Chapter 10

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ABSTRACT

A description of how interdisciplinary collaboration can take place is presented to frame this chapter on the risks and barriers to interdisciplinary collaboration. Beginning with a working definition of interdisciplinary collaboration, defined as jointly co-authoring a paper, academic project, or grant with somebody from another discipline or jointly creating a program that contains courses from the joint collaborators’ disciplines, this chapter reviews recommendations for creating and supporting successful interdisciplinary collaborations. Included are ten simple rules for successful cross-disciplinary collaborations put together by a group of researchers in the sciences, who more often participate in interdisciplinary collaborations than do their counterparts in the humanities and social sciences. The chapter closes with the case of issues with interdisciplinary collaboration in library and information science, an area that is truly interdisciplinary, yet often becomes the object of turf battles with other academic areas. This case provides a true-life look at just how attempts at interdisciplinary collaboration that should work, can easily backfire.

UNDERSTANDING COLLABORATION

Collaboration is defined as “working jointly with others or together especially in an intellectual endeavor” (Merriam-Webster, 2017), thus interdisciplinary collaboration could be defined as working jointly with other disciplines in an intellectual endeavor. Because Fullan (1993) made the statement that “Collaboration is one of the most misunderstood concepts in the educational change business”, Wasonga, Rari, and Wanzare (2012) conducted a review of the literature that revealed quite a variety of definitions of collaboration such as

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(a) A relationship involving equal partners working on ongoing basis to achieve mutually beneficial goals (Russell and Flynn, 1992); (b) sharing resources to reach a common goal (Welch, 1998); (c) the ability to work cooperatively together on a task over time to mutually agreed-upon goals (Lafler and McFadhen, 2001); and (d) a partnership characterized by mutual or reciprocal benefit (Ponticell, 1990) (p. 252).

Disciplines form borders that are made up of their assumptions, theories, tools, techniques, and the methods used to organize their academic work are embedded in the degree offerings of that discipline. These borders serve to differentiate the work of one discipline from another. When these boundaries are crossed, academics are working in an indisciplinary fashion (Pirrie, et al., 1998, as cited in Towsend, T, Pisapia, J., & Razzaq, J., 2015, p. 660). The National Academy for Sciences (2004) defines interdisciplinarity in this way:

Interdisciplinary research (IDR) is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice (Towsend, et al., 2015, p. 660).

To take this one step further, the United States Department of Health and Human Services (HHS) Office of Research Integrity suggests that the nature of collaboration is evolving to include not just departments, disciplines, and institutions but also academic, government, and private industry that encourages “the development of innovative and groundbreaking strategies in investigating increasingly novel, complex and convoluted areas.” So, we don’t just have interdisciplinarity collaboration involved in research but also inter-institutional or inter-organizational collaboration.

For the purposes of this chapter, interdisciplinary collaboration will be defined as jointly co-authoring a paper, academic project, or grant with somebody from another discipline or jointly creating a program that contains courses from the joint collaborators’ disciplines. However, all of the definitions discovered by Wasonga, et al. (2012) could and should be characteristics of a successful interdisciplinary academic collaboration. Furthermore, in interdisciplinary research and collaboration there is assumption of an interdependence and sharing because the theories, perspectives, tools, and findings of one discipline cannot solve or illuminate the problem it is trying to solve so there is a sharing of purpose and methods, and development of understanding of the core principles of the contributing disciplines (Townsend, et al., 2015, p. 660).

**BENEFITS TO INTERDISCIPLINARY COLLABORATION**

The HHS website provides information to justify collaboration and highlights the number of factors that are driving the push toward increased collaboration which are:

- Preferences by funding sources
- Demand for expanded capacity
- Division of labor
- Ability to share resources
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