



## I. STUDENT EVALUATION OF TEACHING

### BACKGROUND

In May 2006, the UBC Senate approved, in principle, recommendations regarding student evaluations of teaching that focused on a modular evaluation process designed to provide data to multiple stakeholders. The Senate charged the Teaching and Learning Committee and the Office of the Provost with developing an implementation strategy.

A policy on Student Evaluation of Teaching was approved at the May 2007 UBC Senate. This policy outlined four major goals:

- 1) To provide data that will be used to continuously improve the student's learning experience
- 2) To provide students, departments, faculties and the University with a source of data about the overall quality of teaching.
- 3) To provide teachers with information on their teaching performance and to assist with the further development of their teaching.
- 4) To provide the University with data on the quality of teaching to be used for operational purposes, including but not limited to assessment of faculty for merit and/or performance adjustment salary awards, promotion, tenure and institutional recognition.

The purpose of this report is to update the UBC Senate on the implementation of the Policy.

### IMPLEMENTATION

Implementation of the Policy began in the Fall 2007 with the inclusion of the University Module items (UMI) in the student evaluation of teaching process. The University Module items approved for Fall 2007 implementation were as follows:

Based on a 5-point scale, where 1= very poor, 2 = poor, 3 = adequate, 4 = good and 5 = excellent, please rate your instructor on the following:

1. The *clarity* of the instructor's expectations of learning.
2. The instructor's ability to *communicate* the course content effectively.
3. The instructor's ability to *inspire* interest in the subject.
4. The *fairness* of the instructor's assessment of learning (exams, essays, tests, etc).
5. The instructor's *concern* for students' learning.
6. The *overall quality* of the instructor's teaching.

The Provost committed to a careful psychometric analysis of the six items in order to review, and if needed, refine the questions. A comprehensive analysis was undertaken early in 2008 by Dr. Ralph Hakstian. The full report can be found at <http://www.vpacademic.ubc.ca/>.



### Scope

The Policy stipulates that, with limited exceptions, Student Evaluations of Teaching should be administered in every course section (or learning experience) at UBC each time the section is offered. The exceptions are individual / independent study courses, classes with very small enrolments, as well as other specialized teaching contexts where alternative forms of obtaining student feedback are more appropriate and practical (e.g., courses taught by multiple instructors, clinical instruction).

A significant number of courses offered in the allied health disciplines contain clinical components and evaluation of instruction in those courses did not include the UMI.

As of April 15, 2008, UMI results for 2,175 instructors (representing 72,174 evaluations) in Term 1 courses had been submitted to the University (two term courses evaluated at mid-term are excluded from this report). The unit of analysis is the unique class / instructor combination (i.e., classes with multiple instructors had more than one UMI data set).

**Table 1. Scope of Fall 2007 Implementation**

FACULTY <sup>1</sup>	NUMBER OF INSTRUCTORS EVALUATED					
	100 Level	200 Level	300 Level	400 Level	Grad	TOTAL
Applied Science <sup>2</sup>	2	1				3
Arts	156	159	293	174	104	886
Commerce		38	57	49		144
Dentistry <sup>3</sup>						-
Education	7	3	133	27	79	249
Forestry	4	11	16	16	6	53
College of Health Disciplines		2		2		4
Land & Food Systems	2	14	13	17	3	49
Law	6	15	33	48	2	104
Medicine				6	1	7
Pharmaceutical Sciences		12	26	34		72
Science	177	112	137	102	76	604
<b>TOTAL</b>	<b>354</b>	<b>268</b>	<b>708</b>	<b>475</b>	<b>271</b>	<b>2,175</b>

<sup>1</sup> With one exception (see next footnote), this denotes the Faculty that evaluated the course.

<sup>2</sup> The Faculty of Applied Science was unable to implement the UMI in Fall 2007. The three instances reported were APSC courses offered to students in other Faculties and evaluated by those Faculties.

<sup>3</sup> Dentistry courses evaluated were all two term courses and many may be covered under exemption.

All instructors for whom UMI data was submitted (including results for low enrolment classes) are included in this report.



### ***Administration of Evaluations***

The University did not specify a required method of data collection, except to say that the method used should be consistent for both the UMI and Faculty-specific questions, and that both sets of questions should be administered at the same time. Both online and paper-based collection mechanisms were used as follows:

**Table 2. Data Collection Mechanisms**

<b>FACULTY</b>	<b>ONLINE</b>	<b>PAPER</b>	<b>NOTES</b>
Applied Science	✓		
Arts		✓	
Psychology	✓		
Commerce	✓	✓	UMI items were administered online; Faculty items were administered separately on paper.
Dentistry	✓		
Education	✓	✓	UMI and Faculty items were administered on separate forms, at the same time. ETEC evaluations online.
Forestry		✓	
College of Health Disciplines	✓		
Land & Food Systems	✓		
Law	✓		
Medicine	✓		
Pharmaceutical Sciences	✓		
Science	✓		

### ***Effect of Online Administration***

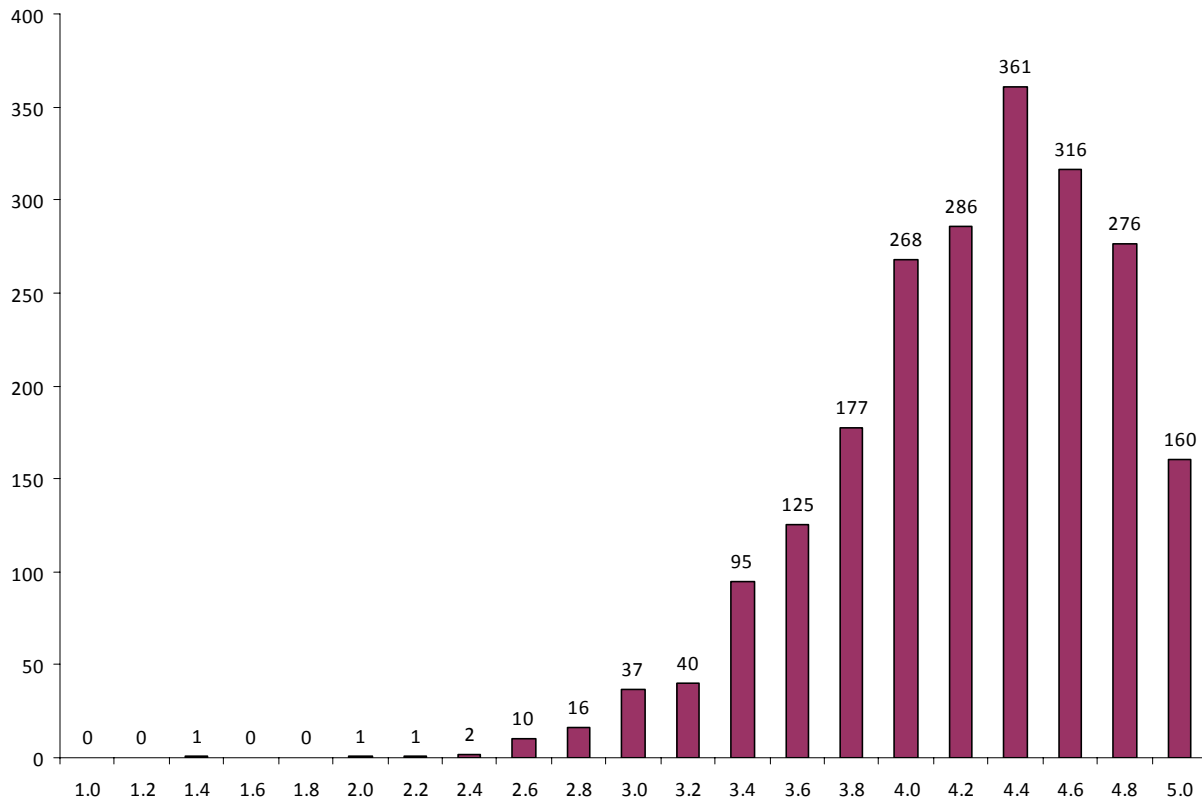
In his report, Dr. Hakstian compared response rates for online and paper-based inventories for the Department of Psychology, and the Faculties of Land and Food Systems, Law and Science. In each case, response rates from 2006 Term 1 paper-based inventories were compared to those for online inventories in 2007 Term 1. He found that response rates were comparable (65.51% vs. 66.48%) overall. Similarly, there was no evidence that this change resulted in any systematic difference in scores on Faculty-based questions. Anecdotal evidence suggests that open-ended comments from online inventories are more meaningful, as suggested in the literature. (Please see the report for a fuller discussion).



## RESULTS

The initial results indicate that, in the opinion of students, teaching at UBC is generally good (4) to excellent (5).

**Figure 1. The Overall Quality of Teaching**



As ranked by students, the overall quality of teaching at UBC rates 4.18 (standard deviation = .52) of a five point scale. Roughly 3 percent of instructors score at adequate (3) or less; approximately 64% of instructors score good (4) or higher.

### ***Reliability and Validity***

The evidence suggests that the six University questions (UMIs) perform at least as well as previously used teaching evaluation items, although some improvement could be made for items 1 and 4. They correlate highly with similar items used in previous and current assessments, there is strong evidence of internal and inter-rater consistency and according to Dr. Hakstian's report, they "...more than adequately perform the function intended for them." (p. 27). Please see the report for a fuller discussion of these issues.



### ***UMI Results by Year Level***

As shown in the following tables, scores for each of the UMIs are routinely four or higher on a five point scale.

**Table 3. Results by Year Level.**

UMI	Year Levels					
	100 Level	200 Level	300 Level	400 Level	Grad	Average
1. The <i>clarity</i> of the instructor's expectations of learning.	4.08	4.03	4.05	4.14	4.27	<b>4.10</b>
2. The instructor's ability to <i>communicate</i> the course content effectively.	4.20	4.17	4.19	4.28	4.39	<b>4.23</b>
3. The instructor's ability to <i>inspire</i> interest in the subject.	3.95	4.03	4.08	4.21	4.29	<b>4.10</b>
4. The <i>fairness</i> of the instructor's assessment of learning (exams, essays, tests, etc.)	4.03	4.06	4.05	4.18	4.27	<b>4.10</b>
5. The instructor's <i>concern for</i> students' learning.	4.12	4.15	4.19	4.29	4.44	<b>4.22</b>
6. The <i>overall quality</i> of the instructor's teaching.	4.25	4.19	4.21	4.28	4.43	<b>4.25</b>

As expected, scores tend to increase with level of instruction, although these changes are not always consistent across Faculties. Where such effects have been observed in the literature, they have been shown to have a marginal impact.

### ***Influence of Class Size***

It is possible that an increase in scores with year-level is influenced by a corresponding decrease in class size. The UMIs show a small negative correlation with class enrolment as shown in Table 4.



**Table 4. Correlation between Class Enrolment and UMI Scores.**

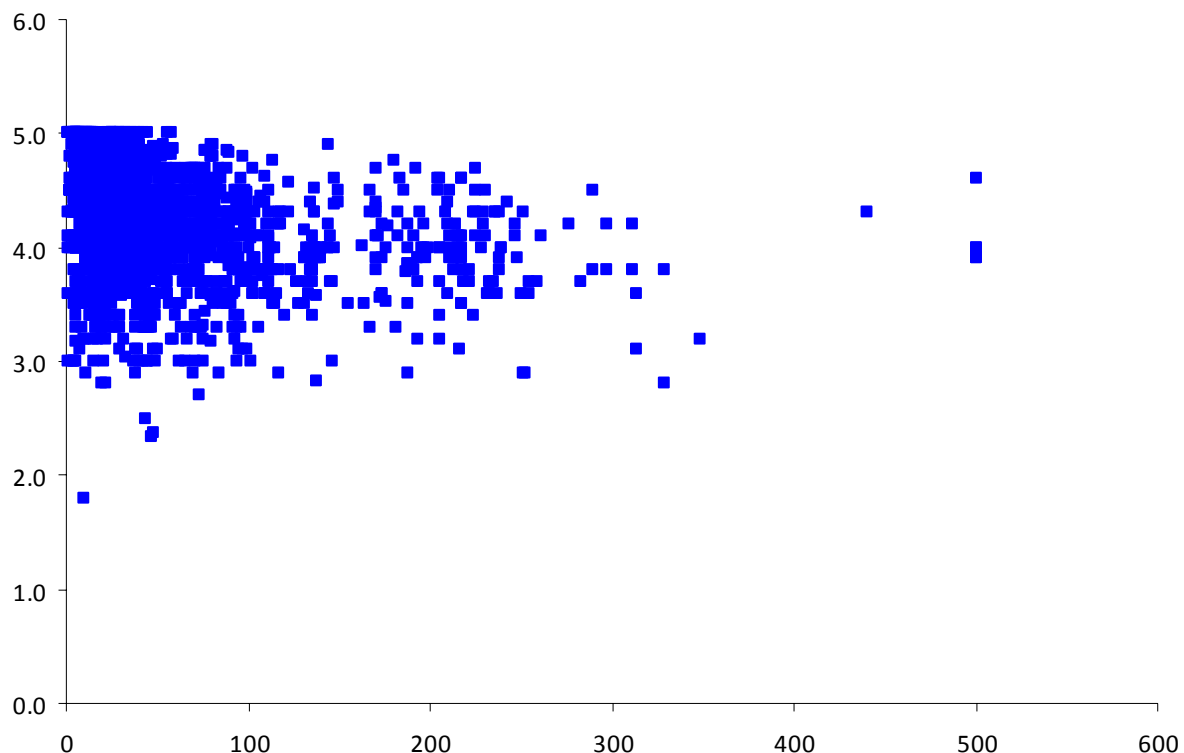
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$r_{xy}$	Item
-.14	The <i>clarity</i> of the instructor's expectations of learning.
-.16	The instructor's ability to <i>communicate</i> the course content effectively.
-.21	The instructor's ability to <i>inspire</i> interest in the subject.
-.26	The <i>fairness</i> of the instructor's assessment of learning (exams, essays, tests, etc.)
-.26	The instructor's <i>concern for</i> student's learning.
-.18	The <i>overall quality</i> of the instructor's teaching.

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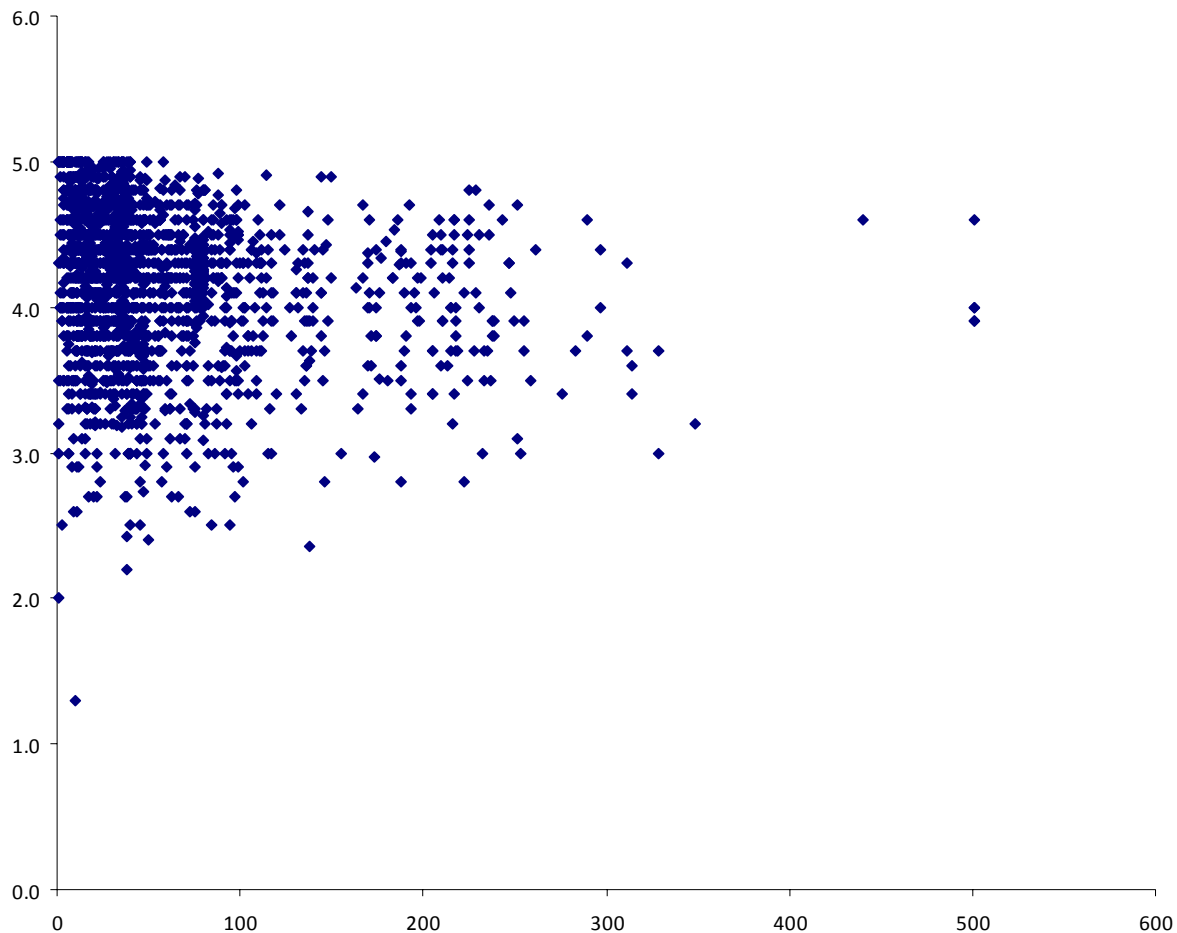
However, the relationship between these variables appears not to be linear and accounts for very little of the variance (< 1%) as shown in the following two examples.

**Figure 2. The Instructor's Concern for Learning & Class Enrolment**





**Figure 3. The Overall Quality of Teaching & Class Enrolment**



### ***Influence of Grades***

There is some suggestion that grades in a course may influence evaluations. Dr. Hakstian's report shows a small positive relationship between grades and mean UMI scores (with year of instruction partialled out), but whether this is because students who get better grades are more generous with evaluations, or whether well taught courses result in higher grades is an empirical question. Class grades do not appear to have a consistent (or in most cases statistically significant) impact on student response rates.

### ***Summary***

As indicated earlier, students perceive the quality of teaching at UBC to be good to excellent. There is a need for more empirical study, for the development of norms and finalization of university questions.



## NEXT STEPS

The University is committed to exploring the recommendations made in Dr. Hakstian's report and to consider feedback on the report and the questions from faculty members and students. Priorities for the next several months include:

1. Focus groups will be conducted with faculty members and with students to gather feedback on the wording of the UMIs, and to discuss whether additional questions are needed.
2. A Standing Committee on Student Evaluation of Teaching will monitor the progress of evaluation.
3. An online tool will be made available for the systematic submission of Student Evaluation of Teaching data.
4. Feedback will be sought on the proposed procedures and mechanisms for posting results.
5. Work will commence on the implementation of the full modular approach identified in the Senate Policy (e.g., ability for instructors to add their own questions) for both normative and summative purposes.
6. TAG will continue to offer workshops to assist faculty members to interpret and reflect on the data collected through student evaluation of teaching.

Additional, longer-term development of the Student Evaluation of Teaching project will include:

1. The development of University-wide, faculty-specific and department-specific norms.
2. Empirical research on response rates and other factors thought to potentially influence student evaluations of teaching.
3. Collaboration with faculty to develop a bank of empirically sound questions for use by individual faculty members to construct their Instructor Modules.

The work identified constitutes an ambitious agenda over the next several years, and Dr. Hakstian will continue to assist us in accomplishing these goals.





## II. TEACHING AND LEARNING INITIATIVES

UBC aspires to be known as a world leader in teaching and learning, and is committed to implementing evidence-based innovative teaching methods and learning experiences. Several central initiatives assist in achieving these goals.

### CENTRAL UBC INITIATIVES

- **The Carl Wieman Science Education Initiative (CWSEI).** This initiative allows departments in the Faculty of Science to engage in evidence-based educational improvement by addressing questions of what students should learn, what they actually learn, and which curriculum content and instructional methods will best achieve identified learning outcomes. In the first year, based on a competitive application process, the CWSEI funded course transformation activities in the Life Sciences Programs and in the Earth & Ocean Sciences department, with initial support also provided to departments of Computer Science, Physics & Astronomy, Mathematics and Statistics.
- **President's Teaching and Learning Initiative: Postdoctoral Teaching Fellows (PTF).** The \$3 million program for Postdoctoral Teaching Fellows in the Faculty of Arts enables innovative and collaborative teaching between Postdoctoral Teaching Fellows and senior UBC professors, while helping to launch the careers of new scholars showing early promise as excellent university teachers and researchers. Students benefit by receiving instruction in smaller classes, by intentional interdisciplinarity, and by exposure to innovative teaching methods and cutting edge research. Fourteen PTFs have been appointed to date and student experience in forty courses has been enriched as a results. This program will expand next year to include more large-enrollment courses.
- **Teaching Assistant (TA) Training Programs.** TAs have a significant impact on the undergraduate student learning experience at UBC. In recognition of their important role in the student experience as well as the value of professional development in teaching for their pending academic careers, and in collaboration with TAG, a new Faculty/Department - based training program model has been developed and implemented. In 2007/08, 24 units received funding to train 685 TAs; in 2008/09 20 units received funding for 707 TAs.
- **The LEAD (Lasting Education Achieved & Demonstrated) Initiative.** The LEAD initiative is stimulating cross-campus conversations about teaching. To date, more than 300 UBC faculty members have attended LEAD discussions.

In addition to these initiatives, two central units continue to support innovation in teaching through a variety of activities.

- **Teaching and Academic Growth (TAG).** TAG provides support for teaching and learning at UBC with professional development activities that focus on evidence-based and reflective practice. Faculty and TAs across campus participate in seminars, instructional skills workshops, certificate programs and communities of practice facilitated by TAG (some specific accomplishments noted in the following pages).



- **Office of Learning Technology (OLT).** OLT's mandate is to facilitate transformative learning experiences by supporting technology-enabled environments for face-to-face and distance learning. OLT staff collaborate with Faculties and service units to introduce innovations in educational technology to the classroom (a sample of specific innovations noted in the following pages).

## INITIATIVES IN SUPPORT OF TREK GOALS

In the pursuit of excellence, individual faculty members, department Heads, Deans, students, instructional support and student services personnel have engaged in the development and delivery of innovative teaching and learning initiatives to increase student engagement and to assist students in achieving the best possible educational outcomes. The initiatives referenced in the following paragraphs highlight some of the varied activities across campus.

### **SOCIAL AWARENESS & GLOBAL RESPONSIBILITY**

Through the creation of new courses and the modification of existing ones, the development of co-curricular or other learning opportunities, Faculties have increased opportunities for students to develop an appreciation for and awareness of issues related to global citizenship.

#### ***Co-curricular Activities***

- Students in the Faculty of Law review claims of wrongful conviction in the province of British Columbia as part of the *Innocence Project*. They investigate claims, identify potential miscarriages of justice and assist in securing the release of individuals who have been wrongly convicted.
- In the Sauder School of Business, faculty coaches train students for local, national and international business case competitions.
- Students in Land & Food Systems are encouraged to engage in at least four paid or volunteer work experiences related to their discipline before they graduate.

#### ***Community Service Learning***

- In the First Nations Studies Program students have the opportunity to volunteer in a service learning program operated collaboratively with the Learning Exchange and the Musqueam Indian Band.
- The School of Human Kinetics offered 24 three-credit community service learning placements to students in the downtown eastside. Courses with community service learning components were also offered in the Faculty of Land & Food Systems (Agricultural Sciences, Agroecology and Food, Nutrition & Health) and the Faculty of Arts (Canadian Studies, Foundations, Italian and Sociology).
- As part of community service learning projects in Geography, four students worked with a women's transition house to create maps to aid women in orienting to the neighbourhood; one student developed a series of workshops to teach mapping skills at Grandview School; and ten students worked in Evergreen Park to collect information on invasive species.



### ***Global Perspectives***

- In Geography, eighteen students took a two week field trip in order to gain first hand knowledge of urbanization and economic transformation in Japan.
- Twenty graduate students from the School of Community and Regional Planning attended a Philippine Planning Studio course in Naga City, Philippines. Students conducted research in transportation and land use planning, urban agriculture, investment and business promotion, sustainable financing for social housing, youth development planning and promoting quality and universal public education. This research informed the city's 2008 legislative agenda.
- An e-portfolio project developed in Dentistry has developed into an international peer review program among students from the UK, Australia, the United States and Canada.
- The Faculty of Education now provides international teaching practica experiences in Mexico, Switzerland, Germany, Australia and the UK (and other potential partnerships have been identified).
- The first students to complete a Global Perspectives major in Natural Resources Conservation will graduate in May 2008. The major focuses on the conservation and management of renewable and non-renewable resources, policy formation and planning within a global context and includes an international study and/or work experience.
- The Institute for European Studies organized a summer program which saw participation from across Canada and Europe.
- Seven students from Anthropology spent three months in Dar es Salaam, learning the language and conducting ethnographic fieldwork.

### ***Aboriginal Issues and Perspectives***

- The *Musqueam – UBC Field School Project* is designed to facilitate research relationships between UBC and the Band on issues of interest to the Musqueam Community.
- Six graduate students spent five weeks in Gitxaala BC, working on community-based research projects in collaboration with the local First Nations community.
- A capstone course in the First Nations Studies Program requires students to design, negotiate, implement and assess independent research projects undertaken in collaboration with, and responding to the stated needs of Aboriginal community organizations.
- A partnership between Film and the First Nations Studies Program has resulted in the development of a concentration in Aboriginal media.
- The Faculty of Science is taking leadership in the coordination of Aboriginal outreach programs in east side schools.

### **ACADEMIC EXCELLENCE**

Faculties are ensuring that programs and courses meet the highest standards of academic excellence through a variety of means, including the assignment of senior faculty to introductory courses, development of interdisciplinary courses and programs, and deliberate emphasis on improvement of analytical and communication skills.



### ***Analytic and Communication Skills***

- Students in the *Centre for Women's and Gender Studies* (CWAGS) wrote journal manuscripts for a 3-stage peer review prior to submitting them to international refereed journals. The process led successfully to two papers being submitted to two peer-reviewed journals.
- The Faculty of Forestry is offering a course to assist international graduate students from 37 countries to develop scientific writing skills in English.
- Arts is piloting a new multi-disciplinary course (ASTU 150) in reading and writing in the research disciplines.
- Graduate Studies offers mini-workshops on writing, publishing, peer review and effective thesis construction to graduate students.

### ***Interdisciplinarity***

- Students are now able to specialize in Environmental and Natural Resource Law, a program offered under the auspices of the Centre for Global Environmental and Natural Resource Law.
- In order to bridge disciplines, the Faculty of Science is offering dual degrees in Science and Music (approved), Science and Education (presented for approval), as well as a cross-disciplinary course called Global Issues in the Arts and Sciences.
- UBC Law is home to the National Centre for Business Law, which provides a robust, interdisciplinary and empirical research environment for research and scholarships in business law and finance policy, focused on both domestic and international comparative law.
- Undergraduate and graduate students in two interdisciplinary research seminars on science and society presented their design of public engagement to an international team of experts. They collaborated to publish information about the complex scientific issues involved and recruited participants from across the province to deliberate about biobanks. This deliberative engagement model is now being used by the Mayo Clinic and universities in Michigan and Australia.
- A cross-faculty initiative pairs graduate students from Creative Writing and Science in an interdisciplinary elementary school outreach program.

### **INSTRUCTION DELIVERY**

Faculties are continuing to develop and expand co-op programs, international and local experiential learning opportunities (see above) and are providing opportunities for undergraduate students to participate in research. There is a concerted effort to 'make the big small', by improving distance education delivery and offering unique individualized programs and program-based communities.

### ***Research***

- Theory and methodology courses are now available for all undergraduate and graduate students in Art History and Visual Arts.



- The Faculty of Arts awards departmental grants to fund undergraduate involvement in research.
- *Archaeological Lab Nights* are weekly opportunities for graduate and undergraduate students to conduct archaeological research.
- The Commerce Scholars Program is designed to provide top Commerce students with hands-on experience with primary research in Business.

### ***Learning Communities***

- A new graduate program in Cell & Developmental Biology is structured to student needs, allowing students to receive instruction in areas relevant to their own research areas, their individual backgrounds and their goals.
- Themed cohorts in Education foster collaborative learning within a common context and encourage the integration of learning activities from all subject areas.
- Small cohorts which engage first-year students in scholarly activity are available in both Arts (Arts One and Coordinated Arts) and Science (Science One and Coordinated Science).

### ***Service and Support for Distance Learners***

- In collaboration with the Faculties, the Office of Learning Technology supported the distance delivery of 110 (286 sections) courses.
- An orientation to online learning for distance learners has been made available, through content sharing, to Faculties who wish to use and re-mix the material to include discipline specific content.
- Instructional Designers in the Office of Learning Technology are collaborating with both the Faculty of Arts in the development of 18 distance education courses, and with the new School of Public and Population Health to develop and deliver courses using a distributed learning format.

## **INNOVATIONS IN TEACHING**

A number of Faculties (including Arts, Dentistry, Education, Forestry, Law and Science) and Programs (e.g., Institute for Resources, Environment, and Sustainability) have recently completed curriculum reviews, or are currently in the process of reviewing curriculum content as well as teaching methods, processes and effectiveness. These evaluations are resulting in innovative approaches that expose students to a variety of learning experiences.

### ***Learning Methodologies & Outcomes***

- Departments undergoing external reviews in Science are expected to include a reflective self-assessment of the teaching program in the documentation.
- A 'transformative' core course in Journalism focuses on knowledge enhancement, new media and interdisciplinarity, and students apply the skills they are learning in assignments which range from covering social issues in the Downtown East Side to addressing questions of diversity and media representation.



- Responding to input from its industry advisory board, the Wood Products Processing program introduced two new programs to help better prepare students for co-op terms.
- Dentistry has undertaken a collaboration to investigate student impressions of their competency when educated in a PBL-based curriculum (UBC) as compared to another more traditionally structured curriculum.
- The Faculties of Forestry and Science have identified courses that have proven difficult for students in the hope of finding ways to improve student success rates in those courses.

### ***Instructional Skills***

- The Faculty of Graduate Studies is partnering with TAG and GSS to produce a series of graduate supervision workshops for new and junior faculty.
- 600 graduate students participated in Academic Career Management Skills and/or Executive Skills Development workshops offered by the Faculty of Graduate Studies.
- A study club for faculty working in Oral Health Centre clinic provides an opportunity for peer discussions about the best approaches to clinical education.
- The Department of English instituted a 21-hour pedagogy series that focused particularly on needs and expectations of TAs in the English classroom.
- Human Kinetics offered TAships to every eligible graduate student interested in contributing to undergraduate education and in support, provided an improved training program.
- Commerce has instituted a new program which requires all PhD students be mentored by a faculty member who teaches an undergraduate course for which the students will later be a TA.
- 160 faculty and staff have graduated from the TAG Certificate Program in Higher Education, with 26 additional members expected to graduate in May 2008.
- 1,359 faculty and staff are members of thirteen communities of practice facilitated by TAG, helping members communicate and collaborate in support of teaching and learning.

### ***Innovative Teaching***

- The First Nations Studies Program is training students in the use of digital video for oral history interviewing and in web implementations of their projects
- Advanced AV technologies and digital images are available to students in Arts History and Visual Arts.
- The Ancient Spaces project developed in Arts allows students to experience the ancient world in a virtual context which they build based on research they have conducted.
- The First Nations Studies Program is collaborating with the School of Medicine in the development of a 3-D environment for understanding cross-cultural interaction.
- User-managed web tools such as weblogs and wikis, have been applied in hundreds of instances for a wide array of teaching and learning applications.
- The Faculty of Education and the Office of Learning Technology are collaborating on an e-portfolio project for teaching candidates.
- Weblogs and Wikis are used to augment the delivery of Student Directed Seminars and to provide effective collaborative writing spaces that can be established quickly and easily managed.