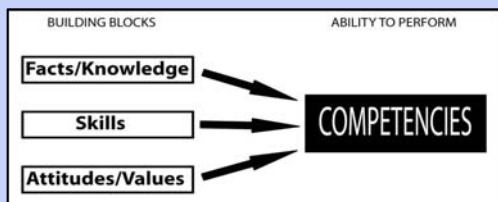


Competencies for Interdisciplinary Public Health Research

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Introduction

- Interdisciplinary studies are essential to the development and application of new knowledge in public health, and effective training of new researchers requires that interdisciplinary training be competency-based.



- Identifying the essential competencies that enable a scholar to move beyond disciplinary boundaries—understanding the cluster of related knowledge, skills, and attitudes that correlate with performance—will allow for the training of a new generation of researchers competent to work in an interdisciplinary health environment.

Objectives

- To evaluate ways in which scholars can develop competencies for training public health researchers.
- To identify competencies for interdisciplinary public health research.

Methods

- From an established definition of interdisciplinary research, a preliminary set of candidate competencies was developed from the expert opinion of key informants and a literature review.
- A Delphi process with a panel of 30 interdisciplinary experts moved from candidate competencies to a set of competencies that can be used to guide health education and learning experiences.

The scholar who has completed doctoral work with an emphasis on interdisciplinary research is able to:

Conduct Research

- Use theories and methods of multiple disciplines in developing integrated theoretical and research frameworks.
- Integrate concepts and methods from multiple disciplines in designing interdisciplinary research protocols.
- Investigate hypotheses through interdisciplinary research.
- Draft funding proposals for interdisciplinary research programs in partnership with scholars from other disciplines.
- Disseminate interdisciplinary research results both within and outside his or her discipline.

Communicate

- Advocate interdisciplinary research in developing initiatives within a substantive area of study.
- Express respect for the perspectives of other disciplines.
- Read journals outside of his or her discipline.
- Communicate regularly with scholars from multiple disciplines.
- Share research from his or her discipline in language meaningful to an interdisciplinary team.
- Modify his or her own work or research agenda as a result of interactions with colleagues from fields other than his or her own.
- Present interdisciplinary research at venues representing more than one discipline.

Interact with Others

- Engage colleagues from other disciplines to gain their perspectives on research problems.
- Interact in training exercises with scholars from other disciplines.
- Attend scholarly presentations by members of other disciplines.
- Collaborate respectfully and equitably with scholars from other disciplines to develop interdisciplinary research frameworks.
- Author publications with scholars from other disciplines.

Results

- These competencies (center panel) describe the activities that can be undertaken by a scholar trained to participate in interdisciplinary research.

Discussion

- Competency statements written for curriculum, training, or development purposes can lead to the building of successful, well balanced interdisciplinary research programs.
- Using these competencies, training programs can organize opportunities for students to master the combination of knowledge, skills, and attitudes essential to successful performance.



- While the application of these competencies may be most immediate in training programs, they may also have implications for the development of research agendas and career development programs.

Conclusions

- Given the stated interest in interdisciplinary health scholarship, it is essential to develop a generation of scholars who are prepared to work in this challenging environment.
- With these competencies identified, it may be possible to plan learning opportunities and develop curricula to enhance the interdisciplinary abilities of trainees and to evaluate those abilities.