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Writing Assignments Across the Undergraduate Curriculum

Writing Assignments Across the Undergraduate Curriculum is a research project that, as the name suggests, focuses on creating a database of knowledge about the writing that undergraduates are asked to perform. The principal investigator for the research team is Roger Graves here at the University of Alberta. This research is funded by the Social Sciences and Humanities Research Council of Canada (410-201101845).

The project has two main activities. First, we collect and analyse groups of syllabi from departments, faculties (in the US the term would be colleges), or entire institutions. To date, we have collected and coded over 1700 writing assignments in 9 different academic units. Each syllabus has been analysed for 20 or more characteristics, and we have presented preliminary results from this work at local, national, and international conferences. Second, we are investigating beyond the syllabus and the descriptions of the assignments to identify the motives and concerns of faculty as they create their assignments, and the experiences of students as they attempt to write documents in response to the assignment prompts.

We are interested in collecting further groups of assignments and adding them to the database. To enquire about becoming a member of this project, email Roger Graves at roger.graves@ualberta.ca

For a more detailed description of the research project, click here.
Session plan

Part 1
The aims, methods, and results of the 4 studies

Part 2
Implications for change

Part 3
Discussion
Study 1: Overall Research Plan

- What genres of assignments were undergraduate students required to write by their instructors?
- How long were these assignments?
- Did assignments change from 1st year to 4th year?
- Did assignments change by discipline of study?
- Did instructors scaffold/nest assignments within a course?
- Were students able to revise their drafts?
- What were instructors thinking when they assigned this work?
Method 1: Analyze assignments

1) identification of one unit for analysis, e.g., either one or more departments, an entire faculty, or entire college;

2) collection of a complete set of all course syllabi for the unit identified;

3) analysis of syllabi using the elements found in the initial project’s coding sheet (in Graves, Hyland & Samuels, 2010);

4) inclusion of site-specific analyses and variables for study;

5) identification of pedagogically relevant findings and implications.
Method 2: Interview instructors

1) Select departments
2) Distribute questionnaire to instructors
3) Gather small groups of instructors for focus group interviews
4) Analyze video and audio of the focus groups
5) Identify themes from the responses
Overall findings: Data

- Sample size = 4,086 (@January 2014)
- 36 administrative teaching units
  (programs, departments, faculties/schools)
- 9 universities:
  - 2 small schools (full-time enrollment under 1,500)
  - 2 mid-size schools (~15,000 students)
  - 4 large schools (25,000-30,000 students)
  - 1 super-size me school (50,000+)
## Genres of assignments by Discipline

<table>
<thead>
<tr>
<th>Genres</th>
<th>Social work</th>
<th>English</th>
<th>Nursing</th>
<th>Engineering</th>
<th>Chemistry</th>
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<td>Paper</td>
<td>79</td>
<td>35</td>
<td>18</td>
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<td></td>
<td>3</td>
<td>8</td>
<td>25</td>
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<td>Annotated Bibliography</td>
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<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Proposal</td>
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<td>8</td>
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<td></td>
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<td>Presentation</td>
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<td>3</td>
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<td>Assignment</td>
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<td></td>
<td></td>
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<td>Goals</td>
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<td>Group email</td>
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<td></td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Handout</td>
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<td></td>
<td></td>
<td>11</td>
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</tr>
<tr>
<td>Journal</td>
<td></td>
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<td>8</td>
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<tr>
<td>Peer evaluation</td>
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<td></td>
<td>7</td>
<td></td>
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<tr>
<td>Self-evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
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<td>Lab report</td>
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<td>Poster</td>
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</table>

Numbers are percentages of all assignments; only the most common assignments are included here.
Audiences for Student Writers

- 93.3% of 3569 assignments gave no indication or identified the instructor or students in the class as the audience.
- 6.7% (239 of 3569) identified someone other than the instructor or students in the class as the audience.
Feedback before Final Grades

- 79% No
- 21% Yes
University of Alberta study

Roger Graves
Outline of study

- 5 studies in
  - Nursing
  - Physical Education
  - Pharmacy
  - Political Science
  - Community Service Learning

- Collected every writing assignment in every course for one academic year

- Wrote reports for the academic unit

- Followed up with workshops and faculty development with 4 of 5 units
### Who isn’t assigning writing?

<table>
<thead>
<tr>
<th></th>
<th>Number of writing assignments</th>
<th>Percent of courses with writing assignments</th>
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</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>485</td>
<td>79%</td>
</tr>
<tr>
<td>Nursing</td>
<td>157</td>
<td>86%</td>
</tr>
<tr>
<td>Political Science</td>
<td>198</td>
<td>100%</td>
</tr>
<tr>
<td>Geography</td>
<td>186</td>
<td>82%</td>
</tr>
<tr>
<td>Service Learning</td>
<td>163</td>
<td>100%</td>
</tr>
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</table>
Number of assignments by year in program

<table>
<thead>
<tr>
<th>Year</th>
<th>Liberal Arts</th>
<th>Political Science</th>
<th>Service-Learning</th>
<th>Geography</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>34/1.5</td>
<td>7/1.4</td>
<td>42/10</td>
<td>15/3.8</td>
<td>17/3.4</td>
</tr>
<tr>
<td>Year 2</td>
<td>225/2.5</td>
<td>39/2.3</td>
<td>12/4</td>
<td>40/2.2</td>
<td>33/5.5</td>
</tr>
<tr>
<td>Year 3</td>
<td>189/4.1</td>
<td>40/2.4</td>
<td>35/6</td>
<td>24/1.85</td>
<td>50/4.2</td>
</tr>
<tr>
<td>Year 4</td>
<td>56/3.0</td>
<td>112/4.2</td>
<td>74/6.7</td>
<td>107/3.5</td>
<td>57/4.4</td>
</tr>
</tbody>
</table>

First number is total number of assignments. Second number is average number of assignments per course.
Genres vary considerably

<table>
<thead>
<tr>
<th></th>
<th>Liberal Arts</th>
<th>Political Science</th>
<th>Service-Learning</th>
<th>Geography</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers</td>
<td>20</td>
<td>32</td>
<td>22</td>
<td>25</td>
<td>18</td>
</tr>
<tr>
<td>Reports</td>
<td>18</td>
<td></td>
<td></td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>Essay</td>
<td>27</td>
<td>21</td>
<td></td>
<td>12</td>
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<tr>
<td>Summary</td>
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<tr>
<td>Self-evaluation</td>
<td></td>
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<td>24</td>
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<tr>
<td>Handouts</td>
<td></td>
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<td></td>
<td>11</td>
</tr>
<tr>
<td>Presentation</td>
<td>15</td>
<td>17</td>
<td>13</td>
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<td>Journal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

Note: numbers are reported in percent of all assignments.
### Length of Writing Assignments

<table>
<thead>
<tr>
<th>Length in Pages</th>
<th>Liberal Arts</th>
<th>Political Science</th>
<th>Service-Learning</th>
<th>Geography</th>
<th>Nursing</th>
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<tr>
<td>under 2</td>
<td>31</td>
<td>5</td>
<td>16</td>
<td>18</td>
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<td>34</td>
<td>74</td>
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<td>5 - 6</td>
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<td>14</td>
<td>19</td>
<td>2</td>
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<td>7 - 10</td>
<td>17</td>
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<td>14</td>
<td>18</td>
<td>18</td>
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<tr>
<td>11 - 12</td>
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<td>11</td>
<td>6</td>
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<td>19</td>
<td>11</td>
<td>6</td>
<td>6</td>
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</table>

Note: numbers are reported in percent of all assignments.
Rubric for writing assignments

<table>
<thead>
<tr>
<th>Liberal Arts</th>
<th>Political Science</th>
<th>Service-Learning</th>
<th>Geography</th>
<th>Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>25</td>
<td>13</td>
<td>20</td>
<td>60</td>
</tr>
</tbody>
</table>

Note: numbers are reported in percent of all assignments.
Pedagogical innovations

1. WAC lectures in disciplinary courses (1 hour)
2. WAC group tutoring for over 100 classes in 3 years
   - Over 200 group tutoring sessions held over 3 years
   - Over 1500 students in group tutoring sessions

Working with individual departments to grow this program/intervention each year.
Curricular contributions

Wrote articles for BA review process:
- “A rhetorical education in the arts”
- “Learning outcomes for the new BA”
- “Towards a communication plan for the new BA”

Wrote articles for national magazine:
- “Why students struggle with writing”
- “Entrance testing is not the answer”
- “Five strategies to improve writing in your courses”

www.ualberta.ca/~graves1/
Wilfrid Laurier University

Boba Samuels
Kelly MacDonald
Syllabi study of Faculty of Science

- Faculty of Science contains 7 departments
- Our third largest faculty → 3600 students
  (Largest is Faculty of Arts ➔ 6000 students, 16 depts.)
- Writing centre has worked with:
  - Biology
  - Chemistry
  - Kinesiology
- Data collected: 353 course syllabi, 2012-13
Study of one faculty:
Faculty of Science 2012-13

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of courses</th>
<th>Average Number of Writing Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>55</td>
<td>2.09</td>
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<tr>
<td>Chemistry</td>
<td>55</td>
<td>1.51</td>
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<tr>
<td>Health Sciences</td>
<td>12</td>
<td>2.42</td>
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<tr>
<td>Kinesiology</td>
<td>36</td>
<td>2.0</td>
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<tr>
<td>Math</td>
<td>43</td>
<td>.23*</td>
</tr>
<tr>
<td>Physics/Computer Science</td>
<td>55</td>
<td>.27*</td>
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<tr>
<td>Psychology</td>
<td>97</td>
<td>2.10</td>
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</table>

Percentage of Science Courses with Writing Assignments

F(6,346) = 10.55, p < .001.
Summary of number of assignments by year

<table>
<thead>
<tr>
<th>Year of program</th>
<th>Number of Syllabi</th>
<th>Average Number of Writing Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>62</td>
<td>.55</td>
</tr>
<tr>
<td>Year 2</td>
<td>112</td>
<td>.95</td>
</tr>
<tr>
<td>Year 3</td>
<td>91</td>
<td>2.26*</td>
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<tr>
<td>Year 4</td>
<td>88</td>
<td>2.10</td>
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<tr>
<td>Total</td>
<td>353</td>
<td>1.50</td>
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F(3,349) = 15.55, p < .001
# Math Program Profile

<table>
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<th>Level</th>
<th>Number of Courses</th>
<th>Number of Courses with Writing</th>
<th>Percent of Writing Assignments</th>
<th>Number of Writing Assignments</th>
<th>Length: No Details</th>
<th>Length: 1-4 Pages</th>
<th>Length: 5+ pages</th>
<th>Value: No details</th>
<th>Value: 1-10%</th>
<th>Value: 20-40%</th>
<th>Feedback</th>
<th>Rubric/Learning Goal</th>
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<td>3</td>
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# Math Program Profile

## Year 3 Assignments

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<thead>
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<th>Assignment Type</th>
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<td>Proposal</td>
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<td>Report</td>
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<td>Presentation</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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## Year 4 Assignments

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<th>Assignment Type</th>
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<td>Report</td>
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<tr>
<td>Presentation</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
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</table>
Discussion points for faculty

- Does your profile indicate writing is included in the way you think best for your discipline?
- Are you providing students with an effective program of writing/communication development?
- Where and how do you think writing might be integrated to support student learning?
Next step

1) Request made for presentation at Faculty Council meeting

2) Research Ethics approval received for faculty focus groups – pending

3) Ongoing development of in-class writing supports for individual programs (Biology, Health Sci) from the Writing Centre
University of Waterloo Study

Judi Jewinski
Jay Dolmage
In 2011, Waterloo’s Provost commissioned a task force to assess communication skills development across campus.

The final report identified several concerns:
Concerns:

- Co-op employers increasingly express alarm about workplace communication skills (in 2012, Waterloo had ~14,500 FTE co-op students)
- English Language Proficiency Exam (in place since 1976) is not a reliable measure of writing ability. Students who meet the minimum standards are often identified by faculty as weak writers.
- Overall, the report pointed to the lack of a cohesive, university-wide approach to development of English language competency, an approach which reflects that competency requires “continual practice with informed feedback and guidance” (Report, p. 20)
The report proposed a vision to establish English language competency as a lifelong core value AND as a degree requirement for all by . . .

- Creating pre-university bridging programs
- Requiring a 1st year foundation course for all
- Requiring discipline-specific 2nd year courses for all
- Eliminating Waterloo’s English Language Proficiency Examination
- Expanding Writing Centre to address other language competencies
- Completing environmental scans to identify discipline-specific courses with language competency as outcome
- Developing pilot studies to establish best practices
- Emphasizing formative rather than summative feedback
Environmental scans and faculty discussions revealed . . .

- Regular upper year writing assignments, in contrast to few in first/second year
- Satisfactory, even surprising numbers of writing assignments in STEM disciplines, yet few rubrics, rare formative feedback
- Heavily subscribed writing classes, but class sizes often too large (100+) for individualized attention, poor student engagement
- Anecdotal evidence that many students do not collect assignments, little value in summative feedback
- Support for ELL a challenge, despite readily available courses for credit, need for discipline-specific support
Pilot projects (2013 – 2014)

- 215 1st year Actuarial Science students completed a 2-draft writing exercise for multiple audiences (worth 25%):
  - Support provided in extra classes and study sessions
  - Students distinguished business and academic genres
  - TAs learned transferable skills

- 1,500 Intro to Biology students completed a scaffolded exercise (worth 15%) including brief lit review, short essay, and face to face presentation to a TA
  - 27 TAs attended marking workshop, norming session
  - Grades were more fairly distributed than in previous terms

- 15 4th year Economics students completed an honours essay after 12 hours of workshops (led by WC instructor + librarian)
  - Strong results (83.3%), high student/faculty satisfaction

- 15 Earth Sciences students from China entered 3rd year with support from peer mentors and 2 co-instructors:
  - Non-credit course offered disciplinary activities, writing/speaking projects
  - Student pre- and post- interviews revealed tremendous improvement in communication and interpersonal skills, confirmed by higher overall averages and course grades

- School of Social Work is embarking on a 2-year project of aligning course outcomes and assignments to emphasize communication skills:
  - Environmental scan revealed multiple assignments (5/course) but few rubrics, little scaffolding, almost no formative feedback
Faculty-wide initiatives

- Faculty of Math now requires 2 communication courses in first three terms (offered by Arts)
- Faculty of Engineering is developing WID courses before and after first co-op work term
- Faculty of Environment already has first year WID courses, developing upper year programs
- Faculty of Applied Health Science emphasizing already strong writing program
- Faculty of Arts and Faculty of Science considering non-writing foundation courses (research methods in Arts, speech communication in Science)
A repurposed Writing Centre

- A central resource for English Language Competencies expertise, best practices and initiatives. The Writing Centre is a natural starting point to help forge connections between curricular and co-curricular ELC programming.

- **Collaboration with the libraries.** Extending “ask a librarian” to include “ask a writing professional.”

- Development of an online presence.

- Additional support in speech communications, graphics, digital media, web design, presentation media. . .
Huron University College

Faculty Focus Groups

Theresa Hyland
Grace Howell
Allan MacDougall
- Faculty resistance to presentation of results:
  - “in-process feedback” = office hours;
  - Other means of giving information to students.

- No increased buy-in to writing programs
  - Writing Centre.
  - Status of writing.
Research Questions

- From faculty responses
- From our own analysis
- From the research (Anson & Dannels, 2009)

1. To what extent are writing activities in a department consistent with and working towards the department’s stated learning outcomes?
2. What instruction methods are employed to achieve those outcomes and what challenges does the department face?
3. Are the methods employed by departments dictated by individual personalities or by disciplinary demands for writing?
Program Profiles: Anson & Dannels

- “....a profile based on internal, consultative study of a program .... representing the department’s current status: how writing and speaking are used, where, to what ends, and in what relationship to broader curricular, pedagogical and career goals” (p. 1)

- “....attention to the subject matter with attention to the genres, audiences, language, presentational modes and other aspects of communication in the field” (p. 2)
Methods of Data Collection

- Contacted department
  - English
  - History
  - Psychology
  - Political Science

- Distributed preliminary materials
  - Consent Forms & Pre-focus group surveys

- Held focus groups (video-taped)
Metaphors in the Departments

Dept. of English (silos)
- “They write for different professors, and different professors are going to want different kinds of analyses, so …”

Dept. of Psychology (modelling)
- “our aim, ultimately, is to get our students to write in exactly the same style that we ourselves write to produce professional journal articles.”

Dept. of History (the stuff of history)
- “[Historical research] is looking at materials that are generated in... were generated in the period that you're studying, so that is the stuff of history basically, the primary sources themselves that come from that period.

Dept. of Political Science (the well-prepared meal)
- “And I always tell them a thesis is a sort of a five course meal, you have to have a... the appetizer and the soup and then the main course.”
Findings (2)
Disciplinary Characteristics: Ontological Positioning

<table>
<thead>
<tr>
<th>Research orientation</th>
<th>Assigned Texts</th>
<th>Text Discovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positivist</td>
<td>Psychology</td>
<td>Political Science</td>
</tr>
<tr>
<td>Relativist</td>
<td>English</td>
<td>History</td>
</tr>
</tbody>
</table>

**Ontological orientation**

- Positivist
- Relativist
Discussion

1. Naming assignments is problematic for instructors & possibly for students:
   a. Course syllabi study:
      a. 26.9% of assignments “essays”,
      b. 20.9% were named “papers” and
      c. 17.8% were called reports.
   b. Focus Groups: Professors used diverse, descriptive names for their assignments in the interviews

2. Ontological perspective influenced how assignments were developed:
   a. English: each assignment longer than the last (500, 750, 1000, 1500)
   b. Psychology: nested assignments: (i.e. essay proposal, literature review, results section).
Follow-up to the Faculty Focus Groups

- More customized workshops were requested
- More students at Writing Centre.
- Invited to participate in the Departmental Accreditation Discussions.
- “Writing in the Disciplines” talks were accepted
- Invited Director to be a member of the Administrative Leadership Team.
Possible reasons for change:

- Stern’s (1999)* Values/ Beliefs/ Norms
  - Behaviour is determined by deep-seated values that determine more mutable beliefs
Gifford (2008)* “Social Dilemma Approach”

Diagram:
- Decision-Maker Influences
- Environmental Outcomes
- Dilemma Awareness
- Decision-maker Outcomes
- Decision-Maker Strategies

*Note: The asterisk denotes a reference or citation.
How are these outcomes sustained?

- Publicized: to local community
- Published: to broader community outside the institution.
- Politicized: to administration as well as to faculty
Your turn at the round table

What strategies have you used to prompt curricular change at your institution?

Would you like more detail from any of us on our experiences?

Would you like to join this project?