Designing for Change: Engaging Faculty Through a Blended Certificate in University Teaching Program

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Abstract
A key role of teaching and learning centres at postsecondary education institutions is to provide professional development for faculty and staff. A challenge for teaching and learning centre staff is to design, develop, and deliver professional development programs that are engaging and relevant to participants. This Report of Practice describes how two programs—a Certificate in University Teaching for faculty and staff and a parallel Certificate in University Teaching for Teaching Assistants—were developed and delivered. Factors that led to their success are also discussed. The use of a constructivist approach to teaching and learning, coupled with a blended design for course delivery and a flexible approach to the application of learning methods are highlighted as key factors in the success of these programs.

Résumé
Un des rôles essentiels des centres d’enseignement et d’apprentissage des établissements d’éducation postsecondaires est de proposer le perfectionnement professionnel de son personnel et de son corps enseignant. Le défi auquel font face les membres du personnel de centres d’enseignement et d’apprentissage est d’imaginer, de créer, puis de diffuser des programmes de perfectionnement professionnel qui soient stimulants et appropriés pour les participants. Le présent rapport de pratique décrit comment deux programmes ont été créés puis diffusés : un certificat en enseignement universitaire pour corps enseignant et membres du personnel, et un certificat en enseignement universitaire pour professeurs adjoints. On y présente des facteurs qui ont conduit à leur succès et qui ont influencé les participants. Les approches constructiviste et mixte dans la conception et la mise en œuvre de ces programmes sont soulignées comme des facteurs déterminants de leur efficacité.
Like many universities, the University of Ontario Institute of Technology’s (UOIT) Teaching and Learning Centre (TLC) has offered a certificate program for instructors and teaching assistants (TAs) focused on providing skills and knowledge in the area of postsecondary teaching. Previously the program had taken the form of a series of workshops, with participants completing a required number to obtain a certificate of completion. Various elements have been added to or removed from the program over the years, including classroom observations, written reflections, and presentations. While many useful topics were addressed, there were challenges with scheduling and retention of participants and little evidence of deeper learning or development of teaching practice.

When redesigning the teaching certificate, facilitators set out to create a program that encompassed a cohesive, in-depth, and (ideally) transformative learning experience that was tailored to fit the busy schedules and myriad obligations of faculty and TAs. The desire to create a learner-centred community of practice around teaching provided an overall motivation for the program and served as a guiding principle for design.

**Constructivism, and Modelling Good Practices in Teaching and Learning**

From the outset, the program facilitators were conscious of following what they considered “good practices” when planning the design, development, and delivery of the Certificate in University Teaching for Teaching Assistants (CUT-TA) and the Certificate in University Teaching (CUT). This was important to create both an engaging program and a program with strong

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technologies all contributed to the success of these programs. Lessons learned and future directions for the program are also explored.

décrit également les facteurs qui ont mené à la réussite de ces programmes. L’utilisation d’une approche constructiviste envers l’enseignement et l’apprentissage, un concept prônant la prestation de cours, ainsi qu’une souplesse dans l’application des technologies d’apprentissage ont toutes contribué au succès de ces programmes. Enfin, on y aborde aussi les leçons tirées des programmes et leurs orientations futures.
elements (design, development, and delivery) that could be taken as exemplary “signposts” for what a well-aligned, integrated program looks like.

To this end, the CUT and CUT-TA programs were designed according to a constructivist paradigm of teaching and learning. All the facilitators were familiar with this approach to teaching and learning, and have advocated for its application in classrooms and online at UOIT. Within the context of the CUT and CUT-TA offerings, the application of constructivism served the following purposes:

1. To demonstrate that course design, planning, and teaching could and should be aligned with an underlying theory of teaching and learning (constructivism)
2. To demonstrate alignment between a theory of teaching and learning (constructivism) and other elements of the course (learning activities, evaluation, and assessment)
3. To encourage collaboration amongst participants and to encourage participants to use teaching strategies that encouraged participant collaboration.

Backward Design

The program was designed according to the precepts of Backward Design (Fink, 2003). Based on backward design principles, program-level learning outcomes are created. Learning activities and assessment are then created to support learning outcomes.

As a starting point, a series of program-level outcomes were developed to reflect the overall goals and motivations behind the redesign of CUT. The initial offering of the redesigned CUT program was open to all instructors from faculty to TAs, and outcomes were tailored to fit a broad audience. However, with the addition of a separate program for TAs, similar but distinct outcomes were developed. The CUT-TA program is more focused on practical skills, whereas the faculty program includes more information about learning theories and research.

Blended learning has been shown to have the potential to achieve transformative learning in postsecondary education. Described as the “thoughtful integration of classroom face-to-face learning experiences with online learning experiences” (Garrison & Kanuka, 2004) p. 96), blended learning seeks to bring the best of both interactive in-class activities and the wealth and variety of information available in online environments to the learning experience. Ideally, “when the dynamic of fast-paced, spontaneous verbal communication characteristic of face-to-face learning is combined with the potential for thoughtful discussion and reflection online, the educational possibilities are multiplied” (Owston, Wideman, Murphy, & Lupshenyuk, 2008, p. 202). As an added benefit, blended learning courses can allow for flexible delivery that reduces the time spent in synchronous face-to-face meetings.

At an institution with a mandate to provide a technology-enriched learning environment (UOIT, 2017), the inclusion of a technology component in teaching-development programs
is especially important. The integration of technology provides the opportunity to showcase available tools and good practices, and allows participants to experience technology-enriched learning as “students.” These advantages, along with the ability to provide a flexible learning experience made a blended approach the obvious choice for the format of the CUT program.

**Figure 1:** Constructive alignment (Carleton University Open materials, n.d.).
**Table 1: Learning Outcomes for CUT and CUT-TA Programs 2015–2016**

| CUT Outcomes                                                                 | CUT-TA Outcomes                                                                 |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Engage in a community of practice through discussion and reflection to critically evaluate teaching practices and classroom strategies. | Actively engage in a community of practice through discussion and reflection to critically evaluate teaching practices and classroom strategies. |
| Use evidence-based teaching practices to design teaching and learning activities that foster student engagement (active learning, Universal Design for Learning, authentic assessment, etc.). | Use evidence-based strategies to develop and enhance practice as TA to improve all aspects of the course each year. |
| Discuss and apply principles of instructional design including constructive alignment, strategies to promote significant learning, and relevant assessment (methods/activities/techniques). | Articulate a personal set of good practices as a TA, including effective communication, time management, and professionalism. |
| Make informed choices regarding the use of various learning technologies in personal teaching practice. | Make informed choices regarding the use of various learning technologies in personal teaching practice. |
| Articulate a personal teaching philosophy based on personal investigations and analyses of teaching and learning. | Create a poster (print or digital) that expresses a personal set of good TA practices, based on investigation and analysis of teaching and learning. |

Once the program outcomes were established, a series of topics were identified. These topics were then divided amongst the facilitators and developed into fully-fledged learning modules, each with their own outcomes; both programs also embodied an online and a face-to-face component. While a general format for each module was established, especially for online materials, each facilitator brought his or her background and interests to the topic. Each module includes active learning components ranging from discussion and brainstorming to group activities and presentations.
Table 2: Course Outlines—Sequence of Content for CUT and CUT-TA Programs 2015–2016

| CUT Modules | CUT-TA Modules |
|-------------|----------------|
| 1. Introduction | 1. Introduction |
| 2. Learning Theories (online module) | 2. Good Grading Practices |
| 3. Good Teaching and Learning Practices | 3. Academic Integrity |
| 4. Active Learning | 4. Effective Feedback |
| 5. Learning Outcomes (online module) | 5. Good Practices in Undergraduate Teaching |
| 6. Assessments | 6. Active Learning |
| 7. Universal Design for Learning | 7. Tutorials, Labs, and Office Hours |
| 8. Effective Classroom Communication (includes peer observation of teaching) | 8. Life Hacks and Effective Time Management |
| 9. Instructional Design: Theory Practice | 9. Learning Theories (online module) |
| 10. Technology and Teaching | 10. Intercultural Communication |
| 11. Classroom Techniques | 11. Critical Incidents and Case Studies |
| 12. Preparing Instructional Materials | 12. Technology and Teaching |
| 13. Scholarship of Teaching and Learning | 13. Mental Health and Wellness |
| 14. Teaching Philosophy | 14. Final Poster Presentation |

Because the certificate program was informal, in the sense that participants do not receive a grade or transcript notation, it was necessary to identify assessment activities and assignments that would provide facilitators with evidence of learning and an opportunity to give formative feedback. A reflective journal component was included, with participants completing an entry for most modules of the course. This journal was intended to show evidence of learning over time and provide participants with a private space to reflect on their teaching practice in relation to topics explored throughout the program. In addition, a “final project” focused on the development of a teaching philosophy statement (faculty program) or set of good practices (TA program) that allowed participants to summarize and synthesize their learning. Participants shared these final products with peers through presentations at the end of the program.

Successful completion is on a pass / fail basis and depends on participation in program activities and the completion of the reflective journal or an alternative assignment and teaching
philosophy / good practices as required components. Participants received a certificate of completion and a letter outlining the details of the program. They were also given feedback on required components that they were encouraged to include as part of their teaching dossier along with other products and evidence of learning they had gathered throughout the course.

Face-to-Face, Blended, and Online Modalities

The CUT and CUT-TA program follow a blended model of delivery (Garrison and Vaughan, 2008). Blended learning for this program took the form of a flipped classroom. For the purposes of this program, the flipped model meant that participants review content online and completed other learning activities online ahead of the face-to-face sessions. This pre-sessional work was intended to take 1 to 2 hours, with another 1.5 hours of face-to-face contact in the classroom. The online activities were meant to provide a “leaping off” point for discussion and additional planned activities in the face-to-face setting. Several sessions were held entirely online; this was intended to permit participants to experience a fully online educational experience from the learner’s perspective (UOIT offers a significant number of fully online courses, and is committed to providing a technology-enriched learning environment for its students).

Schedule / Timeline

Based on response to the 2014–2015 offering, and in the interests of making the schedule as flexible as possible, two sections were created for the TA program to accommodate larger enrolment. Both programs ran for 14 weeks (7 weeks per semester). When developing program schedules, facilitators took the academic calendar of the institution into account. In both terms there was a one-week break in order to permit participants to catch up on both certificate-related work and on non-certificate work, in order to help reduce attrition due to workload.

Blackboard Learning Management System

A course was created for each program within UOIT’s learning management system (Blackboard). Content folders were used to organize course content. Each module had its own folder; there were also folders for Additional Resources and Alternative Assignment Options. Each course used differing themes and visual elements in order to emphasize that these were two concurrent but unique offerings, which included a distinctive header for each program and recruitment materials (posters and registration forms). An initial How to Use This Course video was created and placed within a Getting Started module to help orient participants to the online course materials. Access was granted to the online environment approximately 1 week before the first face-to-face meeting. No work was required ahead of this meeting.
During the first face-to-face session the facilitators and participants went over the format of the course and established connections among group members and the facilitators.

In each week’s individual folder, a checklist for the week was included with learning outcomes, activities for online and face-to-face sessions, and resources (readings, videos, and links). These templates were consistent across CUT and CUT-TA sections. Features that were used within Blackboard for CUT and CUT-TA programs included:

- content areas
- folders
- discussion threads
- journals
- wikis
- quizzes
- announcements

By using a wide range of features, the facilitators hoped to demonstrate how instructors might use these in their respective settings, and they encouraged participants to think about and share other ideas for their use in the classroom.

**Figure 2:** Screenshot: CUT content area.
Conferencing Applications

At several points during the CUT programs, the facilitators made use of both Adobe Connect Meetings conferencing software and Skype to enable participation in the face-to-face session by those who were unable to physically attend. Web-conferencing was not initially part of the design for the program; this kind of participation was unplanned and came about from a desire to stay flexible and help people complete the program. Off-site participation was enabled through the use of a webcam, external microphone, and the speaker and chat functionalities of the conferencing applications. Participants who might otherwise have missed the session expressed gratitude that they were able to participate in this manner. Adobe Connect is UOIT’s supported web-conferencing tool and is used by many instructors as part of their online course delivery. Modelling its use in CUT was intended to encourage instructors in the program to try this in their respective settings. A planned Adobe Connect session for all participants in the CUT faculty group was also added since there was an interest among faculty in trying a synchronous online session. The use of Adobe Connect in this program thus led to an investigation on how participants could make the best use of this tool.

Figure 3: Screenshot: CUT learning module.
Web 2.0 Tools and Applications

While Blackboard was the basis for the sessions, the facilitators felt it was important to go outside this learning management system and explore Web 2.0 applications through activities in the online and face-to-face sessions. Applications and websites used in the program included:

- YouTube videos
- Wikipedia
- Padlet
- Google tools (documents, forms, and folders)
- Piktochart (infographics and other digital posters)
- Socrative (online polling)
- Vimeo

Furthermore, participants were encouraged at various points throughout the course to locate and try other applications (software packages, websites, and online apps) for their own use and to share with one another.

Lessons Learned and Future Directions

As with the first offering of the revamped CUT program in the 2014–2015 academic year, a number of lessons were learned in the two versions of the 2015–2016 certificate programs.

Shared Planning and Facilitation

Delegating the development and facilitation of each of the modules among the three facilitators involved in planning these programs has worked well. Furthermore, in the 2015–2016 offering of the program, several guest facilitators from the university with subject matter expertise on specific module topics (e.g., intercultural communication, mental health, and multimedia development) co-planned and co-facilitated some of the modules. Bringing in these guest facilitators served as a good way to bring a breadth of perspectives to the program and is something that will likely be continued in future offerings.

Clarifying Expectations for the Online Component

Finding ways to clarify expectations for the online component of the programs, including completing the online portion of each module before attending face-to-face sessions as well as journal reflections after each module, is a continuing challenge that the facilitators are seeking ways to address.

Many of the participants had never been asked to write a reflection before taking this program, and the facilitators became aware of participants’ concerns with completing journal
Reflections amidst demanding workloads in the first offering of the program. Therefore, two alternative assignment options were made available to program participants who did not complete journal reflections at the end of each module. This was done in the interests of helping more participants complete the program and, as a side benefit, demonstrating that flexibility with assignment formats can enhance teaching lessons (i.e., participants might take this as a lesson for their respective course deliveries). Moreover, these alternatives could enable participants to demonstrate what they learned and in a manner that was most meaningful to them. Alternative assignment options included a mini-teaching portfolio or mini-literature review and synthesis for the faculty, sessional instructor, and professional/administrative staff group. Alternative assignment options included a mini-literature review and synthesis, or two classroom observations for the TA and graduate student group. The facilitators plan to maintain the current alternative assignment options for individuals who do not complete the journal reflections. Providing options where possible has worked well so far.

Separating Sections by Role

Anecdotal feedback from faculty in the 2014–2015 offering of the program, which mixed TAs and graduate students, indicated that faculty might be more comfortable openly sharing their experiences if they were enrolled solely with fellow faculty, sessional instructors, and staff, rather than TAs and graduate students. After observing the depth of conversation and the two distinct communities of practice that were formed in the 2015–2016 offerings, which separated faculty, sessional instructors, and staff from TAs and graduate students, the facilitators agreed that it is beneficial to maintain this separation between the groups. An alternative option suggested by a few of the 2015–2016 participants was to mix the two groups for modules where content was relevant to both groups. This is something that might be considered for future offerings of the programs.

Scheduling

Scheduling sections of the program to accommodate busy teaching schedules and smaller group sessions has been a challenge. In the most recent offering of the certificates in university teaching, one section was scheduled for the faculty, sessional, and staff group, while two sections were scheduled for the TA and graduate group. Because there were more TAs and graduates registered for the program than faculty, sessional instructors, and staff, this decision seemed to make sense from a scheduling perspective. In future offerings, however, the facilitators are likely to schedule only one section for the TAs and graduate students due to a drop-off in attendance in the second term, which left a sparse number of participants in one of the sections. The ability to engage with peers in the teaching community is an important aspect of the program that can be lost when any of the sections are under-attended, as was the case in the second half of the program for TAs and graduate students.
Furthermore, in order to meet the needs of faculty, sessional instructors, and TAs who commute long distances to the campus and have demanding teaching schedules, the facilitators are also considering scheduling fewer face-to-face meetings (perhaps only one per month, rather than weekly) and increasing the online component.

Similarly, some faculty who could not participate in the program over the academic year expressed an interest in a summer offering. As such, a condensed version of the program might be offered to faculty, sessional instructors, and staff in the summer term. This could entail placing a greater portion of the program online. Maintaining the strong community element of the program could be a challenge in this scenario. However, it might mean more members of the teaching community could participate in the program.

**Maintaining Flexibility**

Flexibility has been a key theme throughout the development, facilitation, and updating of these programs. Allowing participants to connect via web-conferencing software (Skype or Adobe Connect) when they are unable to attend face-to-face sessions in person and to participate asynchronously when teaching and research schedules conflict with live sessions will be continued in upcoming offerings. In the 2015–2016 offering of the program, three participants connected to face-to-face meetings using Adobe Connect or Skype during sessions where they were unable to be present due to other commitments off-campus. This served as an effective way to bring participants into the meeting: the projector and speakers in the classroom allowed the facilitators to show the web-conferencing platform on the screen and participants in the classroom could hear and see their colleagues at other locations. Furthermore, two faculty members whose teaching schedules conflicted with face-to-face meetings participated only asynchronously in the second half of the program, mainly through the discussion board on the course site. In addition, in advance of the face-to-face meetings these participants were given guiding questions, which often involved connecting the information presented in the online content to their current teaching practice. Posting their contributions to the course discussion board—a place that was visible to all course participants—was intended to help maintain the sense of community that all participants helped establish in the first half of the program. Increasing the accessibility of these development opportunities overall is something that is important to the TLC as a whole.

**Conclusion**

This paper discussed the redesign and facilitation of two certificates in university teaching programs offered to instructors and TAs in a blended format. Using principles of backward design and constructivism, the facilitators sought to design and facilitate learning experiences that would bring together members of the university’s teaching community in two programs.
There, they would learn from one another and explore good practices in teaching and learning in higher education contexts. Fourteen modules, including online and face-to-face components, were developed for two streams of the programs and were presented to participants in the university’s learning management system.

A number of lessons learned in the first two offerings of the updated CUT and CUT-TA programs have been shared, including issues related to clarifying expectations for online elements; separating sections by roles (faculty, instructors, and staff classes were separated from TAs and graduate students) to allow all participants to be comfortable in openly sharing their experiences. In the future facilitators will schedule fewer sections to account for attrition in the second term and will plan future alternatives for individuals whose teaching schedules conflict with face-to-face meeting times. The facilitators have also identified the importance of flexibility in responding to challenges that arise—for example, flexibility in terms of scheduling, assessment methods, delivery formats, and modes of participation.

Overall, the facilitators were pleased by the quality of participation by individuals who were able to engage in the programs from start to finish and by the formation of two communities of practice focused on teaching and learning in higher education. Furthermore, these offerings have served as opportunities to enhance the facilitators’ skills as designers and facilitators of blended learning experiences.

Planning for future offerings of the programs is underway, using the lessons identified in this paper and some of the existing tools and resources that have contributed to the programs’ success to this point. Viewing this as an iterative process, the facilitators seek to design and facilitate improved CUT and CUT-TA programs that will continue to assist participants in exploring ways to enhance their teaching practice and connect with colleagues in the teaching community, in order to improve the educational experience in their respective teaching contexts.
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