Teaching Creativity Across Disciplines in Ontario Universities: Preliminary Results – July 2012

Research Questions

- How do instructors in different disciplines at various Ontario universities define, value and teach creativity?
- Do the answers to these questions vary across disciplines? institutions?

Methodology

- Data was collected via an electronic survey sent to the email addresses of approximately 6700 full-time faculty members at eight Ontario universities.
- The universities which participated in the survey were selected by the research team as representative of the various sizes and types of institutions in the province (i.e., Medical Doctoral, Comprehensive, Primarily Undergraduate).¹ OCAD University was also selected to participate due to its institutional focus on creativity.
- The survey contained a mixture of forced-choice and open-ended questions.
- 614 valid responses² (response rate = 9.29%)

¹ Institution type is recorded as categorized in the Maclean's Magazine Annual University Rankings.

² A valid response is a submitted survey which recorded participant consent, institution, and discipline. Responses that did not specify these qualities were not used in the analysis of the results.

Respondents

Breakdown	by	Institution:

McMaster University:	N = 157 (25.6% of responses)
OCAD University:	N = 17 (2.8%)
Queen's University:	N = 96 (15.6%)
Trent University:	N = 32 (5.2%)
University of Guelph:	N = 78 (12.7%)
University of Ontario Institute of Technology:	N = 14 (2.3%)
University of Waterloo:	N = 105 (17.1%)
University of Western Ontario:	N = 115 (18.7%)

Breakdown by Institution Type³:

Medical Doctoral:	N = 368 (59.9%)
Comprehensive:	N = 183 (29.8%)
Primarily Undergraduate:	N = 63 (10.3%)

Breakdown by Discipline:

Business:	N = 33 (5.4%)
Engineering:	N = 64 (10.4%)
Art/Design:	N = 37 (6.0%)
Health Science:	N = 159 (25.9%)
Humanities:	N = 81 (13.2%)
Science:	N = 141 (23.0%)
Social Science:	N = 74 (12.1%)
Other ⁴ :	N = 25 (4.1%)

Breakdown by Gender:

Female:	N = 261 (42.5%)
Male:	N = 335 (56.1%)
Transgendered:	N = 1 (0.2%)
Did not respond:	N = 17 (2.8%)

Breakdown by Instructional Experience in Higher Education:

0 – 5 years:	N = 75 (12.2%)
6 – 10 years:	N = 117 (19.1%)
11 – 15 years:	N = 120 (19.5%)
16 – 20 years:	N = 72 (11.7%)
21+ years:	N = 217 (35.3%)
Did not respond:	N = 13 (2.1%)

³ OCAD University is not included in the Maclean's Rankings categorization; the responses of respondents identifying as OCAD faculty were not included in "Institution Type" analyses.

⁴ The "Other" category includes respondents who teach in education, law, and interdisciplinary programs.

Key Findings

Defining Creativity

- Responses to a multiple-selection question asking participants what factors are important to creativity in their fields indicated that some factors are seen as important to creativity across disciplines, such as the need to challenge assumptions or generate new/novel ideas.
- Other qualities were valued differently across different disciplines. For example, "innovation" was valued more by Science, Health Science, and Engineering instructors, while "expressiveness" was valued by those teaching in Art/Design, Humanities, and Social Sciences.
- No significant differences were displayed between institutions or institution types.

Valuing Creativity

- Instructors from all disciplines indicated that creativity was important to their field, with no major variance across disciplines.
 - Average Ranking: 4.22/5.00 (N = 603)
 - Lowest Ranking: Health Sciences: 4.10/5.00 (n = 157)
 - Highest Ranking: Other: 4.50/5.00 (n = 24)
- There was no statistically significant difference between institutions or institution types.

Teaching Creativity

- Some techniques for developing student creativity were reported to have been used broadly across all disciplines (e.g., "brainstorming/idea generation", "collaborative work / projects"). However, there was some difference between the disciplines' use of other techniques (e.g., "self-directed learning", "supporting risk-taking").
- When respondents were asked to rank their agreement with the statement "I feel well-trained to facilitate student creativity in my discipline" on a 1-5 Likert scale, the overall mean value selected was 3.46/5.00 (n = 593). When responses were separated by discipline, the mean values ranged from 3.09 (Health Sciences) to 4.14 (Art/Design), a statistically significant difference.
- Instructors report nurturing student creativity in different instructional contexts depending on the
 discipline. For example, Health Science instructors selected "Tutorials" more often and "In-Class
 Instruction" less often than instructors in other disciplines.

Next Steps

- An article describing this study is in preparation and will be submitted for publication shortly.
- The information collected as part of this survey gives a broad overview of how disciplines view creativity in Ontario's universities. The outcomes of this study will inform future research that investigates the efficacy of strategies for developing students' creativity in various disciplines.