



# A LEARNING ENVIRONMENT

STUDENT PERSPECTIVES ON TEACHING AND LEARNING

A REPORT FROM THE STUDENT TEACHING EXCELLENCE COMMITTEE

# WATERLOO

# FOREWORD

*We welcome everyone in the Faculty of Environment's teaching and learning community to read this document in order to consider how we might best benefit collectively from the report's many thoughtful ideas and recommendations.*

*Faculty of Environment graduate students at the University of Waterloo held Town Hall meetings this past winter (2013) to discuss how faculty members, staff and graduate students might further foster a collaborative teaching and learning environment. Such an approach is consistent with ENV's mandate to teach critical thinking and collaborative problem-solving skills that can be used to address many contemporary societal and bio-physical challenges. It is also part of the vision of the Faculty to create a stimulating and vibrant academic community that shapes a sustainable future. This document puts theory into practice and it offers an excellent example of how problem solving skills have been put to use to encourage excellence in teaching and learning. This report was compiled and written by the graduate students. It reflects students' ideas generated by town hall meetings that were supported by the Faculty of Environment and by UW's Centre for Teaching Excellence.*

*We applaud the graduate students for their professional and well-thought out report, as well as for their voluntary contributions to the town hall meetings and accompanying discussions. This report poses opportunities for student and faculty collaboration. It also presents ideas for mutually strengthening the teaching and learning environment in the faculty within the context of a changing society and changing academy. We look forward building on the creative ideas presented in this very useful piece of work.*

**André Roy, Dean**

**Jean Andrey, Associate Dean, Graduate Studies**

**Jennifer Clapp, Associate Dean, Research**

**Mary Louise McAllister, Faculty Teaching Fellow**

# PREAMBLE



## **The Student Teaching Excellence Committee**

The Student Teaching Excellence Committee (STEC) was formed in the Fall of 2012 after student representatives on the Faculty's Teaching and Learning Committee recruited fellow students from each department in the Faculty of Environment. The initial mandate of the committee was to organize and lead town hall meetings in order to capture and relay the student body's ideas and concerns regarding teaching and learning to the Teaching Fellow. While it was initially thought that the committee would dissolve upon completion of this task, the STEC decided to broaden its mandate. STEC hopes to serve as a semi-autonomous body linking the broader student population, the Environment Graduate Students Association, and the Association of Graduate Planners to the Faculty of Environment's Teaching Fellow.

**STEC Membership (at time of town halls):** Nicholas Belanger, Kristin Elton, Candice Gartner, Kyrke Gaudreau, Mark Groulx, Kendra Oneill and Stephanie Whitney

In addition to the efforts of the STEC committee, this report has benefited greatly from the efforts of Trevor Holmes, and financial assistance from the Faculty of Environment Teaching Fellow.

## **Report Authors - in alphabetical order**

**Nicholas Belanger** is a first-year MES student, studying in the Department of Environment and Resource Studies.

**Kyrke Gaudreau** recently completed his PhD in the Department of Environment and Resource Studies, and was formerly a member of the Faculty of Environment's Teaching and Learning Committee.

**Mark Groulx** is a PhD student in the School of Planning and a former member of the Faculty of Environment's Teaching and Learning Committee

**Stephanie Whitney** is a third-year MEB student, studying within the School of Environment, Enterprise and Development. Upon completion of the MEB in Spring 2013, Stephanie will begin a PhD within the Department of Environment and Resource studies in Fall 2013.

**Contact:** [STEC.Env@gmail.com](mailto:STEC.Env@gmail.com)



TA assigning ✓  
TA opportunities  
TA Feedback / TA  
CTE Links / Support  
TA Responsibility  
Teaching opportunities (1)  
Formalized teaching opp  
Mentoring undergrads  
New Grade  
Mentorship as early teacher  
Long term course sch. for Ins  
(Not so ad  
Peer support / Learning  
Teaching Pedagogy Requirement  
(Through CTE??)  
Outliers

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# 1.0 INTRODUCTION



In 2012, each Faculty at the University of Waterloo nominated a Teaching Fellow to lead initiatives that could enhance teaching and learning excellence across the university. To advance this mandate, Mary Louise McAllister, the Faculty of Environment's Teaching Fellow, recruited student and faculty representatives from across the Faculty to form the Teaching and Learning Committee (TLC). These representatives serve as an advisory board for the Teaching Fellow, and provide a communication channel within each departmental unit. To complement the work of the TLC, the Faculty committee's student representatives formed a parallel student-led committee known as the Student Teaching Excellence Committee (STEC). STEC's mandate is to elicit student feedback regarding teaching and learning experiences in the Faculty of Environment in order to frame future dialogue, encourage involvement and ultimately inform decision making.

As a primary activity for the 2012-2013 academic year, STEC organized two Faculty-wide town hall meetings during Winter Term 2013: one for PhD students and one for Master's students. The purpose of these meetings was to scope out challenges and opportunities relating to teaching and learning from a student perspective. After consulting with Trevor Holmes, a Senior Instructional Developer at the Centre for Teaching Excellence, STEC designed a group exercise that prompted town hall participants to individually identify specific opportunities and challenges relating to teaching and learning in the Faculty of Environment. The results from this exercise make up the bulk of this report.

Consistent with the broad dialogue solicited during the town halls, this report should be read as a scoping and framing document that explores the ideas and concerns offered by students. Its primary intent is to initiate discussion in the Faculty, thus the insights should not be considered either fully representative or definitive. The information and insights found in this report are primarily aimed at the Teaching Fellow and the TLC, as these bodies take their 'next steps' to enhance teaching and learning in the Faculty of Environment. That said, many of the issues discussed here extend beyond the mandate of the Teaching Fellow and the TLC, and begin to touch on topics that relate more broadly to graduate education in the Faculty. We hope this report contributes to the conversation taking place amongst students, faculty and administration.

Following a description of the facilitated exercises (**Section 2.0**), the report presents the results generated by the town hall meetings (**Section 3.0**). Throughout this section, a number of inset boxes ask 'What if...' questions regarding prominent topics. While these 'What if...' statements are not policy recommendations as such, they do serve to highlight complimentary linkages that emerged from the data. The report closes by calling attention to the overarching implications of the data, and then offers some suggestions as to how this data might inform 'next steps' in the Faculty (**Section 4.0**).



# 2.0 THE TOWN HALLS

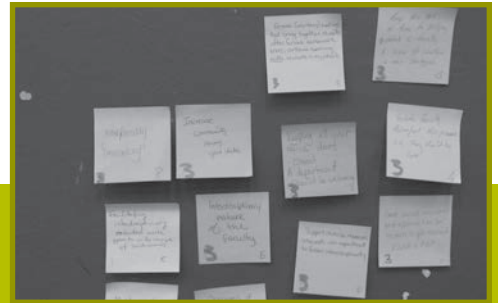
This section briefly describes the town halls and the analysis of the data generated from them. The PhD and Master’s town halls took place on March 18th and March 22nd, 2013, respectively. The PhD town hall was facilitated by Trevor Holmes from CTE, with help from the Master’s representatives on STEC. The Master’s town hall was collectively facilitated by Candice Gartner, Kyrke Gaudreau and Mark Groulx. Both town halls were attended by approximately fifteen students from across the Faculty, and featured introductory presentations from Mary Louise McAllister (the ENV Teaching Fellow), Jean Andrey (ENV Associate Dean, Graduate Studies) and Jennifer Clapp (ENV Associate Dean, Research)

The purpose of the town halls was to gather and organize feedback on teaching and learning in the Faculty. After a brief introduction from the facilitators, participants completed an individual brainstorming activity using several sticky notes each. They were asked to write down individual ideas on sticky notes and place these sticky notes onto the wall. The sticky notes came in three colours, each representing a different type of action: red – stop doing something; yellow – keep doing something; green – start doing something. Depending upon whether their idea related to ‘teaching’ or

‘learning’, sticky notes were placed on one of two walls. Ideas that did not easily fit into either teaching or learning were placed on a ‘bike rack’. Finally, to delve further into department specific challenges and opportunities, the students were asked to place a letter representing their department on the sticky note.

**Table 2.1** Sorting results from PhD town hall

Teaching	Learning
<i>Original sort</i>	
By Group A a. TA Opportunities b. TA Feedback c. CTE Links and Support d. TA Responsibilities e. PhD opportunities (instruction) f. Formalized teaching opportunities g. Mentoring undergraduates h. Mentorship as early teachers i. Long term course schedules for instruction (not so ad hoc) j. Peer support and learning k. Teaching pedagogy requirement (through CTE?) l. Outliers	By Group B a. Skills training b. Policies/scheduling c. Group learning and community learning d. Bridging to outside world e. Faculty/student relationship
<i>Revised sort</i>	
By Group B a. TA assigning b. TA feedback/TA awards c. CTE Links/Support d. TA Responsibilities e. Teaching <ul style="list-style-type: none"> <li>o PhD teaching opportunities</li> <li>o Formalized teaching opportunities</li> </ul> f. Mentoring <ul style="list-style-type: none"> <li>o Mentoring undergrads</li> <li>o Mentoring new grads</li> <li>o Mentorship as early teachers</li> </ul> g. Long-term course scheduling for instructors (not so ad hoc) h. Peer support/learning	By Group A a. Comp. Consistency b. Academic Skills c. Career skills (Non-Academic) d. Methods e. Faculty/student relations f. Group/peer learning support g. Bridging to outside world h. Funding i. Curriculum/course delivery j. Feedback



# THE TOWN HALLS

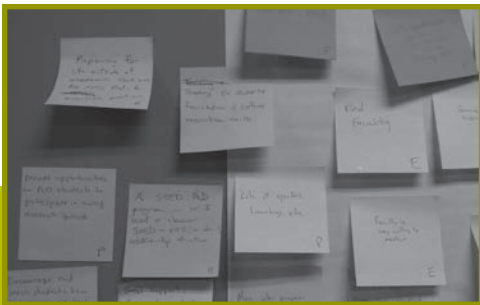
The individual coding exercise lasted about 10-15 minutes, and once it was complete, a collective coding activity took place. To facilitate this collective categorization, participants were divided into two groups, one for teaching and one for learning. Each group was instructed to organize their sticky notes into holistic, but discrete themes. This activity took place in complete silence at first, followed by animated discussion within the groups.

When initial theming was complete, the groups switched and revised the other group's work. In this second round of organization, both groups of students were asked to verify and reorganize the initial themes as they saw fit, including adding, deleting and merging themes. Table 2.1 and Table 2.2 show the original and revised sorting themes from the PhD and Master's town halls. As Table 2.1 shows, in the PhD town hall the first group preferred more themes than the second group. In contrast to the PhD students, in the Master's town hall the themes related to teaching were left untouched, whereas the learning themes were expanded upon by the second group during the revision.

Following the collective coding exercise, the students reconvened for a group discussion of the themes that arose. Many of the students expressed interest in continuing the conversation with the intent of acting on the ideas and topics that had emerged from the town halls.

**Table 2.2** Sorting results from Master's town hall

Teaching	Learning
<i>Original sort</i>	
By Group A a. Mentoring/team teaching b. Career skills/links c. TA selection d. TA feedback e. Learning to teach f. Curriculum constituency	By Group B a. Mentorship b. Curriculum c. True interdisciplinarity d. Space e. Field courses f. Course content g. Professional support/external community (real world)
<i>Revised sorting</i>	
By Group B (no change from original) a. Mentoring/team teaching b. Career skills/links c. TA selection d. TA feedback e. Learning to teach f. Curriculum constituency	By Group A (no change from original) a. Mentorship <ul style="list-style-type: none"> <li>o Mentorship between professors and students</li> <li>o Mentorship between PhDs and Masters</li> </ul> b. Curriculum c. True interdisciplinarity d. Space e. Field courses f. Course content g. Professional support/external community (real world) h. Atmosphere (inter-faculty) i. Learning <i>how</i> to research (methodology) j. Course administration k. Preparing for professional careers l. Linking course content to community m. Student support n. Conferences



# THE TOWN HALLS

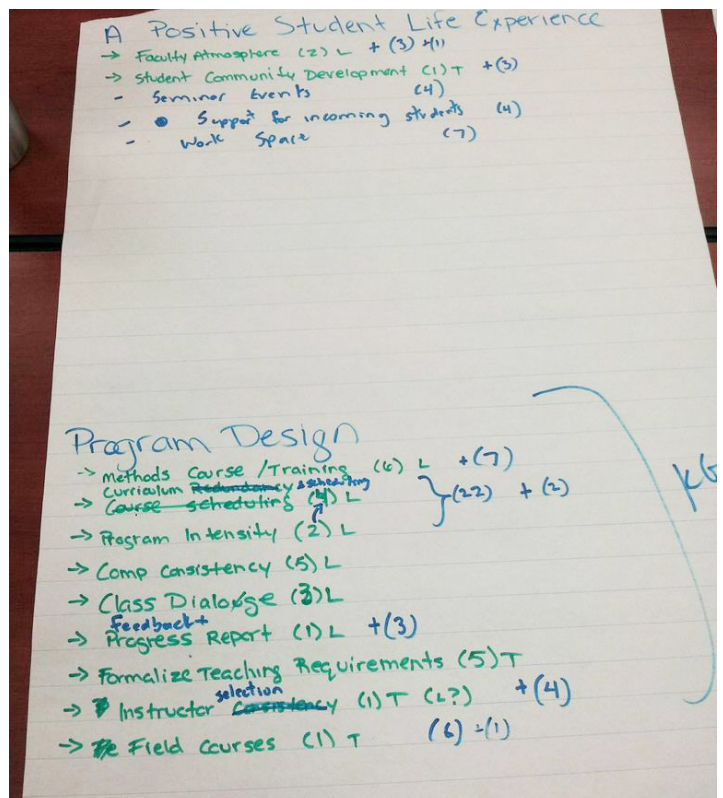
## 2.1 RECODING THE DATA

Once the town halls were complete the STEC met in early May to compile and analyze the data. The original intent was to maintain the themes developed in the town halls. However, the choice was ultimately made to reorganize the original themes. This was done for three reasons:

First, while the original separation of teaching and learning was helpful for facilitating the town halls, this separation was artificial and became inappropriate for analysis. The inappropriateness of this divide was particularly relevant for the Master's students, whose interests primarily related to learning. Likewise, in many instances a given topic relates both to teaching and learning. For example, the topic of TAing includes both opportunities to TA (teaching) as well as learning how to be an effective TA (learning).

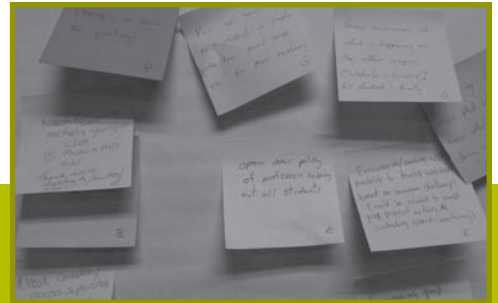
Second, it became clear from the analysis that certain topics were more closely related than others, making it logical to propose a number of themes and sub-themes. This was particularly apparent at the PhD town hall where themes developed by the first group (e.g. formalized teaching requirements and PhD teaching opportunities) were placed as sub-themes inside a larger theme (i.e. 'teaching').

Third, the collective coding and re-coding exercises provided limited time for students to reflect upon the themes and organize and reorganize as appropriate.



For these reasons, the members of STEC undertook a final reorganization of the sticky notes, one that was informed by the themes developed in the town halls. To simplify the process, the teaching/learning divide was eliminated, and instead the sticky notes were placed





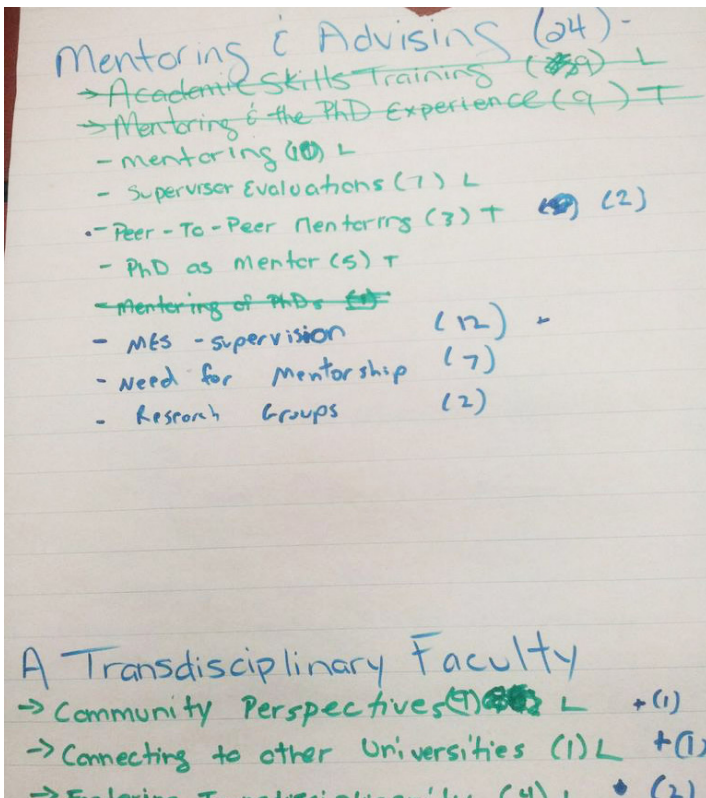
# THE TOWN HALLS

into seven major themes and further grouped into sub-themes. This structure is illustrated in the concept map on page 7. The recoding exercise clearly has some limitations. Notably, the recoding represents the analysis of the authors of this report, rather than the 30 students attending the town halls. Furthermore, there are still

sticky notes and sub-themes that lend themselves to two or more major themes.

Despite its limitations, we believe the recoding is beneficial as both a means of summarizing the insights from the town halls and as a helpful framework for future action (e.g. surveys, roundtables, water cooler discussions). First, the recoding incorporates all the topics that emerged from the town halls and presents them in a manner that can be more constructively acted on than the original teaching/learning divide. Second, each of the seven major themes is relatively self-contained and generally self-explanatory. Finally, where relevant, we have attempted to note the linkages between the seven major themes, so as to avoid the trappings of arbitrary divides.

The following section provides an initial discussion of the seven major themes and their respective sub-themes. The discussions are not intended to be a final verdict. Instead, they should be thought of as insights that emerged from the town halls.





# 3.0 STUDENT PERSPECTIVES

As described above, the STEC explored the results of the Master's and PhD Town Halls, organizing this data into a number of themes and sub-themes. We reiterate that due to the size of the turnout and the voluntary nature of participants' involvement, the themes discussed in this report are not a definitive list. That said, discussions at each town hall, and indeed across the town halls, did converge around several key areas. Accordingly, we suggest that the following seven themes are a good point to initiate future efforts to enhance graduate students' experiences with teaching and learning in the Faculty.

### **3.1 Mentoring and Advising**

### **3.2 A Transdisciplinary Faculty**

### **3.3 Professional Skills Development**

### **3.4 Teaching and TAing**

### **3.5 Student Life Experience**

### **3.6 Program Design**

### **3.7 Life as an Academic**

In addition to these themes, our exploration of the town hall data revealed a number of related sub-themes that describe more detailed topics. The structure of these themes and attendant sub-themes is presented in the concept map on the following page. Importantly, while both Master's and PhD students provided information relating to the broader themes, this is not necessarily the case with the sub-themes. The smaller green circles represent topics that were discussed by Master's and PhDs. By contrast, the smaller blue circles are topics discussed only by Master's students and the smaller

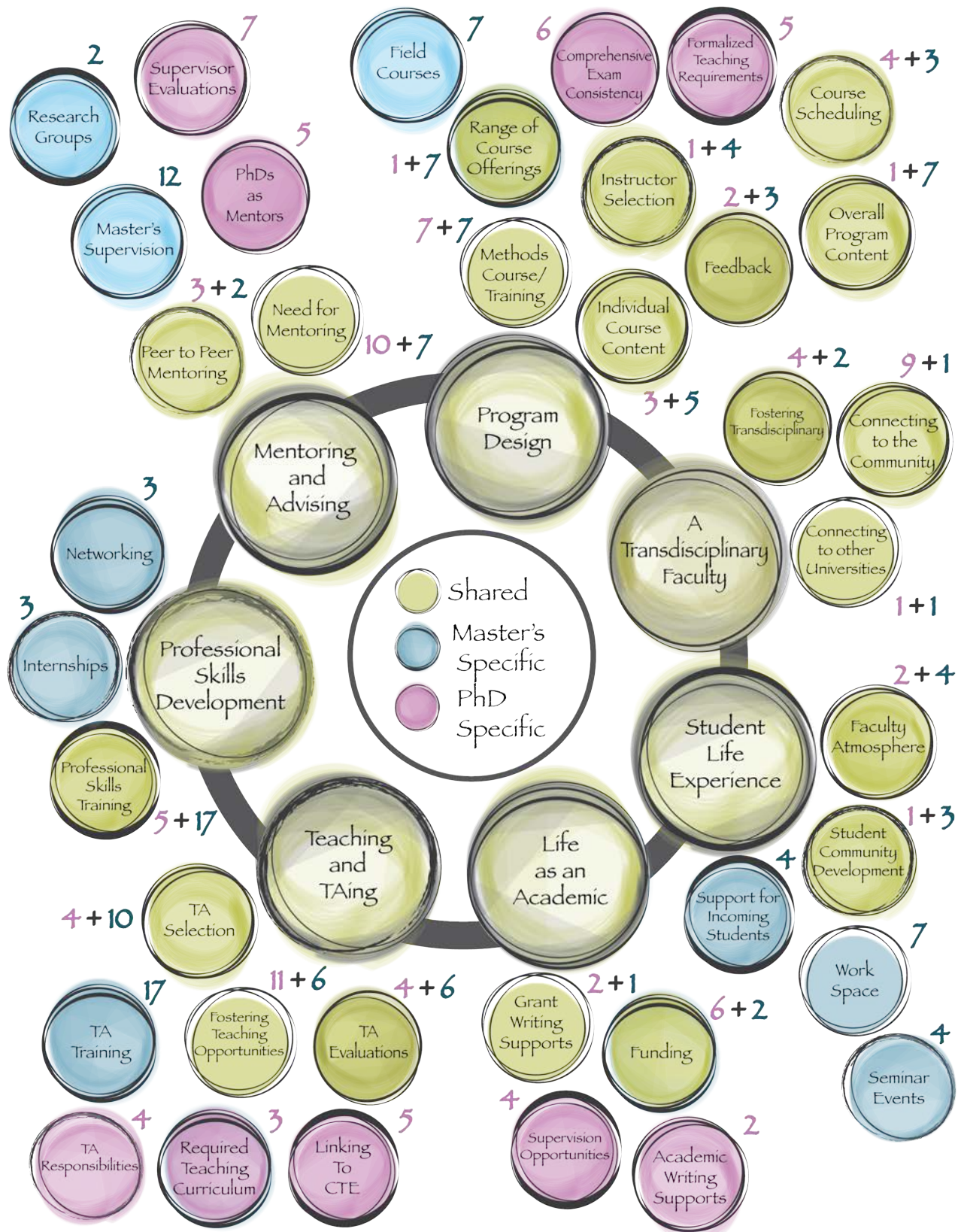
purple circles are topics discussed only by PhD students. To help illustrate the relative focus that was placed on each sub-theme, the number of related comments from Master's (blue numbers) and PhDs (purple numbers) are shown in the concept map. It is important to note that these numbers are only a simple count. They do not take into account other aspects of the data, such as the length of the comment or whether comments discussed strengths or areas for improvement. This count is also not reflective of the importance that the group attributed to given topics during the discussion sessions that followed the coding exercises.

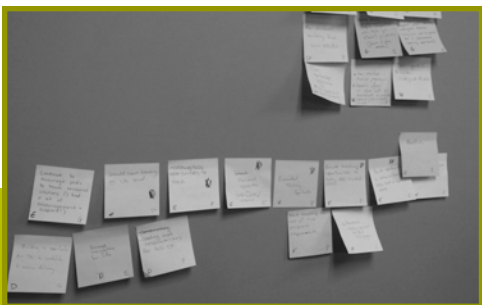
The remainder of this section discusses in more detail each of the seven themes that emerged from the town halls. An attempt has been made to summarize the general thrust of each theme, and to provide a description of students' ideas and opinions that relate to each. Throughout this section, a number of inset boxes also provide program or project 'What if...' statements that relate to the concerns discussed during the town halls. We phrase these ideas as 'What if...' statements for two reasons:

First, these ideas emerged solely from discussions among the STEC and are thus not necessarily representative of broader student opinion.

Second, the purpose of these ideas is not to set the ground for policy development, but to illustrate potential linkages between various themes and sub-themes.

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## 3.1 MENTORING AND ADVISING

‘Mentoring and advising’ was a popular theme at both town hall meetings, garnering 25 comments from the PhDs and 23 from the Master’s students. While ‘Mentoring and advising’ was identified by both groups as an important theme in terms of enhancing teaching and learning, a diversity of sub-themes emerged upon analysis of the student comments.

Based on the comments provided, this theme was divided into six sub-themes:

1. *Need for mentoring (P10, M7);*
2. *Supervisor evaluations (P7, M0);*
3. *Peer-to-peer mentoring (P3, M3);*
4. *PhDs as mentors (P5, M0);*
5. *MES supervision (P0, M12);*
6. *Research groups (P0, M2)*

Each of these sub-themes will be briefly discussed below, recognizing that some sub-themes have relatively low numbers in terms of comments.

Both the PhDs and Master’s students identified a strong need for increased mentoring. Among the PhDs, some comments expressed dissatisfaction with their Supervisor-PhD mentorship experience. Others commended the Faculty as a whole, noting that it is “very willing to mentor”. Master’s students conversely

saw a need for increased mentorship to take place at multiple levels. For example, comments called for greater mentorship not only on the supervisor-Master’s student spectrum, but also among PhDs, first and second year Master’s and undergraduate students. It was noted during group discussions that pairing experienced students with new students is an important means of transferring knowledge and building a healthy sense of community.

Seven PhD comments expressed a need for a mechanism, formal or otherwise, through which they could evaluate and receive feedback from supervisors.

Both PhD and Master’s students noted that increased opportunities for peer-to-peer mentoring would be of benefit to them. PhD students expressed that an arrangement that paired 3rd or 4th year PhD students with 1st year PhD students would be of great benefit, particularly in terms of establishing research agendas, and preparing for comprehensive exams. Master’s students noted that informal peer-to-peer mentorship would serve the dual purpose of ensuring continued learning (especially after course work has been completed) while providing a venue for academic and non-academic mutual support.

PhD students also expressed an interest in serving as mentors themselves. Four of five comments within this sub-theme noted an interest in taking on a more formal role in terms of mentoring undergraduate students. In



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a similar vein, another comment expressed that PhD students could also mentor new Master's students.

The Master's supervision category received twelve comments from Master's students (more than half of the total Master's comments for this theme). The bulk of these comments were directed toward the need for clearer expectations of what the student-supervisor relationship is to involve, and how it is to unfold over time. Some commenters suggest clearly setting out expectations for this relationship at the outset of the program, highlighting points such as timely feedback and the regularity of meetings. Other commenters suggest holding workshops for faculty on the subject of mentoring.



Finally, some Master's students called for more inter- and intra-departmental research groups --bringing together students, at various levels of their graduate career, with similar research interests -- as a means of addressing some of the issues listed above.

## 3.2 A TRANSDISCIPLINARY FACULTY

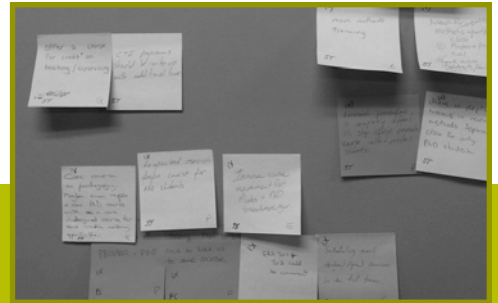
'A transdisciplinary Faculty' emerged from the town hall meetings as a distinct theme, garnering 28 comments. The term "transdisciplinary" is used loosely here, referring simultaneously to creating better linkages with non-academic professionals, developing community links, creating opportunities to collaborate with other universities, and transcending beyond the methods conventionally used in a given discipline.

Based on the comments provided, this theme was divided into three sub-themes:

1. *Community perspectives (P9, M1);*
2. *Connecting with other universities (P1, M1);*
3. *Fostering transdisciplinarity (P4, M2);*

Each of these sub-themes is briefly discussed below, recognizing that some sub-themes have relatively low numbers in terms of comments.

The bulk of PhD and Master's comments focus on bridging the gap between academia and the community.



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Comments from both town halls indicate a demand for greater interaction with non-academic experts and practitioners. Commenters expressed an interest in linking course work with ongoing community-based environmental projects. Also, comments note that such interactions might clarify, reinforce or challenge the relationship between theory and practice.

One comment from each of the town hall meetings expressed interest in connecting with students from other universities, particularly Wilfred Laurier University (WLU). Students from both groups indicated interest in opportunities for collaboration and joint-research, and in organizing UWaterloo-WLU student symposiums or conferences.

Lastly, commenters indicated a need to further strengthen transdisciplinarity internally. They note that the Faculty's departments remain relatively isolated from one another, both in terms of cross-department course availability and opportunities to work with and learn from students from other departments, be it within the Faculty of Environment or in other Faculties.

## 3.3 PROFESSIONAL SKILLS DEVELOPMENT

The 'Professional skills development' theme emerged from the town hall meetings with students discussing the knowledge and capabilities they feel are pre-requisites for life after completion of a graduate degree.

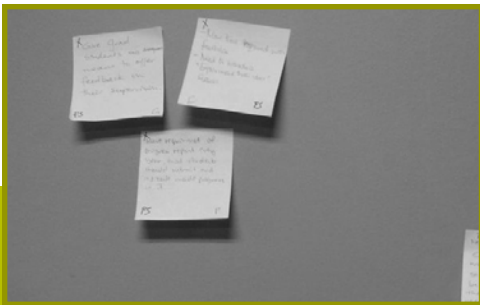
Most students stated that their intention was to pursue a career outside of academia, and expressed a desire to broaden their skill set to include lessons and tools with expanded applications. Overall this theme is dominated by comments from Master's students, with 21 comments compared to 5 PhD student comments. This might indicate the differing needs and desires of the two cohorts, and may also reflect the previous graduate experience of most PhD students.

Based on the comments provided, this theme was broken up into three sub-themes:

1. *Professional skills training (P5, M15);*
2. *Internships (P0, M3); and*
3. *Networking (P0, M3);*

Each of these sub-themes is briefly discussed below, recognizing that some sub-themes have relatively low numbers in terms of comments.

The 'Professional skills training' sub-theme makes up the majority of this theme, with key comments from both Master's and PhD students relating to the need to link theory to application (including but not limited to policy implications and impact given current and forecasted environmental regulations). There was also a focus on research methods and developing skills that are transferrable from research to other non-academic sectors.



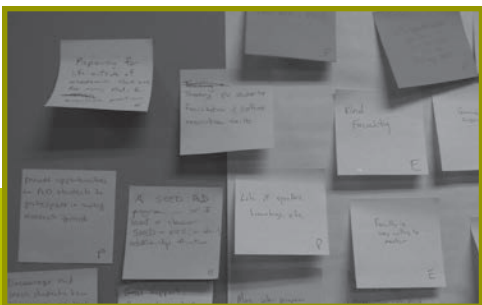
# STUDENT PERSPECTIVES

At the Master's level, three comments noted the desire for more internship/co-op opportunities and/or information regarding potential research opportunities, as well as a desire for exposure to industry research applications. Also at the Master's level, there were three comments regarding conferences, including praise for the opportunities to attend conferences and presentations given to Planning students, the desire for funding options for students wishing to gain networking experience through conference attendance, and a call to focus on professional networking opportunities outside of conferences.

WHAT IF a clearinghouse of information existed and was managed by the Faculty of Environment, creating a singular location for students to learn about the existing resources and on-campus programs? PhD and Master's students expressed a need for more professional skills and teaching-related skills training, and the University of Waterloo already offers many such tools: including workshops and certificate programs offered by internal and external facilitators. Providing a central source for accessing information regarding these programs might increase the level of participation, decreasing the gap in knowledge and skills that students feel they should be developing as part of their graduate experience.

What if students had more hands-on opportunities to learn and practice on the job skills from industry professionals? PhD and Master's students recognize the academic excellence in the Faculty, but suggest that a stronger connection to practice can help better prepare them for success after graduation. A series of monthly 'Skills Modules' taught in cooperation with industry professionals could give all students in the faculty flexible access to important skills training that they may not be able to build into their regular academic course loads.

It was noted anecdotally by participants in both town hall meetings that students within the Faculty of Environment are generally not aware of the various professional skills and career development resources that are available to them on campus (e.g. workshops, presentations, etc). Comments suggest that internal and external opportunities for learning are communicated through such a variety of channels that students are often inundated with information. Town Hall participants at both the PhD and Master's level indicated that they often dismiss emails sent by the Faculty and other internal supporting departments such as Career Services.



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The idea of information overload was brought up by numerous students in both town halls, who suggested that many information channels are being ignored by the majority of students within the Faculty, leading to under-utilization of existing resources. Further, it was suggested that greater awareness of existing resources might allow graduate students and their supervisors to tailor mentorship and other informal training tools to address gaps not covered through other means.

## 3.4 TEACHING AND TA'ING

'Teaching and TAing' was a popular theme at both town hall meetings, garnering 31 comments from the PhDs and 39 from the Master's students. While 'Teaching and TAing' was identified by both groups as an important topic area in terms of enhancing teaching and learning, a diversity of sub-themes emerged upon analysis of the student comments (as with other topics previously discussed). Once again, this may indicate the differing needs and desires of the two cohorts, given their respective roles and responsibilities as teachers and TAs. Based on the comments provided, this theme was broken up into seven sub-themes:

1. *Require teaching curriculum (P3, M0);*
2. *Foster teaching opportunities (M6, P11);*
3. *Linking to CTE (P5, M0);*
4. *TA selection (P4, M10);*
5. *TA responsibilities (P4, M0)*

6. *TA evaluations (P4, M6); and*
7. *TA training (P0, M17)*

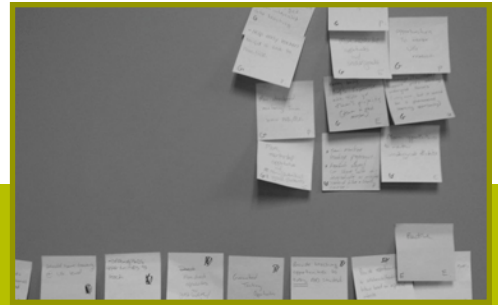
Each of these categories is briefly discussed below, recognizing that some sub-themes have relatively low numbers in terms of comments.

The 'Require teaching curriculum' sub-theme had three comments, exclusively from PhD students. One comment called for a course on pedagogy and suggested the coupling of a core PhD and undergraduate course to provide teaching opportunities. Another student discussed the desire for course credit for teaching and supervision responsibilities, while the third comment was regarding the CTE program, tying in with the next sub-theme.

The 'Fostering Teaching Opportunities' sub-theme had 17 comments, mainly from PhD students. The comments ranged from praise for the collaborative teaching environment between professors and PhD students, to the desire for increased teaching and mentorship opportunities. Interestingly, such comments link back to topics regarding TA positions and mentorship within other themes.

The 'Linking to CTE' sub-theme had 5 comments, which were exclusively from PhD students who expressed interest in the Fundamentals of University Teaching Program offered through CTE. Of note was a desire for the expansion of the number of workshops and also





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increased promotion and support of the program during graduate studies.

The 'TA Selection' sub-theme had 14 comments, and the main message from students was the desire for a mechanism where TAs are selected based on a combination of student interests/preferences and skills. It was noted that this process exists in one or two departments, but is seemingly not consistent throughout the Faculty.

The 'TA Responsibilities' sub-theme had four comments, exclusively from PhD students, mainly regarding increasing TA responsibilities such as the opportunity to participate in course delivery.

The 'TA Evaluations' sub-theme was primarily focused on receiving feedback throughout TA placements, although administrative aspects such as standardization between professors' evaluations of TAs and the ability for TAs to evaluate professors were also mentioned.

The 'TA Training' sub-theme had 17 comments, exclusively from Master's students, with a diverse range of topics, including; wanting more guidance from professors regarding expectations for TA positions, mentorship from experienced graduate students for those new to TAing, and training around 'soft' teaching skills such as classroom management, planning, etc.

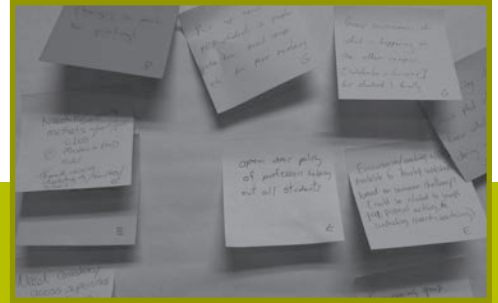
## 3.5 A POSITIVE STUDENT LIFE EXPERIENCE

As a theme, 'A positive student life experience' attempts to provide a general feeling of the community life of a graduate student over their tenure in the Faculty. Overall this theme is dominated by comments from Master's students (24 Master's comments compared to 3 PhD student comments) which may indicate the differing needs and desires of the two cohorts, as well as perhaps the previous graduate experience of most PhD students. Based on the comments provided, this theme was broken up into five sub-themes:

1. *Faculty atmosphere (P2, M4);*
2. *Student community development (P1, M3);*
3. *Seminars and presentations (P0, M4);*
4. *Support for incoming students (P0, M6); and*
5. *Providing workspace for masters students (P0, M7)*

Each of these sub-themes is briefly discussed below, recognizing some sub-themes have relatively low numbers in terms of comments.

In terms of Faculty atmosphere, both Master's and PhD students noted that the administrative staff are very supportive and the faculty are kind. One comment noted that faculty members should be included throughout the town hall process. This model suits the vision of future town halls, while recognizing that the first round of



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town halls were designed to be student-focused, so as to provide an enabling atmosphere for students to share experiences.

In terms of student community development, the comments recognized the current interfaculty 'camaraderie', as well as the good social environment available to those involved in the Environmental Graduate Students Association (EGSA) and the Association of Graduate Planners (AGP).

Three sub-themes related solely to Master's students were seminars, support for incoming students and workspace. In the Master's town hall, four students noted the importance of seminar events, such as the ERS Speaker Series, and there was a feeling that more seminars, town halls and speaker series should be taking place.

Another concern that emerged solely from the Master's students relates to support for incoming graduate students. Six students voiced their desire for increased support, particularly at the outset of their graduate careers. Some comments suggested that this might be achieved through more informative orientation sessions, or through the implementation of a needs-based assessment. Other students were interested in general guidance, as well as Faculty wide introductory courses to bring all students up to speed. It was suggested that an entry survey might be able to identify needs of Master's and PhD students that are not currently being met.

Finally, the Master's students voiced interest in having more formalized and equitable workspace across the Faculty. While the Loud Room was lauded, there was a feeling there should be dedicated desks or office space for Master's students. Potential to explore various space options, such as 'flex desks' (i.e. weekly/bi-weekly use of desks) or 1-2 terms of guaranteed desk space for Master's students during thesis writing stage were discussed.

## 3.6 PROGRAM DESIGN

As a theme, 'Program design' covers the more formal aspects of learning, particularly coursework and comprehensive exams. This theme covers a substantial portion of comments – 43 Master's comments and 30 PhD comments - perhaps - due to the breadth that it encompasses. To help organize the comments, 'Program design' was broken up into ten sub-themes:

1. *Overall program content (P1, M7);*
2. *Individual course content (P3, M5);*
3. *Course scheduling (P4, M3);*
4. *Instructor selection (P1, M4); and*
5. *Range of course offerings (P1, M7);*
6. *Methods course/training (P7, M7);*
7. *Field courses (P0, M7)*
8. *Comprehensive exam consistency (P6, M0);*
9. *Formalized teaching requirements (P5, M0);*
10. *Feedback (P2, M3);*



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Given the number of sub-themes in this theme, the sub-themes will be discussed in four blocks, namely: **(1)** overall program content, individual course content, course scheduling, and instructor selection; **(2)** range of course offerings, methods course/training, and field courses; **(3)** comprehensive exam consistency and formalized teaching requirements; and **(4)** feedback.

## **OVERALL PROGRAM ISSUES, INCLUDING PROGRAM DESIGN, COURSE CONTENT AND SCHEDULING, AND INSTRUCTOR SELECTION**

At the overall program level there was a feeling from the Master's students that courses should be updated so as to remain relevant. Likewise, several Master's students noted unwanted redundancy in terms of topics and guest lectures, and some felt the core courses did not teach sufficiently new content. One PhD student suggested increased course requirements at both the Master's and PhD level. At the individual course level, there was a feeling amongst both Master's and PhD students to increase the amount of discussion in class, in part to build a sense of community. Likewise, the Master's students called for more flexibility in courses so they may pursue their own research interests as opposed to the professors' interests.

There were comments by both Master's and PhD students regarding course scheduling, primarily the goal of making the schedules more flexible, less dominated by courses in the Fall, and with increased summer course

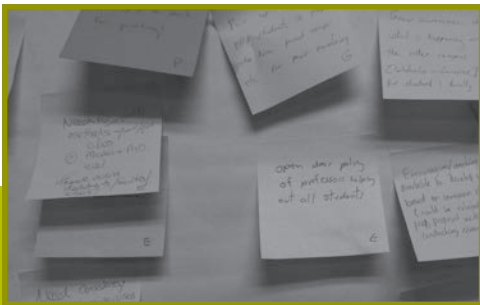
offerings. One student specifically suggested ERS 701 and 702 should be held concurrently, while two students argued that Planning 801, 802 and 710 overlap and should therefore be reviewed.

In terms of instructor selection, the only comments came from Planning Master's students, who appear to want instructors with an appropriate mix of professional and research experience. One PhD student requested that core courses be taught by the same professor over a longer term.

## **RANGE OF COURSE OFFERINGS, INCLUDING METHODS, AND FIELD COURSES**

Many comments from both Master's and PhD students related to the range of course offerings. At both levels there appears to be a desire to maintain diverse elective course offerings, and add new offerings, such as a communications course. Two Master's students requested more graduate specific courses (i.e. ones that are not cross-listed with undergraduate courses), and one noted that cross-listing courses with undergrads may discourage undergraduates from entering graduate school.

A methods course was a popular subject, and both cohorts requested methods courses of various forms, including modules, lectures, discussion groups and workshops. The feeling appears to be one in which methods is a Faculty wide concern and opportunity



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rather than something handled at the department level. One PhD student suggested that PhD students might teach methods modules to Master's students.

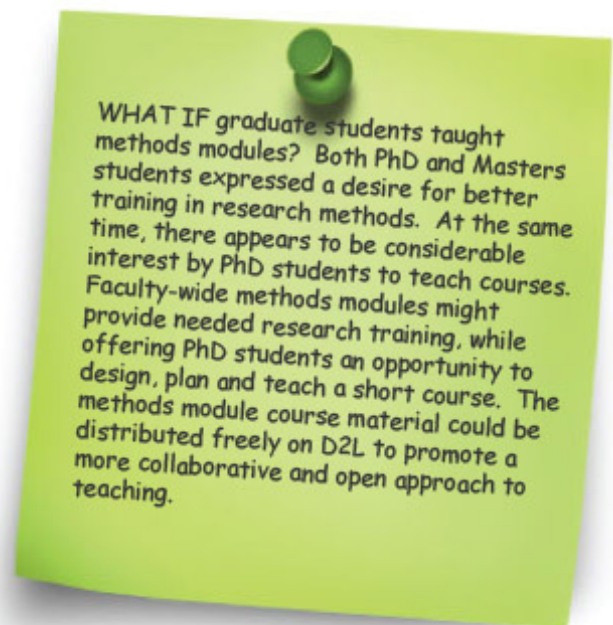
The final type of course offering relates to field courses, which emerged with the Master's students. Effectively, the feeling is that more field courses are necessary and desired, and that learning about the environment should not be mediated through technology. The importance of field courses ties in with ideas of professional development, which are discussed in a different section.

## COMPREHENSIVE EXAM CONSISTENCY AND FORMALIZED TEACHING REQUIREMENTS

Two themes that emerged from the town hall discussions that relate specifically to PhD students are comprehensive exam and mandatory teaching requirements. Several students felt the comprehensive process should be stricter, more consistent in terms of process, and more consistent in terms of content (e.g. two students in ERS suggested a core reading list for all students). Regarding formalized teaching requirements, several PhD students suggested that both teaching and learning pedagogical theory become a formalized part of the PhD program.

## PROVIDING FEEDBACK

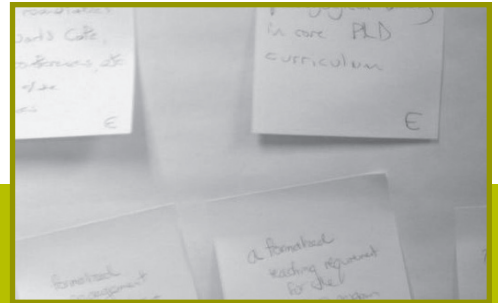
Finally, both the Master's and PhD students showed interest in various forms of feedback. At the Master's level this related to program reflection and offering an



exit evaluation of both the program and the supervisor. For the PhD students there was interest in providing students an anonymous channel for feedback on their supervisors, as well as a formalized progress report for students to fill out on an annual basis.

## 3.7 LIFE AS AN ACADEMIC

The 'Life as an academic' theme speaks to several of the daily tasks and logistical concerns that are unique to graduate school, particularly to individuals pursuing a life in academia. This theme featured more prominently at the PhD town hall (14 comments) than at the Master's



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town hall (3 comments). The sub-themes within this topic are quite specific in nature, which lends to a rather narrow focus for this particular theme. This includes three sub-themes that relate directly to prominent tasks within the daily life of an academic, and a fourth sub-theme that focuses less on skills and more to the logistics of supporting oneself financially as a graduate student.

1. *Grant writing supports (P2, M1)*
2. *Academic writing supports (P2, M0)*
3. *Supervision opportunities (P4, M0)*
4. *Funding (P6, M2)*

Each of these sub-themes is discussed briefly below, recognizing that some sub-themes have relatively low numbers in terms of comments.

Three comments were offered that spoke to the topic of Grant Writing Supports. Although all three generally relate to a desire for guidance in the grant writing process, two different mechanisms to achieve this goal were proposed. On one side there is recognition that the Faculty encourages its students to apply for funding and that existing workshops and tutorials will continue to guide their efforts. At the same time, another comment suggested that beyond these established support mechanisms, PhDs could learn a great deal if they could “participate in writing research grants”.

As publishing is a significant part of the PhD experience, it is not surprising that the need for academic writing

supports was raised by only PhD students. Although small in size with only two comments, the importance of developing academic writing skills at a publishable level is highlighted by one student who asked whether publishing scholarly articles should be a program requirement.

The opportunity to supervise or co-supervise thesis work was brought up by four PhD students. The ability to supervise undergraduate theses was viewed by one student as a strategy to ease the workload of professors who are often called to take on supervisory roles at the PhD, Master’s and Undergraduate level. Given the importance of supervision in an academic career, this early exposure was viewed by another student as a “phenomenal learning opportunity”. Creating supervision teams was brought up as a potential model for the Faculty.

The general message from PhD and Master’s students within the funding theme was to continue to ensure that graduate students receive funding. Along these lines, one comment noted specifically the need to ensure PhDs are funded into their fourth year. The most common mechanism for achieving this was TA and RA positions, although one PhD student noted that funding could be tied to undergraduate supervision roles.

**NOTE:** A copy of the detailed town hall results can be obtained by contacting the STEC



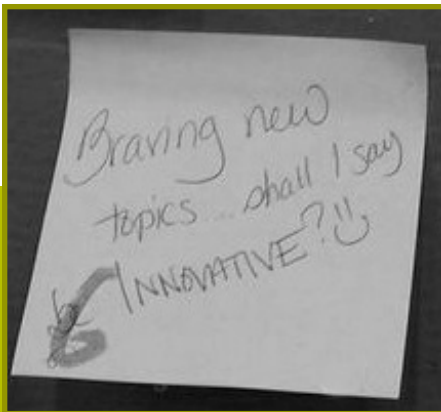
# 4.0 MOVING FORWARD

The town hall meetings provided a snapshot of graduate student experiences with teaching and learning throughout the Faculty of Environment. The participants at these meetings highlighted many positive aspects such as; the faculty and administrative staff's commitment to supporting its graduate students, an inter-departmental 'camaraderie' that fosters a good social environment, and an active commitment by student associations to build on this camaraderie. In order to inform future decision-making with respect to teaching and learning objectives and initiatives, the following topics that resulted from the town hall data are presented for consideration. These topics are focused on opportunities to enhance the teaching and learning experience of students as per the mandate of the Faculty's Teaching Fellow and Teaching and Learning Committee.

Many students pursue graduate studies as a means to not only advance their technical knowledge in a chosen field of study, but also to gain broadly applicable skills in order to be competitive in today's

economic workplace. In this regard, there appears to be some disconnect between the graduate curriculum and student perceptions of the knowledge and skill sets they should have after completing an advanced degree. This may, in part, be due to a lack of awareness of existing resources and promotion or encouragement to participate in available programs. Ideally, graduate students and their supervisors should work together early on in the relationship to determine learning





# MOVING FORWARD

objectives and how these can be met during the degree program; whether through course work, additional training, conference attendance, mentoring, etc. The concept of a clearinghouse of information may increase awareness of both students and faculty about program availability, and may help to determine how knowledge gaps can be filled through alternative means.

Additionally, the desire for greater mentorship and training, both as teachers (PhDs) and teaching assistants (Master's), as well as clearly communicating expectations for these roles, was a prevalent theme related to students' learning objectives. A 'natural fit' between PhD students that wish to take on mentorship roles and Master's students seeking guidance from peers that are further in their studies seems to be a key message from these town halls. The development of students groups, organized around research themes or otherwise, could capitalize on the existing knowledge within the department and minimize additional responsibilities given to faculty members, who could chair these groups and provide some direction. At the same time, this model would allow students to lead the progression of the relationships that formed.

A key question that arose from the STEC's analysis and interpretation of the town hall data was whether a formal or informal approach to addressing opportunities for program enhancement should be taken. For example, should a professional track within the graduate curriculum become a mandatory component of existing

program, or is informal promotion of resource centres a more desirable pathway. Similarly, should a mentoring program be formally established, or would a more organic approach to fostering research and study groups, left to the discretion of supervisors and students, ultimately produce a larger impact? It is recognized that in a resource-limited environment, there are trade-offs between delivery methods and that one answer may not apply to all questions. Also, devoting resources to formalizing new initiatives may result in reduced capacity to deliver existing aspects of the graduate curriculum that students value and enjoy.

In order to advance the teaching and learning initiatives within the Faculty of Environment, the STEC suggests that the data presented in this report be used in further discussions on specific areas of interest, either through roundtables, surveys, or in other means of decision-making. Many students who attended the town hall meetings indicated interest in further participation in scoping activities, and could be engaged in continued dialogue around the themes outlined in this report. There was also recognition that orientation is an ideal opportunity to engage new grads in ongoing efforts to improve teaching and learning. Further, in order to validate the data collected, it is suggested that the greater graduate study body is approached, either through survey or other means, to increase the sample size of this exercise and ensure the views discussed are representative and relevant within the Faculty.