skills, and values that will empower them to act as change agents to promote human rights, justice, equity, and peace.

Structure/Method/Design: This paper examines existing literature on student-centered learning, cooperative learning, autonomous learning, transformative learning, and competency-based education. The focus is on graduate-level curricula in global health and sustainable development that employ transformative learning theory to deliver competencies. Emphasis is placed on 1) the role of students in transformative learning; 2) the adjustments required of institutions to facilitate the implementation of the transformative learning model; 3) how instructors can create and construct the conditions under which transformative learning occurs; and 4) the key elements needed for the transformation of a student into an ethical leader that promotes justice, equity, and human rights.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): This paper proposes a model for graduate education based on Mezirow’s definition of transformative learning: that is, the process of using a prior experience and interpretation to construct a new or revised interpretation of the meaning of one’s experience in order to guide future action. An effective implementation of this model begins with establishing core curriculum competencies, and implementing student selection processes that consider students’ prior work experience, demonstrated leadership, strong ethics and values, and commitment to change. The delivery of the competencies is based on “real-time teaching” that promotes prolonged exposure to the global-local link to problems and opportunities on multiple campuses and in several communities around the globe. This model redefines the new classroom, provides insight into the institutional changes, and establishes guidelines for capacity building for faculty and support staff.

Summary/Conclusion: The proposed model combines competency-based education and transformative learning theory to prepare graduates to tackle immediate challenges facing their countries in the areas of global health and sustainable development as well as bring about a world of greater justice, equity, and human rights for all.

Impact of the NIH Fogarty International Clinical Research Program on trainees’ career trajectories: Results from a 2013 impact evaluation

A. Smart, M. Blevins, T. Warner, C. Len, M.H. Martin, S. Vermund, D.C. Heimburger

Background: Between 2004 and 2012, the NIH Fogarty International Clinical Research Scholars and Fellows (FICRS-F) Program offered 1-year mentored clinical research training experiences in low- and middle-income countries (LMICs) for doctoral students and postdoctoral professionals in health-related fields from the United States and LMICs. Through June 2012, the program supported 436 scholars (doctoral trainees) and 122 fellows (postdoctoral professionals) in 1-year mentored clinical research training experiences at 61 NIH-funded research sites in 27 countries.

With former scholars and fellows transitioning into the next phases of their careers, we evaluated the impact that the FICRS-F Program has had on the professional choices of a subset of program alumni.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Not applicable

Summary/Conclusion: We achieved a response rate of 94%, with inputs from 38 US and 34 international scholars and 15 US and 7 international fellows who participated in the program. Alumni considered the FICRS-F Program very influential on their career choices; scores across all groups ranged from 80 to 86. U.S. fellows reported the strongest influence on all four aspects of the trainees’ professional development: competitiveness for career advancements or additional training; decisions to accept a position, residency, or fellowship; choice of any posttraining specialty or topic area of focus; and choice of institution(s) for study, work, or training.

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Structure/Method/Design: We used REDCap Survey™ to administer an electronic questionnaire of 100 FICRS-F alumni. A representative subset of all FICRS-F participants was selected to maximize the response rate. The selection was weighted such that the combination of program and year should have a similar distribution to the entire program. The evaluation included questions on accomplishments, ongoing collaborations, career influences, ongoing research, and interest in global health. We used a slider scale (0 = none to 100 = extremely) to measure the influence of the training on four aspects of the trainees’ professional development: competitiveness for career advancements or additional training; decisions to accept a position, residency, or fellowship; choice of any posttraining specialty or topic area of focus; and choice of institution(s) for study, work, or training.

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The concentrated, mentored clinical research training in global health settings provided by the FICRS-F Program exerted significant influence on the professional career trajectories of its alumni, especially those who participated as postdoctoral fellows. The FICRS-F
Program has had a major impact in building the next generation of global health leaders. Findings are limited by the absence of a comparison group.

Midwest Consortium of Global Child Health Educators: Local collaboration to strengthen global education

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Background: The mission of the Midwest Consortium of Global Child Health Educators is to advance the science and implementation of global child health training through regional multi-institutional collaboration and scholarly output.

Structure/Method/Design: In 2009, global child health educators from seven Midwest pediatric residency training programs founded the Consortium in order to standardize and synergize the various global health educational efforts that were occurring at each respective institution. The Consortium meets annually, and facilitates additional communication through collaborative workshops, publications, and presentations.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): The Consortium is comprised of pediatric residency global health educators from the following institutions: Cincinnati Children’s Hospital, Mayo Clinic College of Medicine, Medical College of Wisconsin, Northwestern University, Rainbow Babies and Children’s Hospital, University of Minnesota, and University of Wisconsin.

Summary/Conclusion: The following accomplishments have been achieved through collaborative efforts: (1) competency-based objectives were adopted at each institution; (2) knowledge assessments were developed; (3) curriculum resources were shared; (4) global health workshops were led by consortium members (2010-2013); (5) consortium members assumed national leadership roles pertaining to global health education, including within the Association of Pediatric Program Directors Global Child Health Educators Association; (6) a shared article was published and two further have been submitted; (7) simulation curriculum and facilitator training were developed for implementation and evaluation at each program; (8) global health elective resources and partner sites were developed and shared; and (9) tools for evaluation of global health trainees are being developed. Despite the challenges of coordinating multi-institutional projects and schedules, we have found that regional collaboration improved the capacity of each respective institution to develop innovative educational tools, establish standards for curriculum, and optimize global health education in pediatric residency training. This model has the potential to be highly effective and warrants regional replication amongst other institutions that are committed to advancing the field of global health.

Preparing locally to learn globally: The development of a joint UME and GME preparatory curriculum for global health electives

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Background: Recent studies on trends in US medical schools’ global health curriculum found less than 30% of programs adequately prepare students for their overseas experience. To align with the AAMC’s Guidelines for Premedical and Medical Students Providing Patient Care During Clinical Experiences Abroad (2011), the Medical College of Wisconsin (MCW) developed a joint undergraduate and graduate medical education (UME and GME) preparatory curriculum for trainees seeking to participate in global health electives.

Structure/Method/Design: An interdisciplinary group of MCW faculty was formed in 2012 to determine the essentials of prepreparation preparation for medical trainees. Based on a literature review, discussion with national colleagues and local expert consensus, 2.5 hours of training materials were developed with the following components: 1) two 20-minute online preparation modules ("What to consider with international travel health" and "Global health elective preparation"); 2) an MCW Guide for Global Engagement; and 3) an in-person 1.5-hour seminar on the ethics of short-term global health electives jointly for UME and GME trainees. The curriculum was piloted on MCW UME and GME trainees in spring 2013 and some modifications were made. UME and GME administrative approval was subsequently obtained to incorporate the curriculum for all MCW trainees participating in global rotations, and institutional review board approval was secured for a longitudinal evaluation of the curriculum. Data will be gathered through annual surveys (2013-2017) to assess whether the curriculum enhances trainee preparation for global electives.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Curriculum development was funded through an institutional grant from the Medical College of Wisconsin. Institutional collaborative partners included faculty and administrative leaders from Bioethics, Medicine, Pediatrics, International Travel Clinic, and Global Health Program.

Summary/Conclusion: The largest challenge is for trainees to attend the in-person ethics seminar due to schedule conflicts; therefore, an alternative online documentary viewing is offered. A review of the literature does not reveal similar combined UME and GME preparatory curriculum that is provided in conjunction with faculty mentorship to cater to individual training requirements. Thus, this is a potentially scalable model for other programs attempting to prepare large groups of trainees for global engagement.

Are we practicing what we teach? Ethical guidelines and student global health research experiences

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Background: Increasing numbers of students from high income countries (HIC) are participating in global health research in low and middle-income countries (LMICs). Current best practices exhort students to define objectives and procedures in collaboration with LMIC partners, seek local IRB approval, receive research ethics training, and disseminate results locally, among other recommendations. However, compliance with such guidelines is not monitored or widely known.