CENTRE FOR TEACHING, LEARNING AND TECHNOLOGY (CTLT)

EXTERNAL REVIEW SELF STUDY

October 2016





REFLECTIVE OVERVIEW

The last five years have seen significant changes in both the external environment of teaching and learning in post-secondary institutions and the internal leadership and priorities in this area at UBC. Against this backdrop, we too have changed and matured significantly as a unit and have accomplished a great deal.

We have become significantly more focused on supporting Faculties and faculty members, with a more service-oriented approach designed to meet their needs 'where they are'. We now have CTLT staff embedded in Faculty-based learning support units in liaison roles, together with individual faculty members seconded into CTLT to work on specific projects. Arising out of this Faculty-focused approach are both newly-established and strengthened existing partnerships with Faculties, other service units on campus, and various leadership groups. We continue to build teaching and learning capacity in departments through a variety of coherent engagements with faculty and teaching assistants, including development of capacity for educational leadership and the Scholarship of Teaching and Learning.

We have led the campus conversation around the future roadmap and governance structure for technology to support teaching and learning, in close collaboration with UBC IT. We have also established greater input from faculty and students in strategy and operations in this critical area. We are making increasing use of benchmarking and data-driven approaches to our planning, program delivery, and decision making, including evaluating the reach of teaching and learning enhancement projects, institution-wide surveys of faculty use of technology and teaching practices, and stakeholder feedback to drive planning of a revised professional development curriculum. Our activity in external partnerships and networks—such as the edX consortium, the Universitas21 network, IMS Global, the Society for Teaching and Learning in Higher Education (STLHE), and the Centre for Integration of Research into Teaching and Learning (CIRTL)—is always undertaken with a view of how we leverage the activities for greater impact on local support and priorities.

Amongst the highlights of our accomplishments, a few stand out as those we can feel most proud of. First, our move to a far greater degree of "F/faculty-ness" is visible in all of our core areas of activity. Adapting services and support to meet the needs of Faculties, departments, and individuals is realized through a range of both formal and informal activities. Second, we now have strong and highly effective partnerships in many areas built on a solid foundation of mutual trust, particularly with UBC IT (for leadership of learning technology strategy and

support) and the Faculty of Arts and Faculty of Science (across multiple projects with both the deans' offices and individual departments). Finally, the shift and maturation of the service-oriented culture with CTLT, though still most certainly a work in progress, has been significant.

Reflecting back over the past five years, there are also things we feel we could have done differently and/or better. We have approached some things, such as course design and development, in a way that has been unnecessarily complex and inefficient and did not meet the needs of a particular stakeholder or partner who required a quicker, more agile approach. We have not always navigated the inherent tension between a capacity-building model for teaching and learning support services versus a concierge model, where CTLT staff provide direct development support. Are we enabling faculty to be able to do this for themselves in the future, or are we simply 'doing it for them'? Clearly articulating this across our service areas and communicating these expectations to our partners could have been done more consistently and coherently.

Communicating a diverse range of services and the essence of 'what we do' to a diverse group of stakeholders remains an ongoing challenge, but the opportunity to consider and reflect on how to present our services, including formulating the structure of this Self Study, has been extremely helpful. Implementing a Centre-wide process for how and when we take on new work or assignments to aid capacity, resource, and workload planning is something that we have been working on for some time, but have not yet completed and fully operationalized. Finally, the efficient and effective organization of our support across the interface between development work when designing a new course and the transition to operational support once the course has been delivered has taken too long for us to achieve. Recent changes in unit structure will help us to build a stronger set of practices and relationships across these teams.

In reflecting on areas where we as a unit could have done better, we also see missed opportunities. Our Faculty Liaison roles, where CTLT staff are embedded in local, Faculty-based teaching and learning support units, are valued linkages between central and local support and faculty. However, Liaison roles currently do not span all Faculties. This leads to an uneven and inconsistent application of the idea that integrated, central support services can be delivered or enacted locally. We will continue to articulate the benefit of these roles to other Faculties. Additionally, we have not always had access to understanding what the most pressing issues are for departments and Faculties related to teaching and learn-

ing in a systematic way. Being able to do that may allow us to plan how to allocate resources more effectively to support these needs—and it certainly does happen through various (informal) mechanisms, but a more coordinated approach would be beneficial. Finally, we have collected, through the 2014 Teaching Practices Survey, a dataset of faculty practices and attitudes towards teaching that is, we believe, unrivalled in its comprehensiveness (more than 1,100 faculty responded, 30% of whom were full professors in the research stream). This data provides a tremendous opportunity to open conversations about the current and future state of attitudes and practices around teaching and learning. Doubtless these conversations have happened in local pockets, but not in a consolidated manner. As a research-intensive institution with a commitment to evidence-based approaches, we should make full use of this wealth of evidence.

We close this overview with a forward look of what we will do in the future. Here, the current university context is significant: we have a new President recently in post, a University-wide strategic planning process about to get underway, and the recruitment of a new Provost and Vice President Academic on the near horizon. Our main activity as this moves forwards will be to ensure that we balance our portfolio of services and support against emerging institutional priorities. This may involve some difficult choices about where we place our emphasis on delivering support. As an example, we know (from both informal and formal faculty feedback, such as the comments from faculty included in this review) that individual consultations and relationships with faculty are highly valued, but these are expensive in terms of our staff time.

Our work sees us interact and collaborate with faculty, students, and staff across the institution, through which we implicitly possess a distributed knowledge base of innovation, activity, and expertise through teaching and learning connections across diverse contexts. We will investigate ways in which we can more effectively curate and disseminate this implicit hub of knowledge. The result would certainly be an increased awareness of the range of activities, innovations, and expertise, together with the possibility of increased connections and even collaborations across disciplines and departments. At the same time, we must continue to focus on moving faster and more efficiently to meet the needs of our partners and stakeholders, balancing our rigour of approach and process with innovation and agility.

Within the unit, we will continue to work towards our commitment to build a high level of generalist competencies across all

staff engaged in consultations with faculty, while at the same time retaining the particular specialisms and expertise that individuals possess. We will complete the work to define the way we take in new activities and projects and implement it across the unit. We will engage with Faculties and the Provost's Office to understand their emerging strategic priorities for online credit-bearing courses and, if necessary, rearrange our service priorities to be able to support these priorities. We will continue to work towards resolving ambiguity of the current mixed economy by which we charge for support provided to some graduate and professional programs and not for others. Finally, we will continue to build in evaluation of impact more systematically into our work, moving from merely reporting on activities and services to gaining a greater understanding of the effect our work has, in order to better serve the needs of Faculties, departments, and individuals.





This report provides an overview of CTLT's services and activities in support of teaching and learning at UBC. It should be read in conjunction with the more detailed Appendix document, which follows the same content structure.

CONTENTS

1.0	Services and Activities	6
2.0	Supporting Strategic University Priorities	10
2.1	Engagement with the Aboriginal Strategic Plan	10
2.2	Flexible Learning/Teaching and Learning Enhancement Projects	11
2.3	Learning Technologies	12
2.4	Supporting Educational Leadership and Scholarship	14
3.0	CTLT Structure and Organization	15
4.0	Supporting People	16
4.1	Professional Development: Faculty	16
4.2	Professional Development: TAs and Graduate Students	18
4.3	Learning Technology Hub (LT Hub)	19
4.4	Faculty Associates	20
4.5	Research and Evaluation	20
5.0	Supporting Departments and Faculties	21



8.0	SWOT Analysis and Priorities	30
7.0	Activities Beyond UBC	29
6.4	Support and Operation of Other Technologies	27
6.3	Deployment of Open Source Technologies	26
6.2	Application Development	25
6.1	Learning Technology Context and Constraints	25
6.0	Institutional Support	25
5.6	Student Evaluation of Teaching	24
5.5	Departmental TA Training Programs	23
5.4	Process Design, Facilitation and Program Renewal	22
5.3	Distance Education Course Support	22
5.2	Learning Technology Rovers (LTRs)	21
5.1	Faculty Service Clusters and Faculty Liaisons	21

SECTION 1: SERVICES AND ACTIVITIES

VISION, MISSION AND VALUES

VISION

The Centre for Teaching, Learning and Technology is a transformative educational services partner to the UBC Community.

MISSION

The Centre for Teaching, Learning and Technology advances scholarly and innovative approaches to teaching, learning, curriculum, and educational technology practices within and across UBC's diverse disciplinary and cultural contexts.

VALUES

Collaboration

We are committed to reciprocal relationships developed through consultation to build strong learning communities.

Flexibility

We are responsive to the needs of our stakeholders and engage in initiatives with openness and a balanced approach.

Innovation

We bring creativity, a passion for exploration, and a forward-looking approach to our work. We try new things and learn from them. We lead by example. We consider the future.

Integrity

We resolve to be responsible, transparent, and invite scrutiny. We acknowledge the contributions of others.

Respect

We practice equity and fairness by listening for understanding and supporting inclusivity. We show consideration and appreciation for those with whom we work.

Sharing

We engage in and facilitate knowledge exchange in a spirit of generosity by sharing insights into pedagogies and technologies and providing a platform for discussion and research.

TEAMS



CTLT TIMELINE



2006



2009

Two separate organizations of TAG and OLT. OLT acquires Distance Education (DE) from Continuing Studies. TAG incorporates ISoTL.

TAG external review

2010

Bicameral Directorship: Academic and Managing Directors

July: CTLT forms and Academic Director *Pro Tem* appointed

2012

Appointment of Academic Director, and Senior Advisor, Teaching and Learning, Dr. Simon Bates Sept: UBC joins Coursera

Nov: DE transition (change in funding model)

2012-13: Initiation of Flexible Learning (FL). Develop first UBC MOOCs on Coursera.

2013

Sept: LMS performance and stability issues

Truth and Reconciliation Commission

Aug-Dec: Senior team restructuring, create Faculty-facing FL Liaisons in five Faculties May: First round of 36 FL projects receive funding

July: Managing Director seconded to Provost's Office for FL special projects. Academic Director takes on Management and Academic Leadership of CTLT.

2014

Jan-June: CTLT and UBC IT form Learning Technology (LT) Hub Feb-Apr: LT Hub consultation March: ECAR Benchmarking

Survey

Aug: LT Hub opens to campus

Sept: UBC joins edX consortium. PD Program Innovation, Flex ISW, Flex CDI. **Sept-March:** Learning Technology Ecosystem Project (LTEP)

Sept-Dec: Revise TLEF scheme and processes support within CTLT

Oct-Dec: Teaching Practices Survey undertaken across all UBC faculties, 1,300 faculty responses

2015

Sept 2015-May 2016: Implement new LT governance structure June: UBC co-hosts STLHE Conference

Jan: University-wide budget cuts, elimination of six ongoing positions

2016

Jan-June: Reconceptualization of educational leadership May: Initiate Learning Technology Environment Renewal and Faculty Associates programs. UBC joins CIRTL.

June: Initiate Learning Analytics project. Teaching Practices Survey for TAs.

Sept: Launch Navigating Your Teaching Career

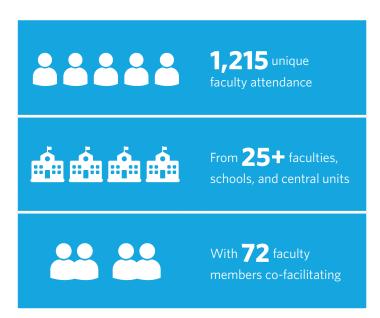
SERVICES AND ACTIVITIES: AT A GLANCE

SUPPORTING PEOPLE: FACULTY, TAs, AND THE UBC COMMUNITY

Professional Development Workshops and Seminars

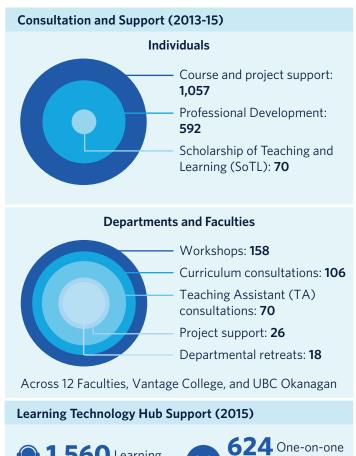
CTLT professional development engagements range from drop-in and one-hour workshops, through single- and multi-day institutes, to six-week and eight-month programs.





Consultations

CTLT provides consultations to individuals and departmental groups across its service areas of support.



1,560 Learning Technology tickets



meetings with faculty

Scholarship of Teaching and Learning (SoTL)

Through the Institute for the Scholarship of Teaching and Learning, CTLT provides seed funding and support to faculty who are interested in conducting research on their teaching. CTLT also trains graduate student SoTL specialists to support evaluation, data analysis, and analytics.



PARTNERING WITH FACULTIES AND DEPARTMENTS

CTLT partners with Faculties and departments across UBC in support of Faculty priorities.



17% of CTLT staff seconded to, or working exclusively with, Faculties and departments



80 Teaching and Learning Enhancement Fund (TLEF) funded projects between 2013-16 supported by 45CTLT staff



82 Distance Education courses with **8,085** student enrolments and **64** instructors supported by CTLT in 2015









INSTITUTIONAL SUPPORT FOR LEARNING TECHNOLOGIES

Learning Technology Rovers (LTRs)

LTRs are co-op students who provide customized LT support to instructors.



Open Source Web Publishing

CTLT, Faculties, and Communications and Marketing have collaborated on a University-wide open content management service.

5 MILLIQN

average page views per month on web publishing platforms managed by CTLT in 2015-16

1,200+ Websites

60,000+ Wiki pages

20,000+ **Blogs**

CTLT open source web publishing platforms in 2015-16

Learning Ecosystem Tools

CTLT staff develop, integrate, operate, and support learning technologies used across both UBC campuses.



Currently Supported



Developed (2013-16)



Integrated (2013-16)

REACHING OUT BEYOND UBC (2013-16)

CTLT staff contribute to scholarly publications and regularly receive visitors from around the world who are interested in learning more about CTLT's support of UBC's teaching and learning priorities.

peer-reviewed journal articles authored or co-authored by CTLT staff

individual visitors and delegations from 160 14 different countries

SECTION 2: SUPPORTING STRATEGIC UNIVERSITY PRIORITIES

CTLT provides support for key institutional strategic priorities. This section highlights four areas of recent and ongoing activity over the past few years that align with core UBC strategies, drawing on the full range of CTLT services and support.



Musqueam Elder Larry Grant attends the Classroom Climate Series in November 2015

The Indigenous/First Nations staff and their materials, are not only top-notch, but also specific to our students and their experiences.

Note: All quotes included in this document come from a survey of faculty perceptions of CTLT services in August 2016. Full details are listed in the Appendix, Section 8.

2.1 ENGAGEMENT WITH THE ABORIGINAL STRATEGIC PLAN

UBC's Vancouver campus stands on the traditional, unceded, ancestral lands of the Musqueam people. CTLT offers programming, resources, consultations, and support focused on Indigenous engagement in curriculum, pedagogy, and classroom climate. Our work is done in accordance with agreements identified in the Memorandum of Affiliation created between the Musqueam Nation and UBC.

CTLT is represented on two advisory groups that support Indigenous engagement: the Faculty Advisory Group on Indigenous Classroom Climate Issues, which identifies and discusses key issues involved in working with Indigenous material in the classroom, and the Musqueam Advisory, which provides guidance on emerging ideas and programming. These groups are integral to CTLT's support of Indigenous engagement as they facilitate the dissemination of accurate representations and information through respectful consultation with the Musqueam Nation.

Support for individual faculty and academic units is offered through three main approaches: the Classroom Climate Series, consultation and customized services, and resource development. The Classroom Climate Series is a set of professional development workshops that provides a space for all members of the UBC teaching and learning community to share teaching and research practices and learn more about how to engage in conversations about place, power, and social location. CTLT's Indigenous Initiatives team engages in consultations across campus to develop skills, resources, and capacity around Indigenous engagement in teaching and learning. In addition, they work collaboratively with units to develop customized faculty and staff development sessions and Teaching Assistant (TA) training on topics such as discussing Indigenous and other socially contentious issues in the classroom, classroom climate, and diversity and inclusion. The Indigenous Initiatives team also develops and promotes research projects and educational resources that enhance engagement with Indigenous histories, politics, people, cultures, and perspectives through accurate and informed representations and collaborations with the Musqueam Nation and other communities. Available online resources include: What I Learned in Class Today: Aboriginal Issues in the Class, Indigenous Foundations, Time and Place at UBC: Our Histories and Relations, The Power of a Name educational film series, and Where Are We in the World?

In 2013, then UBC President Stephen Toope invited the UBC community to participate in the Truth and Reconciliation Commission (TRC) national event in Vancouver. CTLT supported curricular and programmatic efforts that engaged students, faculty, and staff in gaining a more in-depth understanding of the history and legacy of Indian residential schools in Canada and the initiatives supported by the TRC. The momentum and connections made through this engagement have created pathways for future



We've had great collaborations with CTLT--very responsive to our needs. The FL initiative was particularly successful: we managed to 'flip' the majority of our undergraduate curriculum offerings. CTLT supported every aspect of this endeavor-from design to implementation and evaluation.

development in this area. The Indian Residential School History and Dialogue Centre, set to open at UBC in 2017, will be a manifestation of UBC's commitment to Indigenous engagement, a promise in word and deed that permeates student experiences, research excellence, and community partnerships at the University. CTLT's Strategist for Indigenous Initiatives currently sits on the Advisory Committee for the Centre and will contribute to future programming, resource development, and community and faculty engagement within this space.

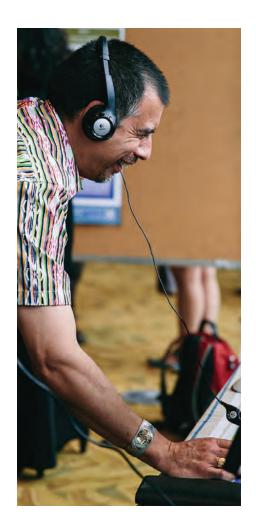
2.2 FLEXIBLE LEARNING/TEACHING AND LEARNING ENHANCEMENT PROJECTS

In 2013, UBC developed the Flexible Learning (FL) initiative, an overarching strategic response to a changing post-secondary environment (PSE). The initial focus was transforming undergraduate courses to encourage active learning through the introduction of flipped and blended techniques; integrating learning technology to effectively enhance interaction in the classroom; and increasing options for access and flexibility for students, including fully online courses.

In order to provide strategic and operational support for FL, CTLT established a project office to strengthen partnerships with Faculties. To enhance the impact of these projects, CTLT developed end-to-end support in project planning, development, and delivery for on-campus, blended, and fully online courses and expanded professional development support to faculty and TAs that focus on FL-related contexts, including blended, online, and Massive Open Online Courses (MOOCs). A key part of our approach was to create new Faculty Liaison positions, embedding CTLT staff in Faculties with a co-reporting relationship to leadership in the Faculties. This ensures that CTLT services are aligned and available to support FL projects and facilitates connections between Faculties and service units focused on teaching and learning innovation and enhancement projects across the University.

On behalf of the Office of the Provost and Vice President Academic, CTLT also provides administrative, development, and evaluation support to the Teaching and Learning Enhancement Fund (TLEF). CTLT has developed processes to support the overall funding process, including introducing an online application system that has greatly streamlined the submission and evaluation of proposals; extensive consultation support during the pre-adjudication planning stages of proposals; and development, design and evaluation support for projects that request it. Funded from a portion of student tuition, TLEF provides approximately \$2.5 million annually for both Large TLEF Projects (up to \$250,000, formerly funded by FL) and Small TLEF Projects (under \$50,000). TLEF is an innovation engine for UBC, and we see broad engagement from across all Faculties each year with submissions, increased quality of proposals, and evaluation activities across both large and small TLEFs.

To give an indication of scale of impact, TLEF projects funded in the current 2016 round have the potential to impact 99,000 student enrolments across 234 courses in the coming year. Since 2013, 89 FL and Large TLEF Projects have been funded; in the 2015-16 session, 180 undergraduate and 29 graduate courses were impacted by resulting course transformations, representing approximately 31,000 student enrolments (19,000 unique students). Faculty engagement with these projects has been



CTLT advocates on behalf of students, researchers, faculty w.r.t to their technical empowerment - without this independent voice, IT needs for students, researchers, faculty would be narrowed to simple business focus such as email, home drive, SharePoint.

high, with 174 research-stream and 167 teaching-stream faculty members collaborating in project teams. An additional 118 Small TLEF Projects have been funded since 2013. In total, 45 CTLT staff have provided direct support to 80 projects funded through FL or TLEF.

2.3 LEARNING TECHNOLOGIES

Over the last two years, CTLT has worked collaboratively with faculty members to define changes in the way we support learning technologies, platforms, and tools. In September 2014, we initiated a Learning Technology Ecosystem Project (LTEP), sponsored jointly by the Provosts of the Vancouver and Okanagan campuses. Guided by feedback from faculty and students and advice from learning technology leaders at peer institutions, a Working Group developed a vision and principles for decision making; identified and prioritized functional and service gaps; and created a high level roadmap for the future of the learning technology ecosystem of tools, applications, and support.

Through this process we learned that faculty want to see more visible academic leadership and understand how academic strategy influences decisions about learning technology, and that students want more clearly articulated avenues for input. In response, we proposed new governance structures designed to increase agility, optimize opportunities for faculty and student input, and clearly articulate how decisions are made. There are a number of significant projects underway within the broad area of learning technology to ensure faculty at UBC have the tools and support they need to achieve their teaching goals, meet student expectations, and keep pace with rapid technological and PSE changes. Three of these projects are highlighted below.

Core Learning Environment Selection

The core of UBC's Learning Technology ecosystem is the Blackboard Learn product (branded locally as Connect). The key LTEP priority for 2016 is re-evaluating this core by relevant UBC stakeholders. Although there has been significant growth in the range of tools used to support teaching and learning—both supported and integrated with other UBC systems and existing outside of this structure—there is still a requirement for a central core, albeit with a reduced footprint of services that it can uniquely provide. This view is well aligned with educational technology thought leaders (e.g., EDUCAUSE) and a shift from language that describes systems as 'learning management' to that of a 'digital learning environment'.

The current Learning Technology Environment Renewal project, jointly led by CTLT and UBC IT, directly engages faculty and students in the assessment of needs for a next generation digital learning environment. Our approach is already attracting significant interest from other institutions approaching similar learning technology decision points. Faculty members (secondments via course buyout) and students (secondments via co-op appointments) on both campuses are leading conversations with their peers around what tools and data are needed to design and participate in learning activities that engage students actively in their learning. Instructional support staff based in Faculties will contribute features and tools used extensively in their academic domains, and technical staff will identify current and emerging standards to be used, together with security, privacy, and integration requirements. These consul-



Melanie MacFarlane, Senior Partner Manager at edX, presents at the edX workshop hosted by UBC in January 2016

tations will be used to formulate discrete functional, technical, and operational requirements against which vendor systems will be evaluated. A final decision is to be made in April or May 2017.

Learning Analytics

While UBC has a long history of capturing, analyzing, and reporting on learning data, there are significant limitations in the current state. Institutional reporting remains a labour-intensive process of collecting data from a limited subset of learning environments, most lacking institutional data integration or real-time data capture. Yet, having an effective learning analytics system is essential for UBC to optimize student learning success and continuously improve the learning ecosystem, identify students at risk of failure earlier and target supportive interventions, measure effectively the value of investments in teaching and learning transformations, and support efficient and timely data-informed decision making.

UBC's Learning Analytics multi-year project is currently being initiated and has three broad but interrelated components: faculty engagement with rapid research pilots to surface interesting questions, establishment of an ethical and policy framework, and planning and development of the technical infrastructure required to deliver enterprise functionality.

Online Strategy: edX, CPE, Online

A core component of UBC's Flexible Learning initiative was to develop and enhance academic partnerships and broaden access to learning opportunities through emerging digital platforms, partnerships, and collaborations. Initially through Coursera, and more recently through edX (which UBC joined as a charter member in Fall 2014), UBC has developed a portfolio of offerings in more than 10 topic and subject areas as MOOCs

and Career and Personal Education (CPE) courses.

CTLT staff collaborated with teams and units across the University and beyond to support the planning, development, and delivery efforts of these offerings, with a focus on building a strong support community and providing training in Faculties that have active courses (Arts, Education, Science, and Medicine). In addition, we have also supported a number of blended and distance learning projects using the edX (Edge) platform in credit courses. These courses are making extensive use of learning technology integrations developed by CTLT staff actively involved in the edX community developing and enhancing the platform. Collaborative projects that are underway are also developing tools and approaches to evaluate student engagement and overall student learning in MOOCs.

A key priority for UBC's online strategy is expanding opportunities for CPE through digital channels such as the edX platform and consortium. We are providing curriculum planning and development support for a number of emerging CPE projects and

The impact on my teaching has been dramatic. CTLT has offered me more resources and tools than I have had the time to utilize. The tools I have utilized have provided tangible impact on my teaching. CTLT sessions have also helped me to understand what "leadership" is and how I might be able to demonstrate it in future years.



working with the Provost's Office to ensure that the overall LT ecosystem for the University supports the needs of CPE. This allows for leveraging of existing technologies as well as the development or evaluation of tools and approaches to support strategies relating to personalization and scale of delivery to markets beyond the UBC campus.

2.4 SUPPORTING EDUCATIONAL LEADERSHIP AND SCHOLARSHIP

CTLT supports the development of teaching practice, working with both individual faculty members and departmental and faculty leadership in support of the teaching and learning goals of programs and units. Supporting departments in building capacity for ongoing innovation and enhancement in teaching and learning is a key strategy in our approach. While the development of 'educational leadership' (expressed broadly at UBC as 'demonstrating impact beyond one's own classroom') is a requirement for promotion and career advancement of faculty in the Professor of Teaching stream, all faculty are encouraged to take a scholarly approach to their teaching. This includes an awareness of discipline-specific, evidence-based pedagogies and application within their own teaching as appropriate. A significant number of faculty take this one stage further by undertaking systematic evaluation or enquiry within their own teaching and learning contexts and disseminating the results publicly. This engagement with the Scholarship of Teaching and Learning (SoTL) across diverse disciplinary contexts has

both a long history at UBC and increasing uptake from faculty.

CTLT provides a variety of support for faculty working across this continuum of evaluation—enquiry—scholarship—dissemination. All funded enhancement projects (such as those from TLEF) require a detailed evaluation plan, and support is provided before, during, and immediately after project funding to assist with project evaluation. Discipline-based education research projects are also supported through the SoTL Seed Fund. The Seed Fund was established in 2014 as a response to the gap in funding opportunities for small-scale investigations. Since then, it has funded 24 research projects in nine Faculties, impacting thousands of students. Support is provided primarily through graduate students from a variety of disciplines, known as SoTL Specialists, who are trained by CTLT in education research methods, ethics, experimental design, qualitative and quantitative data collection and analysis, and preparation of results for dissemination. SoTL Specialists work collaboratively with faculty project leads in a manner that supports skill development in both groups. The benefits to this synergistic and low-cost program include faculty professional development and increased capacity to carry out SoTL investigations; transfer of knowledge, skills, and tools across individuals and Faculties within UBC; scholarly publications around teaching and learning and international leadership; and increased opportunities for graduate students to engage in authentic research experiences. Select research findings are highlighted on the ISoTL website.

SECTION 3: CTLT STRUCTURE AND ORGANIZATION

CTLT is organized as a unit with an Academic Director, Senior Management group, and five teams. The Academic Director reports directly to the Provost and VP Academic, Dr. Angela Redish, and the unit falls within the portfolio of Associate Provost, Academic Innovation, Dr. Hugh Brock. Our Senior Management team consists of the Academic Director, Associate Directors (for the four main service areas described below), and Senior Managers of different areas. This team meets every two weeks, with alternate meetings focused on operational and strategic issues.

Internally, CTLT consists of five teams (distributed over three distinct locations in two buildings):

- 1. Teaching and Learning Professional Development (TLPD)
- 2. Curriculum and Course Services (CCS)
- 3. Teaching and Learning Technologies (TLT)
- 4. Projects and Faculty Partnerships (PFP)
- 5. Planning, Administration and Communications (PAC)

Currently, CTLT comprises 77 staff members (74.3 FTE) and 26 students (18.3 FTE). A full organizational chart is provided in the Appendix. Between 2011 to early 2015, our staff complement increased by 40%, then reduced to our current numbers after a significant budget cut for all centrally funded units. The majority of our staff positions are in the Educational Programming and

Information Systems and Technology (IT) job families, with a few other positions around administration, communications, and marketing. A third of our staff members have PhDs. Our student positions are mainly co-op positions, where students provide direct support to faculty members around learning technologies.

A broad range of faculty and graduate students contribute to CTLT's work through informal and formal arrangements—as facilitators for programs such as the Instructional Skills Workshops (ISW), as (co-) leaders of CTLT workshops and events (72 faculty/87 graduate student co-facilitators in 2015-16), and most recently, through the pilot Faculty Associates scheme (four Associates in 2016-17).

Although operationally and organizationally divided into five distinct teams, many of our staff members work across teams to provide our service offerings. A typical project or activity will draw on staff expertise from multiple team areas. We also have a variety of 'cross-team' groups, whose members are intentionally chosen from all areas of our unit. These groups support efficient unit operations (e.g., in the areas of communications; social activities; and health, safety and wellness); respond to particular requests for input or action in certain areas (e.g., the unit's response to UBC's Equity and Diversity Working Group report); or provide specific resources to focus on a time-sensitive project activity, such as an 'agile action team'.



SECTION 4: SUPPORTING PEOPLE

Supporting people, primarily faculty and teaching assistants, in their teaching and learning endeavours is a key component of what we do. Professional development programs, services, and resources provided to members of the UBC teaching and learning community at different stages in their careers are delivered via drop-in support, consultations, workshops, events, facilitation, classroom observation, and departmental retreats. These services also play a pivotal role in the development and evolution of the learning technology ecosystem, and in supporting the University's goal of creating an exceptional learning environment.



Our visiting scholar program has received great feedback regarding workshop and training. The participants felt well informed during the training offered by CTLT and were excited about using the new technology in their teaching work. We really appreciate CTLT's help and support!

4.1 PROFESSIONAL DEVELOPMENT: FACULTY

CTLT offers one-on-one faculty consultations upon request to faculty members seeking individual support related to an aspect of their teaching. Consultations can be a single session or the beginning of a process designed to help a faculty member achieve a specific goal related to teaching and learning. Faculty members can also receive one-on-one drop-in support at the Learning Technology Hub and associated drop-in clinics.

There is an extremely broad range to these conversations. Faculty members may work with us to:

- » Identify teaching and learning goals
- » Connect with a faculty mentor
- » Receive feedback on their teaching through classroom observations
- » Design a process for facilitating a discussion or meeting around a teaching or learning issue
- » Integrate technology into teaching practice
- » Design an online learning resource or Distance Education course
- » Evaluate the impact of a change they are making in their teaching or course design
- » Map out a course/curriculum redesign project
- » Develop applications for funding to support teaching and learning innovation (e.g., TLEF proposals, TA training support)
- » Identify resources to address a particular teaching challenge
- » Establish, or take part in, a community of practice (CoPs) or learning community

Typically, we offer these types of consultations to approximately 300 faculty members per year, with the number growing each year since 2010. Provision of support such as this sits within a program framework of Helping Faculty Navigate Their Teaching Careers, designed in part to address the challenge of communicating with

Helping Faculty Navigate Their Teaching Career

Between 2014-16, CTLT extensively reviewed its professional development programs and services. We completed a needs analysis involving consultations with 100 faculty, TAs, and staff (including those who had not previously used CTLT services), as well as a comparison of our offerings to those of other Teaching and Learning Centres at leading global universities. The overall goal of the project is to create an easy-to-navigate pathway for faculty and graduate students. This pathway will be published on CTLT's website in the Fall of 2016. The pathway crosses the spectrum of teaching competencies (i.e., foundational, developing, innovative), recognizing existing and emerging pedagogical priorities and meeting a multiplicity of needs (cohort-based, customized consultations, workshops, just-in-time consultations, and self-service resources). The project and subsequent design work are nearing completion; many new, innovative elements are already woven into CTLT's program offerings, and a Navigating Your Teaching Career online resource will be launching later in the fall.

Drawing on published work on continuous learning pathways, the pathway framework covers four stages of progression to personal competency: engaged, established, accomplished, and exemplary. Four focus areas related to teaching and learning exist within each stage: learning (about principles of learning), designing (activities, course, or curriculum elements), practice (the 'doing' of teaching and learning), and enhancement (through innovation or sharing back to the teaching and learning community). This approach is intended to enable faculty to find easier routes into a flexible professional development pathway, enhance support for graduate students and TAs intending to pursue a career in the academy, build capacity and enhance a culture of learning about teaching amongst educators, and complement the excellent work being done by instructional support staff all across campus.

Please see Appendix, Section 4.1 for more details.

faculty members about how we can respond to their needs, at whatever stage of their teaching career. There is a strong focus throughout our provision of current research about teaching and learning theories and methods.

Another significant component of this professional development framework includes a wide range of workshops. Face-to-face workshops range from short sessions targeting specific development areas (e.g., how to incorporate student peer evaluation), to extended programs such as the three-day ISW (e.g., enhance teaching effectiveness) and the Academic Leadership Development Program (ALDP) (e.g., develop leadership capacity). We also offer a multi-day fully online workshop focused on teaching successfully online, and an extended blended course focused on Teaching in a Blended Learning Environment (T-BLE). We make workshop content available on-demand through one-on-one consultations and custom offerings to academic units.

While many workshops target individuals, they often serve as gateways to sustained, departmental engagement. One example of this is the Course Design Intensive (CDI), a three-day workshop focusing on best practices in course design using a constructive alignment approach. Faculty who participate in the CDI often share their experiences with colleagues who, in turn, attend future offerings of the workshop. Many CDI participants take on leadership roles in their departments, focusing on curricular or programmatic change, and seek longer-term curriculum support from CTLT.

All CTLT professional development services are informed by an evidence-based approach and are designed to encourage scholarly practice. One example of this is the UBC Peer Review of Teaching (PRT) initiative. This initiative, driven by the needs and circumstances of discipline-specific communities of practice, places emphasis on scholarly approaches to both formative and summative peer review of teaching practices. The PRT initiative coordinated by CTLT provides faculty the opportunity to participate in a cross-faculty formative peer review of teaching process. It also offers campus-wide workshops on peer review of teaching as well as on-demand, customized workshops and consultations for individual departments, schools, and Faculties. CTLT also facilitates the peer review process for several academic units.

Not all faculty are able or wish to attend in-person events. For those who prefer self-service, a just-in-time model, or reference documents, CTLT has developed a wide range of <u>digital</u> and <u>print resources</u>. In partnership with UBC Library, CTLT con-



I credit the ISW for the continual improvement and reflection upon my teaching experiences. I hope to continue teaching beyond graduate studies and know that how I approach teaching and learning has been shaped entirely by my experiences with CTLT.

tributes to the development of the Learning Commons and provides ongoing support to the student web team who support student learning in this multi-dimensional service model. With funding from both BCcampus and TLEF, CTLT has also partnered with the Library on the development of Digital Tattoo, designed to help students think critically about their presence online, navigate issues involved in digital identity, and learn about their rights and responsibilities as digital citizens. As of 2014, the number of annual visitors to the resource was 19,000 (from across Canada, the United States, and beyond). The University of Toronto has recently joined as a strategic partner, and the University of Victoria and Thompson Rivers University have joined as contributing partners.

CTLT has also developed a number of resources in support of UBC's Aboriginal Strategic Plan, as outlined in section 2.1. We have also partnered with the First Nations House of Learning to develop resources in support of the 2013 Truth and Reconciliation Day. Please see Appendix, Section 2.1 for more details.

4.2 PROFESSIONAL DEVELOPMENT: TAS AND GRADUATE STUDENTS

CTLT offers a wide range of workshops to support the ongoing professional development of TAs and graduate students. These workshops range from short sessions targeting specific development areas (e.g., facilitation basics) to extended programs such as the Certificate in Advanced Teaching and Learning (CATL) and the ISW described below. CTLT also develops customized workshops for departmental TA training, as described in Section 5.4. In June 2016, UBC (CTLT, in partnership with the Faculty of Science) joined the Centre for the Integration of Research, Teaching and Learning (CIRTL) Network as the first Canadian member. Members of the network are committed to extending engagement with graduate students and teaching skills development in STEM disciplines.

Graduate Student Instructional Skills Workshops (ISW)

The ISW is a three-day interactive workshop (24 contact hours) offered within a small group setting. The workshop uses an intensive experiential learning approach designed to enhance teaching effectiveness. It was created in British Columbia in 1979 and is offered in universities, colleges, institutes, government organizations, non-profits, hospitals, and training organizations around the world. In 2014, CTLT moved from a purely face-to-face ISW to a blended model, where participants spend three hours of their workshop time completing five online lessons before and during the ISW.

The workshop encourages reflection and examination of one's teaching practices, with effective feedback (practiced in the workshop) focusing on the learning process rather than specific lesson content. ISWs offered for graduate students at UBC are in great demand. Departments who require the ISW for their TAs can reserve spots in CTLT's ISWs or request a customized ISW for their department. CTLT offers 18 ISWs per year for graduate students out of core funding and an additional four ISWs paid for by departments. In addition, some departments pay for 15-20 "reserved spots" per year in the core-funded program. This year, we will be offering four more ISWs, in

conjunction with UBC joining the CIRTL Network. Despite this, the demand for Graduate Student ISWs is still significant. We have approximately 500 unique individuals requesting registration in a Graduate Student ISW each academic year. We are currently considering ways to continue to provide additional ISWs to help decrease this waitlist.

Certificate in Advanced Teaching and Learning (CATL)

CATL, redesigned and relaunched in 2015, is an 18-month cohort-based blended teaching program that supports the development of graduate students' expertise in teaching and learning. CATL prepares graduate students who seek faculty positions focused on teaching and learning, and more broadly, creates a cohort of graduate students positioned for future educational leadership. A University-wide Advisory Committee offers insights, suggestions, and feedback to the program. Evaluation of the program, linked to a related SoTL research project, has been ongoing. The primary focus of this research project is to explore whether, and to what degree, the program has the beneficial impacts for participants that it is meant to achieve, and to make adjustments to increase the impact for future cohorts. In September 2016, there are 25 participants across two cohorts.

4.3 LEARNING TECHNOLOGY HUB (LT HUB)

In late 2013, UBC's then Chief Information Officer (CIO) proposed that UBC IT and CTLT jointly manage the CTLT technology team. Through a formal consultation process, the community rejected that approach, suggesting instead that CTLT and UBC IT could and should find better ways of working together which did not require organizational change. In addition, and more importantly, there was a desire to see more prominent academic leadership in the area of learning technology. Collaboratively, we proposed an LT Hub model, which would physically co-locate members of the UBC IT Learning Applications team with relevant staff members in CTLT, creating a single 'point of contact' for LT support.

After almost a year of staff co-located in the LT Hub, this model has proven to be more successful than anticipated. Learning Applications staff now have a greater understanding of the implications of their work on teaching and learning, and CTLT staff are much more effective and efficient in assisting faculty members. The LT Hub partnership has enabled UBC faculty members to have increased access to academic media support at no cost, as well as access to equipment, resources, and training to develop basic media resources for teaching purposes. The media facilities available include a Lightboard Studio, a 'one-button' studio, and a studio where DIY projects can be completed. Consultation and design support are also available for more sophisticated media projects, often funded by TLEF.

The establishment and initial success of the LT Hub now allows us to consolidate support for online (distance education) credit courses. Faculty members teaching fully online courses are offered support for course design, production, and delivery of distance education courses as well as professional development to help them develop pedagogical strategies for an online context. CTLT staff also provide ongoing support to faculty to ensure that course materials, activities, and assessments are updated each term as needed.



I am particularly impressed by The Hub - very useful; great staff who are patient and helpful. Because of the help in The Hub I could do a lot of practical things at work that had stumped or confused me before.

4.4 FACULTY ASSOCIATES

CTLT launched a Faculty Associates program in 2016 to provide faculty members with the opportunity to develop educational leadership experiences while engaged in the development and execution of a significant teaching and learning project. Faculty Associates are seconded into CTLT for two years with an annual three-credit teaching release to allow them to develop and deliver their projects with support from CTLT. The inaugural cohort welcomes four faculty members from four different Faculties: Land and Food Systems, Forestry, Science, and Pharmaceutical Sciences.

The overarching goal of the program is to build additional educational leadership capacity across the University and strengthen links between academic units and CTLT. The program increases communication opportunities between CTLT and departments so that we are able to better understand the needs and requirements of a particular department, and so that departments have a local point of contact to facilitate access to the services and expertise that we offer. The Associate thus acts as conduit for this two-way information flow. Additionally, the program supports the professional development of Associates through cohort-based training in evidence-based teaching practice, research, and scholarship, contributing to and expanding the base of UBC's educational leadership capacity.

- » A series of research briefs, which summarize innovative research on teaching and learning, made accessible to a wide range of faculty.
- » SoTL Explorer, a platform to support lateral and vertical transfer of knowledge and evaluation approaches across the University.

Each of these activities is intentionally cross-disciplinary to enable unique collaborations and knowledge transfer across disciplines.

Beyond the activities of ISoTL, we also encourage faculty to approach all innovation projects from a scholarly perspective. For example, CTLT provides direct research support to faculty involved in UBC MOOCs, addressing a broad range of topics including improving student learning outcomes, participation and satisfaction within MOOCs, and ways to transfer successes to on-campus courses. This includes working with faculty to inform proposals with recent research and critically evaluating the success of their projects. Since 2013, dedicated support has been provided to faculty project leads on TLEF projects for evaluation planning, with additional implementation support for more complicated projects.

4.5 RESEARCH AND EVALUATION

CTLT provides formal support for discipline-based education research through the Institute for the Scholarship of Teaching and Learning (ISoTL), a research institute established in 2006 by the Senate. ISoTL supports research and scholarly reflection on teaching and learning, aiming to inform and enhance practice both locally and internationally. It also aims to increase the engagement of faculty members and experts in education research from across campus in evaluating evidence-based practices in higher education. Support is provided through a range of activities, including:

- » An active community of practice, led by a faculty member, which meets regularly and explores a wide range of topics based on members' interests and needs.
- » The competitive SoTL Seed Funding program, which provides professional development and structured support around faculty-directed SoTL research projects. Since 2014, 23 projects have been funded from 51 applications.

Learning Analytics Hackathon

In October 2015 the Learning Analytics Visual Analytics (LAVA) group held the first ever learning analytics hackathon at UBC. The two-day event attracted more than 70 undergraduate and graduate students, faculty, staff, and professionals with a wide range of backgrounds and expertise, who applied a variety of approaches to analyzing learning-related data. Examples included using classroom observation data to better understand how learning unfolds and using data from a learning management system to identify patterns in how learners use available materials. At the end of the hackathon, nine participant-led groups presented their research findings. Several of the projects have since become full-scale research projects.

SECTION 5: SUPPORTING DEPARTMENTS AND FACULTIES

Over the past several years, CTLT has actively sought opportunities to strengthen our relationships with departments and Faculties by providing support for strategic priorities. This support is provided through a wide range of services including embedding staff, providing customized support and facilitation of retreats for academic units, supporting a data-driven evaluation of current programs and the development of new program proposals, providing customized TA training, and managing the student evaluation of teaching (SEoT) process.



Arts Outcomes Project

Since 2014, CTLT has partnered with the Faculty of Arts to support the Arts Outcomes Project, which engages departments in thinking critically about their programs, the outcomes students are intended to achieve, and the ways in which students achieve those outcomes. All programs have been asked to develop outcomes that articulate the unique skills and knowledge of the discipline that students will obtain by the time they graduate. As a result of this process, a number of units have also engaged in curriculum renewal projects. Over the 2015-16 academic year, the project will focus on developing Faculty-level graduate attributes derived from the program outcomes and reviewing Faculty graduation requirements.

5.1 FACULTY SERVICE CLUSTERS & FACULTY LIAISONS

Faculties and schools at UBC are incredibly diverse in size and scope, ranging from 'larger than small institutions' to 'smaller than some departments.' In order to better address and support the unique needs of specific Faculties, several service models are currently in place. In Pharmaceutical Sciences, a CTLT staff member is providing embedded learning technology support halftime, spending the other half of his time working in the LT Hub. In Science, staff supporting learning technology are fully embedded within CTLT, though their focus is exclusively Science. Both of these models allow staff members to better serve Faculty needs by having a firm understanding of university technologies and their unique application within specific academic units. The Faculty cluster model has also been applied to curriculum support in Arts, where CTLT staff are working with units to develop student outcomes (see the 'Arts Outcomes' project highlight), and in Applied Science, where CTLT staff are supporting the development of a number of new degree proposals.

In addition, CTLT has five Faculty Liaisons who are embedded in Arts, Land & Food Systems, Sauder School of Business, Science, and Vantage College. Originating from the work of the Flexible Learning initiative, Liaisons collaborate with faculty on the development and delivery of projects funded through TLEF; network across department, Faculty, and University contexts to connect people to information and resources; and ensure alignment of CTLT services with Faculty priorities. Each of the Faculty Liaisons also serves in a role that is unique to the needs and culture of their Faculty. CTLT works collaboratively with the Faculties to determine how the Liaisons can best support their strategic priorities.

5.2 LEARNING TECHNOLOGY ROVERS (LTRs)

In the Fall of 2013, the Flexible Learning Leadership Team announced a pilot implementation of LTRs to provide on-the-ground learning technology support for faculty members. The role of the LTRs includes basic support and troubleshooting as well as triage for services provided through local Faculty Learning Centres, CTLT, and/or UBC IT.

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

Asking for technical help from [CTLT staff member] and the tech rovers is always a pleasure. Makes it easier for me to do what I need to do in my job.

CTLT was extremely helpful in guiding me through the beginning process of designing an online course (a process in which I have NO experience). They were always available and let me know all the ins and outs of process and costing such that I was then able to develop a common sense outline of the course along with appropriate timelines. They have agreed to support me in all steps of the production process: SUPERB!!

to the Faculty of Education and Sauder School of Business (2014); the Faculty of Applied Science, Faculty of Pharmaceutical Sciences, and Faculty of Land & Food Systems (2015); and the Faculty of Forestry and Faculty of Medicine (2016), all of which now participate in the continued development of the training program. Faculty support units also occasionally send other student hires to the training.

The LTRs participate in a community of practice once a month and meet on their own more often, developing, on their own initiative, a knowledge base to assist each other.

5.3 DISTANCE EDUCATION COURSE SUPPORT

CTLT partners with academic units to identify priorities for course maintenance and potential new course developments. All courses go through a review process led by the academic unit. Technical and logistical support extends to students registered in these courses, with dedicated help-desk support. CTLT has worked to gain efficiencies by leveraging support through the LT Hub. CTLT also provides specific training and orientation support for instructors who are teaching DE courses.

CTLT staff work one-on-one with faculty in the initial planning and development of DE courses. We also liaise with Enrolment Services, UBC Bookstore, Access & Diversity, UBC Library, and other internal organizations to manage logistical details of course development and delivery, including academic accommodations for DE students in online courses, Library collections and services for DE students, and remote and online exam support for DE students who are writing exams beyond the UBC campus. Small teams within CTLT are able to provide course development support through instructional design, media design, and production and learning technology support as needed by a particular project.

In 2015-16, there were 80 fully online (DE) courses across eight Faculties with 8,085 enrolments, taught by 64 DE instructors. About 90% of these students also take on-campus courses. In addition, CTLT staff provide development and delivery support for UBC's online Masters of Educational Technology (MET) program (with 15 courses and 20 instructors), as well as graduate courses in the Faculty of Law; the School of Library, Archival and Information Sciences; and the Department of International Surgery in the Faculty of Medicine.

5.4 PROCESS DESIGN, FACILITATION AND PROGRAM RENEWAL

CTLT regularly provides facilitation services to faculty and staff from academic units to determine a course of action, solve a problem, make a decision, or improve organizational effectiveness. These services include both process design (development of deliberately sequenced activities intended to lead to projected outcomes) and facilitation (enabling diverse groups to work together collaboratively and effectively in pursuit of specific goals). CTLT staff design custom retreats in consultation with the person or unit requesting the service and draw from a variety of methods and approaches to meet the specific needs and cultures of the groups we serve. Between 2013-15, CTLT staff worked with 18 different units to produce custom departmental retreats. These services are typically offered at no charge for undergraduate programs and on a cost recovery basis for graduate and professional programs.

Using these approaches, CTLT has worked with departments across campus to clarify departmental or program goals, set strategic direction, identify intended student learning outcomes at both program and course level, facilitate consultations with industry partners and disciplinary practitioners, and map curricula to determine whether programs or courses are structured to provide sufficient opportunities for students to achieve desired outcomes. In response to client demands, CTLT relies on a data-informed approach to program and course development and renewal. This includes analysis of student performance data, collection and summary of alumni or practitioner feedback, and visualizations of comprehensive program data, such as the relationships across and between courses. CTLT is also increasingly drawn into the development of documentation for accrediting bodies, Faculty, Senate, or Ministry approval. In such projects, CTLT works closely with faculty and academic leaders to clarify goals; conduct needs analysis; seek feedback from key stakeholders; and determine teaching practices, assessment methods, and technology consistent with and necessary to achieve goals and learning outcomes. However, despite the fact that staff from two CTLT teams (CCS and TLPD) engage in offering these services, we are challenged to meet the increasing demand.

5.5 DEPARTMENTAL TA TRAINING PROGRAMS

The majority of CTLT's engagement with TAs is through support offered to departmental TA training programs. Funding for TA training is offered biennially to Faculties and departments through the Provost's Office. We provide consultative support on the development of training proposals, and CTLT staff members serve on the adjudication committee. Departmental training programs are expected to provide graduate students with the fundamental knowledge, abilities, and skills necessary to begin their work as TAs, recognizing that these attributes will be context-specific. The training must also prepare TAs to interact with diverse student populations and effectively engage with sensitive issues and situations as part of their teaching duties. CTLT's Indigenous Initiatives team, sometimes in partnership with the Equity and Inclusion Office, collaborate in supporting this aspect of the training.

CTLT provides facilitation support for TA training, including training new facilitators and supporting their ongoing professional development. CTLT also works with departments to:

- » Advise on existing programs and services on campus that can optimize the efficiency of their TA training programs
- » Assist in developing schedules for implementation
- » Provide training to prepare TAs to facilitate their peers in their departments
- » Discuss how program requirements are being met/addressed
- » Design program evaluation

Feedback from training events is regularly used to improve subsequent training offerings as well as to improve the program itself. Systemic changes to both the application and feedback processes were implemented for the 2016-17 academic year based on feedback from the previous year.

Asian Studies: Peer Review of Teaching

A strong collaborative partnership has existed between CTLT and Asian Studies since 2013, when CTLT was contacted by Asian Studies to lead a formative Peer Review of Teaching program to improve student evaluations of teaching within the department. Today, several instructors within the department have completed the Course Design Intensive (CDI), student evaluations of teaching have shown significant improvement, and innovation has begun at the curricular level.

CTLT has led several workshops for our TAs that have helped them gain skills that they need in the classroom. They have also funded our budget requests, which will enable us to provide more programming for them throughout the next two years. Overall, I am very appreciative of this centre and their excellent staff!

5.6 STUDENT EVALUATION OF TEACHING

Since 2007, when the Policy on Student Evaluation of Teaching (SEoT) was approved by the Senate, CTLT has been working with Associate Deans Academic to facilitate its implementation. CTLT manages and supports centrally provisioned, locally administered tools that support online summative student evaluations of teaching and reporting (including for promotion and tenure purposes). As required by the Policy, a summary report is submitted and presented to the Senate annually.

The approach to implementation has been deliberately research-focused and empirical; various formal and informal studies have been conducted to answer research questions posed by faculty members, heads, and/or deans.

Since 2012, CTLT has also collaborated with the Alma Mater Society (AMS) to encourage instructors to collect Mid-Course Feedback, informal, formative feedback from students. CTLT works with units and individuals to demonstrate how this feed-

Response rates in Students' Evaluations of Teaching

At UBC, similar to many other institutions, there is concern about the response rates to formal student evaluations of teaching in terms of potential impact on validity and reliability of the collected data. In response to discussions with Associate Deans Academic, we undertook a simulation study to model statistically desirable response rates. We were able to present acceptable response rates for a range of variabilities (including class sizes, confidence level in the data, and margin of error). This provided useful data back to Associate Deans to enable them to, in some cases, target instructors of classes in a particular size range with strategies that have been shown in literature to enhance response rates.

back can engage students as co-creators of a course, help them understand the rationale behind various pedagogical practices, and illustrate their own role in contributing to the success of the course and themselves.



SECTION 6: INSTITUTIONAL SUPPORT

In addition to supporting the strategic University priorities described in Section 2, CTLT staff develop, provision, integrate, and operate technology in support of teaching and learning activities across both campuses.

CTLT invited me into a technological process and helped me to translate into a new medium what I wanted to have happen in terms of pedagogy and learning outcomes.

iPeer

iPeer is particularly useful for teambased teaching and is designed to allow students to evaluate the contributions of team members according to instructor-created rubrics. iPeer was originally developed by staff in Applied Science in 2004 as part of a Team Based Learning (TBL) approach and transferred to CTLT (then OLT) for continued development and support in 2010. The initial codebase has been replaced and functionality enhanced as requested by faculty members at UBC and elsewhere. The application is fully integrated into the LT ecosystem and was used in 172 UBC sections in the 2015 academic year. The application is freely available; version 3.1.6 has been downloaded 716 times.

6.1 LEARNING TECHNOLOGY CONTEXT AND CONSTRAINTS

CTLT staff work primarily in the innovation and exploration phase of the technology lifecycle, contracting with UBC IT for the provision of infrastructure. Although it was our aspiration, there was no mechanism for transferring technologies to UBC IT once they become operational. Even if there had been capacity, UBC IT staff did not have the requisite knowledge or skill set to work with Web 2.0 or 3.0 technologies, nor were the UBC IT processes agile enough to manage these types of applications. In the past year, the desired model has evolved to one of shared services related to learning technologies. As new technologies are being on-boarded to the LT Hub, knowledge transfer of the application and the infrastructure is also taking place to free up developer time from dealing with Tier 1, 2 (and in some cases, 3) support. This partnership model is more sustainable and will enable CTLT development staff to spend more time on innovation activities.

The Freedom of Information and Protection of Privacy Act (FIPPA) in British Columbia, which requires that all personally identifiable information be stored and accessed only in Canada, complicates activities in the Learning Technology innovation space. This means that cloud-based services cannot automatically be made available for teaching and learning purposes, that certain regulatory requirements (e.g., Privacy Impact Assessments) must be completed, that vendor-hosted options are often not a possibility, and that significant testing activities must be deployed for every proposed implementation and/or integration.

6.2 APPLICATION DEVELOPMENT

The development team takes a deliberatively lean approach, focusing on rapid development and production of a minimally viable product (MVP), with frequent feedback from faculty and consequent iterations to ensure the pedagogical use case is realized. New tools have a formal pilot and evaluation process prior to being implemented in the LT ecosystem. All applications developed at CTLT are open source and available at github.com/ubc. Increasingly, applications are developed as part of a funded TLEF project, and we are currently working on ways to ensure that sustainment activities are being considered if enterprise deployment is an ultimate goal.

Peer Instruction

The Peer Instruction (PI) tool was developed in 2015-16 and emulates Eric Mazur's Peer Instruction methodology, which helps students develop a deeper understanding of concepts, in a fully online format. The PI tool was UBC's first functional contribution to the edX core codebase in Spring 2016 and has since been deployed in several courses. Further collaborative work with other institutions over the next few months is expected to extend the functionality and to evaluate use cases.

ComPAIR (aka Adaptive Comparative Judgement)

ComPAIR is a new application for peer- and self-reflection and feedback provision, based on work done by Thurstone¹, which suggests that individuals are far more reliable when comparing one thing with another than when making absolute judgements without any comparison. ComPAIR has been part of a two-year iterative pilot across disciplines (Math, English, and Physics) and different use cases. The pilot evaluation indicated positive benefits for both instructors and learners, and the tool will be ready for enterprise deployment in September 2016.

1 Thurstone, L. L. (1927). A law of comparative judgment. *Psychological Review* 34, 273–286.



Learning Records Store

CTLT has established a learning record store (LRS) for collecting and reporting on learning activity, including badges, within WordPress (see Section 6.3). The approach utilizes xAPI, an emerging specification for learning technology that makes it possible to collect data about the wide range of experiences a person has (online and offline). The advantage of this technology is the freedom it provides an institution to define what constitutes learning activity and to collect only those events that have significance for learning. Since it is a standards approach to managing the collection of data, it also provides, in theory, the ability to integrate learning activity data from multiple learning applications. Information collected as part of this project will inform the Learning Analytics project described in Section 2.

Other Tools

Other significant tools and/or building blocks developed include a Response Map application (based on work done by University of Queensland), Identity Detective (a tool for mapping cloud-based application user information to institutional account information), and Building Blocks to maintain records of the authorization status of copyrighted material within courses.

Integrations

CTLT staff take a standards-based approach to integrations, often using a modified version of Learning Tools Interoperability (LTI) to ensure FIPPA compliance. This requires negotiation with and cooperation from vendors. Current integrations include publishers as well as local and cloud-based learning tools. Please see Appendix, Section 6.2 for a current integration map.

6.3 DEPLOYMENT OF OPEN SOURCE TECHNOLOGIES

Faculty at UBC have a long commitment to "open" and some prefer to publish course materials in an environment that supports open publishing, pedagogy, and collaboration. Various blogs and wiki environments have been made available, extended and operated by CTLT (and its predecessor organizations) since 2004. Open source learning technology applications are also deployed and supported. Applications with significant use are described below.

UBC Blogs

Blogs were first implemented in 2004 using MovableType, and more than 700 users were migrated to WordPress in 2008. At present, approximately 3,600 new blogs are created every year through self-service, and the system now contains over 25,000 blogs. UBC Blogs is integrated with the rest of the LT ecosystem through LTI.

UBC Wiki

UBC Wiki is a campus-wide application for collaborative writing. Content can be created and edited by anyone using a campus wide login (CWL). About 3,700 new users sign in every year. Collections are grouped according to type with four options available: Main (for UBC-related articles), Documentation, Courses, and Sandbox.



I don't think I can capture this in a small space so I'll just list a few things that I can think of as profoundly impactful. Through my interactions with CTLT I have learned about the following things, which are now integral aspects of my teaching: using blogs and wikis in courses and open education, open educational resources, open pedagogy (e.g., "student as producer"-the value of students creating content that is useful beyond the classroom).

Webwork

Webwork is an online assignment and quiz application primarily for mathematics, where students get immediate feedback on answers. This frees up TA time for assisting students with understanding content, rather than marking homework assignments. Several years ago, developers in Statistics integrated Webwork with the R programming language, and this additional functionality is now being used in statistics courses across disciplines.

6.4 SUPPORT & OPERATION OF OTHER TECHNOLOGIES

From time to time, CTLT is asked, on behalf of the University, to support and/or operate technologies that have wider application than teaching and learning. Two such technologies are described below.

FluidReview

CTLT staff are responsible for configuring and managing the Call for Proposals (CFP) application software for the TLEF application process as well as UBC Okanagan's Aspire Learning and Teaching (ALT) Fund application process. Following a market scan, CTLT selected FluidReview and worked with the company to develop the workflow processes, including the generation of reports.

Content Management System (CMS)

The CMS is a joint offering between CTLT and Communications and Marketing (C&M, formerly Public Affairs) dating back to 2009. It is a centrally provisioned content management service to enable the creation of UBC websites that conform to UBC's Common Look & Feel (CLF). Though not formally part of our mandate, we partnered with C&M, and the service has evolved into a limited, but sustainable, offering that addresses a significant need for the UBC community, as evidenced by take up of the service.

We have partnered with a number of UBC units, including UBC Library, Faculty of Arts, Faculty of Medicine, Faculty of Forestry, and Faculty of Land & Food Systems, as well as various departments and schools. Each of these units takes responsibility for websites under their domain and supports their own users. Individuals without local support have access to a WordPress clinic once a week, jointly staffed by CTLT and C&M. Institutional partners work collaboratively to extend functionality for the system; CTLT manages (and pays for) servers housed by UBC IT. Currently, there are 1,200 active UBC websites on this service (with about 5 million page views per month on average).

From time to time, we consult with partners about moving operation of the service to UBC IT. There is resistance, partly related to anticipated cost (currently there is no cost to Faculty units) and procedural overhead associated with development and/or integration of new functionality. Largely, the sustainable approach we have taken is consistent with an "open source community," and there is a perception that this would be lost if the service were moved. Faculties threaten to deploy their own instances, increasing potential for risk.

I regularly attend the WordPress clinic held on Thursdays from 1pm to 3pm. Those clinics are awesome! The staff are very helpful and they are able to answer all my inquiries and help me troubleshoot website updating issues. CTLT staff continue to run two other WordPress services (blogs.ubc.ca and events.ctlt.ubc.ca), and there are efficiencies with maintaining the security and currency of the software. A recent survey of partners indicates widespread satisfaction with the service, though additional enhancements are desired. Currently, CTLT has 3.5 FTE developing new functionality for teaching and learning as well as managing security and infrastructure of the CMS, blogs, wiki, and events platforms. An additional new service, CourseSpaces, designed for course offerings, is expected in September 2016. An evaluation is currently underway to determine future direction.



SECTION 7: ACTIVITIES BEYOND UBC

Although the core focus of CTLT activities is providing services in support of teaching and learning at UBC, we have a significant presence outside the University: provincially, nationally, and beyond.

We make significant contributions to the leadership, events, and programming of teaching development networks throughout BC, including BCcampus, Educational Technology Users Group (ETUG), and the BC Teaching and Learning Network, and nationally and internationally, including Society for Teaching and Learning in Higher Education (STLHE), Canadian Network of Innovation in Education (CNIE), and ISW International Advisory Committee (ISWIAC). CTLT staff have held Chair (ETUG, 2012-16; STLHE Awards, 2014-15; STLHE Student Advocacy, 2013-16; ISWIAC, 2005-16) and other committee roles (BCT-LN, 2015-16; ISWIAC, 2012-16) in these organizations. In 2015, UBC and Simon Fraser University partnered to co-host the annual STLHE conference in downtown Vancouver, drawing a record attendance of over 750 international attendees. CTLT staff contributed to one in ten of all accepted presentations.

We also contribute to the activities of various international networks of universities. In partnership with the Faculty of Forestry, which are leading the Asian Pacific Forestry Network (of six institutions), we have supported the development of a series of six self-paced courses on Sustainable Forestry Management, providing a valuable resource for practitioners in the field. Since UBC joined the edX consortium as a charter member, we have actively contributed to the development of a number of MOOC and CPE courses delivered through the edX platform, together with substantial code development projects for the open source edX community and collaborative research or development activities with international organizations such as Edraak (an initiative of the Queen Rania Foundation), Harvard, MIT, Tokyo Tech, and Osaka University. Our Senior Manager (Research and Evaluation) has served as program Co-Chair for the 2016 Learning at Scale (L@S) conference.

CTLT plays an active role in the activities of the Educational Innovation cluster of the Universitas21 (U21) network of research universities (the Academic Director is the current Chair of this cluster). The work on reconceptualizing educational leadership, together with a survey of teaching practices and attitudes across the U21 network have arisen directly from these collaborations. We are active and well-regarded members of the EDUCAUSE Learning Initiative, and one of our Associate Directors is the institutional board member on the IMS Global

consortium. In 2016, we partnered with the Faculty of Science to enable UBC to join the CIRTL Network, a network of North American research institutions focused on improving STEM education, as the only Canadian member.

Over the past three years, CTLT staff have delivered 10 keynote presentations/talks at 10 institutions, been part of teams who have received eight external awards for their contributions to teaching and learning enhancement, and contributed as authors to over 30 peer-reviewed publications. We have hosted a range of visits to well over 160 colleagues from over 55 institutions in 14 countries, ranging from one-day drop-ins to two-month staff sabbaticals. We now have an established staff exchange program with the teaching and learning centre at ETH Zurich, which arose out of one of these visits in 2015. Please see Appendix, Section 7 for more details.



SECTION 8: SWOT ANALYSIS AND PRIORITIES

STRENGTHS

1. Depth and breadth: CTLT engages in a broad range of activities with very deep capabilities and expertise in certain areas.

- **2. Academic leadership and input:** The dual role of Academic Director & Senior Advisor provides a strong focus on academic support and influence. Our key service areas have advisory groups that lead directly back to Faculties.
- **3. Service to Faculties:** We have strong service orientation in support of UBC's teaching and learning mandate, with increased direct and active involvement from or with Faculties, including Faculty Liaisons, Faculty Associates, LTRs, student and faculty secondees to projects, embedded staff, and peer facilitation for faculty and TAs.
- **4. Collaboration:** We leverage and build capacity through strategic community partnerships across UBC (e.g., Science Centre for Learning and Teaching, President's Musqueam Advisory Committee, faculty leadership, UBC IT, UBC Library, and other service units)
- **5. Research- and evidence-based:** Our approaches draw on research-based practices; staff contribute to research and scholarship projects, and many are active scholars in their areas.

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OPPORTUNITIES

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- **1. Knowledge hub:** We occupy a unique position on campus to be able to connect people across departments, Faculties, and interests, through both formal and informal connections and a variety of models (e.g., cohort models, coaching models, and facilitation models).
- 2. Strategy meets operations: We are able to access very early entry into conversation around teaching and learning strategy and operationalize it.
- 3. Leaders in educational leadership: UBC has an enviable reputation for reward and recognition of teaching and educational leadership. We are able to both lead the campus conversation and provide support to teaching-stream faculty engaging in scholarship/education research.
- **4. Inter-/intra-campus collaboration:** We have laid the foundations for stronger collaboration with the Centre for Teaching and Learning at UBC Okanagan (provision of system-wide teaching and learning services) and UBC IT (roadmap for learning technology).
- **5. Emerging priorities:** We are well-positioned to be able to contribute to emerging strategic priorities of Faculties/the institution (e.g., quality assurance/program level learning outcomes and expansion of CPE activities).

PRIORITIES:

Our overarching priority is to provide support to UBC's mandate to create an excellent teaching and learning environment through:

- **1.** Broadening and deepening departmental/program/curriculum level consultations and activities while balancing the support needs of individual faculty members.
- **2.** Providing ongoing academic leadership and co-stewardship of the LT ecosystem, with major, critical projects including the LMS replacement and Learning Analytics.

WEAKNESSES

- **1. Size and agility:** We are a large unit, distributed across multiple spaces, which presents challenges to internal communications and practices. We cannot always work as quickly as Faculties/faculty need or want us to.
- 2. Focus: Capacities are uneven across different areas, with a tension between innovation work and operations.
- **3. Adaptability:** There have been challenges with adapting to various changes since CTLT was formed, with instances of low resilience to adaption.
- **4. External communication:** We provide a broad range of services but need to better communicate about how we can help faculty with varying requirements.
- **5. Authenticity:** Most of our (suitably qualified) staff do not have opportunities to take on teaching responsibilities at UBC, which can negatively affect interactions with Faculties.



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THREATS

- 1. **Duplication/competition/unevenness:** There is an inherent tension in UBC's integrated-distributed model with no requirement for Faculty-based teaching and learning service units to collaborate or partner with different instantiations across the University.
- **2. Faculty autonomy:** Decisions taken by Faculties to determine their own priorities can impact our ability to provide consistent services or collaborate across campus (e.g., Faculties purchasing LT tool licenses or gatekeeping).
- 3. Changing PSE landscape: There are external threats (with impact well beyond just CTLT), from the changing nature of student/employer expectation, to pace of change in the teaching and learning environment and challenges to the value chain of higher education.

- **3.** Reconceptualizing educational leadership and the implications for the Appointment, Review, Promotion and Tenure (ARPT) process.
- **4.** Improved communication of our services for individuals, departments, and Faculties to the campus community.
- **5.** Relocating to a single building and the subsequent changes in working this will permit.

Below you will find a glossary of abbreviated terms that are used frequently throughout the report.

ALDP	Academic Leadership Development Program
AMS	Alma Mater Society
CoP	Community of Practice
CATL	Certificate in Advanced Teaching and Learning (graduate students)
ccs	Curriculum and Course Services (CTLT team)
CDI	Course Development Intensive (workshop)
CIRTL	Centre for the Integration of Research, Teaching and Learning Network
CLF	Common Look & Feel
CMS	Content Management System
СРЕ	Career and Personal Education
CTLT	Centre for Teaching, Learning and Technology
CWL	Campus-Wide Login
DE	Distance Education
ECAR	EDUCAUSE Centre for Analysis and Research
FIPPA	Freedom of Information and Protection of Privacy Act
FL	Flexible Learning Initiative
FTE	Full-time Equivalent
ISoTL	Institute for Scholarship of Teaching and Learning
ISW	Instructional Skills Workshop
LMS	Learning Management System
LRS	Learning Records Store
LT	Learning Technology
LTEP	Learning Technology Ecosystem Project

LTI	Learning Tools Interoperability
LTR	Learning Technology Rover
моос	Massive Open Online Course
MVP	Minimally Viable Product
OLT	Office of Learning Technology (former unit that merged with TAG in 2010 to create CTLT)
PAC	Planning, Administration and Communications (CTLT team)
PFP	Projects and Faculty Partnerships (CTLT team)
PI	Peer Instruction tool
PRT	Peer Review of Teaching
PSE	Post-Secondary Environment
SEoT	Student Evaluation of Teaching
SoTL	Scholarship of Teaching and Learning
STLHE	Society for Teaching and Learning in Higher Education
TA	Teaching Assistant
TAG	Centre for Teaching and Academic Growth (former unit that merged with OLT in 2010 to create CTLT)
TBL	Team-Based Learning
T-BLE	Teaching in a Blended Learning Environment
TLEF	Teaching and Learning Enhancement Fund
TLPD	Teaching and Learning Professional Development (CTLT team)
TLT	Teaching and Learning Technologies (CTLT team)
TRC	Truth and Reconciliation Commission
U21	Universitas21 Network