Centre for Learning and Teaching

focus

on university teaching and learning

Note From the Director

Change comes in many forms in the university today. We are challenged, as faculty and students, to re-think and re-evaluate our philosophies and approaches, and sometimes come to terms with changes not of our own choosing. Finding ways to be resilient as we experience the tumult of change is not always easy, but it is imperative to our success. Authors in this issue of *Focus* have explored the impact of change within their own contexts and how resiliency manifests itself to cope with and support necessary and important changes in teaching and learning.

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DALHOUSIE UNIVERSITY

Why Change and Resiliency in Higher Education Teaching and Learning?

Brad Wuetherick,
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It is an interesting time in higher education, particularly within the Maritimes. At Dalhousie, we are facing yet another year of budget challenges, prompted in large part by constrained government commitments to our operating budget at a time when we are both struggling to grow our student numbers in a substantive manner. This is in part due to a demographic crunch within the traditional university-aged population in our region. In addition, universities are experiencing lower than desired retention rates for those students who do attend (currently around 84% between first and second year). Maintaining the status quo appears to be a risky proposition for our campus on a number of fronts. However, given the recruitment, retention and student success challenges facing our campus, we cannot be complacent in striving for innovation in our academic programs and excellence in teaching and pedagogy.

'Innovation in programs and excellence in teaching and pedagogy' is one of the priorities currently articulated in Dalhousie's strategic directions. Within this strategic direction, the institution calls for faculty, instructors, staff and students to work towards innovation and change in teaching and learning.

Why Change?

There has been a significant increase in scholarship that explores how to improve teaching and learning in higher education over the past decades; but even with this increased evidence available to the higher education community, there have been repeated calls for action due to the lack of systemic change and innovation. Unto this, two Canadian university presidents, Pierre Zundel and Patrick Deane indicated that it is imperative that universities facilitate innovation in its teaching

and learning environment (University Affairs, 2010). They argued that:

> To create the [teaching and learning] environment in which large-scale innovation takes place, … constraints need to be removed, reformed or at least appropriately mitigated to facilitate change and flexibility. The first and greatest impediment to change, however – and the one over which we have the most control – is our own habit of intellectual self-limitation: of conceiving the future always in terms of the past, and the possible in terms of the proven. (Zundel & Deane, 2010)

The fact that evidence-based approaches to university teaching have been slow to be adopted by universities has long been a topic of conversation in the higher education literature, and at teaching and learning conferences world-wide. Over the past two decades the literature has regularly questioned why higher education, and its institutions, are not readily changing teaching practices to adopt evidence-based approaches to student learning (Arum & Roksa, 2011; Bok, 2006; Boyer Commission, 1998). Much of the current literature contains language that refers to universities 'failing' their students, or 'underachieving' and 'adrift' as institutions of higher learning. While there are individual and program level examples in most universities that have attempted to engage faculty in large-scale, evidence-based, teaching and learning, change processes have largely failed when either mandated top-down by administration, or when institutions rely solely on individual grass-roots champions to instigate change from the bottom-up (Trowler, 2008).

Perhaps the most troubling theme emerging from this literature is the disconnect between the current understanding of student learning, teaching, and curriculum development in higher education, gained from individual innovation in teaching and learning, and the lack of systemic change in teaching practices across the academic community as a whole (Bok, 2006; Wieman, Perkins, & Gilbert, 2010). Despite increasing evidence about the benefits of active and student-centred teaching, including better student learning outcomes, and higher retention and student success rates, many faculty and instructors remain hesitant to change their teaching and learning practices (Bok, 2006; Pundak, Herscovitz, Shacham

& Wiser-Biton, 2009; White & Weatherby, 2005). World-wide, as a response to this challenge, there have been a number of urgent calls for universities to change teaching and learning practices. These include those from presidents of two Canadian universities, previously quoted in this article, who argue that we need to radically rethink the teaching and learning process, and the environments we create to support innovation, in order to truly transform undergraduate education (University Affairs, 2010).

Change Towards Excellence in Teaching and Learning

There are a number of barriers to change and innovation in higher education. For example, students have demonstrated resistance due to discomfort and 'culture shock' that comes with learning in a variety of ever-changing educational environments. There has been administrative resistance, at the program, faculty, institution and national levels, arising from the lack of resources, the perpetuation of traditional reward structures, and the continued focus on content-oriented curricula in many disciplines. Additionally, there are pedagogical issues to implementing change that include: the lack of training and support; large class sizes; inappropriate physical infrastructure; reduced control of the teaching and learning environment; and, limited time to investigate and implement innovations. Furthermore, innovation and change are wrapped up in the complexity of individual academic identities, and the educational and philosophical beliefs they have about teaching and learning. These beliefs include, faculty members perceived value of faculty development activities aimed at supporting an enhanced understanding of teaching and learning, and the teaching contexts in which they find themselves located (Lindblome-Ylanne et al., 2006; Samuelowicz & Bain, 2001; Trowler, 2008).

Teaching and learning in higher education is highly contextual. Consequently, moving forward with a change and innovation agenda in any institution of higher education requires that we strive to understand more about the contexts within which academics are teaching and what they want to achieve in the 'local' contexts. We need to further understand the need for change and innovation in a given local context, and what may be the barriers to, and enablers of, change. We also need to understand the appropriate contexts in which change is more or less likely to occur,

including, but not limited to: different disciplinary (or even departmental) environments; if present, the requirements of accreditation and formal program review processes; the demographics of faculty and instructors in different programs; the demographics and needs of the students; the presence of support for change processes in the local environment; the administrative willingness to champion change and innovation; and the readiness of faculty and instructors to engage in change.

In the current educational environment faculty members and instructors are faced with ever-increasing pressures related to publication and research expectations, as well as those associated with acquiring continued employment for part-time and contract teachers. It is critically important to note that, especially given these pressures, resilience is one of the skills needed most among our faculty and instructors (Abu-Tineh, 2011; Floden, Goertz, & O'Day, 1995). While it would be a mistake to gloss over the issue of resilience required in today's students, the innovation and change imperative that is emerging in higher education requires resiliency for faculty and instructors, as well as for academic leaders. Resilience is required as individuals and programs struggle with what it may mean to undertake and sustain change processes in their own teaching and program development practices, which inevitably require questions to be explored about why certain practices are used and the impact those practices have on students and their learning (Abu-Tineh, 2011; Conner, 1992; Floden et al., 1995). In particular, for those faculty and instructors at the fore of change and innovation, it requires resilience to persevere in an environment that is often not designed to reward and recognize the work and effort required to sustain, and excel with new or innovative teaching and learning practices (White & Weatherby, 2005).

Our hope in this issue of Focus, and at the 20th Annual Dalhousie Conference on University Teaching and Learning, is to spark conversation around the evidence of existing innovative teaching and learning practices in higher education, to explore the need for further change and innovation, to understand the barriers and enablers of change, and to recognize the importance of student and faculty resilience in the challenging contexts of change in today's university environment.

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Building Nursing Capacity in Nunavut

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With the formation of Nunavut Territory in 1999, a commitment was made by the new government to build the capacity of the Inuit into the work force of the territory to reflect territorial demographics, where 85% of the population are Inuit (Statistics Canada, 2015). One initiative to achieve this goal was the development of the BScN (Arctic Nursing) Program through a partnership between Nunavut Arctic College and the Dalhousie School of Nursing. Nunavut Arctic College is an institution with an infrastructure for post-secondary education which has been developed through a long-term collaboration with both McGill University and the University of Regina. Partnering with Dalhousie University's School of Nursing seemed like a natural fit, as the school has had a long relationship with Canada's north. For 30 years, it ran the outpost nursing program to help prepare nurses for rural and remote settings, and Iqaluit was one of its clinical sites (Martin-Misener, 1997; Martin-Misener, Vukic & May, 1999). The Iqaluit site is situated close to a regional hospital and a variety of other health services, and is ideally located to host such a program.

The program provides access to a BScN program for Inuit and northern residents. One goal is to increase Inuit representation in the workforce, so priority is given to Inuit applicants who meet admission requirements, followed by other residents of Nunavut. Since the first graduate in 2004, the program has graduated 48 nurses, 17 of whom have been Inuit. Counselling and tutorial services are aware of the sometimes unique needs of our students. The program allows the flexibility to take leaves of absences for reasons unique to the north and the Inuit culture. There has been high attrition of Inuit students over the years, often related to

personal and social issues, and difficulties with the transition from high school to university. A number of initiatives have been implemented to reduce attrition rates, which include tutoring, counselling services and a pre-nursing year that have had a positive effect on helping students remain in the program.

This BScN program is unique in that it provides students with not only a nursing education, but also incorporates *Inuit Qaujisarvingat* (Inuit Knowledge), the Inuit Culture, the social determinants of the *Nunavummiut* (Inuit of Nunavut), and the Nunavut context of heath care. The six guiding principles of *Inuit Qaujisarvingat* (Arnakak, 2000) are consistent with nursing values and concepts and have been integrated throughout the curriculum. For example, *Pijitsirniq* (the concept of service) is linked with the caring aspect of nursing; *Aajiiqatigiingniq* (consensus decision-making) is a principle of person-centered care; *Pilmmaksarniq* (skill and knowledge acquisition) reinforces the importance of nursing knowledge; *Piliriqatigiingniq* (collaborative relationships, working together for a common purpose) supports the teamwork and inter-professional nature of nursing; *Avatimak Kamattiarniq* (environmental stewardship) is a part of environmental health and infection control; and *Qanuqtuurunnarniq* (being resourceful to problem solve) is a fundamental aspect of the nursing process and the critical thinking required by all nurses. Inuit Elders visit classes to speak to students about the Inuit knowledge, culture and the implications for their practice, provide first-hand and real world examples of the how *Inuit Qaujisarvingat* complements nursing education, and illustrates the social determinants and health needs of

the *Nunavummiut*. During their clinical experience, students work in a variety of health settings in Iqaluit and smaller communities of Nunavut, which prepares them for their spring clinical experience in Halifax. This mixture of clinical experiences provides them with an understanding of health

services both in Nunavut, and the broader Canadian community.

By developing a program specifically for Nunavut, we have increased the number of Inuit entering the nursing profession. Having a program situated both geographically and contextually in Nunavut permits additional flexibility to respond to student's needs, both social and academic. Graduates from the program not only have a nursing education, but also develop an understanding of the Nunavut health care system, the distinctive health needs of the Inuit population, and an awareness and appreciation of the Inuit culture.

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Change hurts, change scars, sometimes change wounds and mars: How do university instructors understand and respond to change?

*(Hummed to the tune of "Love Hurts" with recognition to Boudleaux Bryant,
the Everly Brothers, Nazareth and many, many others)*

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The following piece is a personal reflection on the impact of, and response to, change over my quarter century of university teaching. I offer it in the tradition of Stephen Brookfield's practice of self-reflection drawn from my own experience; readers may or may not agree or resonate with it. The impetus for this self-reflection was the adoption of our fourth Learning Management System (LMS) on the Truro campus (Webct up to 2008; Moodle 2009-2014; Blackboard 2014-2015; Brightspace 2015-present). The last two LMS changes (2014; 2015) were done in order to align our Faculty's online pedagogy with the rest of the university. Of course the change in the LMS software was not the only change the instructors in my Faculty have experienced in the last decade, given new academic processes implemented as a result of the September 2012 merger of the former Nova Scotia Agricultural College to become the Faculty of Agriculture, Dalhousie University.

I recall the somewhat steep learning curves we have all faced over the years with changes in our teaching environment: the adoption of our first LMS (Webct), newly implemented video conference teaching to our Chinese university partner (Fujian Agriculture and Forestry University, Fuzhou, China) under our articulation programs, and the inherent change (e.g., generational and influx of international learners) in our student population. I remember asking, how could I best use these changes to support student learning in my courses? Would I be able to learn my way around and follow the 'Webct breadcrumbs' without making a fool of myself in front of my students? (I sometimes do that, but like many of us, I prefer to avoid it when possible!) How might it be possible to make video-conference teaching interactive when some of my ability to assess the classroom 'mood' is altered? How much of my time and energy would all this take?

In other words: *Would adopting these changes (e.g., a new LMS) be beneficial? Would I be able to adapt to the change as the instructor? Would the* <u>*energy*</u> *and time I put into learning and adopting these technologies be returned in increased student experience and learning?*

With respect to changes in the campus LMS, by the time my courses were migrated to Blackboard (the third LMS system in a decade), I felt less angst with the change. Although the menus and design of this LMS were different, I now had experience that allowed me to explore from an informed comfort zone. If Webct and Moodle had the capability to perform function 'X', then I had developed a coping response that would transfer to a more up-to-date version of a widely used LMS, I just simply had to find it. (Sometimes relying on the assistance of Linda Jack, and our Educational Technology and Design group.)

In other words: *I felt empowered to know it must be possible. I used my previous experience and* <u>*adapted*</u> *to the change.*

Over the last two and a half decades, the LMS system is only one of the changes I have encountered. The classroom where I teach first year chemistry was remodeled in 2013. Although consultations with instructors were conducted, the decision remained firm: there would no longer be a sink at the front of the

classroom for use in demonstrations. This alteration as well as a change from a recessed computer monitor to a desk-height that blocks the view of students in the first 3 rows of the classroom, challenged my _resilience_ as an instructor. These changes meant that I could no longer perform real time chemical demonstrations/applications with student volunteers in the classroom. I had no control over these changes, and I felt these changes 'hurt' the learning environment of my classroom. These are changes that I still struggle to mitigate in terms of active, available learning in my classroom.

In other words: _Change is often something we cannot control. Change can feel like it hurts sometimes. Instructor dedication to supporting student learning is both critical and extra hard in light of uncontrollable, and seemingly unwanted change._

Over the last two and a half decades I have seen the student body change, and change yet again. I have tried different learning/teaching methods, adopted and adapted different assessment methods, and experienced the full range of student comments. How would I characterize my response? I would capture it as **R**esilience, **E**nergy, **A**daptability, and **D**edication. What better acronym than **READ** to capture an instructor's response to change?

Now, switching the melody to "What's Love Got to Do With It?" (with appreciation to Tina Turner) What's _Change_ Got To Do With It?

Change has kept me, the instructor, engaged. Change has helped to keep me young and my practice continuously refreshed by applying the concept of **READ** to my teaching. What's _change_ got to do with it? I suggest it has a lot to do with university instruction!

Changes: Considering the university curriculum

Susan Joudrey, PhD, Senior Educational Developer

It seems like discussions about "curriculum" at the university are ubiquitous. During the last ten years, in particular, universities have embarked on an intentional effort to reconsider the education offered to twenty-first century students. There are many good reasons to examine curricula at the course, program, and institution level, especially since neither the university community, nor the society in which it resides, remain static.

The literature on curriculum defines it in a number of ways, however Fraser's (2006) discourse analysis of a series of faculty interviews identified four main categories of understanding applied by academics to curriculum: the structure and content of a course unit; the structure and content of a programme of study; the students' experience of learning; and a dynamic process of interaction (p.8). These definitions are typically confined to a course or a programme, and do not expand to think of curriculum as something to consider at an institutional level, even if it is becoming increasingly common to do so. A more comprehensive definition of curriculum describes it as culture, "…a revealing system of implicit and explicit beliefs, values, behaviors, and customs in classrooms and schools which are deliberated within communities and other public spheres" (Joseph, 2011, ix). In the context of institution-wide change, it can be helpful to think about curriculum as culture instead of a combination of individual course offerings, because a meaningful change in the curriculum also requires a shift in culture. Making comprehensive changes to a university curriculum is challenging, but not impossible.

Changes to university curriculum are often more symbolic than comprehensive, which can prove frustrating to those involved. It is easier to demonstrate a desire for change by adding components to the already existing framework, than overhauling the framework itself. However, even seemingly symbolic modifications to a curriculum can be powerful since the process requires "articulating, defining, and ordering the values of a university" (Arnold, 2004, p.573). For example, following the Second World War, a university education became accessible to members of society who had previously been denied access on the basis of class, race, and gender. These new students did not see themselves—their experiences, their cultures, or their values—reflected in the university's curriculum. A number of new areas of study were generated from a diverse student body questioning the acceptance and validity of certain privileged ways of thinking and understanding. The eventual addition of new areas of study provided an initial recognition by the university that it was important to facilitate research in these fields. However, the values and attitudes associated with women's studies, cultural studies, or environmental studies were not necessary embedded into other disciplines, although over time a number of other fields adopted research methods and ways of analysis that were central to theses newly emerging fields.

The recognition for additional areas of study is one approach to facilitating change in the curriculum. However, what does it look like to institute broader, attitudinal shifts? An example of a conceptual change towards the university curriculum is more recent. Drawing on Jean Francoise Lyotard's concept of performativity, Barnett, Parry, and Coate (2001) have observed that university curricula has been reconceptualised so that the standard of academic knowledge is no longer 'is it true?' but instead 'what use is it?' They asserted that "[A new conceptualization of curriculum] implies doing, rather than knowing, and performance, rather than understanding." (p.436) Most members of the university community are familiar with this shift, and many of us understand that "doing" cannot be divorced from "knowing" even if there is an increased emphasis on explicitly demonstrating each discipline's relevance to the world outside of academia. Regardless of the general acceptance of this shift—especially in disciplines that were already oriented toward employment options—it has not yet reached a systemic acceptance by many members of the university community.

How does the university facilitate the type of deep or comprehensive curricular change that articulates certain values across the disciplines? According to

de la Harpe and Thomas (2009), despite a number of efforts, most universities have not been successful in achieving lasting, comprehensive curriculum change (p.76). In part, this is the result of underestimating the power of deeply-rooted philosophies about the university's role in society and the purpose of a university education. There are a number of beliefs about post-secondary institutions that members of the university community take for granted. This can include which groups in the university make final decisions about curriculum change, who is consulted about curriculum, and how and when change is instituted.

There are strategies or attitudes that can be adopted to help create meaningful and successful change. Those who have devoted time to researching this area have recognized a number of ways change could be implemented, accepted, and sustained. It may not be surprising that most of these methods hinge on effective communication, emanating from those central to directing change as well as instigated from any one effected by the proposed change. It is paramount to ensure that those involved (de la Harpe and Thomas, 2009, p.77-79):

- clearly understand the reasons for change,
- possess a shared vision,
- receive opportunities to fully discuss and debate,
- claim ownership over their contribution to the change, and
- receive regular communication regarding the goals, progress, and successes.

Over all, "the effectiveness of any change initiative relies 'heavily on the willingness of academic staff to engage in this work and where necessary to change the way they design, teach and assess within their discipline'" (de la Harpe and Thomas, 2009, p. 76). These strategies help eliminate factors of resistance that can include mandated change from the top down, the creation of implementation timelines that are too ambitious, and supporting a culture that does not encourage collaboration.

Dalhousie's Strategic Direction (2014-2018) articulates a number of priorities that reflect a desire for curriculum change. Increasing first-year student success, creating a learning charter, developing recommended core elements in undergraduate programs, adopting teaching and learning initiatives that support student success, and establishing core

principles for Faculty Academic Program Plans all directly effect the university's curriculum (*Inspiration and Impact: Dalhousie Strategic Direction 2014-18*, http://www.dal.ca/about-dal/leadership-and-vision/dalforward/strategic-direction.html). As the university endeavours to (re)consider its curriculum and explore approaches to include and communicate specific values related to the purpose of a university education, I have been working with groups on campus to support the articulation of their discipline or faculty-specific goals. I would encourage any one who wishes to start or continue a conversation about curriculum change to contact me at sjoudrey@dal.ca or the CLT directly.

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Moving with the times: Helping students become more marketable

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Once upon a time, completing a PhD was guaranteed to secure a tenure-track faculty position. Unfortunately, for many graduates, this goal has seemed more and more elusive over recent years, and stories abound of PhDs driving taxis or waiting on tables. As academic institutions continue to churn out PhDs, and with fewer and fewer tenure-track positions available to absorb them, how can you make sure that the skills your graduate students learn during their studies are marketable in other career streams? After all, completing a PhD typically involves a narrow field of study within a particular discipline (unless you are conducting interdisciplinary studies). While traditionally a PhD provides the opportunity to learn how to conduct independent and original research within a defined field, there are many other skills to be learnt. Identifying and harnessing these transferable skills will improve students' chances of being marketable to other sectors. In this article I focus on four marketable skills – project management, innovation, communication and resiliency.

Project management: By the end of their training PhD graduates are excellent project managers. Throughout their studies they will have designed, executed and evaluated an independent project that provides an original contribution to their field. Within this narrow focus, they will have honed time management, project planning, trouble-shooting and team-working skills. Each of these skills is increasingly valued in the modern workplace, where workers are often expected to do more with fewer resources. Think of highlighting these project management skills for your graduate students and how they might apply to other settings.

Innovation: When you study for a PhD, you join an elite group of thought leaders and opinion shapers. A PhD inherently requires a student to develop their own original ideas - to be innovative, push the boundaries of knowledge, and to think critically. While a student's PhD studies may be quite narrowly focused, the skills that this process fosters need not be, and holds currency in the broader workplace.

Communication: The reputation of academia conjures up images of an elite group of people occasionally incapable of communicating beyond their disciplinary silos. Yet, PhD training uniquely equips a student to communicate with a range of stakeholders. While students' primary audience is often other academics, grant-funding agencies increasingly require a lay summary to be included with an application, challenging them to think about the "real world" relevance of their work. Presentations at conferences also develop their communication skills, and events like the "Three-Minute Thesis" provide further opportunity for them to communicate concisely to others outside their immediate field of study.

Resiliency: Academia has often been described as "eating its young". Throughout their studies graduate students are socialised in failure –from getting accepted into a program, to securing external scholarships, or getting a paper accepted for publication – each is highly competitive and poses a high risk of rejection. It took me six months to address the reviewer comments on the first paper I submitted for publication. It was only when the editor of the journal contacted me to ask if I was going to resubmit did I realise that the level of critique received was "normal". This experience occurred before I embarked on my graduate training, so I did not have an academic mentor with whom I could discuss the feedback, but that early experience of criticism has been repeated time and again throughout my career! This makes academics incredibly resilient, since rejection is such a normal expectation of this career path. Such resiliency further fosters strong problem-solving skills and a desire to improve on what went before. Coupled with grant-writing skills, resiliency is an asset in the workplace, so frame it as such for your students.

A great tool to help you to assess and reframe graduate students skills for the wider workplace is the *Researcher Development Framework* (RDF), developed by Vitae in the UK[1]. This framework

identifies the knowledge, behaviour and attributes of successful researchers across four domains and several sub-domains. The framework is designed to apply across differing fields of study, capturing the generic attributes common to higher education. It can also be helpful to frame discussions with your graduate students, and can help them to reflect on their own attributes, or identify areas where they might benefit from additional support or training opportunities. Although aimed at PhD students, these skills also apply to graduates more broadly, and I have used the framework with a variety of students, to help them improve their marketability both within and outside of academia. It is also a very helpful aide memoire when writing letters of reference or support! Get into the habit of describing these broader skills whenever you talk about graduate studies with your students. Finally, encourage your students to be brave, be bold and be open to the many opportunities that exist beyond the walls of the academy.

1. Vitae Researcher Development Framework, available from https://www.vitae.ac.uk/researchers-professional-development/about-the-vitae-researcher-development-framework. Date accessed February 7th 2016.

6th Biennial - Threshold Concepts Conference

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Keynote Speakers

Elizabeth Wardle
University of Central Florida

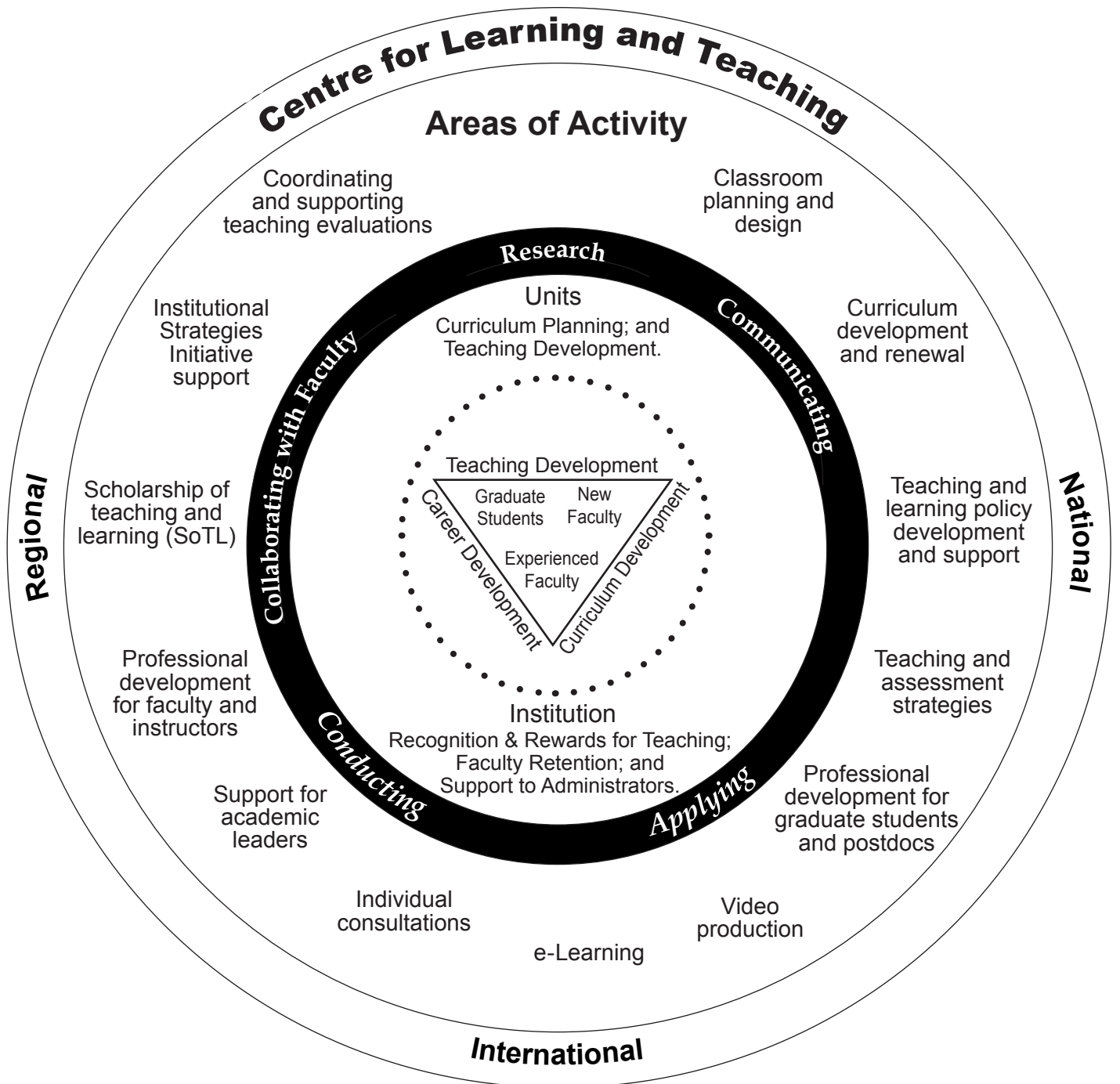***Linda Adler-Kassner***
University of California

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The Centre for Learning and Teaching (CLT) works in partnership with academic units, faculty members, and graduate students to enhance the practice and scholarship of learning and teaching at Dalhousie University. CLT takes an evidence-based approach to advocating for effective learning and teaching practices, curriculum planning, services to support the use of technology in education, and institutional policies and infrastructure to enhance the Dalhousie learning environment.

Centre for Learning and Teaching

Areas of Activity

Coordinating and supporting teaching evaluations

Classroom planning and design

Institutional Strategies Initiative support

Curriculum development and renewal

Scholarship of teaching and learning (SoTL)

Teaching and learning policy development and support

Professional development for faculty and instructors

Teaching and assessment strategies

Support for academic leaders

Professional development for graduate students and postdocs

Individual consultations

Video production

e-Learning

Regional

National

International

Research · Communicating · Applying · Conducting · Collaborating with Faculty

Units
Curriculum Planning; and Teaching Development.

Institution
Recognition & Rewards for Teaching; Faculty Retention; and Support to Administrators.

Teaching Development

Graduate Students

New Faculty

Experienced Faculty

Career Development

Curriculum Development

DALHOUSIE UNIVERSITY
Centre for Learning and Teaching