

Options for inter-disciplinary research training – short courses versus collaborative programs in global health

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Introduction & Rationale

Beyond the usual theoretical and methodological requirements of research training, specific training needs arise due to the complexities of doing health research globally. The latter include: the wicked nature of global health problems; the marked difference in low and middle income country (LMIC) contexts; and the more elaborate partnership arrangements among stakeholders with stark differences in available resources.

Institutions of higher education (HE) institutions have responded to the demand for additional training in various ways. Short courses, can be open to both existing students and those wishing continuing education relevant to competencies in global health research (Cole et al. 2011). Intramural cross-departmental programs can focus primarily on graduate students at one HE institution. Both options aim to provide opportunities for learning, mentoring and cross-disciplinary collaboration, with different strengths and weaknesses. Unfortunately, little comparative evaluation research is available to inform HE institutions' choices.

This paper draws on research following up those involved in short courses (Godoy-Paiz et al 2011) and program evaluation work on a collaborative doctoral program (Nasserie et al 2014). After laying out key aspects of each program, methods and results, the paper compares the options.

Cross university- research institute short courses

Over seven years (2004-10), different LMIC and Canadian universities and research training institutes partnered with the Canadian Coalition for Global Health Research (CCGHR – a cross Canadian university coalition, www.ccghr.ca/) to co-sponsored “Summer Institutes for New Global Health Researchers” (SIs). Funding was raised from research funders and international health organizations (CDN\$ 100-200k per year) and curriculum developed in months before the first SI, with an annual cycle thereafter. SIs required applications from Canadian-LMIC pairs (or dyads) of newer researchers to global health (< 5 years experience) that were collaborating, or planned to collaborate on a research project. After a preparatory phase of joint responses to a set of questions virtually, face-to-face (F2F) residential sessions included didactic sessions (partnerships, knowledge translation, mentorship), field visits to research sites, and mentorship of dyads by a more experienced researcher, or “facilitator”.

In 2011, we conducted a sequential, mixed-methods exploratory study (with research ethics board approval) among SI alumni and facilitators (n=190). The first phase consisted of an online questionnaire (consented response n = 62) and the second, a set of semi-structured interviews (n = 39). Interviews were analyzed in an iterative process to identify emergent themes.

The vast majority of alumni were satisfied with their SI experience, citing the open, non-competitive atmosphere conducive to learning. SIs had a positive impact on all but a few participants in their knowledge and capacity in global health research, and in their career trajectories. The “dyad” format facilitated ongoing and meaningful collaborations between new researchers, and a notable number of new collaborations arose through networking at and after the F2F sessions. Translation of knowledge to

action also occurred, (joint presentations, grant applications and publications among SI participants) often long after the F2F sessions.

Intramural collaborative PhD program

The Collaborative PhD Program in Global Health grew out of joint interest among faculty and doctoral students. It was designed over three years to: enable students to develop an understanding of global health in terms of the interactions between local, regional and national forces, processes and conditions; grapple with complex health-related policymaking by a range of international, national, and local actors; and provide an intellectual community that facilitates interactions between doctoral students and faculty with a shared interest in adapting frameworks, partnerships and approaches to a global context.

Sponsored by the School of Public Health (no new funds) and approved in 2008, the program (<http://www.dlsph.utoronto.ca/degree-information/collaborative-doctoral-program-global-health>) requires: completion of a core course and an elective course outside the student's home department, participation in a global health research seminar for three terms, and defence of a research thesis in global health. Of 31 doctoral students admitted from 11 home programs, five have graduated, 19 continue and 8 have had to withdraw due to personal or program constraints. Monitoring of program quality has included feedback on the doctoral seminar (7 terms), annual reviews with students and program committee members, and exit questionnaires and interviews with graduates.

The doctoral seminar received high ratings (4.7/5.0 overall mean), particularly for resource materials (mean 5/5) and contribution to students' learning (mean 4.8/5). Key themes include students' appreciation of the opportunity to connect with faculty members and other students from a wide range of disciplinary backgrounds, to discuss diverse topics and to find new opportunities for collaboration. Students networked with others and broadened global health contacts. Students would appreciate more formal mentorship beyond their supervisory committee members. Faculty members grapple with expansion and adequate support for program enriching events and international student support.

Discussion – Comparative reflections

Strengths of the SI short course include the short turnaround for development, shared in-kind investment by volunteer instructors, and a rich mix of graduate students and emerging researchers across universities and institutes. Collaborative Program student participation is formally recognized, it has built support among faculty and students across disciplinary programs, and it provides excellent professional skills development. Drawbacks of the short course include the lack of formal course credit, wide heterogeneity in methods training among students, short time period for extensive training, and cost (primarily travel & accommodation) with fundraising challenges. The Collaborative program faces funding challenges along with additional student workload and faculty responsibilities. These findings should inform decision-making by IHE planners.

References

Cole DC, Davison C, Hanson L, Jackson SF, Page A, Lencuch R. Kakuma R. Being global in public health practice and research: Complementary competencies are needed. *Can J Public Health* 2011; 102(5):394-97

Godoy-Paiz P, Cole DC, Lenters L, Kakuma R, Cole NEP, Noisel N. Canadian Coalition for Global Health Research Summer Institute (2004-2010) Participant Follow-Up Study. Report to CIHR-Institute for Population and Public Health. August 2011. 88p

Nasserie T, Cole DC, Birn AE, et al. The University of Toronto Collaborative Program in Global Health (CPGH): Cross-Disciplinary Support and Trans-Disciplinary Learning. Poster at Canadian Society for Epidemiology and Biostatistics National Student Conference. McMaster University, May 9 & May 10, 2014.