

The I-TECH Approach to Faculty Development: Models for Health-Professional Schools

Background

The International Training and Education Center for Health (I-TECH) is a PEPFAR implementing partner that operates from headquarters at the University of Washington (UW), in close partnership with the University of California, San Francisco (UCSF). I-TECH's overarching strategy under PEPFAR is to strengthen ministries of health and pre-service academic institutions to build strong, sustainable health systems that are able to deliver high-quality health services. I-TECH accomplishes this by working closely with local institutions to build the capacity of their staff and to develop policies and systems to ensure sustainable programs.

I-TECH supports 10 locally-registered offices that link pre-service education institutions in more than a dozen countries to technical support from UW, UCSF, and other universities in the United States. I-TECH assists its partners to strengthen the quality and relevance of pre-service education for a range of health care professionals including physicians, nurses, social workers, clinical officers, laboratory technicians, and psychologists. Capacity-building activities reflect the multifaceted, long-term, participatory nature of pre-service reform, and may include faculty development, curriculum enhancement or reform, strategies for student and faculty retention, and strengthening clinical teaching. I-TECH's portfolio in this regard includes programs in Botswana, Ethiopia, Guyana, Haiti, India, Mozambique, Namibia, and Tanzania.

This paper focuses on the faculty development component of pre-service strengthening.

The Need for Faculty Development in Pre-service Training Institutions

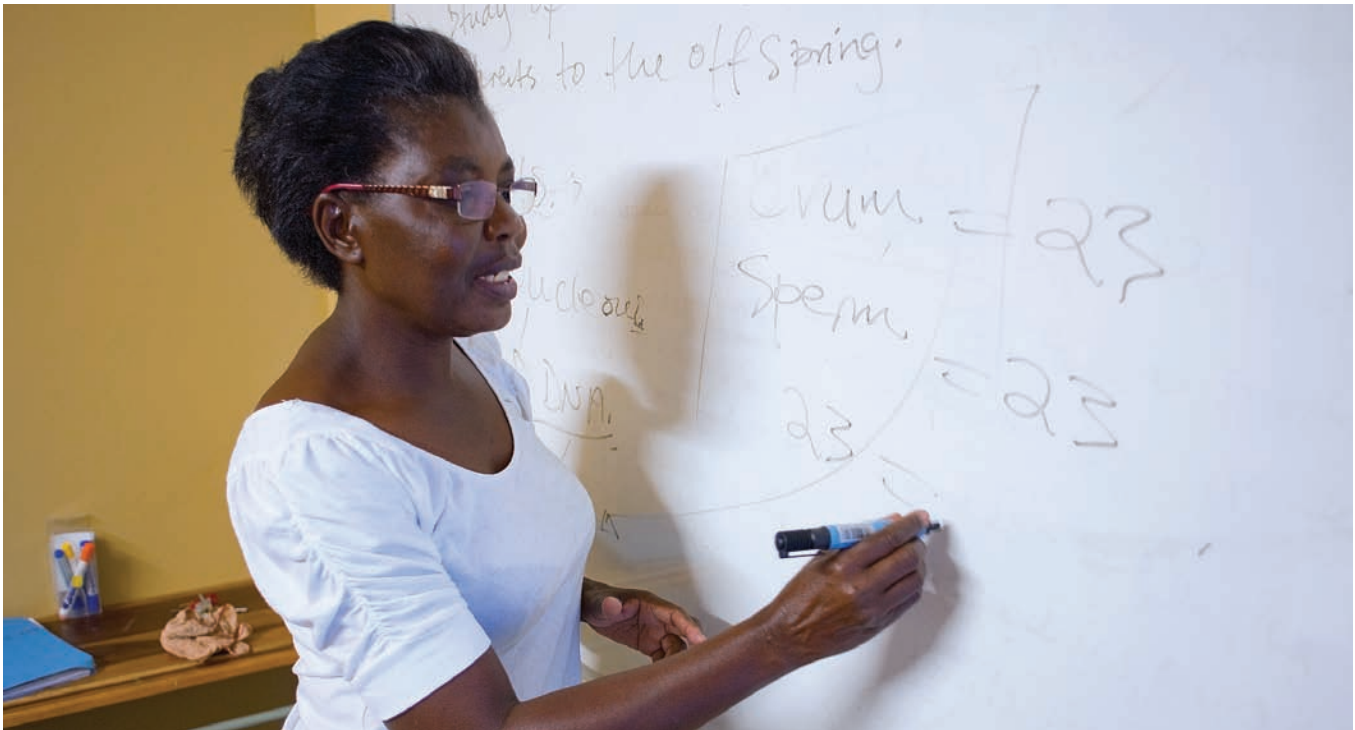
Whether in well-resourced or resource-limited settings, faculty are at the heart of quality teaching. Ca-



pable faculty prepare students to deliver high-quality care and treatment services and can inspire and nurture students toward mastery and personal growth. I-TECH's faculty-development activities contribute to its overall mission to build a skilled health care workforce and well-organized national health care systems by strengthening educational institutions and faculty in the critical role of training their countries' future health care workers.

Health-professional schools in resource-limited settings often face numerous constraints. They may be underfunded; lack resources for salaries, infrastructure, media, and equipment; or have outdated, non-standardized curricula. Faculty are often under-trained in educational techniques and/or not up to date on current care and treatment guidelines and protocols. In many settings where I-TECH works, faculty face challenges such as:

- Limited training and/or experience in curriculum design, lesson planning, and/or student performance evaluation.
- Limited training in the skills necessary for excellence in teaching beyond an advanced degree or specialization in a clinical content area.



- Conflicting time demands in balancing teaching and other faculty responsibilities with clinical practice.
- Non-existent, out-of-date, or very general curricula/syllabi.
- Lack of up-to-date teaching materials, textbooks, references, or other resources.
- Lack of experience in defining basic knowledge and/or competencies required by students.
- Poor remuneration and a lack of opportunities for advancement.
- Limited access to computers, projectors, electricity, and other material resources that support a classroom environment that is conducive to teaching and learning.
- High student-to-faculty ratios.

In this context, strengthening the capacity of faculty to be better educators is crucial to helping them succeed as facilitators of effective and efficient learning, to meet accreditation requirements, to ensure ongoing quality improvement of educational programs, and, most importantly, for ensuring that students are adequately prepared to address contemporary health and patient-care issues.

This document presents a set of competencies for faculty that I-TECH believes are necessary for a health

care worker–training institution to deliver educational programs that prepare health care workers to provide quality prevention, care, and treatment services.

Desired Competencies for Health-Professional School Faculty

I-TECH has developed a set of core competencies that all health professional–training institutions need in order to provide effective education, regardless of discipline or setting. However, because the structure and staffing of institutions differ, all of these competencies might not be applicable to each individual faculty person. For example, some faculty might be involved in curriculum development, while others might focus exclusively on teaching. Nonetheless, this set of competencies should exist within the institution.

Beyond setting standards for faculty and thus institutional performance, these competencies can be used programmatically, such as to conduct a needs assessment of institutional strengths and gaps, design programmatic interventions, and/or evaluate program implementation.

TABLE 1: I-TECH CORE COMPETENCIES FOR HEALTH-PROFESSIONAL SCHOOL FACULTY**Core competency 1: Designs courses****Subcompetencies:**

1. Bases course design and implementation decisions on educational theory and research, and awareness of wider educational program and accreditation standards
2. Uses a course design process that includes:
 - assessing needs
 - writing learning objectives
 - mapping objectives to specific competencies
 - identifying teaching, learning, and resource materials
 - designing learning activities based on the knowledge-, skill-, and attitudinal-learning objectives to be achieved
 - organizing and sequencing content and activities in a course
 - developing evaluation strategies
3. Develops a syllabus that clearly communicates expectations for students

Core competency 2: Facilitates learning**Subcompetencies:**

1. Develops lesson plans from curriculum and/or syllabus
2. Manages the classroom using clear rules and norms
3. Establishes a nonjudgmental, supportive learning environment
4. Uses a variety of teaching methods and strategies appropriate to learners' needs, curriculum objectives, content, and context
5. Appropriately uses audiovisual or information technologies when available to support the teaching process
6. Asks questions and leads discussions that promote learning (e.g., clarification questions, probes, Socratic questions, reflective questions)
7. Creates opportunities for learners to develop critical thinking and reasoning skills
8. Stimulates independent learning
9. Provides timely, constructive, and thoughtful feedback to learners
10. Demonstrates awareness of gender and cultural influences on teaching and learning
11. Demonstrates enthusiasm for teaching, learning, and the health profession that inspires and motivates students
12. Advocates for students' needs within the administration

Core competency 3: Uses assessment and evaluation strategies**Subcompetencies:**

1. Designs and uses tools for assessing and evaluating student learning in the cognitive, psychomotor, and affective domains
2. Uses assessment and evaluation data to enhance the teaching-learning process

Core competency 4: Maintains professional expertise**Subcompetencies**

1. Maintains the professional knowledge and clinical skills needed to help learners prepare for contemporary practice (content expertise)
2. Engages in self-reflection and continued learning to improve teaching practices
3. Balances the teaching, scholarship, and service demands inherent in the role of educator, clinician, and member of an academic institution



Faculty-Development Programs

A comprehensive approach to faculty development typically involves multiple activities—from faculty involvement in the revision of a school’s curriculum for its health-professional students, to skills-building workshops in teaching methods, to strengthening the design and delivery of clinical teaching. Institutional change in pre-service curricula and the role of faculty cannot occur without broad involvement and buy-in from key stakeholders. Advocacy and coordinated planning with partners, relevant ministries, and health-professional training institutions is, therefore, critical to I-TECH’s faculty-development work.

Table 2 (below) presents an inventory of the activities carried out across the I-TECH network to address specific faculty competencies. The scope and sequence of activities implemented will vary, depending upon the program’s specific needs and objectives.

TABLE 2: SUMMARY OF I-TECH’S FACULTY-DEVELOPMENT ACTIVITIES BY COMPETENCY AND COUNTRY

	Haiti	Mozambique	Namibia	Tanzania
Competency 1: Designs Curriculum				
Involvement of faculty in planning pre-service strengthening initiative	X	planned	X	X
Participatory process with faculty to define competencies, learning objectives, and learning methods	X	X	X	X
Training in syllabus use and writing	X	X		X
Integrating classroom-based teaching with practica				
Involvement of faculty in planning pre-service strengthening initiative		planned		X
Competency 2: Facilitates Learning				
Training in PowerPoint and computer skills	X	X	X	X
Training in basic teaching skills: learning styles; giving and receiving feedback; diverse teaching methods including lecture, case study, and role play	X	X	X	X
Training in lesson planning	X	X		X
Teaching in the clinic setting		planned		
Mentor visits to observe the use of HIV teaching materials and faculty facilitation as well as to provide feedback	X	planned		X
Training in conducting physical exams, including HIV-specific exams	planned	planned	X	planned
Competency 3: Uses Assessment and Evaluation Strategies				
Training in the design and use of tools for assessing and evaluating student learning in the cognitive, psychomotor, and affective domains	planned	planned	planned	planned
Orientation on standard student assessment tools		planned	planned	planned
Use of peer and/or student evaluation to improve teaching	X	planned		
Competency 4: Maintains Professional Expertise				
Enhance faculty knowledge in new content areas	X	planned	X	X
Training in HIV basics	X	planned	X	X
Provide overviews of other national and international HIV information sources for ongoing professional development		planned	X	
Faculty exchanges and consultations via videoconference		planned	planned	



Future Directions for I-TECH's Faculty-Development Assistance

As I-TECH's work in pre-service grows, we are continuing to refine and expand our approach to faculty development. New areas of focus include:

- Academic twinning as a sustained approach to faculty development—building long-term relationships between faculty at “twinned” institutions in the United States and resource-limited settings.
- Strengthening faculty members' clinical teaching skills—applying I-TECH's experience in clinical mentoring to the pre-service context and including clinical preceptors in faculty-development activities.
- Expanding the scope of I-TECH's efforts beyond faculty in clinical training programs—reaching out to allied health professions, including laboratory science and public health, and addressing faculty-development issues unique to these cadres (e.g., developing skills in research methods with a focus on publication, and supporting student theses for public health faculty).

Table 3 presents a summary of future faculty-development activities that will be undertaken in the I-TECH network. Note that pre-service initiatives are often multiyear, as they involve revision of multiyear curricula; therefore, corresponding faculty-development activities can span several years as well.

Pre-service education is vital to ensuring an adequate and well-trained health care workforce. Skilled, confident, and effective pre-service faculty provide the foundation for developing and sustaining skilled health care workers in decades to come.



TABLE 3: FUTURE FACULTY-DEVELOPMENT ACTIVITIES, BY COMPETENCY

Competency 1: Designs Curriculum

- Training working groups involved in revising or adapting curricula in instructional design
- Building faculty capacity to ensure that learning objectives are integrated across classroom and clinical settings

Competency 2: Facilitates Learning

- Facilitating discussions on best practices in teaching using faculty-teaching diaries
- Facilitating discussions between classroom and clinical instructors in linking theoretical knowledge to student practice

Competency 3: Uses Assessment and Evaluation Strategies

- Mentoring visits to support the development and use of diverse student evaluation strategies
- Facilitating exchanges between classroom faculty and clinical faculty on diverse health topics
- Training in the use of electronic-resource libraries to remain up to date and to improve teaching
- Supporting faculty to mobilize resources for multimedia teaching tools and to maintain these tools so they remain available to faculty over time



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I-TECH is the International Training and Education Center for Health. I-TECH was established in 2002 by US Health Resources and Services Administration (HRSA) in collaboration with (CDC) Global AIDS Program. For more information about faculty development, please contact Stacey H. Lissit, MPH, MSW; Director of Training at slissit@u.washington.edu. For more information about I-TECH's activities and the countries in which we work, visit www.go2itech.org.