

Benefits of Supporting Interdisciplinary Learning and Research: A University of Manitoba Perspective

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The University of Manitoba

The University of Manitoba is a member of the U15 group of Canadian research-intensive universities and the only research-intensive university in the Province of Manitoba. The population of the Province of Manitoba is about 1.3 million people; 50% of that population lives within a 20 km radius of Winnipeg, which is home to the University of Manitoba. The University is a publicly-funded institution with nearly 30,000 students, 3,800 of which are graduate students. Although the University was created in 1877, the Faculty of Graduate Studies wasn't created until 1947 (67 years ago). Over the initial years there was a proliferation of discipline-based master's and doctoral programs. There are 78 departments/units at the University that offer graduate programs; all offer a master's program but only 60% have doctoral programs.

The “Tribe” Mentality

Those of us pursuing graduate studies in the 1980's know all too well that we were educated in “silos”—discipline-specific departments. Angela Brew (2008) follows Becher's idea and likens the disciplinary “silos” to “tribes”—each with its own tradition and culture. Brew (2008) notes, “the tribe becomes self-sustaining with a relatively distinct academic, social and cultural identity.” She goes on to assert “students are socialized into the culture in order to be accepted into the tribe.” Graduate deans are well aware of the cultural diversity and norms across an institution's graduate programs. While this culture is still common, many graduate schools (including the University of Manitoba) have facilitated interdisciplinary studies. The literature uses two other terms to refer to interdisciplinarity, *viz.*, transdisciplinarity and multidisciplinarity—while there are more than nuances between these terms, interdisciplinarity is probably the best term.

Why Interdisciplinary Studies?

The need for interdisciplinary studies is obvious. Many of today's research topics are much broader than a single discipline, for example, human rights, material science, or medical research. While epidemiologists argue over the merits of traditional mammography, physicists and electrical engineers are working with oncologists to develop new techniques to differentiate breast tissue. While some of these interdisciplinary studies have given rise to new “disciplines,” (such as bio-medical engineering in the latter example), many still remain as interdisciplinary studies.

Interdisciplinary Studies at The University of Manitoba

Of the 3,800 students enrolled in graduate studies at the University of Manitoba, approximately 50 are enrolled in an individual interdisciplinary (master's or doctoral) program, known as an “IIP.” An IIP allows a student to pursue research that does not fit within a traditional

“silo” or “tribe.” To formally enroll in an interdisciplinary program (either master’s or doctoral), the student’s proposed program of study must span at least two departments and the proposed program of study must not be possible under any one of the associated department’s supplemental regulations. To facilitate the administration of an interdisciplinary student’s program, s/he is assigned a home department—typically the home department of the primary advisor. Since co-advisors are common for interdisciplinary students, one of the co-advisors is designated as the primary advisor. IIP students at one time were administered at the faculty level as opposed to the departmental level. Unfortunately, not associating an IIP student with a department often resulted in these students being overlooked for departmental-based awards, which constitute the majority of graduate awards at the University of Manitoba. There was a certain irony associated with overlooking these students as the GPA requirement for admission to an IIP program is (with only a few exceptions) higher than that required for admission to a non-interdisciplinary program.

An IIP student forms a “bridge” between the co-advisors; this facilitates a sharing of discipline-specific perspectives that benefits the student and the advisors. There is a richness that results from this “cross-fertilization” of perspectives that can lead to new approaches and perspectives to problems. In some cases an IIP student is part of a large team of investigators tackling a significant problem from a variety of perspectives. The payoff for an institution can be significant when there is a major breakthrough.

References

Brew, A. (2008). Disciplinary and interdisciplinary affiliations of experienced researchers. *Higher Education*. 56: 423-438.