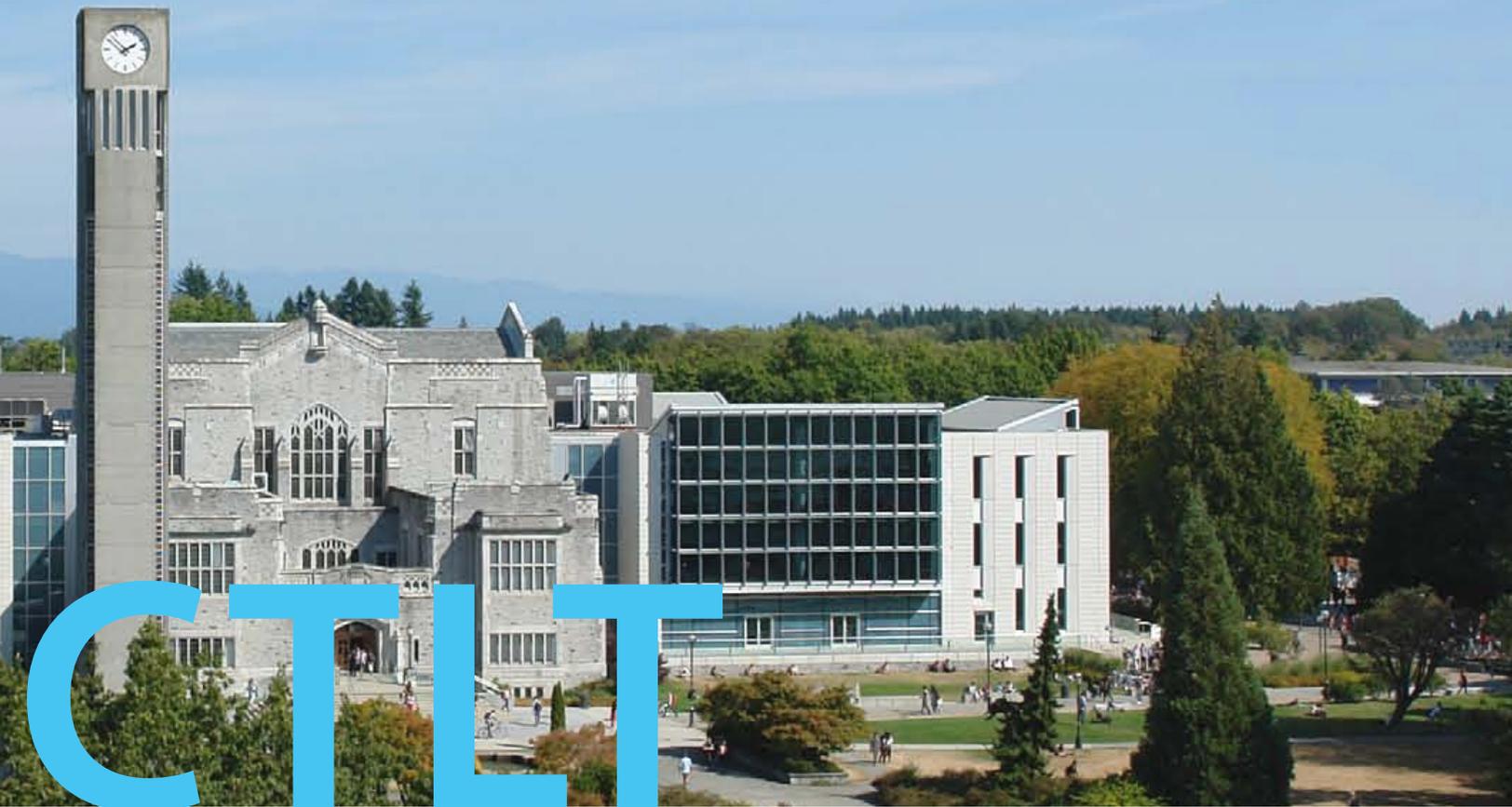




CENTRE FOR TEACHING, LEARNING AND TECHNOLOGY  
THE UNIVERSITY OF BRITISH COLUMBIA



**CTLT**

# Annual Report

a year in review

July 2014



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# Director's Reflections



As I write this, at approximately 36,000 feet up in the air, en route home after a week of conference talks and presentations at the start of the summer, I am reflecting on just what a busy and interesting year it has been. In some ways, it's hard to imagine that this time a year ago we were only just beginning to articulate how CTLT would support faculty and Faculties in the first round of Flexible Learning (FL) projects. Now, a year later, we're at the start of the third call for proposals for project funding, are supporting the preparation of a second phase of 4 MOOCs

to be delivered in the Fall and are completing preparations for a new short blended course to support faculty teaching in a blended learning environment.

This report offers some highlights from these areas of activity, together with details of some of the fundamental support activities for faculty engaged in delivering teaching and enabling learning that we continue to develop and deliver. For the sake of readability, it's not intended to be a complete directory of all that we do and have done this year, but an abbreviated selection. These I hope will give you at least a flavor of the breadth and depth of activities we are engaged in to support teaching and learning across the UBC campus. Although separated into discrete sections, more often than not, we find ourselves in conversations that traverse unique and synergistic pathways through the academic services and support we are able to provide.

I think this year has laid a solid foundation for us to tackle the coming twelve months as well as long-term challenges with confidence. These include changes to the way we support current learning technologies, platforms and tools and how we collectively define the roadmap for the future version of this ecosystem. Looking ahead to this time next year, UBC faculty and staff will have a great opportunity to showcase and share their innovation and practice in teaching and learning, as we will jointly co-host (with SFU) the 35th annual meeting of the Society for Teaching and Learning in Higher Education in Vancouver in June 2015.

I'd welcome your feedback on what you find of interest in this report, in the online resources that are linked as departure points for more information, or indeed on other ways we can help support outstanding teaching and learning in your Faculty, Department or discipline.

## **Simon Bates**

Senior Advisor, Teaching and Learning

Academic Director, CTLT

Director, Institute for the Scholarship of Teaching and Learning

Professor of Teaching, Department of Physics and Astronomy

June 2014

# Support for UBC Strategic Priorities



The 2013-14 academic year saw us undertake significant activity in support of new and existing strategic priorities. The two examples we present here are Flexible Learning and the events and activities around the National Truth and Reconciliation Commission (TRC) event on September 18th 2013.

## FLEXIBLE LEARNING

FL is an institutional response to the changing post-secondary environment, driven by multiple factors including rapid advances in technology and the expectations of students and employers. This changing environment is requiring universities to articulate the value and opportunities unique to a principally residential university experience, and to make available support mechanisms and resources to realize these. FL aims to do exactly that and comprises a number of pillars of activity across undergraduate, postgraduate / professional, and life-long and life-wide learning. Our focus in AY2013-14 was support for blended transformation and enhancement of undergraduate courses, selected via competitive proposal, and instructional design support for the pilot MOOC courses that UBC delivered through the Coursera platform.

The scale and scope of transformation of undergraduate courses is large: the first call for proposals in Flexible Learning saw faculty teams across 37 projects receive funding, spanning design and development activities in over 100 courses. The number of students impacted in 2013W was nearly 12,000 enrolments (6063 unique students).

Approximately

**15%** of undergraduate students

enrolled at UBC took one (or more) courses supported through Flexible Learning in the 2013-14 academic session.

A further 18 projects were funded through a second call in November 2013, which will deliver redesigned courses and learning opportunities in the coming academic year.

Effective support for FL-funded project activities draws in mixtures of central and local expertise and support depending on the particular project. In order to provide a focal point linking CTLT and the Faculty-based learning support groups and departmental project teams, we have established Flexible Learning Liaison (FLL) roles in several faculties (Science, Arts, LFS, Sauder, and Vantage College). These roles will evolve and develop in ways that recognize the distinctiveness of the Faculty contexts in which they are embedded, with the overarching dual aims of functioning as principal support roles for FL-funded projects, and as two-way conduits for information flow, sharing of innovative practice and access to CTLT services.



This changing environment is requiring universities to articulate the value and opportunities unique to a principally residential university experience, and to make available support mechanisms and resources to realize these.



At the end of the 2013-14 academic session, we marked the end of the first year of FL projects with a series of events as an FL Open House, including a workshop focusing on practical approaches to evaluating the outcomes and impact of FL projects, and a poster session. Twenty-four projects were showcased at the poster session and many of the posters presented are available through the resource links below. Over 150 people attended the Open House events across two days.

In supporting development and delivery of FL projects, we have initiated several new areas of activity. Two of these are highlighted later in this document.

- The Flipped Lab; a series of 4 workshops plus online materials intended for those engaged and interested in, or just curious about, 'flipped' approaches to teaching, where initial presentation of content takes place prior to classroom activities and discussions.
- The development of workshops and online resource materials around DIY media production tools and techniques for faculty and staff interested in creating their own media artifacts.
- A new, short online course for faculty new to or wanting to enhance their knowledge of teaching in a blended learning environment.
- An evaluation effort to help FL project holders to design and execute an evaluation plan for their projects, and to better coordinate evaluation of innovations in teaching and learning that are led by faculty members across campus.

### Resource Links:

**Flexible Learning:** <http://flexible.learning.ubc.ca/>

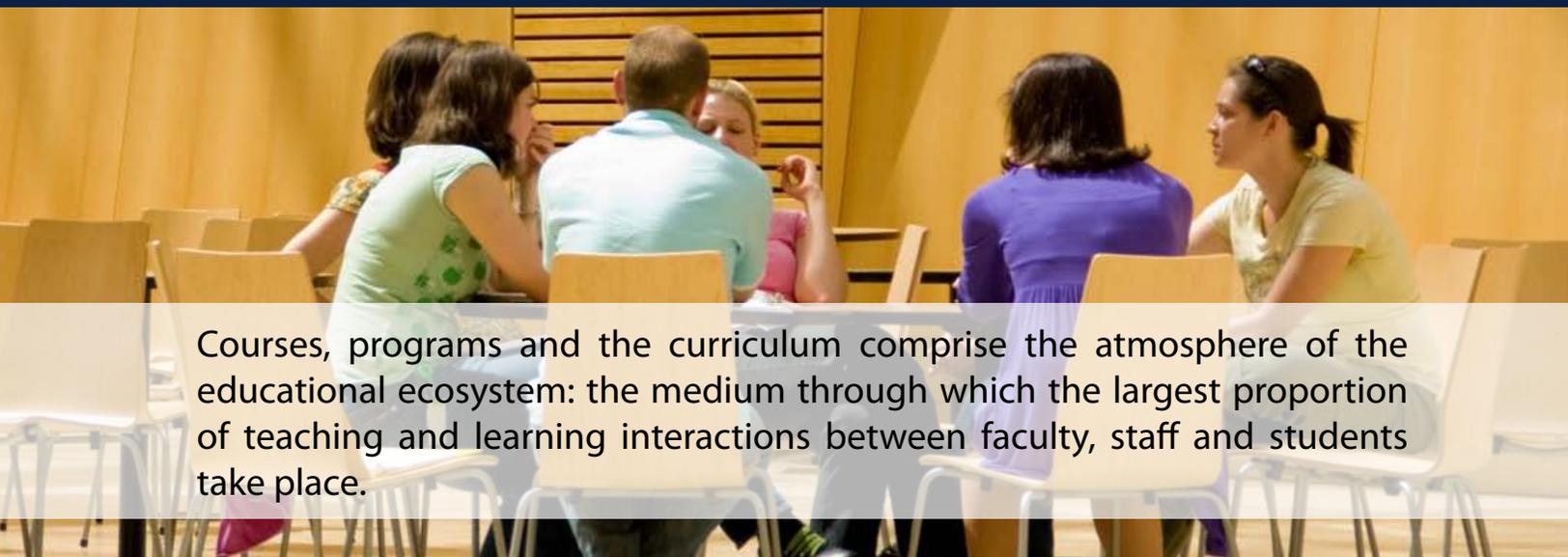
**The Flipped Lab:** <http://flippedlab.learning.ubc.ca/>

**DIY Media:** <http://diy.open.ubc.ca/>

**Teaching in a Blended Learning Environment:** <http://bit.ly/T-BLE>



# Course, Program and Curriculum Services - Supporting Student Learning



Courses, programs and the curriculum comprise the atmosphere of the educational ecosystem: the medium through which the largest proportion of teaching and learning interactions between faculty, staff and students take place.

In the past year, we have supported faculty in the design, development, delivery and evaluation of new courses, course re-designs, course transformations, and research projects on various aspects of teaching effectiveness, across modalities that span blended and fully-online and distance learning.

Distance and distributed learning has a long tradition at UBC, dating back to 1949. In 2013-14, nearly 200 credit-based course sections were delivered entirely online, enrolling over 9000 students. In addition to direct support to instructors of DE courses and helpdesk support, we partnered with a number of Faculties and Faculty-based learning support units on specific projects. One highlight was our participation in the organization and delivery of a 3 day workshop in online course design and development with the Asian Pacific Forestry Network. Led by UBC's Faculty of Forestry, and drawing on expertise and input from across CTLT teams and the UBC IT Digital Media Technologies group, participants included faculty and senior administrative representatives from four universities across the Asian-Pacific Region including Beijing Forestry University, University of Melbourne, University of Philippines Los Baños, and the UBC. The successful workshop was the first component in a larger project to collaborate with the five Asian-Pacific universities in the design, development and delivery of six shared online courses.

We have started a project with the Faculty of Arts to work with Departments as they articulate program level outcomes for their major programs, supporting their curriculum development efforts. These define the discipline-specific skills, values and attributes that faculty collectively believe graduates from a particular program should possess upon completion.

In addition, we provide support to complement faculty expertise in research and development of teaching and learning innovations. Examples include the Teaching and Learning Fellow (TLFs - key personnel in several FL projects) Development Series, offered in conjunction with the Faculty of Science, and the SoTL Seed Fund, a new small research grant fund for faculty undertaking Scholarship of Teaching and Learning projects.

# TLF Development Series

Many course (re)design projects are complex enough to require experts in both disciplinary and pedagogical knowledge who are able to devote a significant fraction of their time thinking about the challenges of educational renewal and evaluating the effectiveness of potential solutions. To complement and supplement faculty expertise, several recently-funded Flexible Learning projects have incorporated Teaching and Learning Fellows (TLFs) into their project plans.

TLFs are postdoctoral fellows with a strong disciplinary background and an interest in teaching and learning. This role was informed by the Science Teaching and Learning Fellow role employed in the Carl Wieman Science Education Initiative. TLFs work collaboratively with faculty on course development, transformation and evaluation. They can spearhead resource development or implementation of pedagogical strategies in the classroom. They can also develop or strengthen evaluation and research activities around teaching enhancement, with the ability to link to Scholarship of Teaching & Learning (SoTL).

In 2013-2014, there were 5 TLFs coordinating and/or supporting the transformation of 23 courses in three Faculties. In addition, two TLFs supported large projects not associated with specific courses: one project around a cross-faculty needs analysis related to statistics instruction and another with the goal to research and disseminate students' experiences with FL while providing individual project evaluation support related to student experience (coordinated through the Vice President Students office).

As most TLFs enter their roles with limited expertise in teaching and learning, early and sustained support to develop this expertise is critical. To meet this need, the TLF Development Series was formed through a strategic partnership between the Faculty of Science and the CTLT. The series builds on the success of the model used in the Carl Wieman Science Education Initiative and integrates a learning community model to “create connections for isolated teachers, establish networks for those pursuing pedagogical issues, meet early-career faculty expectations for community, foster multidisciplinary curricula, and begin to bring community to higher education.”<sup>1</sup>

Between January and April 2014, TLFs met weekly to discuss evidence informed teaching practice, how students learn and the scholarship of teaching and learning. Sessions were designed using a flipped classroom model with required pre-reading from *How Learning Works*<sup>2</sup> along with supplemental reading provided by both facilitators and participants. The TLF Development Series is currently being evaluated using the Kirkpatrick Model. For each session, feedback was gathered to assess participants reaction, learning and potential application of the topics discussed. Participants were later asked to reflect on how they actually applied the learning and whether it resulted in changes in practice. It is anticipated that the series will run again in the upcoming academic year.

<sup>1</sup> Cox, M.D. (2004), Introduction to faculty learning communities. *New Directions for Teaching and Learning*: 5-23. DOI: 10.1002/tl.129

<sup>2</sup> Ambrose, S.A. (2010). *How Learning Works: Seven Research-based Principles for Smart Teaching*. San Francisco, CA: Jossey-Bass.

# SoTL Seed Funding

Support for the Scholarship of Teaching and Learning (SoTL) has deep roots at UBC, with the Institute for the Scholarship of Teaching and Learning, a research unit established by Senate in 2004 residing in CTLT and the long-standing and successful Faculty SoTL Leadership Program as an intensive 8-month cohort program.

In 2013-14, we added an additional funding opportunity for UBC faculty: the SoTL Seed Fund program, intended to further support and develop SoTL capacity on campus by providing small research grants to faculty members to conduct scholarly inquiry into their own teaching and facilitating the dissemination of their findings at UBC and beyond. Two tracks were made available – a research fund (up to \$5,000, intended to support research expenses associated with hiring co-op students, GRA etc.) and a travel fund (up to \$2,000, intended to support travel expenses of faculty members who present at SoTL and disciplinary teaching-and learning conferences).

Proposals were reviewed against criteria including the quality and novelty of project and evaluation plan, potential to advance teaching and learning at UBC beyond the specific project and the potential to contribute to broader understanding of effective teaching and learning in higher education.

We received submissions from over 20 individuals across 9 academic Faculties, with successful applications from the Faculties of Arts (2), Education (2), Science (2), LFS, Medicine and from Vantage College.

## Resource Links:

The SoTL Seed Fund Description and Awarded Projects: <http://ctl.t.ubc.ca/about-isotl/sotl-seed-fund/>



# Teaching and Learning Services - Enhancing Professional Practice



Supporting development and enhancement of professional practice of the faculty (and graduate students) who teach is a core part of our function. This is enacted through a broad portfolio of events, workshops and seminars (ranging from informal one-hour drop-ins to full three day intensive programs) and supported by extensive resource development to support teaching practice.

In the 2013-14 academic session, we held over 235 events that were attended by 1200 individuals in total, 400 of whom hold faculty appointments. Twice per year (May and August) we hold our Institutes, concentrated sessions of 20+ events across several days that offer faculty the opportunity to share practice and learn from each other across a wide range of issues and topics relating to teaching, learning and technology. Many sessions are solely or co-facilitated by faculty members.

over **235** events  
**1200** distinct attendees,  
including **400** faculty



Our provision of Instructional Skills workshops (ISWs) continues to be in extremely high demand. ISWs are three-day courses, where participants work with a tutor in small groups of 5 or 6 on the foundational principles of learning, and how to implement these in their teaching. There is a strong focus on practice and feedback, with each participant delivering three mini-lessons to peers. In 2013, we ran five ISWs for 58 faculty and 17 ISWs for 209 graduate students. In addition, 4 additional ISWs were customized to specific departmental cohorts, reaching another 53 attendees.

In the first half of 2014, we have been developing the ISW to incorporate more blended and online learning activities. This redesigned 'flexible' ISW will pilot for the first time in the Fall of 2014. Finally, our 3 day Course Design Intensive, where faculty attendees work specifically on the (re-)design of a course the currently or plan to shortly teach, continues to be well-attended with three offerings of 20 faculty each fully subscribed.

In the following sections, we present two further highlights of activities and programs designed to support faculty, with a focus on blended and flexible learning. These are the Flipped Lab network – a faculty-led community for discussion of topics pertaining to teaching in a 'flipped' modality; and a DIY media community, supporting the development of different types of media artifacts to support student learning.

# Flipped Lab Network

The first round of Flexible Learning project funding supported a wide variety of course (re)design projects, many of which were adopting 'flipped classroom' approaches to course delivery. To support this, we established the Flipped Lab Network, a faculty-led group of instructors and staff from across UBC, engaged in or curious about the pedagogy and practical aspects of teaching in a flipped modality. Over the course of the 2013-14 academic session, we held 4 workshops, all of which involved a flipped component with pre-workshop activities, attended by over 200 participants. Themes for the workshops included workload in flipped classes, classroom activities and the role of TAs in flipped courses, with 17 different faculty engaged in leading or contributing to the sessions.

In addition to the workshop events, we created, assembled and curated a broad range of resources and artifacts, ranging from practical advice to research evidence for effectiveness of approaches. Built on UBC's open source publishing platform (UBCWiki and WordPress CMS), this site is open to all as viewers, and anyone with a CWL as an editor or contributor. Two further Flipped Lab workshops are planned for the upcoming academic session.

## Resource Links:

<http://flippedlab.learning.ubc.ca/>

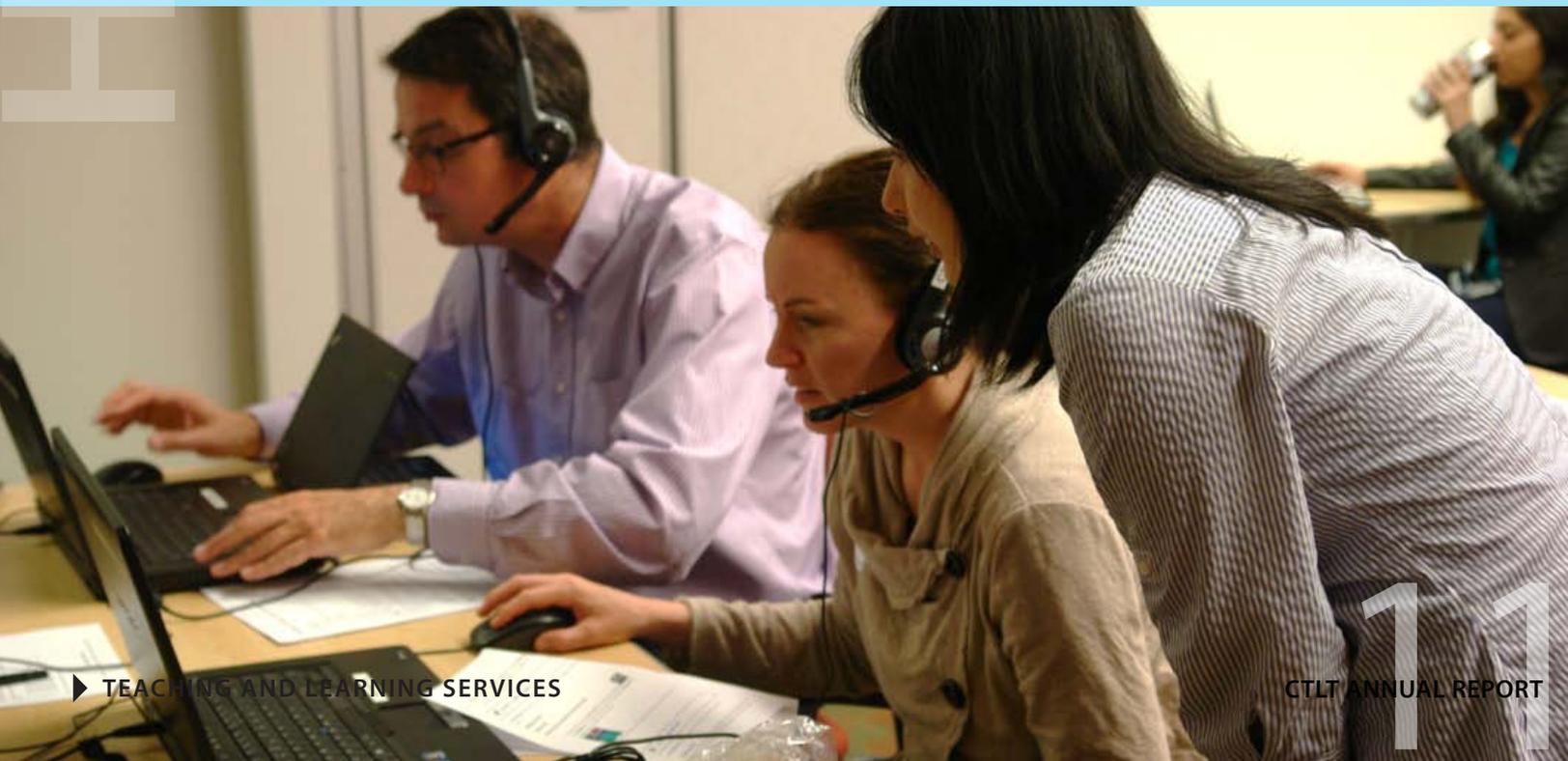
# DIY Media

Advances in the capability of hardware and software are such that it is possible for instructors and staff to now relatively easily self-produce high quality media and resources for learning. The DIY Media learning community we established in 2013 (one of several Communities of Practice we support) and companion website <http://diy.open.ubc.ca/> grew out of a need for practitioners involved with learning/instructional design, media production or training development to support a growing number of faculty and students who are self-producing media to support learning.

The focus is on learning from each other, developing resources together and publishing what we develop in a way that faculty and students can access “just-in-time” learning related to media development. To date, the community has formed a subcommittee to develop: VideoCamp – a facilitated series of 3 sessions to experiment with DIY media; contributed video recorded experiments with animation software; tested various applications with the LMS and collaborated on the development of FAQs and planned focus groups to seek feedback on the site design and content. Our role has been to establish this community, together with the coordination and facilitation of community meetings as well as development of the open resource framework (again using UBCWiki and WordPress CMS) and learning design. To date, 51 separate resource pages have been developed.

## Resource Links:

<http://diy.open.ubc.ca/>



# Learning Technology Services - Integrating Tools and Technologies

The learning technology ecosystem consists of the tools, platforms and applications which enable and enhance student learning. This ecosystem has the potential to impact all areas of teaching and learning: presentation of material, engagement and motivation, flexibility and convenience, peer-to-peer and student-faculty interaction and collaboration, formative and summative assessment and provision of feedback.

Accelerating advances in hardware capabilities and software functionality also mean this is a rapidly-evolving ecosystem that must be robust enough to meet the diverse needs of different disciplines and approaches, yet agile enough to respond to a changing landscape.

CTLT's role in this area focuses on support of existing components and tools, together with development, integration and evaluation of new tools for use in the ecosystem. It is an academic service role that is inherently intertwined with other learning technology service providers (both UBC IT and Faculty-based learning support units and staff), but distinctively flavored by its own expertise in the pedagogical elements of learning technology support, development, evaluation and research.

The current cornerstone of UBC's learning technology ecosystem is **Connect** (Blackboard Learn), which in the fall of 2013 was unreliable and slow. This resulted in a huge amount of understandable frustration and disruption for faculty, support staff and students at a critically important time of the year.

Once the UBC IT applications team improved system stability and response times, we engaged in a process to understand how to implement lessons learned, but also more broadly to consult on and consider the way in which central support for learning technology is provisioned. The outcome of these discussions is a commitment by CTLT to work more closely and effectively with relevant areas of UBC IT and Faculty-based units, to develop, through consultation, a vision for the future of the learning technology ecosystem, and to re-examine governance structures for learning technology.

There are now 8,500 active course sections on Connect at the completion of the migration from WebCT vista, which has been supported by more than 30 customized Faculty-based workshops and training sessions, augmented by drop-in consultations sessions both in person and online.

Open source publishing tools, such as UBCWiki and UBC blogs and the content management system (CMS) contribute to the learning technology ecosystem. The UBCWiki saw 3,000 new user registrations in 2013-14, with over 2 million page edits, and an average of 32,450 unique visitors viewing 178,500 pages every month. The CMS is a centrally provisioned content management service, built on WordPress, to enable the creation of UBC websites with a common look and feel. UBC Communications & Marketing and CTLT partner with Faculty and other central units to provide the service, which is then locally managed. In 2013-14, 472 new sites were developed, bringing the total number in the .ubc.ca namespace to over 750. Across all of these sites, spanning multiple Faculties, Departments and service units across campus, there are an average of 851,000 unique visitors viewing an average of 3,754,000 pages per month.

After an increasing number of requests for Camtasia/Snagit licenses – widely used cross-platform screencasting and image capture tools -- the University negotiated a campus wide agreement for these multimedia creation tools. They are now available to all UBC students, faculty and staff at no cost. The license is available for three years, and includes unlimited upgrades and online support from TechSmith.

# Integrations

A core part of our activities in this area is to integrate other tools and applications into the central core of the learning ecosystem, through 'building blocks' to add functionality into Connect and plugins to extend WordPress capabilities. These additional applications may be authored elsewhere (such as the WebWork system, now used by over 19,000 students across 42 sections in the Faculties of Science and Arts) or home-grown, such as the iPeer tool, originally developed in partnership with Applied Science, now used across 144 sections by 13,000 students. Both of these applications have seen significant increase in uptake (20-25%) in the past year, enabled in part by more effective integration into Connect for easier data transfer (for example, of student grades).

We are committed to open collaboration and sharing, and make all of our application code and tools that we author available through open source repositories such as GitHub.

## Resource Links:

**E-learning Tools and Applications Portal:** <http://elearning.ubc.ca/>

**UBC GitHub Repository:** <https://github.com/ubc>



# Learning Technology Rovers (LT Rovers)



The LT Rover pilot program is designed to provide additional just in time support for faculty on issues relating to learning technology use. Tech Rovers are undergraduate co-op students, with enough technical knowledge and application fluency to be able to resolve a proportion of issues and queries quickly, and able to refer to appropriate Faculty or centrally provided support contacts for more complex and involved issues. Their focus is primarily the Connect LMS, but extends across the entire learning technology ecosystem.

A pilot was implemented in the Faculty of Arts and the Faculty of Science, beginning in May 2014. Relevant personnel from both Faculties, the Chapman Learning Commons, CTLT and UBC IT participated in the development and delivery of training. Further discipline specific training was built on this foundation.

The pilot is being expanded to the Faculty of Education in September 2014, and to the Faculties of Applied Science and Land & Food Systems in January 2015, all of whom will now participate in continued development of the training program. There is Faculty-based interest in expanding the training program to include other student employees in related roles.

# Appendix A: Awards, Publications and Conference Proceedings

## 2013 AWARDS

"Collaboration indices for monitoring potential problems in online small groups," is authored by Namsook Jahng, an Instructional Designer and Project Manager at CTLT. A study that explores how to effectively monitor and evaluate small group collaboration in online courses was presented with the Canadian Journal of Learning and Technology (CJLT) 2013 best paper award on May 15, 2014 at the Canadian Network for Innovation in Education (CNIE) Conference at Thompson Rivers University.

<http://cjlts.csj.ualberta.ca/index.php/cjlt/article/view/686>

Enriching Education Experiences through UBC's First Year Seminar in Science (SCIE 113) including CTLT's Andrea Han, Associate Director, Strategic Curriculum Services, was awarded the Alan Blizzard award at Society for Teaching and Learning in Higher Education (STLHE June 2013).

<http://www.stlhe.ca/wp-content/uploads/2013/02/2013-ABA-Press-Release-ENG-Final.pdf>

The SOILx, collaboration which includes CTLT's Chris Crowley, was awarded the 2014 Canadian Network for Innovation in Education (CNIE) Award for Excellence and Innovation in the Integration of Technology, in a Formal or Non-Formal Educational Program. The award was given for their cross-platform project, SOILx (soilx.ca), an interactive teaching and learning tool that aggregates information, including location on maps, images, videos and scientific data of all existing SSLR (Soil Science Learning Resources) soil study sites.

<http://ctlts.ubc.ca/2014/06/26/essential-soils/>

## 2013 PUBLICATIONS AND CONFERENCE PROCEEDINGS

Armstrong, L., Bickel, B., Fels, L., Gerhard, G., Hoy, A., Jordan, N., Nielsen W., Smith, A., Stubbs, J. and Triggs, V. (2014). Learning Wisdom Through Collectivity: The Women Writing Women Collective. *NASPA Journal About Women in Higher Education*, 7 (1), 1-132. DOI: 10.1515/njawhe-2014-0002

Bates, S. (2013). Different Perspective, Same Challenges. *New Directions*, 9 (1), 1-3. DOI: 10.11120/ndir.2013.00007  
<http://journals.heacademy.ac.uk/doi/abs/10.11120/ndir.2013.00007>

Bates, S., Donnelly, RCA., MacPhee, C., Sands, D., Birch, M., Walet, NR. (2013). Gender differences in conceptual understanding of Newtonian mechanics: a UK cross-institution comparison. *European Journal of Physics*, 34 (2), 421. DOI: 10.1088/0143-0807/34/2/421

Bates, S. P., Galloway, R. K., Riise, J., & Homer, D. (2014) Assessing the quality of a student-generated question repository. In *Physical Review Special Topics Physics Education Research*. DOI: 10.1103/PhysRevSTPER.10.020105

Biol, G., Cassidy, A., Fox, J., Han, A. & Welsh, A. (2013). Assessing Learning Gains in a Writing Intensive First Year Seminar Course for Science Students. *Journal of College Science Teaching*, 43 (1), 82-91.

## 2013 PUBLICATIONS AND CONFERENCE PROCEEDINGS

Casey, M. M., Bates, S. P., Galloway, K. W., Galloway, R. K., Hardy, J. A., Kay, A. E., ... and McQueen, H. A. (2014). Scaffolding student engagement via online peer learning. *European Journal of Physics*, 35(4). DOI: 10.1088/0143-0807/35/4/045002

Hardy, J., Bates, S. P., Casey, M. M., Galloway, K. W., Galloway, R. K., Kay, A. E., ... and McQueen, H. A. (2014). Student-Generated Content: Enhancing learning through sharing multiple-choice questions. *International Journal of Science Education*, 36(14), DOI: 10.1080/09500693.2014.916831

Holmes, N. G., Park, A. K., Day, J., Bonn, D. A., and Roll, I. (2014). Making the failure more productive: scaffolding the invention process to improve inquiry behaviours and outcomes in productive failure activities. *Instructional Science*. DOI:10.1007/s11251-013-9300-7

Iqbal, I. (2013) Academics' resistance to summative peer review of teaching: Questionable rewards and the importance of student evaluations. *Teaching in Higher Education*. DOI: 10.1080/13562517.2013.764863.

Iqbal, I. (2013). Enhancing the summative peer review of teaching. *The Department Chair*, 23(4), 8-10. DOI: 10.1002/dch.20050

Johnson, O., Hancock, S., Hardy, J., Galloway, R., Wallace, M., Bates, S., Draper, S.: (2013) Fostering Learning Improvements in Physics (FLIP) project: A status report. *New Directions* 9(1), 60-65. DOI: 10.11120/ndir.2013.00001 <http://journals.heacademy.ac.uk/doi/abs/10.11120/ndir.2013.00001>

Mitchell, J. and Underhill, C. (2013). Extending students' digital capabilities: the Digital Tattoo Project. *Mastering Digital Librarianship: Strategy, networking and discovery in academic libraries*. Alison Mackenzie and Lindsey Martin, editors. <http://www.facetpublishing.co.uk/title.php?id=9436>

Mundy, A. and Chan, J. C. K. 2013. Visualizing boundaries and embodying conflicts: Lessons learned from a theatrical professional development program. *Collected Essays on Learning and Teaching*. 6: 41-47. <http://ojs.uwindsor.ca/ojs/leddy/index.php/CELT/article/view/3764>

Roll, I., Baker, R. S. J. d., Aleven, V., & Koedinger, K. R. (2014). On the benefits of seeking (and avoiding) help in online problem solving environment. *Journal of the Learning Sciences*. DOI: 10.1080/10508406.2014.883977

# Appendix B: External Visitors Hosted by CTLT

## INDIVIDUALS

**Derek Bruff**, Director, Centre for Teaching and Senior Lecturer, Mathematics, Vanderbilt University

<http://www.vanderbilt.edu>

ISoTL invited scholar - Delivered keynote address, "Class Time Reconsidered", at the Flexible Learning Open House, which was also recorded and posted on the web.

Link to talk: <http://bit.ly/DerekBruffUBClec>

Also participated in "Students as Producers" panel during CTLT Institute.

**Frank Coton**, Vice-Principal for Learning and Teaching, and Professor of Low Speed Aerodynamics, The University of Glasgow

<http://www.gla.ac.uk>

Meetings with members of CTLT senior management team, Director, Flexible Learning Special Projects, and Vice-Provosts, to discuss support of teaching at a large/research intensive university, as well as specific initiatives, including flexible learning.

**Peter Jamieson**, Strategic Advisor, Learning Environment Design, The University of Melbourne

<http://www.unimelb.edu.au>

Participated in three weeks of meetings across campus with various Faculties and units, as well as external institutions, to discuss the importance and development of both formal and informal learning spaces.

Also gave a public talk, "Pedagogy in Place: The Shifting Landscape of Higher Education".

**Tashmin Khamis**, Director of Quality & Teaching & Learning, Aga Khan University, East Africa

<http://www.aku.edu/>

Consultation on support for teaching and learning.

**Eric Mazur**, Balkanski Professor of Physics and Applied Physics and Area Dean of Applied Physics, Harvard University

<http://www.harvard.edu>

ISoTL visiting scholar - presented talk, "The Tyranny of the Lecture", which was also recorded and posted on the web.

Link to talk: <http://bit.ly/EricMazurUBClec>

**Emily Moore**, Research Coordinator, Physics Educational Technologies, University of Colorado Boulder

<http://phet.colorado.edu/>

An ISOTL invited lecture on "Scientific Reasoning in Science and Beyond: Recognizing and Supporting Scientific Reasoning Across Contexts."

**Arnold Schoonwinkel**, Vice-Rector, Teaching and Learning, Stellenbosch University, South Africa

<http://www.sun.ac.za/>

Consultation on structure of Teaching and Learning centers and support for teaching and learning.

**Heather Smigiel**, Director, Center for University Teaching, Flinders University, Australia

<http://www.flinders.edu.au>

Consultation on best practices for teaching and learning centres.

## VISITING DELEGATIONS

University of Coventry

Ian Dunn, Pro-Vice Chancellor, Student Empowerment,  
Tracy Cullis, Director of Student Services,  
Claire Bamforth, Director of Recruitment and Admissions,  
Andrew Turner, Head of Academic Development,  
<http://www.coventry.ac.uk>

Consultation on supporting academic faculty in teaching and learning.

Otago Polytechnic - various University Faculty members.

<http://www.otago.ac.nz>

Singapore Institute of Technology

Ting Seng Kiong, Deputy President (Academic) & Provost,  
Loh Han Tong, Vice Provost,  
Foo Yong-Lim, Head, Learning Environment and Assessment Development (LEAD),  
May Lim, Deputy Head LEAD  
<http://singaporetech.edu.sg>

Consultation on establishing and supporting teaching and learning at a relatively new institution.

Group delegation of university faculty from: Tsinghua University, College of Fujian Normal University, and Chinese University of Petroleum.

Group delegation of university leadership from: National Academy of Education Administration, Huaibei Normal University, Hebei University of Technology, Changzhi University, Shenyang Normal University, Changchun University of Science and Technology, Heilongjiang University, Tongling University, Jinggangshan University, Henan University of Economics and Law, Hunan Institute of Technology, Guilin Medical University, ChongQing Medical University, Sichuan Conservatory of Music, Guizhou Institute of Technology, DaLi University, Zi'an University of Posts and Telecommunications, Xi'an Shiyou University, Gansu Institute of Political Science and Law, Xinjiang Medical University and Tarim University.



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