

THE SCHOLARSHIP OF



MINI-CASES OF EDUCATIONAL LEADERSHIP IN ACTION

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This publication highlights mini-case studies that exemplify educational leadership in action. Inside, you will find an overview of several models of educational leadership in higher education, with a particular focus on the **Five-Pillar Model**, a set of 21 mini-case studies, and an analysis and discussion of the mini-case studies, including their impact and contributions to the scholarship of leading.

This project stems from the International Society for the Scholarship of Teaching and Learning (ISSOTL) Special Interest Group (SIG) on the Scholarship of Leading. Committed to pursuing scholarly work on the relationships between leading, teaching and learning, this special interest group's mission is to create opportunities for dialogue, promote scholarly research on the topic, and provide support to ISSoTL members interested in and/or engaged in leadership. In 2017, the authors (Rolheiser & Carbone) surveyed the SIG on participant goals for the SIG and personal definitions for the Scholarship of Leading and Educational Leadership. Respondents (n=47) to the question, **How do you currently define the scholarship of leading?**, gave answers coded into the following categories:

1. **About Research, Inquiry, Theory:** Research involving methods and theories of leadership
2. **About Learners:** Improving student learning experience through research
3. **About Leadership:** Exploring the role of leadership, specifically in the higher education context
4. **About Mentoring and Support:** Leading through mentorship of new instructors, change and development
5. **Models and Frameworks:** Defining and articulating models and frameworks applicable to leadership in a higher education teaching and learning context

This publication is framed with an emphasis on points three and five: **About Leadership** and **Models and Frameworks**. At the 2017 ISSOTL Conference, SIG discussions centred around those two points as major areas of interest for participants. For example, two survey comments related to the two categories are:

- **Leadership** e.g. *"I conceptualize it within the broader sphere of teaching and learning, so scholarship exploring the role of leadership in higher education teaching and learning, as well as the development of leaders."*
- **Models and Frameworks** e.g. *"That there are scholarly frameworks for leadership/leading change - i.e. theoretical underpinnings; that there exist known strategies for leading change. In other words, I believe there is a body of relevant literature that informs us on this issue and that we do not have to do things from scratch, in isolation, outside the established literature. This means that the scholarship of leading is an approach to leadership that is well supported by literature of some kind, and that there is a way to systematically investigate and provide evidence regarding the outcomes of change management/leadership."*

Through this survey and other discussions, the authors recognized a need to foreground models of leadership to enable both conversations about educational leadership in higher education and to emphasize impact. **The Five-Pillar Model**, first encountered by the authors in a poster presentation by Kenney et al. at ISSOTL 2017 in Calgary, Alberta, offers one useful model for conceptualizing educational leadership. As readers will recognize through the mini-case studies provided in this publication, this model is proved helpful in thinking about practices at all levels of leadership. As well, the authors invited other models of leadership to frame the mini-cases, and we comment on the additional frames of reference that were used by the mini-case study authors.

The overall goal of this publication is to provide concrete examples that will spark discussions across a variety of stakeholder groups, including educational developers, senior leaders in higher education, faculty and staff. We anticipate that such discussions may surface additional mini-cases of educational leadership that can be shared more broadly, and spark actions that may build upon the range of ideas shared by the authors of the mini-cases. Our hope is that we continue to make educational leadership a more tangible concept through the review of specific examples that inspire us.



THE MINI-CASE STUDIES

The mini-case studies included in this publication were solicited through the ISSOTL Scholarship of Leading SIG, the ISSOTL community more generally, and personal connections and invitations through the authors' home institutions and broader networks. The mini-case study authors were invited to frame their work around the **Five-Pillar Model** (see Table 2, p. 9) if this model aligned with their work; however, we also encouraged contributors to utilize other models of educational leadership that they found effective. As is elaborated in the analysis, while faculty members and academic leaders frequently practice educational leadership, they may not always use conceptual frameworks for framing their work within a larger discourse of leadership. The Five-Pillar Model, and other models utilized by participants, are conceptual tools that allow us to see impact and leadership at multiple levels.

BACKGROUND

Defining Educational Leadership

Defining educational leadership is challenging. Depending on context, different paradigms and conceptualizations of leadership can be utilized. The collection of mini-case studies in this publication show educational leadership initiatives in action, demonstrating the myriad ways in which this concept can be conceived of and applied in a variety of contexts.

In their poster, *A Developmental Framework for Teaching Expertise in Postsecondary Education*, Kenny et al. (2017) describe educational leadership as a key facet of teaching expertise:

Educational leaders influence change and implement initiatives to strengthen teaching and learning practices, communities, and cultures (Keppell, O'Wyer, Lyon & Childs, 2020; Martensson & Roxa, 2016; STLHE, n.d.). They share their expertise to inspire and help others strengthen their teaching

practices; implement strategic programs, initiatives and policies to improve teaching and student learning; advocate for positive change; and, lead institutions, faculties and committees to continuously improve postsecondary education (Creanor, 2014; Martensson & Roxa, 2016, STLHE, n.d., Taylor, 2005; UBC, n.d.; University of Calgary, n.d.). (p.4)

At the University of Toronto, Canada, the definition of educational leadership for the purposes of tenure and promotion is dependent on the context in which faculty members are teaching. Each division offers their own requirements and recommendations. For example, the University of Toronto Ontario Institute for Studies in Education (OISE), in their divisional Teaching Guidelines (<https://www.aapm.utoronto.ca/academic-administrative-procedures-manual/teaching-guidelines/>), describes leadership in teaching as:

- developing new courses and/or reform of curricula
- mentoring colleagues and students on teaching
- coordinating programs, cohorts, options, or other program-level initiatives
- creating and/or development of models of effective teaching
- significant changes in policy related to teaching as a profession
- technology or other advances in the delivery of education in a discipline or profession
- offering advice and/or consultation on teaching to programs or organizations outside OISE
- providing seminars, training, modules, programs, etc. on teaching to organizations outside OISE (p. 9)

At the Swinburne University of Technology, Australia, although there is no formal definition of educational leadership, it is expected that academics demonstrate educational leadership at each level in which they operate. A national framework developed in Australia by Chalmers, an Australian National Senior Teaching Fellow, based on the UK Professional Standards Framework (UKPSF) (<https://www.heacademy.ac.uk/ukpsf>) provides universities and their academic staff with a practical

and flexible guide for clarifying what constitutes quality teaching, educational leadership and how it can be evidenced (<http://uniteachingcriteria.edu.au>). The website contains indicative standards and examples for each academic level. For example, at the professional level, educational leadership could be defined as:

- Leadership role and impact in curriculum design and review, planning and/or development at a (inter) national level
- Leadership in mentoring and supporting colleagues in planning and designing learning activities and curriculum
- Leadership in academic practice in the university, discipline or (inter)nationally
- Successful leadership/ mentoring of individuals and/ or teams leading to enhanced assessment, standards and moderation
- Leads effective organisational policies and/or strategies for supporting students and developing engaging learning environments
- Leadership in the development of curriculum/ discipline within the relevant discipline at university and/or (inter)national level
- Sustained leadership in initiatives involving students in pedagogically sound research programs/projects
- Demonstrates further professional qualities such as proactive sustained leadership and contribution to the development of professional qualities at the university, sector/disciplinary and/or (inter)national.

From the Literature

There are a number of ways that educational leadership has been framed and defined in the broader literature. In a 2017 paper, Carbone et al. point out that:

Some leadership theories from outside the higher education context that have been considered in regards to their potential in understanding [the nexus between leadership, learning, and teaching in higher education] include:

- situational leadership (Grae, 1997; Vroom & Yetton, 1973),
- charismatic leadership (Conger, 1989),
- transformational leadership (Bass, 1998; Burns, 1978) and
- leader-member exchange (Brass, 1984; Graen & Uhl-Bien, 1998).

These theories tend to favour formal structures, relationships and characteristics of individual leaders that often prevail in private, corporate and public sector management. Leadership informed by such theories has been found to be not generally well suited to higher education because of the strong desire in higher education for collegiality, consultation and academic freedom (Bolden et al., 2009; Heinrich, 2013; Yelder & Codling, 2004). McMaster (2014) provides a higher education practitioner's perspective



of leadership which emphasises an inclusive approach through bringing in appropriate people from different parts of the organisation to reflect on their expertise, with the intent of improving teaching and learning practices (Carbone et al., 2017, p. 184).

Further to this discussion, Susan Lieff and Francis Yammarino write in a 2017 article:

Given changing environmental demands and the complexity of organizational work, leadership scholarship has moved beyond the designer (or hierarchical) and heroic leaders. The importance of individual authenticity and self-leadership, as well as leadership that is conceptualized as a changing, social, collective process involving many (in the shared and network leadership approaches), is now recognized. These paradigms are not mutually exclusive; they have elements that overlap or that can be combined, and they are increasingly described in the most current leadership literature as the leadership approaches for success and effectiveness in the 21st century. (p. 615)

Lieff and Yammarino's article (2017) builds on the importance of specific leadership qualities identified in the 5-Pillar Model while also providing a broader overview of what they identify as a "paradigm shift in the leadership field" (p. 615), as similarly pointed to by Carbone et al. and summarized in Table 1 (p. 7).

Table 1

Current and New Academic Leadership Paradigms

CURRENT PARADIGMS				NEW PARADIGMS			
		Hero					
Component	Designer (or hierarchical)	Military	Transformational	Authentic	Self	Shared	Network
Focus of practice	Individual	Individual	Individual	Individual	Individual	Collective	Collective
Leader's role	Formal	Formal (usually)	Formal	Formal or informal	Formal or informal	Formal or informal	Formal or informal
Leader's function is to...	<ul style="list-style-type: none"> Design work structures and processes Divide and coordinate responsibilities and accountabilities 	Command and control	<ul style="list-style-type: none"> Inspire Get buy-in Support and encourage 	<ul style="list-style-type: none"> Demonstrate behaviors that generate trust and respect Demonstrate a values-based approach 	Be self-aware, self-reflect, exercise self-control, and self-manage	Be a facilitator, empowering others whenever possible	Perceive, use, enable and manage formal and informal networks
Faculty members' role is to ...	Be a human resource (e.g., a cog in a machine)	Follow	Buy into the vision	Provide perspectives and feedback	Provide feedback	Assume some leadership responsibilities	Build and leverage network relationships
Goal	Deliver specific, desired outputs	Win or survive	Effect a desired, specific change	Generate trust, commitment and productivity	Enhanced leadership behavior and performance	<ul style="list-style-type: none"> Empower others to lead when possible Leverage diverse capabilities 	Address shared and emergent issues
Utility	<ul style="list-style-type: none"> Stable environments Simple or repetitive work 	Urgent or crisis situations	Required or compelling change	Stressful or uncertain environments	<ul style="list-style-type: none"> Enhanced interactions Role modeling 	<ul style="list-style-type: none"> Broad ownership of activities Enhancing leadership capacity 	Big, complex, and novel problems that require creative solutions
Limitations	<ul style="list-style-type: none"> Not easily adaptable to new demands Faculty do not want to be treated like resources Leader may be experienced as a taskmaster 	<ul style="list-style-type: none"> Fosters passivity and dependence in faculty and competition among colleagues Idealization of leader is not sustainable Promotes self-protective culture 	<ul style="list-style-type: none"> Faculty do not want to be sold a vision Does not engage faculty to contribute 	<ul style="list-style-type: none"> Can be used as an excuse for not managing qualities that lead to bad behavior Ineffective if leader's values are not shared by others in the context 	<ul style="list-style-type: none"> Self-assessment and feedback can be inaccurate Must be used as a foundation for other leadership approaches 	<ul style="list-style-type: none"> Takes more time to make decisions and changes There can be conflict between the single leader and team structures 	Not available (this field is still in its infancy)

Lieff & Yammarino, 2017, p. 615

Broadly, leadership in higher education is moving towards models that focus on building capacity, as well as shared and distributed leadership. In *A User Guide for Benchmarking Distributed Leadership* (2013), Jones, Harvey, Lefoe, Hadgraft and Ryland write, "Distributed leadership recognises collaborative relationships as the source of, and support for, flexibility for change, particular in learning and teaching." (p. 2)

In that user guide, the authors identify several benchmarks for distributed leadership in order to evaluate current practices at Australian institutions. Despite this institution-level lens, some of the benchmark domains outlined by the authors are also helpful in identifying the locus of personal leadership practices and initiatives. The authors' five domains are as follows:

1. **Engage:** The domain of *engage* covers aspects of distributed leadership related to the degree and breadth of involvement of individuals. This benchmark includes measurement of the extent of engagement of leaders with institutional responsibility, informal leaders and discipline and functional experts.
2. **Enable:** The domain of *enable* covers the aspects of distributed leadership that address the need for a context of trust and a culture of respect that acknowledges the expertise that individuals can contribute. This benchmark includes the extent to which there is acceptance of the need for change from the traditional reliance upon positional managerial hierarchies to more collaborative approaches to developing relationships.
3. **Enact:** The domain of *enact* covers the aspects of distributed leadership that requires a more holistic process. This benchmark includes the extent to which people, the processes, support and systems are implemented to encourage a distributed leadership approach.
4. **Assess:** The domain of *assess* covers the area of distributed leadership concerned with identifying evidence of the contribution of distributed leadership to leadership capacity building. This benchmark includes evaluating cross correlations between

distributed leadership and increased engagement in learning and teaching, collaboration and growth in leadership capacity.

5. **Emergent:** The domain of *emergent* covers the area of distributed leadership concerned with sustaining distributed leadership over time through action research cycles. This benchmark includes evidence of a participative action research process, reflective practice and continuous improvement.

Jones, Harvey, Lefoe, Hadgraft & Ryland, 2013, p. 4

As part of our mini-case study analysis that follows, we use the **Engage** domain from Jones, Harvey, Lefoe, Hadgraft and Ryland (2013) to look at the roles of those individuals who are active participants in the mini-case studies, as well as the reach of the initiatives highlighted in the mini-cases.

A way of conceptualizing the impact of educational leadership is through what is known as the 4-M Framework (Simmons & Taylor, 2019), as outlined in Figure 1. In this framework, Micro refers to the individual level of activity and influence (perhaps in a course or through student mentorship), Meso to leadership at the departmental and divisional level, Macro to the institutional level, and Mega to disciplinary and interdisciplinary communities beyond the institution, typically at national and international levels (Simmons & Taylor, 2019). Shaping the leadership impact is the extent to which the work of educational leaders is communicated, appreciated, discussed, critically assessed, recognized, and integrated in the community.

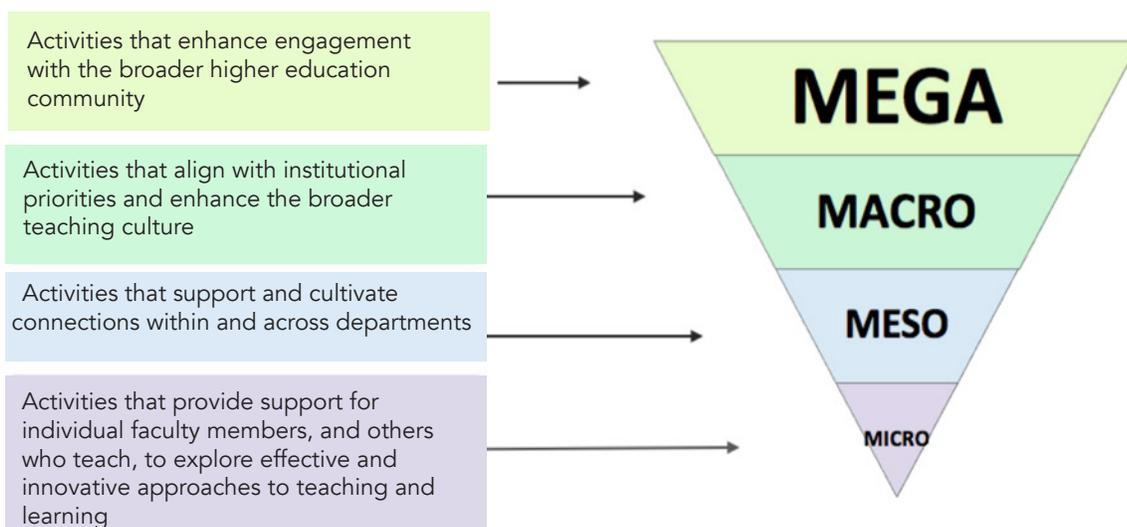


Figure 1. 4-M Framework of educational leadership (Simmons & Taylor, 2019)

In our analysis of the mini-cases presented in this publication, we look at the intended level of impact of the leadership initiatives, although many mini-cases describe impact that resonates past the level from which they first conceptualized their initiative.

development program focused on educational leadership, this framework lays out characteristics of effective educational leaders. The first mini-case study in our set of 21 unpacks the initiative that led to the development of their leadership model presented in Table 2.

As foregrounded earlier, one effective model for thinking about educational leadership on an individual level is through the Five-Pillar Model, developed at the University of Calgary. Based on emergent themes from interviews with individuals identified as educational leaders in higher education through their participation in an academic

Table 2
Five-Pillar Model

Educational Leadership	<p>Affective Qualities</p> <ul style="list-style-type: none"> • Demonstrating humility • Showing respect and empathy • Establishing trust • Facilitating relationship-building
	<p>Action Orientation</p> <ul style="list-style-type: none"> • Effective change • Taking risks • Facilitating long-term transformation • Creating & implementing new teaching & learning projects
	<p>Mentoring & Empowering</p> <ul style="list-style-type: none"> • Helping colleagues strengthen their teaching & learning practices • Mentoring & coaching colleagues • Sharing resources • Building capacity for growth • Sharing insights & advice • Bringing colleagues together
	<p>Teaching Excellence</p> <ul style="list-style-type: none"> • Facilitating student learning • Enabling and empowering students • Inspiring and building learners' confidence • Eliminating barriers to learning • Being exemplary teachers • Effectively communicating and collaborating with students • Improving student learning experiences
	<p>Research & Scholarship</p> <ul style="list-style-type: none"> • Engaging in research • Applying & disseminating scholarship in teaching and learning

Fields, Kenny, & Mueller, 2019, p.8

In the analysis that follows, we demonstrate how many of the mini-case authors found this model effective, as it allowed them to see their own work as part of a spectrum of educational leadership practices. Many of the mini-cases also move from a focus on individual leadership to distributed or shared models – in these instances the Five-Pillar Model reflects the nuance of this leadership across multiple individuals and, in some mini-cases, institutions.



DATA COLLECTION

We issued a call in early 2019 for mini-case studies that outline educational leadership initiatives. The call for submission was distributed to the ISSOTL Scholarship of Leading Special Interest group, national networks such as Council Australian University Leaders in Learning and Teaching (CAULLT, <https://www.caultt.edu.au>), Australian Learning and Teaching Fellows (ALTF, <https://altf.org>), and via internal university list servers such as the President's Teaching Academy at the University of Toronto (see Appendix). We collected 21 mini-case submissions that outlined an educational leadership initiative. Figure 2 illustrates the country of origin of the mini-cases, including: 11 mini-cases from Canadian institutions, 8 mini-cases from Australian institutions, 1 mini-case from an institution in New Zealand, and 1 mini-case from a Singaporean institution. Each mini-case study was vetted by two research assistants and stored in a OneDrive shared folder. Both the co-chairs and one research assistant reviewed and provided feedback on all draft submissions, then approved the final mini-case submissions.

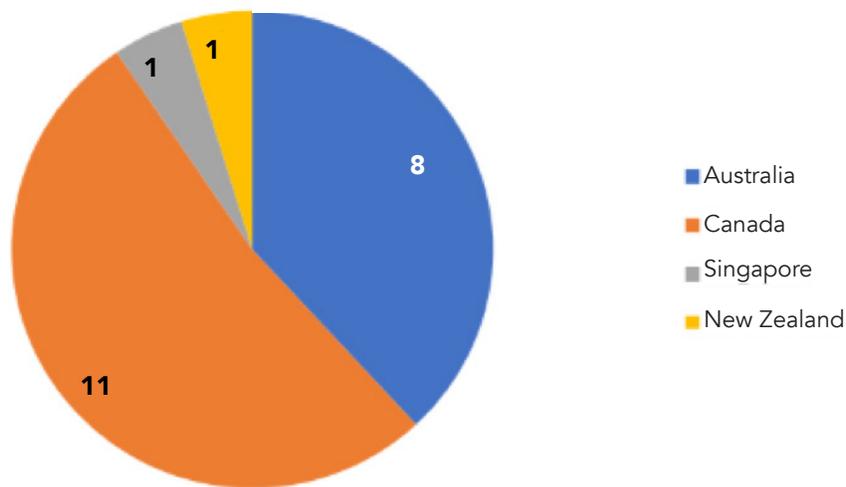


Figure 2. Country of institution of the mini-case

DATA ANALYSIS

The analysis focused on the descriptions related to leadership position, leadership goals, leadership models, financial support, breadth of involvement of individuals and leadership impact.

Leadership positions held

The mini-cases indicate that educational leadership was driven from those that did and did not hold formal leadership titles. Figure 3 shows that there were 15 educational leaders who held formal leadership positions (those with official positions or titles with authority), while 6 mini-cases were identified as informal leaders (those without official positions or titles with authority). The leadership position of participants included Academic Directors (3), Centre Directors (5), Associate Deans (2), Associate Chairs (2), Deputy Vice-Chancellors (2) and Pro Vice-Chancellor (1). The role of formal leadership could be described as an enabler to provide financial sources, remove barriers and create an empowering climate for all individuals. Additionally, enabling cultures allow autonomy and empower interested individuals as informal leaders to construct shared initiatives through grassroots innovation.

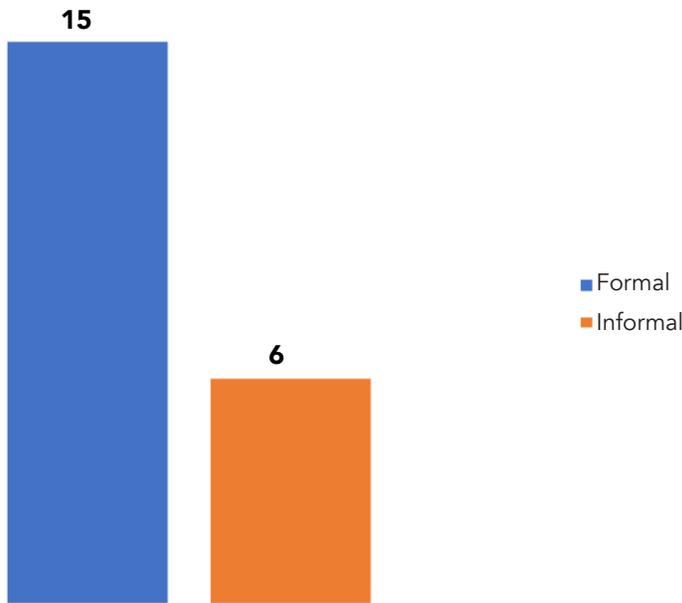


Figure 3. Number of formal and informal leadership positions

Primary goals of the leadership initiative

Leadership goals can be derived from a range of paradigms. Lieff and Yammarino’s article (2017) provides a broader overview of such goals across a range of traditional and contemporary leadership paradigms. Most mini-cases had more than one goal. Figure 4 illustrates that the most common leadership goal focused on the delivery of outputs or wanting to achieve a desired change. However, more contemporary forms of leadership emerged that focused on generating trust and empowering others, enhancing leadership behavior and performance, and addressing shared and emergent issues.

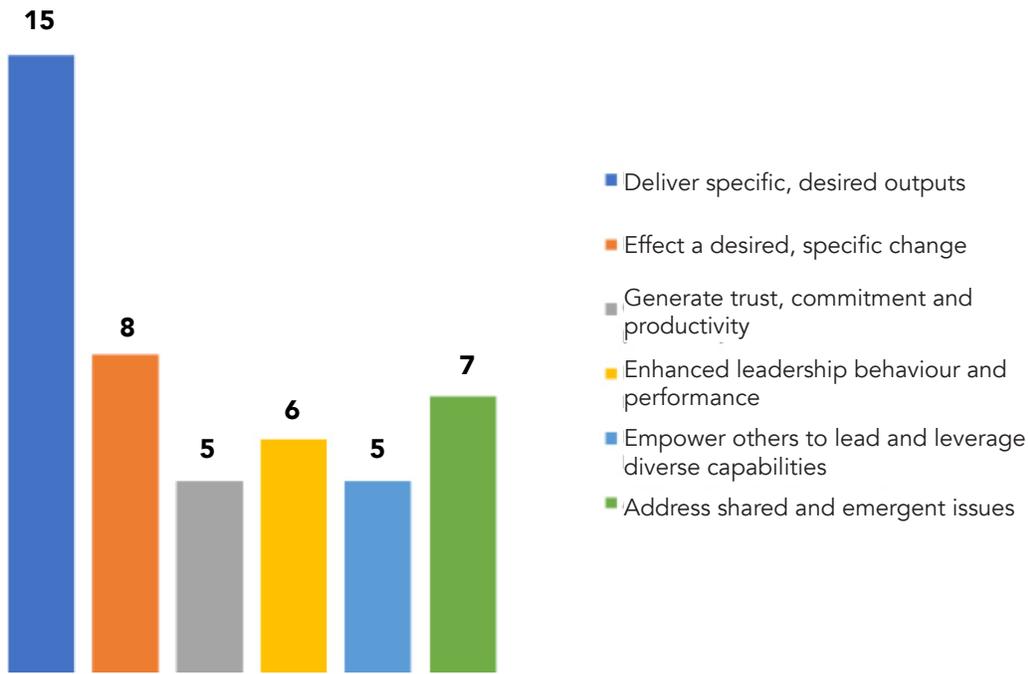


Figure 4. Primary leadership goals

Leadership models applied

In terms of conceptualizing leadership practice, Figure 5 indicates that the 5-Pillar Model was used by the majority of participants to describe their initiative. Apart from the 5-Pillar Model, there were two different leadership models used to engage with academic staff and students respectively. One mini-case highlighted by a formal educational leader from a Centre for Teaching and Learning used a Feminist Model of Leadership to undertake a centre review in order to emphasize community, cooperation, and mutual benefit among academic staff within the institution. Another mini-case described an informal leader in a department who used the Learning in Three Dimensions Model to engage students in a particular course and develop social innovation and inclusive leadership.

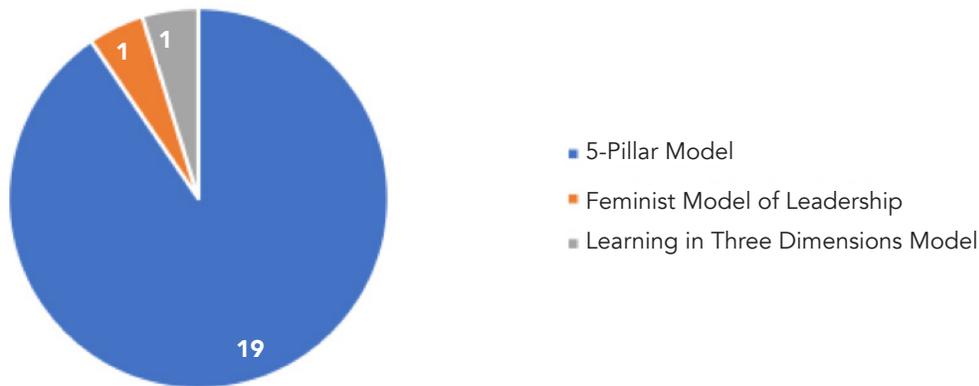


Figure 5. Leadership models applied

Financial support received

The variety of financial sources was worthy of reporting, because funding can fulfill a vital role in supporting and valuing educational leadership. Information regarding the amount of and nature of financial support for leadership initiatives were, in many mini-cases, only implied or described in limited detail. Figure 6 illustrates that the majority of financial support stemmed from the institutions. There were six mini-cases that did not specify funding sources, so we were unable to ascertain whether any funding was received.

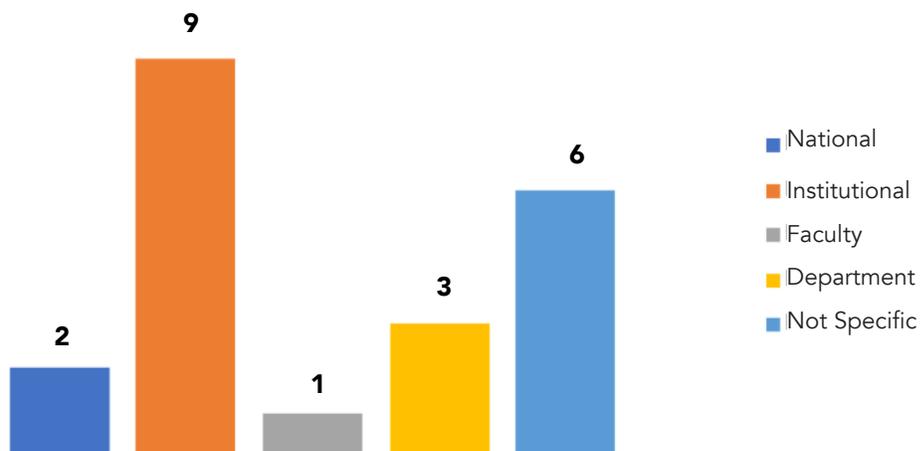


Figure 6. Levels of financial support

Engagement with stakeholders

To determine the breadth of stakeholder engagement we analysed who participants engaged with and for what purposes. Figure 7 indicates that participants mostly involved faculty members in their leadership initiatives to problem solve and take ownership of solutions. Educational leaders effectively integrated with learning and teaching units, collaborated with senior leadership within and across their faculties/departments and engaged students. They also reached out to critical networks, including industry partners, to build stronger connections. Functional experts and administrators were least drawn upon for exchange of ideas and support.

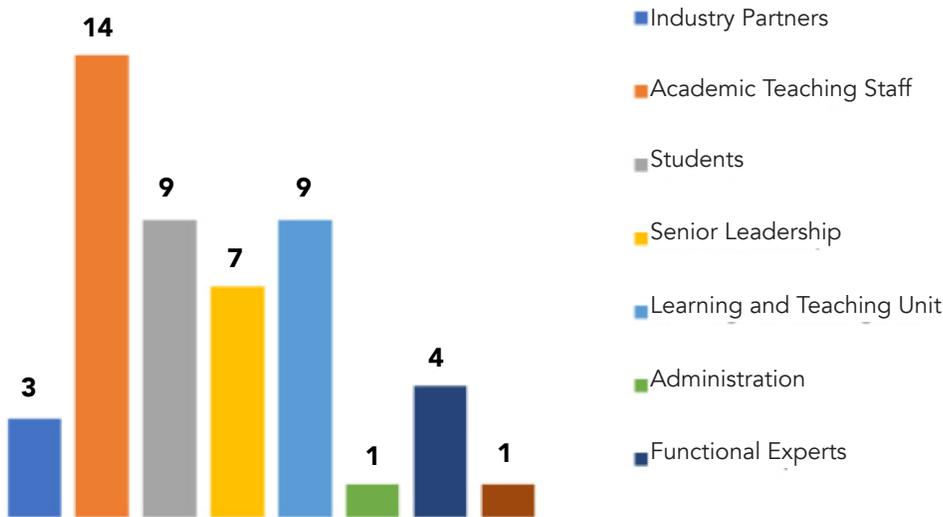


Figure 7. Engagement with stakeholders

Leadership impact

Leadership impact is measured against the four levels of leadership from Simmons and Taylor (2019). As described earlier, leadership can have an impact at the mega (national or international), macro (institutional), meso (faculty/department) and micro (classroom) levels. The scale and scope of leadership impact can exist within and across different levels. For example, an individual academic started at the micro level of activity and extended impact beyond their own unit and practice, which cultivated support and application at the meso and macro levels. Figure 8 shows the level of leadership impact. In some mini-cases the initiative may have created impact at the meso level and then created additional impact at the macro level. Our data are reported based on the highest level of impact.

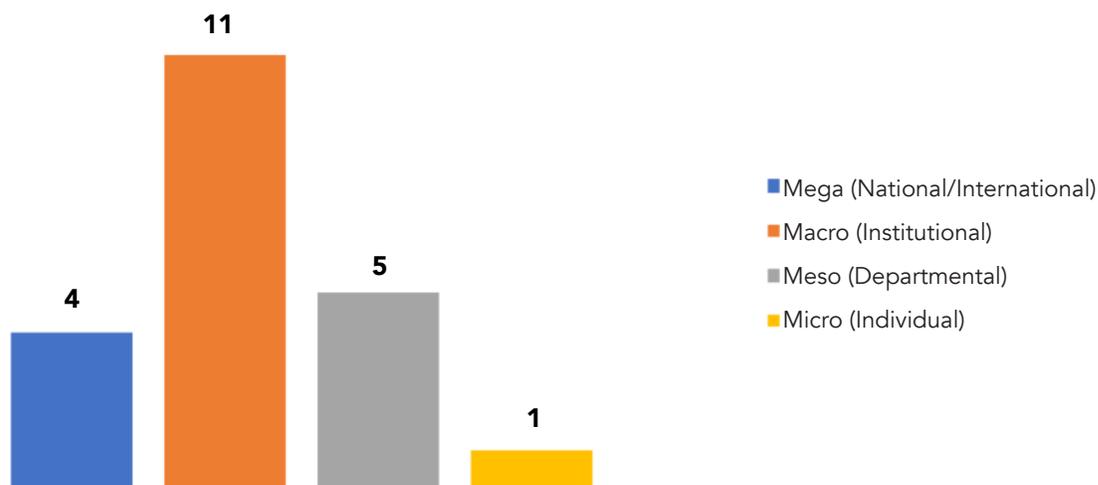
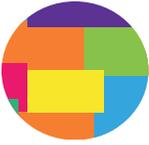


Figure 8. Level of Leadership Impact



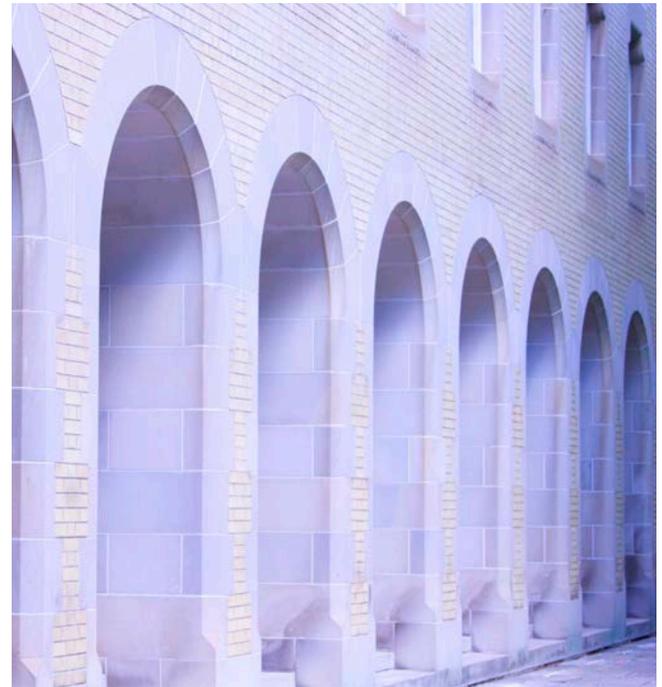
By providing the Five-Pillar Model in our original solicitation of mini-case studies, we privileged this particular model over other frameworks of educational leadership. As shown by Lief and Yammarino (2017) numerous leadership paradigms exist. Many of those build on the importance of specific leadership qualities identified in the 5-Pillar Model, while also providing a broader overview of newer paradigms that reflect shared, distributed and networked models of educational leadership.

Indeed, two of the mini-case studies in this publication elected to use other models of leadership to frame their work: *Feminist Model of Leadership and Learning in Three Dimensions Model*. If you are interested in those models, we encourage you to engage with the citations provided by the authors, as they give further detail regarding these interesting and fruitful frameworks for leadership practice. Indeed, examples such as these demonstrate that leadership models provide critical frameworks for conceptualizing, implementing and/or reflecting upon our approaches to educational leadership.

Our provision of one model, the Five-Pillar Model, and the large take-up of that model by mini-case authors, indicates to us that while educational leadership is widely practiced and often deemed an important part of processes such as tenure and promotion across institutions, there is not necessarily broad awareness of how to identify and articulate these practices, and how to situate them within leadership conceptual frameworks.

REFLECTIONS ON THE FIVE-PILLAR MODEL

The process of soliciting mini-cases, working with mini-case study authors and analyzing the initiatives and projects has clarified to us that providing a conceptual model allowed mini-case authors to think more deeply about their educational leadership practice. Mapping their extant and ongoing work onto a framework allowed them to reflect on the different facets of their initiatives, locating their efforts and drawing connections with, in most mini-cases, each of the five pillars. In Table 3, we outline the five pillars with exemplar quotes from the mini-cases (quotes are cited by their mini-case number in the Table of Contents).



Each mini-case reported in this booklet highlights that:

- the affective qualities and behaviours are essential for academic leaders, especially the ability to develop trusting relationships and collegial networks that will enable change.
- teaching excellence is at the core of educational leadership. Many cases highlight a strong commitment to academic activities, with programs and facilitators grounded in excellence.
- mentoring and coaching facilitated learning in others and empowered colleagues towards success in their educational practices.
- leaders were not just thinking about issues but oriented towards taking action and risks to improve practices.
- pedagogical research formed the foundation of most initiatives, or leaders applied literature to strengthen the initiative. Many leaders engaged in scholarly activities such as systematic inquiry, reflection, and dissemination.

As the mini-case authors continue to engage in developing these and other leadership initiatives, leadership frameworks such as the Five-Pillar Model can help them draw connections between their educational leadership practice and the impact of it, creating the potential of an ongoing continuum of leadership development.

Table 3

5-Pillar Model with Example Quotes from the Mini-Cases

Five-Pillar Model	Mini-Case Example Quotes
Affective Qualities	<ul style="list-style-type: none"> • "Affective qualities were employed by positional and distributed leaders in the establishment of good will and enthusiasm for the change." (Mini-case #18) • "The affective qualities highlighted by our research participants are well-aligned with a leader's ability to develop trusting relationships with colleagues and to enable change in teaching and learning cultures and practices. Such trusting relationships are core to the formation of collegial networks that are bounded by significant conversations about teaching and learning, contributing substantially to instructors' on-going growth and development." (Mini-case #1)
Teaching Excellence	<ul style="list-style-type: none"> • "The program is grounded in excellence in teaching and effective pedagogy, through matching of students' study majors with industry research projects, thus providing context to the curricular content." (Mini-case #16) • "Educational facilitators and learners employ work-integrated, practice-based, interactive and reflective practice-based learning approaches to co-create opportunities, where the application of learning is experienced first in the institute and then progressively in real-world contexts." (Mini-case #12)
Mentoring & Empowering	<ul style="list-style-type: none"> • "Distributed responsibility for working with teachers and feeding back into the broader strategy is supported by mentoring and empowering teaching and learning support teams." (Mini-case #13) • "Formation of collective, collegial "teaching teams" in different courses that are comprised of faculty instructors and TAs lends support to a robust mentorship model, where advice about and insight regarding teaching excellence is readily shared." (Mini-case #8)
Action Orientation	<ul style="list-style-type: none"> • "This transformational project from a traditional classroom into a studio space was initiated to promote a different kind of teaching in our Faculty. Instructors using the space must be willing to take risks and change their pedagogy, as the space was created with the intent to experiment and demonstrate teaching innovations." (Mini-case #19) • "Participants noted that after ... experience, they were more willing to speak up on issues of Indigenization with their departmental colleagues, and more likely to undertake appropriate advocacy and action. The FLC was action-oriented in the sense that part-way through the year, the focus shifted from thinking about the issues to exploring how faculty members' classes could be decolonized or indigenized." (Mini-case #20)
Research & Scholarship	<ul style="list-style-type: none"> • "The evidence-based development of the...Framework ... and the ongoing quality assurance analyses and pedagogical research that have been priorities throughout the process of implementation and institutionalization." (Mini-case #17) • "... was initially designed based on results from pedagogical research demonstrating that group work, peer teaching, low-stakes testing, and immediate feedback enhances student learning and reduces drop rates." (Mini-case #10)



AVENUES FOR FURTHER WORK

We see a significant opportunity for further exploration of educational leadership models within diverse institutional contexts. The mini-case studies in this publication show that faculty members, administrative leaders, and staff in teaching and learning centers are practicing diverse forms of educational leadership, piloting and implementing initiatives that make significant positive impact on student learning and higher education teaching practice. However, individuals performing this work may not always have the language and models to conceptualize it or communicate it more broadly.

This brings forth further avenues to explore:

- Providing faculty with a range of models and frameworks of educational leadership can be a fruitful exercise, as it prompts reflective practice from different perspectives. Further resources can be developed to encourage faculty to leverage leadership models and frameworks to centre and grow their efforts and initiatives, identifying gaps and building on strengths.
- Further applications of the Five-Pillar Model can be investigated. While this model particularly focuses on dimensions that educational leaders reflect in their work, the mini-cases in this publication show the value of the model beyond individual leaders.
- How might these mini-cases be used to spark discussion of educational leadership in action? For example, how might they be used in workshops or other professional development activities to generate discussion, exploration and possible generation of new mini-cases?

Educational leadership work is important not only in personal teaching practices, but can result in systemic changes at the macro and mega levels. Formal and informal leaders in diverse roles develop courses, initiatives, training and development frameworks, rethink curricula, build programs and create community. Educational leadership has a significant impact on improving both student experience and teaching culture. By working with leaders to conceptualize, document and develop educational leadership practices, we build capacity at our institutions and can enhance teaching and learning on a broader scale. We hope that in reading these mini-case studies you will be inspired to reflect on your own practice, exploring the variety of models set forth, perhaps locating, and further developing or sharing your own work through similar mini-cases.

CASE #1

THE TEACHING SCHOLARS PROGRAM

JACQUELINE FIELDS, NATASHA KENNY AND ROBIN MUELLER, UNIVERSITY OF CALGARY, CANADA

DISCIPLINE: Education, Educational Leadership

RESEARCH AREAS: Academic development, teaching development, student learning

PURPOSE / CONTENT

The University of Calgary Teaching Scholars Program (the Program) is designed to strengthen educational leadership across departments and faculties. Whether they hold formal or informal roles, educational leaders have substantial impact on teaching and learning cultures and practices. They make a difference by sharing knowledge and research, creating social support networks, mentoring others and influencing change (Fields et al., 2019; Hannah & Lester, 2009; Mårtensson & Roxå, 2016). The Teaching Scholars program provides academic staff (especially those who do not hold formal leadership roles) with the opportunity to build their educational leadership by implementing strategic teaching and learning initiatives. The program also allows its members to engage other academic staff in professional learning opportunities to strengthen their own teaching and learning practices.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

Over \$360,000 CAD were committed to 14 Teaching Scholars from across nine faculties at the University of Calgary from 2016 to 2019. The distribution of the Scholars across the University of Calgary is representative of the tangible way in which we are striving to build integrated networks of educational leadership. Scholars:

- Completed meaningful and relevant initiatives of shared disciplinary and/or

interdisciplinary interests.

- Developed and implemented initiatives that enable and engage other instructors to help strengthen their teaching and learning practices, and to build networks of practice across the broader academic community.
- Participated in an interdisciplinary community of practice with fellow Teaching Scholars.
- Disseminated the results of their initiatives.
- Completed mid-term and final reports outlining their projects' progress and findings.

“The Teaching Scholars program provides academic staff (especially those who do not hold formal leadership roles) with the opportunity to build their educational leadership by implementing strategic teaching and learning initiatives.”

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

The Teaching Scholars Program was assessed through a research study aimed at understanding



BIOGRAPHIES/CURRENT ROLES

Jacqueline Fields is an instructor and PhD candidate at the Faculty of Social Work, University of Calgary. Her main interests are collaborative leadership in social service organizations (PhD research focus), educational leadership in higher education, organizational policy development, and social work instruction and administration. Jacqueline led the data generation and analysis for the Teaching Scholars research project.

Natasha Kenny is Senior Director of the Taylor Institute for Teaching and Learning at the University of Calgary. In this role, she leads a team of faculty, staff, students and postdoctoral scholars in strengthening teaching and learning communities, cultures and practices. Her research interests relate to educational leadership, well-being in higher education, the scholarship and practice of educational development, and the scholarship of teaching and learning (SoTL).

Robin Mueller is an Educational Development Consultant and faculty member at the University of Calgary's Taylor Institute for Teaching and Learning. In this role, she supports engagement in the scholarship of teaching and learning (SoTL), consults with campus partners to strengthen teaching and learning initiatives, and supports individual teaching development.

how academics conceptualized and defined educational leadership in a post-secondary context. Analysis of the research findings yielded the Five-Pillar Model of Educational Leadership.

The Scholars perceived educational leadership to be characterized by five thematic categories: affective qualities, mentoring and empowering, action-orientation, teaching excellence, and research and scholarship; and these categories represent the “five pillars” of our model. Educational leaders may not necessarily possess all characteristics at once, as these leadership qualities are highly context-dependent (Gibbs et al., 2008; Taylor, 2005; Taylor & Rege Colet, 2010; van Ameijde et al., 2009).

AFFECTIVE QUALITIES, MENTORING AND EMPOWERING, AND ACTION-ORIENTATION

The first three pillars (affective qualities, mentoring and empowering, and action-orientation) are well-supported by the literature about academic leadership in higher education. Several qualities are reported to be essential for academic leaders: a) interpersonal skills including visioning, negotiating, active listening, and building relationships; b) the ability to empower and support colleagues; c) demonstrating creativity, innovation, and risk-taking; and d) strategically taking action to initiate and inspire change.

Leadership behaviours such as being considerate, treating others with integrity, being trustworthy, and having personal integrity were highlighted by Bryman (2007) in a review of literature about leadership effectiveness at the departmental level. Similarly, Taylor (2005) suggested that qualities such as listening, being open to input, understanding local contexts and communities, and enabling others to enact change were perceived as core qualities of university leaders. The affective qualities highlighted by our research participants are well-aligned

with a leader’s ability to develop trusting relationships with colleagues and to enable change in teaching and learning cultures and practices. Such trusting relationships are core to the formation of collegial networks that are bounded by significant conversations about teaching and learning, contributing substantially to instructors’ on-going growth and development (Roxå, Mårtensson, & Alveteg, 2011).

Another thematic category was coaching, mentoring, and empowering colleagues towards success in their educational practices. These findings are congruent with those of Taylor (2005), who suggested that academic development leadership was rooted in ‘facilitating the learning of others’ (p. 38). There is alignment between these perceptions of the qualities of educational leadership and the approaches of academic developers, where building collegial relationships, understanding local contexts, enabling the development of others, and effecting change are foundations of practice (Gibbs, 2013; Taylor & Rege Colet, 2010; Timmermans, 2014).

TEACHING EXCELLENCE

The Scholars perceived teaching excellence as a core component of educational leadership. They suggested that having credibility, acting as a role model, and having a strong commitment to one’s academic activities are important aspects of higher education leadership (Bryman, 2007; Spendlove, 2007). Findings indicated that one’s academic credibility as an educational leader is grounded both in demonstrating teaching excellence, as well as in applying, engaging in, and disseminating research and scholarship related to teaching and learning. The Scholars’ narratives strongly aligned with learning-centered approaches to teaching, where instructors facilitate learning processes and break down barriers to learning, to best enable student success (Paris & Combs, 2006; Weimer, 2013).

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NETWORKS

International Society for the Scholarship of Teaching and Learning

Society for Teaching and Learning in Higher Education

Educational Developers Caucus of Canada

POD Network

RESEARCH AND SCHOLARSHIP

Our study also revealed the Scholars' perceptions that educational leaders actively apply, engage in, and disseminate research and scholarship related to teaching and learning in higher education. Their narratives highlighted the interrelationships between scholarly teaching and the scholarship of teaching and learning (Richlin, 2001), where educational leaders were seen as those who consult and apply literature to strengthen their own teaching practice. Educational leaders were also perceived as those who actively engage in systematic inquiry, and who investigate and disseminate their teaching and learning practices.

(Note: All references in this case are listed in Fields et al., 2019 article)

IMPACT

The Teaching Scholars Program had a direct impact on the Scholars' personal growth, teaching development, and student learning, through the implementation of their individual initiatives. The Scholars reported on being enabled to self-identify as educational leaders and earning personal "visibility" within academe. They enhanced their teaching skills through knowledge-sharing and collaborative engagement within their community of peers that formed organically in the Program, and that of their students across disciplines at the University of Calgary. The Scholars also reported on students' increased learning capacity. The following quotes from a recent focus group, exemplify the programs impact:

"I think because we were given this grant, we were able to focus on something [initiative] ... That is what has made me feel like an educational leader. I know what I'm talking about now'.

"I think it [the Program] gave me a lot of visibility that I otherwise wouldn't have gotten."

"The seed funding provided by the Teaching Scholars Program helped me to create...a unique program for teaching development for STEM graduate students. I developed a collaborative network of expert educators to introduce graduate students to the principles of the SoTL. I built a dynamic network of faculty mentors and mentees to provide immersive teaching practicum experiences for graduate students. At the end of the program... scholars have written their teaching philosophy, can design lessons by completing lesson plans and selecting appropriate teaching strategies, implement their lessons and assess the effectiveness of the teaching strategies they used."

RELATED REFERENCES

- Fields, J., Kenny, N., Mueller, R. (2019) Conceptualizing educational leadership in an academic development program. *International Journal for Academic Development*, 24(3), 218-231, DOI: 10.1080/1360144X.2019.1570211.
- Hannah, S.T., & Lester, P. B. (2009). A multilevel approach to building and leading learning organizations. *The Leadership Quarterly*, 20, 34-48.
- Mårtensson, K., & Roxå, T. (2016). Leadership at a local level—Enhancing educational development. *Educational Management Administration & Leadership*, 44(2), 247-262.

CASE #2

DISTRIBUTED LEADERSHIP TO EMBED SCHOLARSHIP IN STEM TEACHING TEAMS

TINA ACUNA AND JO-ANNE KELDER, UNIVERSITY OF TASMANIA, AUSTRALIA

DISCIPLINE: Scholarship in STEM, Higher Education, Quality Assurance

RESEARCH AREAS: Developing academic capability for scholarship, authentic leadership



PURPOSE / CONTENT

In Australia, the Higher Education Standards Framework (HESF) minimum requirements include continuous evaluation that informs ongoing curriculum transformation; five threshold standards refer explicitly to scholarship.

The Tertiary Education Quality and Standards Agency (TEQSA), which regulates the sector in Australia, recently published a Guidance Note: Scholarship that states: 'The intent of the Standards is that scholarship that is claimed to inform teaching (or supervision) must have a demonstrable relevance to the course being taught, including scholarship relating to the process of teaching and learning in itself.' (TEQSA, 2018, p. 4).

Changes to national Learning and Teaching awards and grants suggests a signal that scholarship is *in practice* an undervalued and largely invisible activity that may be neglected altogether by academics and management in Australian universities.

Our fellowship is a response to minimum requirements for continuous evaluation informing ongoing curriculum transformation. It is a key driver for universities to identify mechanisms to engage and reward academics to engage in the Scholarship of Teaching and Learning (SoTL). The whole team of academics involved in designing and teaching degree curriculum need to be engaged in SoTL; not just specialist teachers.

BIOGRAPHIES

Associate Professor Tina Acuna and Dr. Jo-Anne Kelder are the joint Australian Council of Deans of Science Fellows for 2019.

Tina led the Office for Learning and Teaching (OLT) funded national Learning and Teaching Academic Standards for Agriculture (AgLTAS) project from 2013-15.

Jo led the OLT funded Peer Assisted Teaching Scheme extension grant and was a co-investigator in the AgLTAS project. She is a Senior Editor for the Journal of University Learning and Teaching Practice.

Tina was recipient of an Australian Award for University Teaching: Citation for Outstanding Contributions to Student Learning in 2016. Jo was recognised in University of Tasmania awards (three team awards, 2014; individual 2017).

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▶ <http://linkedin.com/in/jokelder>

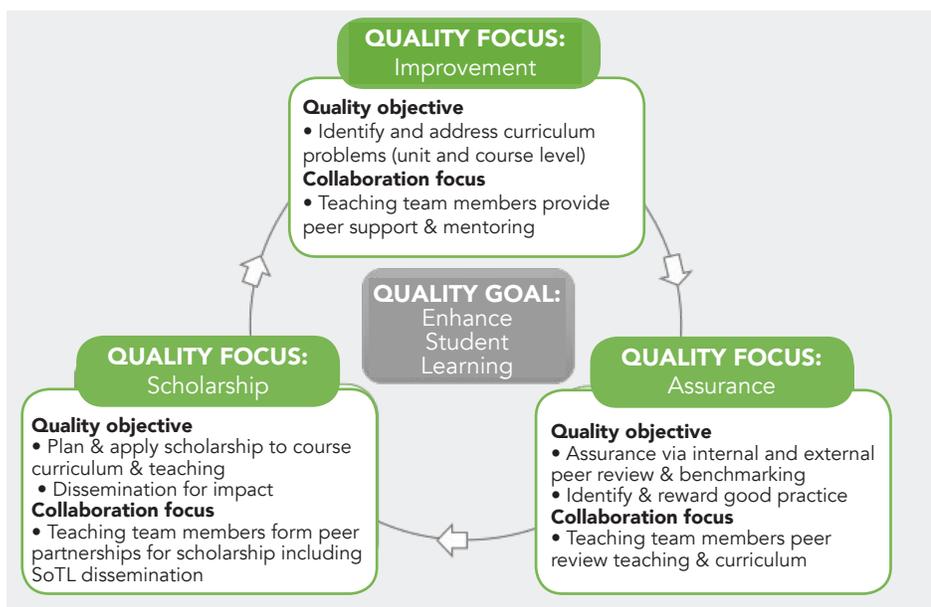


Figure 1. Proposed Curriculum Evaluation Research (CER) Framework for STEM, modified from Kelder & Carr (2017)

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In STEM, prioritization of disciplinary research and lack of capacity/expertise in research approaches more common to the humanities, social sciences and education are substantial barriers to SoTL.

Our Fellowship embeds leadership for active engagement in scholarship within teaching teams. It contextualizes the 'Curriculum Evaluation Research (CER) framework' (Kelder & Carr, 2017) for the specific characteristics of STEM degrees. The outputs include national workshops for fourteen institutional partners, a STEM specific CER framework, a website presenting the framework, dissemination outputs, and sharing of case studies and resources developed during the fellowship.

Longer-term outputs will be a greater percentage of STEM academics engaged positively in scholarship and an improved curriculum.

REFLECTING ON AND APPLYING THE FIVE- PILLAR MODEL

The Fellowship demonstrates *Mentorship and Empowerment* with an *Action Orientation* (Fields, Kenny, & Mueller, 2019). The CER framework (Fig. 1) – specifically adapted for STEM academics – supports team-based planning and, doing activities that are aligned with institutional structures, processes and governance instruments, so that scholarship can be made visible, monitored, measured, met and reported at the level of degree curriculum.

The joint leadership provided for this institute explains why, what and how scholarship can be undertaken for a whole curriculum and provides practical opportunities to apply the CER framework and adapt the resources to a local context. The Fellowship is endorsed by the Australian Council of Deans of Science, and we envisage their

“The joint leadership provided for this institute explains why, what and how scholarship can be undertaken for a whole curriculum and provides practical opportunities to apply the Curriculum Evaluation Research (CER) framework and adapt the resources to a local context.”

support will be a key factor in enabling a translation of the concepts into research plans approved by Research Ethics Committees, to empower academics teaching in STEM disciplines to collaboratively develop and use a longitudinal evidence base for transformation, innovation and quality assurance of curriculum.

IMPACT

The strategy for embedding outputs and achieving impact has been articulated using the Impact Management Planning and Evaluation Ladder (IMPEL) framework (Hinton, 2014) for the 12-month timeframe of the project and the 2-5 years following. Key measurements of impact in year 1 include: Good Practice examples originating from Quality Improvement (QI) activities can be published as an Internal Newsletter, on the CER – STEM website or form the basis of a conference paper or poster. Evidence collected through the QI cycle can be used to inform Quality Assurance (QA) against standards, including the external benchmarking against other providers that occurs on at least a 5-yearly cycle (TEQSA). Thus, QA is likely to be planned during the

CURRENT ROLES

Tina's current role is Associate Dean Learning and Teaching in the College of Sciences and Engineering at University of Tasmania.

Jo's current role is Senior Lecturer in Curriculum Development and Innovation in the Tasmanian Institute of Learning and Teaching at the University of Tasmania.

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NETWORKS

Higher Education Research and Development Society Australasia (HERDSA)

International Society for the Scholarship of Teaching and Learning (ISSoTL)

fellowship for future application in the next QA reporting cycle.

Evidence collected through the QI and QA activities by the teaching teams that leads to generalisable outcomes for the STEM sector can be prepared for publication in a journal article or conference proceedings. We propose to leverage new internal funding in the College of Sciences and Engineering at the University of Tasmania for teaching development seed projects in the home institution. We will co-edit a special issue of the International Journal of Innovation in Science and Mathematics Education (IJISME), to give partner-participating institutions an opportunity to contribute relevant scholarship.

RELATED REFERENCES

- Fields, J., Kenny, N.A. & Mueller, R.A. (2019): Conceptualizing educational leadership in an academic development program, *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211
- Hinton, T. (2014). *The Impact Management Planning and Evaluation Ladder (IMPEL)*. Department of Education, Available: <https://docs.education.gov.au/documents/impact-management-planning-and-evaluation-ladder-impel>
- Kelder, J., & Carr, A. (2017): Embedding evaluation and scholarship into curriculum and Teaching: The curriculum evaluation research framework. In A Hørsted, P. Bartholomew, J. Branch & C. Nygaard (eds), *New Innovations in Teaching and Learning in Higher Education 2017* (pp. 430-451). Faringdon, UK: Libri Publishing.
- TEQSA. (2018). *Guidance Note: Scholarship (Version 2.5_2, 12 December 2018)*. Canberra, Australia: Tertiary Education Quality and Standards Agency. Available: <https://www.teqsa.gov.au/latest-news/publications/guidance-note-scholarship>



CASE #3

LEADING DIGITAL TRANSFORMATION

KEVIN ASHFORD-ROWE, QUEENSLAND UNIVERSITY OF TECHNOLOGY, AUSTRALIA

DISCIPLINE: Teaching Assessment

RESEARCH AREAS: Authentic learning, authentic assessment, digital learning and teaching, teaching excellence in higher education

PURPOSE / CONTENT

Queensland University of Technology (QUT) is undertaking a digital transformation (Dx) to enhance the ways in which many of the important functions of the university are facilitated. Importantly, this includes the mediation of the academic teaching and student learning experience. *Digital transformation, at its most simplistic, is the process of transforming an organization's core business to better meet customer needs by leveraging technology and data* (Clark, 2018). In essence, it is the move from a predominantly analogue service delivery model that might use information and communication technologies to deliver or automate existing workflows (*digital in part*), to an more customer (student) focused approach that uses the capabilities of these technologies to reshape and redefine the ways in which that customer experience is mediated; that is the ways in which students will engage with the university, at least the relevant parts of it (*digital at heart*).

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

QUT is embarking upon Dx with the intention of seeking to be more deliberate and effective in the use of educational technology to enhance the student learning experience. To enable this to occur, such Dx in learning and teaching will need to occur across the full range of functions that students will need to interact with on their learning and teaching journeys. In

“It is the affective qualities described within the Five-Pillar Model that are central to building the constituency necessary to achieving change, at scale, across such a broad community as a university.”

order to progress this work, it is useful to envision these journeys as ones that occur across both a physical as well as a virtual campus, noting that increasingly for many of those students studying online and by distance, their journey will occur on the digital campus only. Such transformation will require enhancement of the *Digital Learning Eco-system* as well as an increase in the academic uptake and usage of educational technology by instructors. It will also require that consideration is given to the preparedness of both instructors and students to be able to access and engage with that learning and teaching experience.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

It is the **affective qualities** described within the Five-Pillar Model that are central to building the constituency necessary to achieving change, at scale, across such a broad community as a



BIOGRAPHY

Professor Kevin Ashford-Rowe is the Pro Vice-Chancellor (Digital Learning) at the Queensland University of Technology (QUT). Prior to this (2012 – 2018) he was the Director of the Learning and Teaching Centre (LTC), at Australian Catholic University (ACU).

He was an invited member of the International Advisory Panel for the former New Media Consortium's 2016, 2017 and 2018 Horizon Reports. He has also served as an invited member of the National Advisory Panel for the New Media Consortium's Australian Horizon reports 2009, 2010, 2012, 2014, 2015 and 2016.

CURRENT ROLE

At QUT he is leading the University's Digital Transformation (Dx) in learning and teaching and he is the service lead for the digital learning environment.

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NETWORKS

AdvanceHE

Council of Australasian University Leaders in Learning and Teaching

EDUCAUSE

university. In this respect, while it is vitally important to be able to describe a vision, it is equally important that humility is demonstrated in consultation with the impacted community and, at the same time, respect and empathy are demonstrated. It is in this way that the requisite trust can begin to be established and the relationships built that will enable change to occur.

In progressing any change or transformation agenda, it is equally important that colleagues are provided with concrete guidelines that inform them, in exact terms, as to what future success looks like. More importantly, it must allow colleagues to measure their own current practice against any such guidelines. In this way, they must also be provided with exemplars and relevant support (including online self-help resources) that offer access to such materials, preferably with clearly described and consistent case studies that describe how other instructors have succeeded. These supporting materials must also be clear and as unambiguous (i.e. outcomes focused) and objective as possible. It is by this mechanism that instructors who are able to help themselves may do so and, those who aren't able can be identified and supported via other means. Thus, a full range of supporting resources and materials are provided, ranging from self-help to one-on-one support. Alongside this will be a requirement to demonstrate innovation as a means of both building champions within the community and describing models of future success.

With reference to *action-orientation* it must be acknowledged that meaningful change should be allowed to occur across a longer time frame. While there will certainly be a requirement for short- and medium-term goals and aspirations, it will take time to achieve true underlying change that is required to ensure transformation. The long term goal is for this change to be meaningful and enduring.

It is the facilitation, enabling and empowering of instructors; the building of learner confidence; and, the elimination of barriers that will be important hallmarks of a successful transformation. It is also important that any

success is grounded in, and evidenced by, explicit and deliberate **scholarship. Excellence in teaching**, and learning, are more often than not grounded in rigorous scholarship and research as opposed to happenstance and chance.

IMPACT

The impact of this transformation agenda will, in its most simple forms, be measured by the improvements in the reported experience of instructors and students across their teaching and learning. Of course, as the transformation process matures and becomes increasingly sophisticated then better measures will need to be devised. What will be most important, though, will be remembering that the digital transformation of the learning and teaching experience has been progressed to enhance the academic teaching and the student learning experience. Thus, the truest and best measures of success will be those grounded in measuring improvements in learning and teaching, as opposed to technology. The end point of such transformation should be: the enhanced ability of the student to access their learning experience at times and in places of their choosing; and, the opportunity for them to learn by means of increasingly sophisticated and authentic 'real world' learning experiences, that will better prepare them to succeed in the increasingly digital world into which they will graduate.

RELATED REFERENCES

- Clark E., (2018) Digital Transformation: What is it? In Educause Magazine (May 2018) at: <https://er.educause.edu/articles/2018/5/digital-transformation-what-is-it>
- Ashford-Rowe, K., Herrington, J., & Brown, C. (2014) Establishing the critical elements that determine authentic assessment. *Assessment & Evaluation in Higher Education*, 39(2), 205-222, DOI: 10.1080/02602938.2013.819566

CASE #4

LEARNING IN THREE DIMENSIONS: HOW COLLABORATIVE LEARNING TAKES ROOT

S. NOUMAN ASHRAF, UNIVERSITY OF TORONTO, CANADA

DISCIPLINE: Higher Education, Equity, Diversity, and Inclusion

RESEARCH AREAS: Organizational design, emancipatory leadership, social innovation, not-for-profit governance, educational leadership

PURPOSE / CONTENT

Nouman teaches Emancipatory Leadership within the Global Executive MBA program, Leading Social Innovation with the second- and third-year MBA programs and Leading Across Differences within the Rotman Commerce Program. His teaching practice equips students with the tools necessary to create impact within their organizations and society-at-large. By engaging students in practical application of classroom discussion, readings and content, Nouman exemplifies the importance of collaboration as a learning tool.

At the Rotman School of Management, the student-consultant model (Bovill, Cook-Saher, & Felten, 2011) has been operationalized as a tool for curriculum development. The student-consultant model asks graduates to provide insights from end-user perspective and co-create the next iteration of the course to maximize learning across three dimensions: teacher to learner, learner to learner, and learner to teacher. This model allows Nouman to assist students in operationalizing their agency through collaboration. As students become agents of their own learning, they recognize that through this process, they are taking on the roles of “holders and creators of knowledge” (Bernal, 2002).

By nudging students to move outside the classroom and apply their learning to complex, real-world

problems, the three-dimensional approach provides an opportunity for active learning. Rather than approaching problems as subject matter experts, students learn how to leverage their skills, curiosity, and empathic abilities to explore diverse perspectives and approach problems creatively. Through a combination of journaling, feedback, in-class sharing and co-consulting, students learn about their own strengths, blind spots, and ability to lead social innovation locally and globally.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In the *Leading Social Innovation* MBA elective course, the student-consultant model is operationalized to engage students within communities and contribute to the development of innovation opportunities at scale. Students are asked to engage with real-life questions being faced by organizational partners through a social innovation lens. This approach builds students’ capacity for developing a deep understanding of the context within which partner organizations operate, leveraging a business design methodology that emphasizes empathy and continuous iteration. Rather than coming in as subject matter or process experts, students bring a combination of academic rigour and genuine curiosity.



BIOGRAPHY

S. Nouman Ashraf is an Assistant Professor, Teaching Stream within the Organizational Behavior area at the Rotman School of Management. He has a broad range of professional, academic and teaching interests, with a specialized focus on enabling inclusive and innovative practices within teams, organizations and boards. For the last decade and a half, he has held progressively senior roles at the University of Toronto. Nouman serves as a Teaching Fellow at the Institute for Gender and the Economy, is an Associate at Trinity College within the University of Toronto, an affiliated faculty member at the University of Toronto City of Schools and Fellow Emeritus at Massey College.

REFLECTING ON AND APPLYING THE LEARNING IN THREE DIMENSIONS MODEL

Learning in three dimensions emphasizes and encourages members within the learning community to utilize their agency in making the learning experience active and meaningful for all. Active learning, broadly defined, is “student’s efforts to actively construct their knowledge” (Carr, Palmer, & Hagel, 2015). To enable learning in three dimensions, the instructor should be able to 1) nudge students out of their comfort zone and establish a safe space within the learning environment, 2) insist on feedback after every interaction with a member of the learning community and, 3) measure what has been learned through the course and how it integrates with existing knowledge and skills, and furthermore, can be applied in current and emerging contexts. A major benefit of learning in three dimensions is that it requires the learner and the teacher to be reflective. Reflective practice is key to effectiveness because it is through reflection that learners and teachers develop a genuine curiosity for their respective subject matters. Furthermore, they can witness the evolution of their thinking and doing.

One technique of enabling and assessing comprehension, extension and application of the material is an entry in a learning journal after every interaction. Through a combination of journaling and in-class sharing, students learn about their own strengths, blind spots, and ability to lead social innovation locally and globally. Partner organizations are consistently impressed by students’ academic rigour and thoughtful, genuine curiosity. Crucially, the end results of students’ consultation with partner organizations do not follow a strictly linear format or template. This focus on purpose over process and prioritization of impact over format and marks is essential to pushing students towards meaningful work and active

learning. In fact, the most successful students and teams are those who are willing to ask questions, get out of their comfort zones, and critically engage with partner organizations to address their consulting problem. While initially uncomfortable, this discomfort enables students to learn from their differences and engage in deep learning. This innovative active learning pedagogy is grounded in the work of Bain (2004) and Bernal (2002). Both these thought leaders espouse that risk-taking in professional and social contexts is absolutely essential for growth. With risk-taking and discomfort comes humility, and with humility comes an open and ready mind for deep learning (Bernal, 2002). Actively creating a space in the classroom where students feel discomfort, but safety, is the only way to facilitate risk-taking and thus create an ecosystem where students not only become knowledge holders, but knowledge creators (Bain, 2004).

IMPACT

Once students relate the subject matter to these larger questions, their orientation for learning shifts from being a ‘strategic learner’ to that of being an ‘active learner’. Within this mindset, the subject then takes on an enhanced relevance and captivates the interest and attention of the students with a view to developing personal mastery over a domain whose applicability they understand and value.

As educators, we need to create conditions under which students learn from us, each other, and offer meaningful contribution to us as instructors around future contributions to curriculum and pedagogy. This requires the enactment and sustainability of an environment in which students experience psychological safety on the one hand and a level of accountability on the other. This combination enhances both academic learning outcomes and the potential of students’

CURRENT ROLE:

Nouman’s current roles include Assistant Professor, Teaching Stream within the Organizational Behavior area at the Rotman School of Management. An award-winning faculty member, Nouman teaches Emancipatory Leadership within the GEMBA program, Leading Social Innovation with the second- and third-year MBA programs and Leading Across Differences within the Rotman Commerce Program. He is also Academic Director of various custom leadership programs in partnership with Rotman Executive Program clients. As of July 1, 2019, Nouman assumed the role of Director of Equity, Diversity and Inclusion, reporting to the Dean.

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NETWORKS

Respondent to AACSB Re-accreditation External Review of the Rotman School Committee, Rotman School of Management

Ludwik and Estelle Jus Memorial Human Rights Award Selection Committee

International Day for the Elimination of Racial Discrimination, Conference Organizing Committee

Social Impact Working Rotman, Office of the Vice President, Human Resources and Equity Table

“As educators, we need to create conditions under which students learn from us, each other, and offer meaningful contribution to us as instructors around future contributions to curriculum and pedagogy. This requires the enactment and sustainability of an environment in which students experience psychological safety on the one hand and a level of accountability on the other. This combination enhances both academic learning outcomes and the potential of students’ own contributions to the field.”

own contributions to the field. In reflecting upon my decade of teaching within the management education space, my focus has been creating what acclaimed teaching and learning expert Ken Bain refers to as ‘adaptive experts’. These are individuals who go above and beyond simply regurgitating answers in a routine manner to adapting to unique and messy problems. Such an approach is particularly salient in my chosen twin areas of interest, and social innovation and inclusive leadership that values diversity and inclusion. In both disciplines, learners must link what they learn in the classroom to real world questions at the individual, organizational and societal levels.

RELATED REFERENCES

- Bain, K. (2004). *What the best college teachers do*. Cambridge, MA: Harvard University Press.
- Bernal, D.D. (2002). Critical race theory, Latino critical theory, and critical raced-gendered epistemologies: Recognizing students of color as holders and creators of knowledge. *Qualitative Inquiry*, 8(1), 105–126. <https://doi.org/10.1177/107780040200800107>
- Bovill, C., Cook-Sather, A., & Felton, P. (2011). Students as co-creators of teaching approaches, course design, and curricula: Implications for academic developers. *International Journal for Academic Development*, 16(2), 133-145. (doi:10.1080/1360144X.2011.568690)
- Carr, R., Palmer, S., & Hagel, P. (2015). (2015). Active learning: The importance of developing a comprehensive measure. *Active Learning in Higher Education*, 16(3), 173-186. <http://dro.deakin.edu.au/view/DU:30074350>
- Cook-Sather, A., & Abbot, S. (2016). Translating partnerships: How faculty-student collaboration in explorations of teaching and learning can transform perceptions, terms, and selves. *Teaching and Learning Inquiry*, 4(2), 1-14. <http://dx.doi.org/10.20343/teachlearningqu.4.2.5>

CASE #5

ENGAGING STAFF IN A PROFESSIONAL DEVELOPMENT PROGRAM

CHARLOTTE BRACK, SWINBURNE UNIVERSITY OF TECHNOLOGY, AUSTRALIA

DISCIPLINE: Academic Development, Teaching Innovation, Higher Education

RESEARCH AREAS: Scholarship of Teaching and Learning (SoTL), academic development, networked learning

PURPOSE / CONTENT

Alignment of degree programs or courses to strategic institutional objectives requires a systematic 'whole of course (program)' approach. At Swinburne University, Australia, this includes a professional development program for team members, which addresses diversity of their roles and experience, focussing on learning-centred design to provide coherence and consistency in responding to strategies.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In 2019 Swinburne University entered Phase 2 of a major project of transforming learning and teaching, with the aim of aligning courses of study to strategic objectives, through a whole-of-course learning-centred design approach. This was supported through a Professional Development Program for development teams on course curriculum and learning design underpinned by scholarship. As the Director of the Learning Transformations Unit (LTU) I led the design and implementation of the Program in collaboration with faculty leaders and input from students and industry. This approach is intended to provide the impetus for uptake of the Program by staff involved in course development. The course design approach includes: visioning; development of a curriculum framework with a clearly articulated educational design; and mapping of

learning outcomes and assessment aligned to the strategic goals. Team members are supported in completing the stages with aligned workshops on educational design and development at course; unit; and learning activity levels.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

Recognizing the challenges of transformation across all courses, Swinburne University took a strategic approach to course renewal through centrally supported professional development. Such programs have been variably taken up by faculty members, often attracting the 'converted' with those most in need not engaging in professional development. The variable engagement reflects the complexity of learning design and its scholarship and the difficulty for staff to see a path to action and impact.

“The 5-Pillar Educational Leadership model of Fields, Kenny, & Mueller (2019) provides a useful lens for designing and implementing our Professional Learning Program to engage staff.”



CURRENT ROLE

Dr. Charlotte Brack is currently Acting Director of Transformation & Learning at Swinburne University of Technology, Australia. In this role Charlotte leads core initiatives and activities, underpinned by the Scholarship of Teaching and Learning, which build the capability of staff for providing transformative student learning experiences across curricula, modalities, strategic initiatives and innovation. A central aspect of this work is an academic development program which offers personalized opportunities for staff to meet the strategic goals of the university. This requires collaboration across organizational units and leadership in the context of complex agendas.

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The *5-Pillar Educational Leadership* model of Fields, Kenny, & Mueller (2019) provides a useful lens for designing and implementing our Professional Learning Program to engage staff. The Program was developed collaboratively with diverse interdisciplinary stakeholder groups specifically to support course renewal but available to all staff. The collaboration drew on *Affective Qualities* by modelling benefits of co-creation of teaching and ensuring the Program offers relevant and personal outcomes for staff helping to frame academic identity (Clarke, Hyde & Drennan, 2013). The Program recognizes the diversity of staff enabling them to personalize a learning path. It encompasses two complementary approaches: ‘capability building’ that supports and enables learning centred course design offered through blended learning themed workshops modelling good learning design (*Teaching Excellence*) with an emphasis on innovation and transformative learning (*Action-orientation*); and ‘scholarly teaching’ including coaching and mentoring through Communities of Practice (*Mentoring and Empowering*). These approaches together provide a framework that supports teachers in conceptualizing their teaching from initial articulation of a course vision to learning and assessment activities, and opportunities to evaluate the impact of their teaching (*Pedagogical Research*).

IMPACT

The effectiveness of the Program initiated in 2019 for the course transformation project at Swinburne is yet to be determined. Impact will be measured in terms of engagement with the Program (participation), and articulation of the course (rigour and integrity) undergoing development. The latter will be assessed through evaluation of the course documentation against the guidelines and mapping criteria. Impact of a similar Program used by the author at another institution in 2018 was measured in terms of staff participation and feedback through evaluation survey and focus groups data (unpublished). Preliminary results showed that the approach positively influenced how faculty staff viewed their role, and empowered them to engage in scholarly activities related to learning and teaching. The ‘strategic academic’ perspective gave staff a way of connecting to their professional purpose and owning their academic identity. The layering of the program from whole-of-course design to blended ‘classroom’ activity and assessment design gave staff a pathway through which they could see benefits of engaging with the academic development opportunities offered.

RELATED REFERENCES

- Clarke, M. Hyde A. & Drennan, J. (2013). Professional identity in higher education. In B.M. Kehm & U. Teichler (Eds.), *The academic profession in Europe: New tasks and new challenges*, (7-22). Dordrecht: Springer. http://dx.doi.org/10.1007/978-94-007-4614-5_2

NETWORKS

Council of Australasian University Leaders in Learning and Teaching (CAULLT) <https://www.caullt.edu.au>

Higher Education Research and Development Society of Australasia <http://www.herdsa.org.au/>

Australasian Society for Computers in Learning in Tertiary Education <https://ascilite.org/>

Society for Learning Analytics Research <https://solaresearch.org/>

CASE #6

MENTORING FOR TEACHING IMPROVEMENT

ANGELA CARBONE, SWINBURNE UNIVERSITY OF TECHNOLOGY, AUSTRALIA

DISCIPLINE: Computing Education, Higher Education

RESEARCH AREAS: Improving student learning of programming, academic professional development, peer assisted teaching and learning, developing employability skills in students

PURPOSE / CONTENT

Often faculties struggle to support academics whose units (subjects) receive low student satisfaction. The Peer Assisted Teaching Scheme (PATS) provides an example of how educational leadership is applied to utilise mentoring to promote educational excellence, improve teaching practices and unit evaluations, and develop educational leadership within academies.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

PATS involves structured peer-to-peer mentoring with activities running pre-semester, during semester and post semester and includes formal educator development. PATS is based around the benefits of social interactions, situated within the context and culture of an academic's teaching role, and relies on peer collaboration and mentoring.

REFLECTING ON AND APPLYING THE FIVE PILLAR MODEL

The 5-Pillar Model of Educational Leadership (Fields, Kenny, & Mueller, 2019) is useful for

examining the PATS initiative. PATS builds on the current research that highlights the benefits of Peer Assisted Learning (PAL) programs and draws on Vygotsky's socio-cultural theory (Vygotsky, 1978) and Lave's situated learning literature (Lave, 1988) but applies it to academic teaching staff. Its purpose is to help colleagues strengthen their teaching and learning practices via a peer-to-peer mentoring partnership and overcome barriers that might prevent them from making changes to their units. The program has necessitated both formal leadership from the National Teaching Fellow, providing ongoing leadership regarding strategies, structures and processes, as well as distributed and shared leadership across the institution, drawing on Associate Deans of Learning and Teaching for management and resources, a PATS coordinator to engage with the participants and ensure ongoing momentum of the scheme and the central university services for professional development (Jones, et al., 2016).

Academics whose units are flagged as needing improvement are invited by Associate Dean Learning

“The Peer Assisted Teaching Scheme (PATS) provides an example of how educational leadership is applied to utilise mentoring to promote educational excellence, improve teaching practices and unit evaluations, and develop educational leadership within academies.”



BIOGRAPHY

Professor Carbone has extensive teaching, leadership and research experience, and has held various educational leadership positions throughout her academic career. She was the inaugural Academic Director of Education Excellence for the Office of Learning and Teaching at Monash University. Prior to that she was the Associate Director of the Office of the Pro Vice-Chancellor (Learning and Teaching) and the Director of Education Quality in the Faculty of Information Technology at Monash University. Her teaching achievements have been recognised nationally, being the first female academic to be awarded the Australia's highest teaching award: the Prime Minister's Award for University Teacher of the Year (1998), and secured two National Teaching Fellowships (ALTC National Teaching Fellowship 2010, OLT National Senior Teaching Fellowship 2012). Angela chairs and engages with a number of national and international networks that are focused on improving the quality of learning and teaching in higher education.

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and Teaching to participate, along with academics with outstanding reputations as teachers. Participation, however, is voluntary, and the invitation to exemplary teachers is to inspire **teaching excellence**. Once participation is agreed, the PATS coordinator engages with the participants via touch points throughout the semester. As a leader, it was important to draw on **effective qualities** to establish trust and build relationships with the partners who participated in the scheme. This was achieved via open communication, regular touch points that were built into the scheme (briefing, debriefing sessions and mid-semester catchups) to address any concerns. The scheme itself is **action-oriented**; academics were required to set goals and implement strategies to achieve their goals. During the semester the partners **mentor and empower each other**. They review each other's mid-term student feedback, undertake a peer observation of each other's teaching and share insights and offer advice. This was required to achieve longer term transformation. In many cases the partners used the data they gathered to engage in **research and scholarship**, disseminating the changes they had made to their practices.

IMPACT

The effectiveness of the scheme is measured via changes in course evaluation ratings and a thematic analysis of the focus group data. At the university where the scheme was originated, PATS engaged 30 academics and improved units needing critical attention. The scheme has been adapted by many Australian and international universities to suit their context and serve as a model to enhance unit and teaching performance. Results show an overall improvement in student satisfaction of the quality of units and highlights both the opportunities and challenges PATS provides academics for teaching improvement. More so, the strength of the evidence of effectiveness of the program has led

to keynote addresses, occasional addresses and presentations in universities both within Australia and overseas.

RELATED REFERENCES

- Carbone, A. (2014). A peer-assisted teaching scheme to improve units with critically low student satisfaction: Opportunities and challenges. *Higher Education Research and Development (HERD)*, 33(3), 425-439.
- Carbone, A., Evans, J., Ross, B., Drew, S., Phelan, L., Lindsay, K., Coffman, C., Stoney, S. & Ye, J. (2017). Assessing distributed leadership for learning and teaching quality: A multi-institutional study. *Journal of Higher Education Policy and Management*, 39(2), 183-196.
- Fields, J., Kenny, N., and Mueller R. (2019): Conceptualizing educational leadership in an academic development program. *International Journal for Academic Development*, DOI: 0.1080/1360144X.2019.1570211
- Lave, J. (1988). *Cognition in practice: Mind, mathematics, and culture in everyday life*. Cambridge, UK: Cambridge University Press.
- Ross, B., Carbone, A., Lindsay, K., Drew, S., Phelan, L., Cottman, C., & Stoney, S (2016). Developing educational goals: Insights from a Peer Assisted Teaching Scheme. *International Journal for Academic Development*, 21(4), 350-363.
- Vygotsky, L.S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

CURRENT ROLE

Professor Angela Carbone is the Associate Dean Learning Innovation in the Faculty of Science, Engineering and Technology at Swinburne University. In this role Angela leads strategic educational development and provides oversight of the operational implementation of strategies relating to Learning, Teaching and Scholarship. Overall, she has accountability for ensuring the implementation of the University's Learning and Teaching strategy within her Faculty. Often this includes facilitating leadership of teaching and learning innovation, driving specific agendas and ensuring the quality of courses and programs.

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NETWORKS

Council of Australasian University Leaders in Learning and Teaching (CAULLT) <https://www.caullt.edu.au>

Australian Council of Deans ICT (ACDICT) acdikt.edu.au

Australian Learning and Teaching Fellows altf.org

Victoria/Tasmania Promoting Excellence Network (VTAS PEN) vtasnetwork.com

CASE #7

TEACHING AND LEARNING ENHANCEMENT GRANTS: CULTIVATING EDUCATIONAL LEADERSHIP

MIRIAM CAREY, MOUNT ROYAL UNIVERSITY, CANADA

DISCIPLINE: Educational Development, Teaching Innovation, Higher Education
RESEARCH AREAS: Scholarship of Teaching and Learning (SoTL)

PURPOSE / CONTENT

Mount Royal University has a long tradition of supporting teaching excellence through the services and programming of its Academic Development Centre (ADC). More recently, the Provost's Office has become more directly engaged in providing additional funding for innovations and risk-taking in teaching, a form of educational leadership.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In 2013/14, The Provost's Office created (and funded) Teaching and Learning Innovation Grants (TLIG), renamed in 2016/17 as the Teaching and Learning Enhancement Grants (TLEG). Faculty are invited to apply for grants up to \$5,000 per annum to support the enhanced use of technology and/or other innovations in their teaching. Applications from faculty are adjudicated by a team from the ADC, together with the Vice-Provost & Associate Vice-President Teaching and Learning. The ADC assigns a partner with specific expertise to the faculty member as they design and execute their project. Faculty are encouraged to disseminate their project findings through appropriate mechanisms, including our annual Celebrate! Teaching and Learning event.

“... there is some agreement that distributed models of leadership might be useful in understanding various aspects of educational leadership that exist outside the traditional hierarchical structures or positions. Our Teaching and Learning Enhancement Grant (TLEG) program offers a powerful example of distributed leadership in action.”

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

Educational leadership takes many forms, not all of which are related to position or title or authority (decision-making rights). As discussed by Fields, Kenny, and Mueller (2019, p.2), the concept may be contested but there is some agreement that distributed models of leadership might be useful in understanding various aspects of educational leadership that exist



BIOGRAPHY

Professor Miriam Carey was tenured in the Department of Policy Studies in 2005 and was seconded into Mount Royal University's Academic Development Centre from 2011-15. Her teaching experience began in Political Science and Policy Studies, extended into General Education foundational courses, and culminated in her role as a Faculty Development Consultant. She is engaged in the Scholarship of Teaching and Learning and has published four articles on her research to date. Miriam is interested in empowering and supporting students and colleagues, and she delivers a leadership course which has a decidedly ontological outcome (rather than epistemological outcomes) – leaving participants being leaders rather than knowing a whole lot about leaders.

outside the traditional hierarchical structures or positions. Our Teaching and Learning Enhancement Grant (TLEG) program offers a powerful example of distributed leadership in action. By providing funding (from the Provost's Office) and expert supports (from the ADC) to faculty whose innovative proposals have been accepted, we are investing in educational leadership through the faculty members proposing their exploration of teaching innovations.

The purpose and outcomes of our TLEG program strongly align with the Five-Pillar Model for conceptualizing educational leadership (Fields, Kenney, & Mueller 2019). Faculty members applying for TLEGs, by definition, are opening themselves to facilitative partnerships in which their willingness to listen is matched by their vulnerability as they explore new teaching territories (**affective qualities**). With its emphasis on teaching innovations, TLEG focusses faculty attention on **action-orientation** and more broadly on **teaching excellence**. There is also recognition that advancement in teaching and learning will emerge from risk-taking and learning from the outcomes of new practice and/or technological innovation. The partnerships between ADC experts and faculty members exemplify the **mentoring and empowering** relationships between colleagues and are an important example of distributed leadership. In terms of **research and scholarship**, some faculty members with TLEGs are exploring the impact of their innovations through the Scholarship of Teaching and Learning (SOTL), although this is not a requirement of the program. The TLEG program's main purpose is to advance teaching excellence and innovation, and scholarly activities and products that arise from it are valuable contributions that are not part of its underlying mission.

IMPACT

A range of criteria have been used to assess the impact of the TLEG program. One measure is the number of projects supported since its inception. To date, thirty-four projects have been supported since 2013/14 (notably, none were supported in 2014/15), which represents an average of six annually. Total financial support from the Provost's Office to date has been ~\$130K, an average of \$3.75K per project. It is notable that although the maximum grant available is \$5K to seed an innovative project, many applications have been under that level. Although an assessment or impact schema was not set up at the beginning of this program, we have seen several faculty members take their initial projects and develop them further in later applications for TLEGs, and we are now implementing an impact reporting system for faculty members who have benefited from multiple TLEG project grants.

RELATED REFERENCES

- Jacqueline Fields, Natasha Ann Kenney & Robin Alison Mueller (2019): Conceptualizing educational leadership in an academic development program, *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211

CURRENT ROLE

Dr. Carey is currently the Interim Academic Director of the Academic Development Centre (ADC) at Mount Royal University, Canada. She works with a team of 18 staff professionals and faculty members, providing educational development opportunities to faculty members across the university. In this role, she coordinates the activities of the Centre and contributes to a wide variety of pan-university Committees responsible for teaching and learning and the effective use of educational technologies. On behalf of the entire ADC Team, Miriam is pleased to submit this mini-case study. Additionally, Dr. Carey is the Speaker of our Chairs' Assembly.

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NETWORKS

Educational Developers' Caucus of Canada (EDC)

International Society for the Scholarship of Teaching and Learning (ISSoTL)

The Professional and Organizational Development Network in Higher Education (POD)

Society for Teaching and Learning in Higher Education (STLHE)

CASE #8

MENTORSHIP OF GRADUATE STUDENTS IN TEACHING & PEDAGOGICAL RESEARCH

ANDREW P. DICKS, UNIVERSITY OF TORONTO, CANADA

DISCIPLINE: Chemistry Education, Higher Education

RESEARCH AREAS: Graduate student mentorship, teaching assistant (TA) training, undergraduate curriculum redesign, collaborative/cooperative learning

PURPOSE / CONTENT

During the last few years, the Department of Chemistry at the University of Toronto has introduced several supports and opportunities related to mentorship of their graduate students from a teaching perspective. These include: (i) enhanced training of new TAs in best pedagogical practices; (ii) formalized in-class instructional observations; and (iii) a unique Chemistry Teaching Fellowship Program (CTFP) that facilitates undergraduate curriculum renewal.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

Many university faculty and administrators have historically assumed that, having obtained an undergraduate education, graduate students “know how to teach”. The formal training and mentorship so essential to growth as an educator is therefore not always provided. The Department of Chemistry has invested in an educational leadership project where incoming graduate students undergo standardized, specific training in effective teaching techniques, both in tutorial and laboratory environments. Following this, TAs that tutor in first-year undergraduate courses for life science students are observed in the classroom by teaching faculty, with an in-person “debrief” taking place afterwards. Consequently, upper-

year graduate students interested in curriculum design may apply for a fellowship that directly pairs them with a faculty advisor, which affords them the chance to positively influence the education of many undergraduates.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

The educational leadership exemplified through implementing this approach is closely aligned with the Five Pillar Model framework. The **effective qualities** of establishing trust and facilitating the building of relationships begins with a highly interactive half-day workshop designed for new graduate students, which is co-organized by a senior TA and a faculty member. Here, scenario-based activities are enacted through “real-world” case studies, to educate the graduate students about what they will encounter in their teaching spaces. Formation of collective, collegial “teaching teams” in different courses that are comprised of faculty instructors and TAs lends support to a robust **mentorship model**, where advice about and insight regarding **teaching excellence** is readily shared. Following this, relationships are deepened by individual, pre-arranged classroom visits by course coordinators which are deconstructed in detail afterwards. This feedback is powerful for the TAs who are, in essence, being “taught how to teach” and how to effectively communicate with undergraduates in order to



BIOGRAPHY

Andrew P. Dicks (Andy) holds the position of Professor, Teaching Stream at the University of Toronto. He has research interests in undergraduate laboratory instruction that involve designing novel and stimulating experiments, particularly those that showcase green chemistry principles. In 2014 he was co-Chair of the 23rd IUPAC International Conference on Chemistry Education which was held in Toronto.

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“Over 70 graduate students have participated in the Chemistry Teaching Fellowship Program (CTFP) since its inception, leading to meaningful and ongoing curriculum renewal with several high-impact projects now published in the chemical pedagogical literature (e.g. Sues et al., 2015; Obhi et al., 2019).”

improve their learning experience. Having received this training, the CTFP provides select graduate students (fellows) with a funded opportunity to develop, implement and evaluate new initiatives in concert with an assigned mentor from among the research or teaching streams (Kim et al., 2017). As an example of **action orientation**, applicants typically craft proposals to design novel laboratory experiments, tutorial activities, workshops, in-class demonstrations, lecture material and other course resources with a view to spending 50 hours on a specific activity. Aside from developing resources, Fellows may also implement material as if they actually were the course instructor (e.g. deliver lectures, conduct workshops, and perform in-class demonstrations). They are also encouraged to investigate the impact of their project on student learning, and to reflect on their development as chemistry educators. In this manner, and under the guidance of a mentor, the CTFP graduate students are deeply engaged in **pedagogical research** and scholarship activities in order to effect positive change.

IMPACT

Feedback from graduate students regarding these activities has been very positive and encouraging. An underlying theme is that they feel initially supported in the department as TAs and not just as researchers, and that they have the option to receive significant group and personal input on their teaching activities.

Over 70 graduate students have participated in the CTFP since its inception, leading to meaningful and

ongoing curriculum renewal, with several high-impact projects now published in the chemical pedagogical literature (e.g. Sues et al., 2015; Obhi et al., 2019). An intention is to extend this “mentorship for teaching” approach to include additional TA training. This may be either in the form of incorporating more “front-end” workshop time, or potentially through the creation of a semester-long seminar course focusing on model educational practices.

RELATED REFERENCES

- Kim, K. S. et al. (2017). The Chemistry Teaching Fellowship Program: Developing curricula and graduate student professionalism. *Journal of Chemical Education*, 94, 439-444.
- Obhi, N. K. et al. (2019). Comparing industrial amination reactions in a combined class and laboratory green chemistry assignment. *Journal of Chemical Education*, 96, 93-99.
- Simmonds, A. H. & Dicks, A. P. (2018). Mentoring and professional identity formation for teaching stream faculty: A case study of a university peer-to-peer mentorship program. *International Journal of Mentoring and Coaching in Education*, 7, 282-295.
- Sues, P. E. et al. (2015). Template effect and ligand substitution methods for the synthesis of iron catalysts: A two-part experiment for inorganic chemistry. *Journal of Chemical Education*, 92, 378-381.

CURRENT ROLE

Andy is currently about to commence a second term as Associate Chair, Undergraduate Studies in the Department of Chemistry. Previously in this role he has overseen the development of a department-wide initiative to improve the writing skills of chemistry students, and a successful first-year undergraduate “Course Community” mentorship program. His involvement in the latter activity has led to great interest in peer-to-peer mentoring models across the university. As Associate Chair, Andy is responsible for providing ongoing leadership in undergraduate curriculum renewal, innovation within classroom and laboratory environments, and other pedagogical advancements. He became a Canadian 3M National Teaching Fellow in 2016, having previously earned the University of Toronto President’s Teaching Award and the Chemical Institute of Canada National Award for Chemistry Education.

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NETWORKS

Society for Teaching and Learning in Higher Education (STLHE): www.stlhe.ca

Chemical Institute of Canada: www.cheminst.ca

CASE #9

DEVELOPING AND IMPLEMENTING HUB-AND-SPOKE MODELS OF OPERATIONS

NINA FOTINATOS, FEDERATION UNIVERSITY, BALLARAT, AUSTRALIA

DISCIPLINE: Higher Education, Learning and Teaching Leadership, Management

RESEARCH AREAS: Leadership, management, mindfulness, academic student support, academic professional development



PURPOSE / CONTENT

Federation University (FedUni) Australia is a multi-campus regional university whose purpose is to 'transform lives and enhance communities' ([Strategic Plan 2018-2022](#)). FedUni is taking a transformational approach to build on our unique opportunities, respond to the higher education landscape and deliver high quality learning, teaching and research skills. FedUni has new campuses in Berwick (Melbourne) and Brisbane, with main campuses situated in regional Victoria (Ballarat, Gippsland and Wimmera region). FedUni has a long-standing history of international partner providers with the most recent in China. The university has approximately 21,125 students and 1,350 full time equivalent academic and professional staff across the organisation. The Academic Portfolio contains six schools and several central service provision areas. This includes the Centre for Learning, Innovation and Professional Practice (CLIPP).

“The complexity with leading any central service is determining the right balance between connecting with schools, and autonomy and efficiency of practice.”

In June 2014, I commenced the role, Director, CLIPP with renewed enthusiasm to support school learning and teaching (L&T) across the university. The focus of CLIPP is to provide academic professional development, innovative learning and teaching strategies and services supporting student transition, orientation and academic success. The complexity with leading any central service is determining the right balance between connecting with schools, autonomy and efficiency of practice.

I lead approximately 32 staff with skills in learning design, learning and teaching technology, lecturing, student support, and learning skills advisors. Over the years, the centre has been involved with a range of L&T and student success/retention initiatives.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

Over time, there has been misalignment between school L&T priorities and timely support from central service areas. Learning and teaching professional services are delivered across universities in a variety of models. Some models provide fully embedded staff within schools. Some models provide support from fully central units. CLIPP has piloted and now implemented a hybrid hub-and-spoke model of L&T support since 2016. In 2016, six learning designers from CLIPP commenced roles whereby 60% of their time

BIOGRAPHY

My background prior to entering academia was predominately within the medical science and public health. After 10 years in diagnostic pathology, I transitioned into the higher education sector in 2009. My key focus area was developing innovative learning and teaching practices within medical curricula. This initiative received institutional (2010) and national recognition as an Australian Learning and Teaching Citation (ALTC) (Early Career) Winner in 2011. I played an integral role in the first delivery of the Bachelor of Biomedical Science degree at FedUni (2009). Prior to commencing as the CLIPP Director, I held senior positions across the university as the Associate Dean (Learning and Teaching) (2012-2014) and Chair, Learning and Teaching Committee (2012-2015).

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was spent being physically located in schools and 40% in CLIPP (per week). This arrangement has been highly successful and in 2018, CLIPP introduced [CLIPP School Support Team](#), to further extend this arrangement.

REFLECTING ON AND APPLYING THE FIVE PILLAR MODEL

1. Affective Qualities: The entire CLIPP School Support Team is based around positive, open relationships with school leaders, empathy to their specific discipline needs and challenges, demonstrating confidentiality and openness while addressing school curriculum priorities.

2. Mentorship and Empowerment: An important focus has been on helping colleagues to strengthen their teaching and learning practices; mentoring and coaching colleagues; removing barriers; sharing resources; building capacity for growth; sharing insights and advice; and bringing colleagues together. Over the past 5 years, I have mentored academic staff in all areas of academia: learning and teaching, research and service/leadership. Within the CLIPP School Support Team, I provide mentoring and coaching support particularly to the learning designers. Mentoring conversations include advice and skills relevant to working with school leaders, leading effective teams, managing conflict and collaborating effectively towards common goals. My mentoring approach is heavily influenced by Situational Leadership II™ and focuses on correct alignment between goal setting, diagnosing staff skill sets (i.e., competence and commitment), matching the style of leadership, and supporting staff over a period of time. I firmly encourage collective team cohesiveness and team-based methodology.

3. Action Orientation: At the commencement of each teaching semester, I coordinate a meeting with the school leaders and the learning designers to discuss upcoming school priorities and initiatives. These priorities are discussed and collated as 'Scope of Project' summaries. These summaries are co-developed with learning designers and school staff, prior to seeking school endorsement. As leaders of the CLIPP School Support Teams, learning designers share this information with their specific team. The team develops a strategic approach that best utilizes varied skill sets (i.e., from all members of the team) that align with meeting goal objectives efficiently and effectively.

4. Teaching Excellence: The Scope of Project summaries are focused at course, program and/or discipline level. They include aspects of student engagement, curriculum (i.e., assessment, feedback strategies and online learning environments), and/or targeted academic professional learning. The CLIPP School Support Team collaborate to identify the most efficient and effective method to achieve the target goals. Teaching excellence initiatives link best practice frameworks with reviews/audits, targeted staff support, working with Program and/or Discipline Leaders/Coordinators and using relevant, timely data that encapsulates the student experience.

5. Pedagogical Research: In my capacity as CLIPP Director, I currently publish across a wide-span of discipline areas. I stay engaged with national and international trends through my engagement with social media and with targeted publications. As yet, I have not published specifically on the CLIPP School

CURRENT ROLE

Currently, I am an Associate Professor, Federation University, Ballarat Australia. Since June 2014, I have successfully led the CLIPP team in a number of learning and teaching initiatives, and more broadly, have led and supported initiatives such as the improvement of sessional staff experience, work integrated learning and an institutional project for Bronze Award Accreditation for Science in Australia Gender Equity (SAGE). In addition to academic development and student retention and success initiatives, I also have a strong interest in leadership styles, management and strategies to better integrate central and school learning and teaching priorities.

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NETWORKS

[Society for the Provision of Education in Rural Australia](#) (SPERA), Executive Committee Member

[Regional University Network](#) (RUN), Pro-Vice Chancellor, Learning and Teaching Leaders

[Council of Australasian University Leaders in Learning and Teaching](#) (Member 2014-2018)

Support Model although I envisage this prospect in the near future. My research engagement fluctuates with university and related priorities. I have also built a reputation with the [Regional University Network \(RUN\)](#) and engage in scholarly discussions with the RUN PVC (Pro-Vice Chancellor) L&T Group.

IMPACT

The CLIPP School Support Team has allowed systematic engagement, prioritisation and follow-through with specific curriculum improvements and/or academic professional learning growth. The model has allowed for:

- Systematic engagement with school leaders regarding curriculum and staff development priority areas
- Building strong networks, connections and relationships with school staff
- Clear endorsement of school projects that can be supported by multi-discipline teams of staff
- Projects aligned with scope, accountability, team-work and successful outcomes geared towards student experience
- Positive example of central services supporting schools in a hub-and-spoke model which is reviewed bi-yearly.

RELATED REFERENCES

- Fotinatos, N. (2018). The role of mindfulness in managing HRM challenges for senior higher education learning and teaching leaders. In Lemon, N., & McDonough, S. (Eds.) *Mindfulness in the Academy*. Pp 173-185. Singapore: Springer Singapore. doi: 10.1007/978-981-13-2143-6_11
- Fotinatos, N. (2017). The impact of human resource challenges and central ADUs. Council of Australian University Leaders in Learning and Teaching (CAULLT). Retrieved from <https://www.caullt.edu.au/project/the-impact-of-human-resource-challenges-on-central-adus/>
- Fotinatos, N. (2017). Well beings led well-being. Council of Australian University Leaders in Learning and Teaching (CAULLT). Retrieved from <https://www.caullt.edu.au/project/wellbeings-lead-well-being/>
- Fotinatos, N., & Sabo, E (2017). Impact of centrally coordinated higher education pre-commencement of teaching student support initiative (FedReady) on student engagement: A regional university case study. *Student Engagement in Higher Education Journal*, 2(1), 86-92. Published online 2018 <https://journals.gre.ac.uk/index.php/raise/article/view/Fotinatos>
- Weuffen, S.L., Fotinatos, N., & Andrews, T. (2018). Evaluating sociocultural influences affecting participation and understanding of academic support services and programs (SSPs): Impacts on notions of attrition, retention, and success in higher education. *Journal of College Student Retention: Research, Theory & Practice*, Published online October 9, 2018. doi: 10.1177/1521025118803847

CASE #10

TEAMING UP TO RE-IMAGINE UNDERGRADUATE EDUCATION

MICHELLE FRENCH, UNIVERSITY OF TORONTO, CANADA

DISCIPLINE: Biology Education, Higher Education

RESEARCH AREAS: Enhancing student learning and engagement through the development, examination and use of new teaching approaches, technology and assessment tools.

PURPOSE / CONTENT

In 2014, Dr. Melody Neumann, University of Toronto (U of T), developed an EdTech tool called Team Up! for online courses. Students sign onto Team Up! and work in groups to answer questions. Key features include immediate feedback, automatic uploading of marks and secure data storage. Dr. Neumann then created a prototype with a dynamic grouping function to facilitate Team Up! use in face-to-face classes.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

The dynamic grouping function of the prototype along with the original features interested Drs. Michelle French and Franco Taverna, who, along with Neumann, were looking for new ways to introduce active learning into large lecture classes (200-1300 students). French, Taverna and Neumann then worked together to acquire Learning and Education Advancement (LEAF) funds from U of T to support the further development and testing of Team Up!. The LEAF grants themselves are an initiative of Vice-Provost Susan McCahan and her newly formed Office of Innovations in Undergraduate Education. The team also proposed and developed a novel cross-disciplinary, case-based teaching approach involving the use of Team Up!. With each trial of Team Up!, user data were collected and the tool was refined. During this time, team members communicated

“A challenge for developers of technological tools, especially in academic settings, is supporting and sustaining their development and use. This requires educational leaders who can help secure additional funding, and those who can act as early adopters and champions.”

their successes to their own networks. In 2018-19, Team Up! was used by 6,300 students in ten courses.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

A challenge for developers of technological tools, especially in academic settings, is supporting and sustaining their development and use. This requires educational leaders who can help secure additional funding, and those who can act as early adopters and champions. Many of the features of educational leadership articulated in the Five-Pillar Model resonate in this case. **Affective qualities:** Neumann, French, Taverna have known each



BIOGRAPHY

Over the past 20 years, Michelle has taught courses at the University of Toronto in the life sciences and scientific communication. She holds a BSc and an MSc from the University of Toronto (U of T) and a PhD in physiology from Western University. Her post-doctoral studies were conducted at WEHI in Melbourne and at the Hospital for Sick Children in Toronto. She is the recipient of ten teaching awards, including a 2017 U of T President's Teaching Award.

other for over 15 years and have previously worked together. They trust and listen to one another, keep each other motivated and on track, and have a diverse but overlapping range of skills and experience. The team held several meetings to formulate their grant proposal and to develop course materials and an evaluation strategy. **Mentorship and empowerment:** Each team member is an educational leader, who has earned the respect of colleagues, teaching assistants and students in their own departments and beyond. This was important for championing the use of Team Up! across the university. For example, French invited Neumann to deliver a presentation to educators in the Faculty of Medicine and the presentation resulted in the early adoption of Team Up! by three attendees. French also gave a presentation at a meeting of U of T's President's Teaching Academy, which generated interest in Team Up! at other U of T campuses. As well, an article was circulated to the university community at large. **Action-orientation:** Each team member took risks in introducing a newly developed technology and new approach to teaching into their traditional lecture classes. Neumann's course consists of 1400 first-year students taught in two sections, where concerns about WIFI access were acute. French worked with two faculty members in her own department to transform two 50-min lectures into a small group problem-solving sessions with 1000 students. **Teaching excellence:** Each team member and all of the early adopters are experienced teachers who are committed to the success of their students and to using and promoting evidence-based teaching practices. Their students respect them and are more forgiving if things don't go exactly as planned. **Research and scholarship:** Team Up! was initially

designed based on results from pedagogical research demonstrating that group work, peer teaching, low-stakes testing and immediate feedback enhances student learning and reduces drop rates. Likewise, the team is engaged in research to study the effectiveness of their novel multi-course, case-based approach using Team Up! Team members have presented preliminary results of their findings at local and international conferences. The results collected to date are promising and will encourage others to adopt new technologies and teaching models.

IMPACT

Students reported that the game-like nature of Team Up! was fun to use and that the in-class group worked allowed them to get to know their fellow students and acquire a deeper understanding of the course material. When Team Up! was combined with real-world cases, students stated that they could see how knowledge was applied. Instructors reported that they were able to introduce active learning into their courses in a time-efficient way. Dr. Neumann has made Team Up! free for students and instructors to use. As a result, even though the tool was in a developmental stage during the 2019-19 academic year, the 6,300 students who used Team Up! collectively saved over \$250,000 CDN because they did not have to purchase a clicker or pay a license for commercial software (based on a \$40 clicker/license fee). The broad exposure of Team Up! across the University has prompted leaders in U of T's instructional technology community to explore new models to support the scale up of Team Up! across the University and to other institutions.

CURRENT ROLE

Michelle is an Associate Professor in the Teaching Stream and Vice Chair Academic (Undergraduate) in the Department of Physiology. As Vice Chair she oversees U of T's Programs of Study in Physiology. She was recently appointed to be Special Adviser to the Dean on Innovation in Undergraduate Education in the Faculty of Medicine, a newly established position. Michelle also teaches undergraduate courses in physiology and research to classes ranging from 30 to 1000 students. In these classes, she strives to incorporate innovative teaching practices and tools to enhance student engagement and learning.

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NETWORKS

Ontario Consortium of Biology Educators (Neumann, French, Taverna)

Online Teaching and Learning Community (Neumann, French, Taverna)

Ecampus Ontario (Neumann and Taverna)

President's Teaching Academy, University of Toronto (French)

RELATED REFERENCES

- Brown, P.C., Roediger III, H.L., & McDaniel, M.A. (2014). Making it stick: The science of successful learning. The Belknap Press, London.
- Epstein, M.I., Lazarus, A.D., Calvano, T.B., Matthews, K.A., Hendel, R.A., Epstein, B., & Brosvic, G.M. (2002). Immediate feedback assessment technique promotes learning and corrects inaccurate first responses. *The Psychological Record*, 52, 187-201.
- Freeman, S., Eddy, S.L., McDonough, M., Smith, M.K., Okoroafor, N., Jordt, H., & Wenderoth, M.P. (2014). Active learning increases student performance in science, engineering, and mathematics. In proceedings of the *National Academy of Sciences*, (111)23, 8410-8415.
- Hake, R.R. (1998). Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses. *American Journal of Physics* 66, 64-74.
- Mazur, E. (1997). Peer Instruction: A User's Manual. Prentice-Hall: Toronto.
- Michaelsen, L. K. (2004). Appendix A – Frequently asked questions about team-based learning and Appendix E – Speeding up team development with immediate feedback. In L.K. Michaelsen, K.A. Baulman, & L.D. Fink (Eds.), *Team-based learning: A transformative use of small groups in college teaching*. Sterling, VA: Stylus.
- Wood, W.B. (2004). Clickers: A teaching gimmick that works. *Developmental Cell*, 7, 796-798.

COLLABORATORS:



Melody Neumann is the creator of Team Up!, and has taught large introductory biology classes for three years. She has expertise in creating lecture videos for a second year online course and a partly-flipped course. She has a great deal of experience in designing and implementing in-class learning activities in fully online and blended classes. As well, she has expertise in creating animations that highlight key concepts.



Franco Taverna has extensive experience with innovation in teaching large introductory classes using technology to enhance student engagement. He has used online teaching tools including webinar software and Team Up! to promote an active learning environment. He has expertise in statistical analysis of very large data sets and in designing survey questions. He has received grants for the development of online courses and a neuroscience concept inventory.

CASE #11

ENACTING EDUCATIONAL LEADERSHIP THROUGH AN EDUCATION-FOCUSED CAREER PATHWAY

JOHAN GEERTSEMA, NATIONAL UNIVERSITY OF SINGAPORE, SINGAPORE

DISCIPLINE: Higher Education, Academic Development

RESEARCH AREAS: Academic identity, evaluation of teaching

PURPOSE / CONTENT

Recognition and reward of teaching is becoming increasingly important in higher education. In a process led by the Provost's Office, the education-focused pathway (the 'educator track') at the National University of Singapore (NUS) was recently overhauled in order to clarify expectations for promotion. The Centre for Development of Teaching and Learning supported the process of revising and enhancing the pathway by providing research-informed advice, and by devising academic development opportunities for prospective applicants.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In 2015, the NUS Provost's Office set up a task force, with representatives from across the university, to examine the challenges associated with the current educator track and propose a way forward. Their proposals for change focused on ensuring that the educator track should provide a clear and well-articulated pathway for career progression, and should offer parity of esteem and harmonization with the university's tenure track. To attain these ends, it was critical to ensure: (1) robust evidence of student learning that goes beyond perception, as is the case with student evaluations of teaching (SETs); (2) educational leadership through sharing of evidence of student learning, and

(3) arm's length review. Accordingly, the university overhauled criteria to reflect principles (1) and (2) and, to meet (3), constituted an external review panel for appointment and promotion to Associate Professor on the track. The panel consists of experts in higher education learning and teaching who, in lieu of external letters, prepare an evaluation based on the dossier. They interview applicants for appointment to Associate Professor remotely and, in the case of promotions, also visit the campus to observe classes.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

Underpinned by a recognition of the complexity of academic practice and academic identity, which in the context of higher education is lodged in the discipline within which an academic has developed expertise and conducts research, the NUS educator track career pathway takes a strength-based approach (Fung, 2017) to career progression. It thereby seeks to integrate the different dimensions and roles of academics, while at the same time recognising and rewarding their particular and diverse strengths in the teaching part of their roles (Fung & Gordon, 2016). In requiring demonstration of student learning through scholarly inquiry into and documentation of evidence of student learning, as well as evidence of educational leadership through sharing such scholarly inquiry, the enhanced educator career track both requires



BIOGRAPHY

Johan Geertsema (PhD, English) moved into the field of academic/educational development after many years teaching literature and academic writing across various institutions. He is an Associate Professor in the NUS University Scholars Programme, where he previously led the Writing and Critical Thinking domain.

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“Educational leadership is thus conceived as influence on other colleagues within the department and the institution more widely (though with seniority, also beyond it), and it is integrated with inquiry into student learning.”

educational leadership and itself enacts it. With reference to the Five-Pillar Model (Fields, Kenny, & Muller, 2019), the track enacts educational leadership by being **action-oriented** in that it expects demonstration of **teaching excellence**, while providing clear criteria and standards for such excellence. The track further expects that successful candidates take the lead by providing formal or informal **mentorship** to colleagues, and it seeks to empower them through provision of development opportunities. Such **empowerment** requires **effective qualities**, in particular the building of trust, which crucially means being attuned to and respectful of academics’ identity within/across their disciplines.

One implication of this respect is a redefinition of what is understood by **‘pedagogical research’**. What the educator track requires is not that academics change their identity in the service of promotion by expecting them to publish research in pedagogy, but instead to inquire into their teaching and their students’ learning so as to represent changes in learning: to demonstrate that they have made a difference. They need to go public with their inquiries, but there is no requirement that the act of going public meet research standards for the reason that they are experts in their disciplines, not the discipline of education. Instead of a narrow focus on publication and research quality evidence of student learning, candidates are expected to go public by documenting and sharing their inquiries locally within the department and the university, so as to shape teaching and learning culture. It is this act of sharing that

constitutes educational leadership in that it influences the practice of other colleagues in the department, faculty, school, or university—an influence that can itself be documented. Educational leadership is thus conceived as influence on other colleagues within the department and the institution more widely (though with seniority, also beyond it), and it is integrated with inquiry into student learning.

IMPACT

The first two promotion rounds under NUS’s new policy for the education-focused track have been completed. With these completed cycles have come valuable feedback from the external review panel, as well as from faculty and school representatives. This work has led to international presentations and publications (for example, Geertsema et al., 2018). While formal evaluation still needs to be executed, in particular with regard to the impact on the culture of the institution, the increase in the number of promotion cases submitted under the revised track scheme suggests that greater clarity in criteria and standards as well as what constitutes evidence of impact, and what is needed for progression, has been achieved. In addition, the reforms have had a cascading effect at the university, with changes being made to the ways in which teaching is evaluated—in particular, the need to move beyond student satisfaction in the form of SETs in order to demonstrate changes in student learning—and revisions to teaching excellence awards.

CURRENT ROLE

As Director of the NUS Centre for Development of Teaching and Learning (CDTL), Johan is responsible for leading the Centre. This includes directing various initiatives to support academics in their teaching role, including programmes for supporting academics’ professional development and learning; outreach and engagement by the Centre across and beyond the university; and policy and governance advice on matters relating to learning and teaching. In order to strengthen the research-practice nexus, he is active in the field of academic development. Among others, he is a co-editor of IJAD (International Journal for Academic Development), the journal of International Consortium for Educational Development, and is a member of the Universitas 21 Educational Innovation Steering Group.

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NETWORKS

Higher Education Research and Development Society of Australasia (HERDSA) <http://www.herdsa.org.au>

Universitas 21 <https://universitas21.com>

Network for the Enhancement of Teaching and Learning in Research-Intensive Universities (NETL) <https://blogs.helsinki.fi/netl-2018/>

International Society for the Scholarship of Teaching and Learning (ISSOTL) <https://www.issotl.com>

RELATED REFERENCES

- Fields, J., Kenny, N., & Mueller, R. (2019): Conceptualizing educational leadership in an academic development program. *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211
- Fung, D. (2017) Strength-based scholarship and good education: The scholarship circle. *Innovations in Education and Teaching International*, 54(2), 101-110. DOI: 10.1080/14703297.2016.1257951
- Fung, D. & Gordon, C. (2016). Rewarding educators and education leadership in research-intensive universities. York: Higher Education Academy.
- Geertsema, J., Chng, H., Gan, M, & Soong, A. (2018). Teaching excellence and the rise of education-focused employment tracks." In C. Broughan, G. Steventon, & L. Clouder (Eds.), *Global Perspectives on Teaching Excellence: A New Era for Higher Education* (pp. 130-142). London: Routledge.

CASE #12

HOLISTICALLY SUPPORTING APPLIED LEADERSHIP IN A HIGHER EDUCATION INSTITUTE

ELIOT HENDERSON, FREEDOM INSTITUTE OF HIGHER EDUCATION & NEW ZEALAND CURRICULUM DESIGN INSTITUTE, NEW ZEALAND

DISCIPLINE: Leadership in Higher Education

RESEARCH AREAS: Applied leadership, holistic faculty and learner support models, excellence in thought and action leadership, empowerment and change management, curriculum design and quality assurance systems

PURPOSE / CONTENT

The FREEDOM Institute of Higher Education is a private higher education institute in New Zealand dedicated to facilitation, management and advanced and applied leadership in the professional fields of business, health and higher education ([FREEDOM Prospectus](#)).

FREEDOM's objective is to 'create thought and action leaders for the world and it achieves this through quality immersive leadership programs, expert educational facilitation, holistic faculty and learner support systems (Fielden, Stevenson, Going, Grant, & Zagala, in press), and the provision of multiple real world opportunities for learners and faculty to practice leading in the institute, community, workplaces and fields. Learners and faculty leadership projects include leading positive changes or promoting a cause or vision. These challenging projects in turn support the development of the Institute's educational facilitator faculty to become educational leaders and their learners to follow pathways into leadership in a diverse array of fields, professions and endeavors. For example, the 2018 postgraduate applied leadership projects included dental care for local migrant and refugee communities, community diversity workshops, holistic well-being planning for community

organisations, increasing retailer profitability and sustainability, evaluation and continuous improvement of a hospital IT systems.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

This case study documents an immersive and holistic of institute approach to leadership development. Institute educational leaders begin supporting learners' leadership goals and aspirations from before learners physically arrive at the Institute. National and international learners pursuing professional qualifications at FREEDOM apply for the program, are interviewed and, if selected, commence and may remain at the institution for up to six years. Faculty lead within their areas of expertise, assisted by practicing real world sector leaders who may also mentor learners. Educational facilitators and learners employ work-integrated, practice-based, interactive and reflective practice-based learning approaches to co-create opportunities, where the application of learning is experienced first in the institute and then progressively in real-world contexts. Learners regularly reflect (Kolb, 1984) and share their insights in a community of practice with peers, faculty and community to continuously improve their leadership effectiveness. The cycles of philosophy, theory,



BIOGRAPHY

Eliot Henderson has held a role as a Director of the FREEDOM Institute of Higher Education and the New Zealand Curriculum Design Institute for over seven years. This directorship followed roles at Te Wananga O Aotearoa and in the retail sector in New Zealand. Eliot currently facilitates applied higher education leadership programs, focused on educational facilitation, curriculum design and educational management and leadership. He also provides consulting services to institutions seeking to improve quality and enhance faculty capability. A key work area is currently supporting the development of robust and innovative assessment through external moderation and professional development to support assessment design and implementation.

research and practice-based learning, followed by personal reflection, ensure that faculty and learners apply and improve their leadership practice through multiple real-world leadership learning opportunities. These are provided through applied research and community projects, workplace change initiatives, workplace leadership experiences, tutoring, supervision, coaching and mentoring (Jones, 2017). Evaluative research with employers of Institute graduates support the view that the resulting graduates are professional confident, work-ready and willing and able to take responsibility and lead.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

The Five-Pillar Model of educational leadership is a valuable framework not just for educational leaders but in a broader sense for also creating field, professional and community leaders for tomorrow. The Five-Pillar Model purposefully supports development of faculty and learners in the following key areas:

Affective Qualities: Creating an environment where leaders, both educational facilitators and learners may collectively have weekly discussions on a twenty-point Institute Professional Honour Code which encourages communication, self-assessment and reflection on affective qualities such as empathy, integrity, honesty and openness. Institutional leadership, faculty and learners all follow the same professional honour code as employees, contractors and learners.

Mentorship & Empowerment: Creating a supportive and safe environment between leadership, faculty and learners by engaging in formal and informal mentorship of leaders within the institution, workplaces and in the community, ultimately builds confidence in new leaders. A key element in the effectiveness of educational leadership is mentorship by experienced others; this in turn empowers both educational

facilitators and their learners to become passionate leaders who through their leadership capabilities can make real world changes at multiple levels.

“A key element in the effectiveness of educational leadership is mentorship by experienced others; this in turn empowers both educational facilitators and their learners to become passionate leaders who through their leadership capabilities can make real world changes at multiple levels.”

Action-Orientation: Promoting acts of leadership by faculty and learners builds confidence, knowledge and skill levels while honing beliefs, values, attitudes and the support systems leaders need. Learners within such a community of practice also develop the capacity to collegially support and encourage each other to achieve increasingly greater and more complex leadership feats. Anderson (2016) states that “students involved in leadership are by implication also involved in the day to day running of the school. A greater benefit of this is that by working together on school or wider community projects relationships between students and staff are strengthened. Students in leadership positions begin to take responsibility for their school. This in turn builds a positive school culture” (p. 21).

Teaching Excellence: Promoting and displaying educational leadership and especially professional feedback and feedforward skills, facilitators and learners support one another to identify each other’s needs, thereby

CURRENT ROLE

Alongside his directorship work, Eliot serves as Academic and Operations Manager at the FREEDOM Institute. Eliot has been a key part of the team implementing the Whare Tapa Rima – The Five- Sided Home – Faculty and Learner Support Model which won a national Best Practice Grant from Ako Aotearoa. The research will be published in written and film form in late 2019. Eliot is also engaged in the development of a national Business Leadership Needs project which will gather information about the needs of micro and small business sustainability requirements in New Zealand.

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NETWORKS

Leadership Institute Aotearoa New Zealand (LIAN)

International Society for the Scholarship of Teaching and Learning (ISSoLT)

Higher Education Research and Development Society of Australasia (HERDSA)

Australia/New Zealand Evaluators Association (ANZEA)

optimising and accelerating learning by both parties. As teaching excellence results in exceptional learning, it also heightens real-world leadership capabilities. Giving and receiving regular feedback and feedforward in 'safety' creates an environment where facilitators and learners can improve rapidly. This enables both parties to adapt and adopt ideas from each other to build teaching excellence within the institution and for learners in their future places of employment and leadership roles.

Pedagogical Research: By incorporating action and appreciative inquiry-based research methods and working alongside faculty, learners, workplaces or community organisations, learners can create and publish works that add value locally, nationally and internationally. As Cooperrider and Whitney (2005) have noted, "The seeds of change are implicit in the very first questions we ask" (p. 85). Appreciative inquiry-based research puts students in the role of leaders, creating a vision and planning a change pathway. For example, as part of their program, a postgraduate leadership learner who had previously worked in a traditional human resource manager role for many years led a holistic and Indigenous model-based well-being initiative with community organisations. This has considerable potential to generate written and audio-visual research publications that support improvements in the holistic well-being of employees.

RELATED REFERENCES

- Anderson, R. (2016). Investigating changing patterns in student leadership in secondary schools. Wellington: Ministry of Education - Educational Leaders.
- Cooperrider, D., & Whitney, D. (2005). Appreciative inquiry: A positive revolution change. In P. Holman, T. Devane, & S. Cady, (Eds.), *The change handbook* (pp. 73-89). Oakland, CA: Berrett-Koehler Publishers.
- Fielden, K., Stevenson, S., Going, N., Grant, S., & Zagala, K. (In press). Whare tapa rima: The five-sided home holistic learner support model. Wellington: Ako Aotearoa- Press.
- Jones, D. (2017). Leadership material: How personal experiences shape executive presence. UK: Hodder & Stoughton.
- Kolb, O.A. (1984). *Experiential learning: Experience as the source of learning and development* (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.

IMPACT

The short-term impact of creating an environment that encourages and promotes leadership within and between faculty, learners and community has had positive effects such as creating and building supportive and ongoing relationships, links with local community, fields and professions. The long-term impacts are expanding currently beyond the local environment and into the national and international environments as alumni, faculty and graduates gain leadership roles while being maintained by a strong supportive alumni and community network.

CASE #13

SHARED LEADERSHIP BRIDGES APPLICATION AND STRATEGY FOR TEACHING AND LEARNING SUPPORT TEAMS

LIZ JOHNSON, DEAKIN UNIVERSITY, AUSTRALIA

DISCIPLINE: Technology-enhanced Learning, Curriculum Renewal, Higher Education
RESEARCH AREAS: Curriculum transformation, building teaching and learning capability

PURPOSE / CONTENT

Deakin University, Australia has a strong focus on learner-centered curriculum, leveraging premium digital learning environments for both on-campus and online learners. Renewal of curriculum in an increasingly complex digital learning environment poses challenges for teachers and teaching support teams. A shared leadership model for teaching support combines deep local knowledge in application with institutional strategy and innovation projects. This sustainable teaching support model bridges the gap between teaching delivery and strategic intent.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In 2014, the Office of the Deputy Vice-Chancellor Education, Deakin University, re-built teaching support teams for curriculum renewal to facilitate whole-of-institution curriculum renewal. Separate teams were placed in each of the University's four Faculties: Arts & Education, Business & Law, Health and Science, Engineering & Built Environment. Each team includes design capability (academic developer, educational designer), production capability for learning resources (multi-media, video and web designers), and a project manager for co-ordination and task management. Teams are embedded in their home Faculty with day-

to-day management of the team by a senior Faculty learning and teaching leader (Associate Dean Teaching and Learning) and physical location near Faculty members. Teams remain structurally connected to the University strategy through the central teaching and learning portfolio, who retains budgetary control over positions in the team and shares supervision of team leaders with the Faculty. Functional connections are maintained through regular contact and collaborative work on innovation projects. Effective matrix management is maintained by close collaborative leadership between the Deputy Vice-Chancellor Education (university central leadership) and each Faculty Associate Dean Teaching and Learning (local Faculty leadership).

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

Teaching and learning is increasingly a team activity. Teaching in higher education is often shared between ongoing faculty staff and sessional staff or teaching assistants with varying levels of experience. Specialists in technology-enabled learning, inclusive curriculum, learning design, assessment, classroom practice, and evaluation of student experience have complementary skills to contribute to teaching practice, but co-ordination of many stakeholders can be overwhelming for individual



BIOGRAPHY

Professor Elizabeth Johnson is Deputy Vice-Chancellor Education at Deakin University in Melbourne, Australia. She is an Australian National Teaching Fellow and a Principal Fellow of the Higher Education Academy, UK and was the inaugural Director of the Teaching and Learning Centre of the Australian Council of Deans of Science from 2013-2018. Liz trained as a plant biochemist and taught university biochemistry for over 30 years. She now researches and publishes in areas associated with curriculum design and renewal, work-integrated learning, digital credentialing and capability-building for learning and teaching. At Deakin University, Liz's portfolio delivers Deakin's online learning environment and supports course development and building staff capability for learning and teaching.

“Effective management of complex teams working in dynamic circumstances requires considered leadership, which reflects the 5-Pillar Model of educational leadership.”

teachers. Using constructed teams to support curriculum renewal has been tested in Australian universities (Matthews et al, 2015; Sharma et al, 2017) and shows the values of multi-functional groups. At the same time, universities need to respond to changing educational contexts and the global growth of participation in higher education with large-scale projects and targeted investment. Effective management of complex teams working in dynamic circumstances requires considered leadership, which reflects the 5-Pillar Model of educational leadership.

Two levels of leadership are evident in this support structure. The Faculty teaching and learning support teams bridge the gap between the shared institutional priorities for learning and teaching, and the reality of teaching delivery. The bridge is effective because these teams have responsibilities and commitment to both central and Faculty leadership. They are local leaders and connectors; helping teachers to navigate a complex environment and ensuring information flows back to the centre to shape future decisions. The second level of leadership emerges from the collaboration between the central and Faculty managers of these teams. This is a respectful relationship based on shared aims and an appreciation of each context.

Both forms of leadership succeed through a shared commitment

to **teaching excellence** (Pillar 4) amongst team managers, team members and teachers. The teaching and learning support teams operate through influence so must persuade teachers through evidence-based practice oriented to **action** and problem-solving (Pillar 3). Teaching and learning support teams frequently partner with teachers in **pedagogical research** to drive engagement with innovation and build the evidence base to shape future strategic planning (Pillar 5). Distributed responsibility for working with teachers and feeding back into the broader strategy is supported by **mentoring and empowering** teaching and learning support teams (Pillar 2). This team environment and matrix management is reliant on **affective qualities** (Pillar 1); particularly trust and empathy to understand different contexts.

IMPACT

Although complex, this organisational structure is resilient and sustainable as it adjusts to pressures from different directions. The Faculty teaching and learning teams have been in place for five years, with structures and functions maintained through changes in all of the central and Faculty leaders and substantial changes in the team personnel. The teams have successfully adapted to support four whole-of-institution projects: curriculum renewal, multiple upgrades of the integrated digital learning environment, introduction of MOOC platforms and development and delivery of new active learning design across multiple disciplines. The teams have simultaneously become embedded in continuous improvement of courses and are now well recognised across the University. This project is recognised within the university as an internal curriculum renewal project. As yet, this work has not been externally referred for publication.

CURRENT ROLE

As Deputy Vice-Chancellor Education at Deakin University, Professor Johnson is responsible for the institutional policy framework and quality assurance for learning and teaching, development of the digital learning environment and the online student experience and major curriculum innovation projects, including the University MOOC portfolio and micro-credentialing. Liz also has oversight of the University Library and a nationally recognized educational research unit.

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NETWORKS

Australian Learning and Teaching Fellows Network

Higher Education Academy, AdvanceHE, UK

Higher Education Research and Development Society of Australasia

Australasian Society for Computers in Learning in Tertiary Education (ASCILITE)

RELATED REFERENCES

- Matthews, K.E., Crampton, A., Hill, M., Johnson, E.D., Sharma, M.D., & Varsavsky, C. (2015). Social network perspectives reveal strength of academic developers as weak ties, *International Journal for Academic Development*, 20(3), 238-251, DOI: 10.1080/1360144X.2015.1065495
- Sharma, M.D., Rifkin, W., Tzioumis, V., Hill, M., Johnson, E., Varsavsky, C., Jones, S., Beames, S., Crampton, A., Zadnik, M. & Pyke, S. (2017). Implementing and investigating distributed leadership in a national university network–SaMnet. *Journal of Higher Education Policy and Management*, 39(2),169-182.

TEAM-BUILDING AND ASSESSING IMPACT THROUGH A CENTRE REVIEW USING MULTIPLE LENSES ON CHANGE

JANICE MILLER-YOUNG, UNIVERSITY OF ALBERTA, CANADA

DISCIPLINE: Engineering, Academic Professional Development

RESEARCH AREAS: Multidisciplinary communities of practice, student and faculty learning, impact of academic development initiatives and engaging in the Scholarship of Teaching & Learning (SoTL)

PURPOSE / CONTENT

Our Centre, situated within a research-intensive institution, recently conducted a self-study to assess the ways in which our work has developed knowledge, practice, policy, and impact among teachers and learners at our university. Due to a high turn-over of academic staff shortly before I started (Fall 2016), the self-study provided an opportunity for us all to learn much about the work of the Centre for Teaching and Learning (CTL) as well as the reputation, quality and impact of our services.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

The process of generating the self-study was a distributed effort involving all CTL staff. Due to the complex nature of intended audiences and impacts as well as our range of services (from one-off workshops and consultations to three-year course redesign projects, and delivery formats including face-to-face, blended, and online), we adopted a complexity-sensitive approach. In a collaborative and iterative process, all staff contributed to the development of two logic models which listed everyone's activities in supporting and developing teaching at the community level (instructors, departments, programs) and

institutional level, and which made explicit our theories of change and assumptions of our impacts. These logic models promoted understanding of each other's work across the unit and guided the design of a survey and key informant interviews for the self-study.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL & FEMINIST MODELS OF LEADERSHIP

In reflecting on my personal approach to leadership, feminist models resonate most strongly for me, as they position leadership as multi-dimensional and multi-directional, are relational rather than transactional, and emphasize community, cooperation, and mutual benefit. In terms of the Five-Pillar Model, these **affective elements**, which are also strongly **action-oriented** in nature, facilitate **mentorship and empowerment of staff**. I also find the concept of reframing extremely useful, "a deliberate process of shifting perspectives to see the same situation in multiple ways and through different lenses" (Bolman & Gallos, p. 13). For example, the self-study helped us (i) develop procedures, roles, and reporting relationships to better align our efforts with campus goals (architectural perspective), (ii) demonstrate how we can meet the



BIOGRAPHY

A Professor in Engineering, Janice Miller-Young is the Academic Director of the Centre for Teaching and Learning (CTL) at the University of Alberta, Canada. Her previous position was the Director of the Institute for Scholarship of Teaching and Learning at Mount Royal University.

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- ▶ <https://scholar.google.com/citations?authuser=1&user=5K0oDZIAAAAJ>

“In reflecting on my personal approach to leadership, feminist models resonate most strongly for me, as they position leadership as multi-dimensional and multi-directional, are relational rather than transactional, and emphasize community, cooperation, and mutual benefit.”

needs of multiple constituencies (political perspective), (iii) and promoted openness, transparency, effective teamwork and collective accountability within the CTL (human resources perspective).

IMPACT

The interesting results and questions that arose from our self-study are informing our future program and evaluation planning. For example, data revealed differences in the nature of services accessed and sought across career progression. Also, those who accessed CTL consultation services have implemented important changes in their teaching, and their students have reported a better experience in their classes significantly more than other self-study participants. Because assessing our work in a resource-efficient way is a pressing challenge for all CTLs, we will also disseminate our study design and process so that others may benefit from this work.

RELATED REFERENCES

- Blackmore, J. (2013). A feminist critical perspective on educational leadership. *International Journal of Leadership in Education*, 16(2), 139-154.
- Bolman, L.G., & Gallos, J.V. (2010). Reframing academic leadership. John Wiley & Sons.
- Kezar, A. & Lester, J. (2011). Enhancing campus capacity for leadership: An examination of grassroots leaders. Stanford, CA: Stanford University Press.
- Miller-Young, J. & Boman, J. (2017). Learning from decoding across disciplines and within communities of practice. *New Directions for Teaching and Learning*, 150, 97–101.
- Miller-Young, J., Anderson, C., Kiceniuk, D., Mooney, J., Riddell, J., Schmidt Hanbidge, A., Ward, V., Wideman, M., & Chick, N. (2017). Leading up in the scholarship of teaching and learning. *The Canadian Journal for the Scholarship of Teaching and Learning*, 8(2), 1-14.

CURRENT ROLE

As Academic Director of CTL, my role includes building a strong and stable team of academic staff, recruiting part-time seconded faculty members, contributing to institutional teaching culture and policy through a variety of central committees and working groups, and further strengthening connections between CTL and the faculties and other CTLs across the country.

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NETWORKS

Canadian Society for the Study of Higher Education (CSSHE)

International Consortium for Educational Developers (ICED)

International Society for the Scholarship of Teaching and Learning (ISSOTL)

Society for Teaching and Learning in Higher Education (STLHE)

- Educational Developers Caucus (EDC)

CASE #15

A SERVICE LEARNING PARTNERSHIP BETWEEN THE UNIVERSITY OF TORONTO MISSISSAUGA (UTM) AND ONTARIO SECONDARY SCHOOLS

JUDITH POË, UNIVERSITY OF TORONTO, CANADA

DISCIPLINE: Chemistry

RESEARCH AREAS: Science education, problem-based learning, service learning

PURPOSE / CONTENT

The purposes of this project, now entering its second year, are to:

- provide experiential learning for undergraduate chemistry students interested in science education;
- introduce secondary school teachers to Problem-Based Learning (PBL) pedagogies; and
- better prepare secondary school students for the expectations of University through use of PBL, an inquiry based and active learning pedagogy.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

This service-learning project enables undergraduate Research Opportunity Program (ROP) students to develop PBL materials for use in Grades 11 and 12 chemistry courses and assist teachers to facilitate their use in secondary school classrooms. The ROP students research PBL pedagogy and the secondary school chemistry curriculum, then select a topic from the curriculum, define their learning objectives and create a real-world scenario in which to imbed their problem. Students then create Teachers' Notes with complete solutions for the quantitative aspects of the problem and suggest a range of solutions for the qualitative and open-ended aspects. In implementing their topic,

ROP students work with a teacher to facilitate use of the problem in the classroom (or in campus laboratories for problems with experimental components), and prepare their problem in a web-ready format for mounting on the PBL website, www.utm.utoronto.ca/pbl

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

Our **action-orientation** in initiating this project was to provide an experiential learning opportunity to our ROP students while building a bridge to teachers and the teaching in secondary schools. It is instructive to assess the project through the lens of *The 5-Pillar Model of Educational Leadership* (Fields, Kenny & Mueller, 2019). The project requires **pedagogical research** on the part of the Principal Investigator (PI) and the co-supervising post-doctoral fellow (PDF) as well as by the ROP students, and has been reported on at both local and national conferences. By preparing chemistry learning materials for others, ROP students significantly enhance their own knowledge of the discipline. While each student creates their own problems, they present their progress to the ROP group in regular meetings and critique and contribute ideas to each other's work in a highly collaborative



BIOGRAPHY

Judith Poë, Fellow of the Chemical Institute of Canada, is a graduate of Imperial College, London. A recipient of many teaching awards including the inaugural University of Toronto, Mississauga (UTM) Teaching Award, a 3M National Teaching Fellowship, the Union Carbide Award for Chemical Education, and the University of Toronto's President's Teaching Award, she was cited in McLean's magazine as "one of the University of Toronto's most popular profs."

fashion. **Affective qualities** are crucial in these meetings, in which the PI and PDF model suitable modes of academic discourse and constructive criticism. Knowing that their original work is going to be used by secondary school students is empowering to ROP students and, along with knowing that their work is going to be published on the website, makes them attentive to the accuracy of their work and to the means of communicating it. In their reflections, students refer to this experience as both challenging and rewarding, with the highlight being that their PBL problems - their original creations - were being used in secondary schools. The service-learning component distinguishes this experience from those that they have had in their other courses. These aspects, when taken together, reflect components of **teaching excellence**. Another feature of this project is to host a PBL workshop for secondary school science teachers, to share our collective resources and enhance their ability to generate their own PBL materials for their classes. This aspect of **mentorship and empowerment** applies also to the PDF who is assisting with the project. In Canada, opportunities for chemists who are interested in a career in science education are very limited at the PDF level in chemistry departments. Participation in this project should help to strengthen the pedagogical content knowledge of PDF's and make them more competitive for teaching-focused positions.

“Research Opportunity Program (ROP) students strengthen their foundational knowledge of chemistry while developing skills of critical thinking, communicating and collaborating. Secondary school teachers have been introduced to a new science pedagogy and through the workshop for teachers we hope to broaden this Problem-Based Learning (PBL) community and provide teachers with the skills to make the initiative sustainable.”

IMPACT

The project has created a mutually beneficial collaboration between the University and local secondary schools. Teachers report increased student engagement and curiosity when working on PBL problems. All teachers have expressed a desire to continue their participation. Research Opportunity Program (ROP) students strengthen their foundational knowledge of chemistry while developing skills of critical thinking, communicating and collaborating. Secondary school teachers have been introduced to a new science pedagogy and through the workshop for teachers we hope to broaden this Problem-Based Learning (PBL) community and provide teachers with the skills to make the initiative sustainable. From our first cohort of ROP students, one presented her work in the Science Education Division of the Southwestern Ontario Undergraduate Student Chemistry Conference and received 2nd prize for her oral presentation. Applications to participate in this ROP project have increased by 150% from the first to the second year of its offering. The PDF training has also paid dividends. Both of the PDFs who have participated in the project were also entrusted to teach a course as PDFs and one has subsequently secured a teaching position at a major Canadian university.

CURRENT ROLE

Poë is Professor, Teaching Stream in the Department of Chemical and Physical Sciences at the University of Toronto Mississauga (UTM) with a cross-appointment to the Department of Chemistry at the St. George campus, University of Toronto. She teaches the first-year, general chemistry course at UTM, as well as an upper year course in bioinorganic chemistry. She recently introduced a chemistry course for non-science majors, 'The Chemistry of Human Health', and is working on the introduction of a Medicinal Chemistry Specialist program. Poë had the honour of serving as the first female President of the Canadian Society for Chemistry and, more importantly, the first President whose scholarly activity was in the area of chemistry education. Currently she is Chair of the Board of Directors of the Chemical Education Trust, a registered Canadian charity that provides scholarships, awards, and seed money for new initiatives in the chemistry education of both students and the general public.

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NETWORKS

Canadian Chemical Education Trust, Chair of the Board of Directors www.cheminst.ca/about/about-cef

Chemical Institute of Canada, Division of Chemistry Education, www.chemedcanada.com

American Chemical Society, Chemical Education Division, www.divched.org

Society for Teaching and Learning in Higher Education, www.stlhe.ca

RELATED REFERENCES

- Fields, J., Kenny, N.A., & Mueller, R.A. (2019). Conceptualizing educational leadership in an academic development program, *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211
- Poë, J. (2015). Active learning pedagogies for the future of global chemistry education. In J. Garcia-Martinez & E. Serrano-Torregrosa (Eds.), *Chemistry education: Best practices, opportunities and trends* (279- 300). Weinheim: Wiley-VCH.
- Overton, T. L., & Randles, C. A. (2015). Beyond problem-based learning: Using dynamic PBL in chemistry. *Chemistry Education Research and Practice*, 16(2), 251-259. <https://doi.org/10.1039/c4rp00248b>

CASE #16

DEVELOPING HIGH IMPACT WORK-INTEGRATED LEARNING IN SCIENCE

GERRY RAYNER, SWINBURNE UNIVERSITY OF TECHNOLOGY, AUSTRALIA

DISCIPLINE: Higher Education, STEM Education

RESEARCH AREAS: Work-integrated learning, academic professional development, student self-efficacy

PURPOSE / CONTENT

The provision of meaningful and contextual work-integrated learning is increasingly recognised as enriching the educational experience of students, providing them with opportunities to apply and further refine valued skills and competencies, and enhance their employability and career identity. This program aimed to address the previous absence of employability and work-integrated learning opportunities for students studying science and related degrees at Monash University.

climate and weather, and others majoring in biology or ecology assigned to projects in the natural sciences (e.g. vegetation survey, wildlife conservation). While the program initially targeted a small cohort of science students, it grew rapidly to become a faculty-wide program, available for all senior undergraduates. At the time the SIPP program converted from a co-curricula, non-credit program to a for-credit unit (aka course/subject), 580 students had been placed on projects with 174 industry partners.

“At its core, the SSIP was established on a commitment to maximising the learning experience and improving the employability prospects of science students.”

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In 2012, with provision of \$20,000 seed funding from the Monash Office of the Vice-Provost Learning and Teaching, Gerry initiated the Science Student Industry Placement (SSIP) program. The SSIP facilitated short-term placements of students with STEM employers, working on curriculum-contextual projects to the benefit of employers and students themselves. For example, science students majoring in mathematics and physics would be assigned to projects related to

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

The SSIP program aligns strongly with the Five-Pillar Model (Fields, Kenny, & Mueller, 2019). At its core, the SSIP was established on a commitment to maximising the learning experience and improving the employability prospects of science students. The program thus reflects **Affective Qualities** such as respect for and empathy with students. The program is grounded in **Excellence in Teaching** and effective pedagogy, through



BIOGRAPHY AND CURRENT ROLE

Associate Professor Gerry Rayner is Associate Director, Academic Development and Learning Innovations, in the Learning Transformation Unit at Swinburne University of Technology. Gerry is also an adjunct in the School of Biological Sciences, Monash University, where he teaches senior undergraduate ecology and botany units. His scholarly interests include the development, integration and evaluation of work-integrated learning (WIL), academic professional development, curriculum design and renewal, development and enhancement of student communication skills, and peer-assisted learning (PAL).

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NETWORKS

ISSOTL – International Society for the Scholarship of Teaching and Learning

HERDSA – Higher Education Research and Development Society of Australasia

HETL – International Higher Education Teaching and Learning Association

matching of students' study majors with industry research projects, thus providing context to the curricular content. Evaluation of the program and its outcomes, including the perspectives of students and industry partners, have been disseminated in several scholarly publications, thereby connecting pedagogical innovation with related **Pedagogical Research**. The program was nimble and adaptable, adjusting its focus to the particular needs of industry partners, while maintaining and focus on student learning and provision of authentic opportunities for them to apply their learning to workplace contexts.

IMPACT

At the time the SSIP program converted to a for-credit unit in 2018, it had placed more than 580 science students on industry-sponsored projects. Evaluations of the SSIP showed that the program provided students with invaluable workplace experience, further developed their team-work and other interpersonal skills, and enhanced their self-discipline and confidence. The program's success had the further benefit of initiating or further strengthening the links between Monash and the SIPP Industry partners.

RELATED REFERENCES

- Sarkar, M., Overton, T., Thompson, C. & Rayner, G. (2016). Graduate employability: Views of recent science graduates and employers. *International Journal of Innovation in Science and Mathematics Education*, 24(3), 31-48.
- Rayner, G. & Papakonstantinou, T. (2015). Employer perceptions of the current and future value of STEM graduate skills and attributes: An Australian study. *The Journal of Teaching and Learning for Graduate Employability*, 6(1), 100-115.
- Rayner, G., & Papakonstantinou, T. (2015). Student perceptions of their workplace preparedness: Making work-integrated learning more effective. *Asia-Pacific Journal of Cooperative Education*, 16(1) 13-24.

ENHANCING TEACHING AND LEARNING THROUGH A NEW INSTITUTIONAL CASCADED COURSE EVALUATION FRAMEWORK

CAROL ROLHEISER, UNIVERSITY OF TORONTO, CANADA

DISCIPLINE: Teacher Education, Higher Education

RESEARCH AREAS: Teacher education and teacher development, instructional and assessment innovation, leadership, the design, implementation and evaluation of professional development initiatives, system reform and managing educational change

PURPOSE / CONTENT

The use of course evaluations in higher education continues to garner much attention in the popular press and academic circles. After a review of the literature related to course evaluations (Gravestock & Gregor-Greenleaf, 2008), the University of Toronto, Canada, undertook a multi-year process to design, implement, and assess a new online course evaluation framework. This is an example of educational leadership led and managed by a teaching centre in a large research-intensive university.

and faculty representatives to “start anew” in our approach to the design and delivery of course evaluations, and to look at how the collected data could enhance teaching and learning across the university. A set of recommendations was put forth to establish a new cascaded course evaluation framework (CCEF) that includes the gathering of data from institution-level core questions that reflect institutional priorities for student learning, as well as context-specific items (e.g., division or faculty level, department level and instructor level).

“Over the last decade this work has necessitated both formal leadership ... as well as distributed and shared leadership across the institution ...”

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

In 2009 an institution-wide Course Evaluation Working Group was formed through the Office of the Provost. The Centre for Teaching Support & Innovation (or CTSI, the central teaching-learning hub), played a leadership role in working with senior-level administrators

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

The 5-Pillar Model of Educational Leadership (Fields, Kenny, & Mueller, 2019) is useful for examining the CCEF initiative at the University of Toronto. Over the last decade this work has necessitated both formal leadership (e.g., the Director of CTSI and



BIOGRAPHY

Professor Carol Rolheiser has held a range of K-12 leadership positions throughout her career, and the following higher education leadership roles at the Ontario Institute for Studies in Education, University of Toronto: Associate Chair, Department of Curriculum, Teaching and Learning; Associate Dean, Academic Development; and Associate Dean, Teacher Education. For the last decade she has had the privilege of serving as the inaugural Director of the Centre for Teaching Support & Innovation (CTSI), University of Toronto.

course evaluation coordinator/team and the Vice-Provost to whom the centre reports, providing ongoing leadership regarding policy, strategies, structures, resources, management, etc.), as well as distributed and shared leadership across the institution (e.g., collaborative design of processes, implementation systems, support mechanisms, etc.) (Lieff & Yammarino, 2017). Reflection on the Five-Pillar Model, the CCEF initiative is **action-oriented** and intended to bring about long-term transformation regarding **teaching excellence** through our collective quest to constantly improve teaching and learning, informed by high quality data. Such excellence involves determining the goals we have for teaching and learning across the institution and for particular faculties, departments, as well as at more granular levels (e.g., an instructor's specific priorities for a given course in a given term).

We set out to bring about large-scale change across an institution of almost 90,000 students, and intentionally chose not to just “tinker around the edges”. This bold initiative necessitates centralized coordination as each division or faculty is brought into the initiative, and decentralized empowerment as each unit (e.g., Faculty of Engineering or Education) examines their local context to remove barriers, builds local capacity for determining teaching and learning priorities, and brings colleagues together for decision-making and ongoing sharing of best practices. Such coordination reflects **mentorship, empowerment, and importantly, coaching and collaboration**. This combination of leadership has necessitated the use of **affective qualities** that support dealing with complex and differing perspectives, and, at times, navigating difficult conversations. Such qualities need to be reflected especially when views are different; it is at these times that respect and understanding are most needed. Importantly, demonstrating those qualities can lead to trust and facilitate the

relationships across the institution and within divisions that are key to the success of a long-term change strategy. Finally, the evidence-based development of the CCEF and the ongoing quality assurance analyses and **pedagogical research** that have been priorities throughout the process of implementation and institutionalization, continue to provide context-specific evidence to support our model and its intended purposes, and to inform our next steps at multiple levels of the institution.

IMPACT

The impact of a large-scale and multi-year initiative can be measured in many different ways, with a few highlighted here to illustrate. The University of Toronto now has a policy (2011) that provides important framing of our institutional goals and uses of course evaluations. As well, regular quality assurance analyses have resulted in a range of reports and guidelines that support our collective understanding of the complex issues related to course evaluations. Such analyses have also supported our response to questions raised in the literature and by stakeholders across our institution. Reports and related resources such as the Centre for Teaching Support & Innovation's, *University of Toronto's Cascaded Course Evaluation Framework: Validation Study of the Institutional Composite Mean (ICM)* (2018) and the *University of Toronto Course Evaluation Interpretation Guidelines for Academic Administrators* (2018) are important documents to support our CCEF and to reflect our evolving understanding and use of course evaluation data throughout the institution. As well, the development of the CCEF and its online implementation have resulted in many presentations at provincial, national and international conferences, and the request for consultations from a large number of higher education institutions around the world. Such activities support our commitment to networked

CURRENT ROLE

Carol's current roles include being a Professor in the Department of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education, University of Toronto and serving as Director of the Centre for Teaching Support & Innovation (CTSI) – the University of Toronto's central teaching and learning hub. The latter role provides her an opportunity to provide strategic direction for educational development across the University, including work that supports programming for instructors and teaching assistants/graduate students (including the support for the Scholarship of Teaching and Learning); coordination and delivery of the Teaching Assistants' Training program; the implementation of course evaluations and conducting related quality assurance; support for pedagogical innovation, including the use of active and collaborative technologies; and development of communication strategies related to all of these activities.

Among other honours, Professor Rolheiser is a recipient of the inaugural University of Toronto's President's Teaching Award (2006), honouring her career commitment to excellence in teaching, research in teaching, and the integration of teaching and research.

Carol's passion for teaching is at the core of her professional work.

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leadership and led CTSI to hosting an inaugural Course Evaluation Institute (2018). This event brought together international colleagues over two days to begin building a collaborative and user-led community focused on course evaluations and teaching assessment and to endeavor to influence an evidence-based narrative around course evaluations.

RELATED REFERENCES

- Centre for Teaching Support & Innovation. (2018). University of Toronto's cascaded course evaluation framework: Validation study of the institutional composite mean (ICM). Toronto, ON: Centre for Teaching Support & Innovation, University of Toronto. https://teaching.utoronto.ca/wp-content/uploads/2019/04/Validation-Study_CTSI-April-10-2019.pdf
- Centre for Teaching Support and Innovation (2018). University of Toronto course evaluation interpretation guidelines for academic administrators. Toronto, ON: Centre for Teaching Support & Innovation, University of Toronto. https://teaching.utoronto.ca/wp-content/uploads/2018/10/Interpretation-Guidelines_Final_Oct.1.2018.pdf
- Fields, J., Kenny, N. A., & Mueller, R. A. (2019): Conceptualizing educational leadership in an academic development program, *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211
- Gravestock, P. & Gregor-Greenleaf, E. (2008). Student course evaluations: Research, models and trends. Toronto, ON: Higher Education Quality Council of Ontario.
- Lieff, S.J., & Yammato, F.J. (2017). How to lead the way through complexity, constraint and uncertainty academic health science centres. *Academic Medicine*, 92, 614-612.

NETWORKS

American Educational Research Association

International Society for the Scholarship of Teaching and Learning (ISSoTL)

- Co-Chair: Scholarship of Leading Special Interest Group

Society for Teaching and Learning in Higher Education (STLHE)

- Education Developers Caucus of Canada (EDC)

The Professional and Organizational Development Network in Higher Education (POD)

CASE #18

DEVELOPMENT AND IMPLEMENTATION OF VICTORIA UNIVERSITY'S BLOCK MODEL

IAN SOLOMONIDES, DEPUTY VICE CHANCELLOR (ACADEMIC AND STUDENTS), VICTORIA UNIVERSITY, AUSTRALIA

DISCIPLINE: Curriculum Development, Teaching Innovation, Organizational Change Management, Professional Development, Higher Education
RESEARCH AREAS: Scholarship of Teaching and Learning (SoTL), learning design

PURPOSE / CONTENT

Victoria University has revolutionized Australian higher education, adopting a unique 'Block Model' of teaching. Described under The VU Way, the Block Model is characterized by high quality, intensive learning. Large impersonal lectures, transmissive pedagogy, and passive learning in concurrent semester-long units of study have been replaced by personalized, small group, deep and engaged learning in sequential units of study, significantly improving the learning experience and outcomes for students. Studying one subject at a time over four weeks in groups of no more than 35 with a dedicated teacher has enabled students to: quickly build a sense of belonging; receive constant, high impact feedback; spend time on the 'right' things; engage in authentic, active and collaborative learning with self-contained assessment; and not be burdened by juggling the competing demands of workload and assessment typical of the traditional university experience.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

Faced with significant ongoing declining organizational and student quality indicators, Victoria University (VU) sought to radically redesign the experience of all its first-year students and is now extending this to include all students in the second year and beyond. As the office holder accountable for many

aspects of educational quality assurance and enhancement, it was and is the author's responsibility to guide the development, from its inception, develop the business case, and seek the endorsement and ongoing support of the University's governing bodies. The inaugural Dean of the First Year College reported to the author who, in turn, made every opportunity to be visible to the College staff at development and staff meetings. He was also instrumental in developing the model's underpinning teaching and learning philosophy and application of pedagogy.

With the VU Way, VU has created an interdisciplinary First Year College and systematically and systemically introduced block mode learning and teaching. In just nine months, every single unit across the first year of all bachelor degrees was re-written; more than 110 dedicated First Year College academics were recruited; and teaching spaces and timetables were re-designed to accommodate class sizes of no more than 35 students across a cohort of approximately 4500.

There are no lectures and a minimal number of exams in the Block Model, which has been described in the media as, "The most radical and comprehensive change any university in Australia has made in living memory to the way it teaches students" (Dodd, 2018). The initial idea was pitched to the Provost in May 2017 following deliberations of



BIOGRAPHY & CURRENT ROLE

Ian has over 25 years of experience in UK and Australian education, joining Victoria University in 2016 where he is the Deputy Vice Chancellor (Academic and Students). He has worked across engineering, art and design, and education and was formerly head of Furniture and Product Design at Nottingham Trent University (UK) and Director of the Learning and Teaching Centre, Macquarie University. Ian has a pre-service Bachelor of Education (Honors) and a PhD in Undergraduate Education; the quality of student learning and engagement being the focus of his scholarly interests. At VU he is accountable for and is project owner of the First Year and Beyond initiative as part of The VU Way and within the Deputy Vice Chancellor (Academic and Students) portfolio is responsible for:

- Institutional quality assurance and enhancement including Connected Learning and the office for Academic Quality and Standards
- The Pro Vice Chancellor (Students) portfolio including the Library, Centre for Student Success, Student Administration, Student Services, and Student Life
- The VU Academy for Social Change and Leadership
- Skunk Control – a STEM based art installation group.

“...what was and continues to be, a highly complex program of work embedding a new approach to learning and teaching, necessitated leadership elements as reflected by the Five-Pillars.”

a small Task Force before ascendancy through the Senior Executive Group and Council. A robust project program and management structure was put in place along with governance, risk management, and reporting.

REFLECTING ON AND APPLYING THE FIVE- PILLAR MODEL

Educational leadership evident in the implementation includes many roles across the university and includes positional and distributed leadership, requiring all elements of the Five-Pillar Model. The impetus for the change was poor institutional and student performance. Three distinct events were identified and brought together in its implementation: the creation (under the Provost) of a cross disciplinary, pan University, First Year College (subsequently lead by an appointed Dean); identification of pedagogy known to impact positively on learning gain with plans to implement this pedagogy in the remediation of high failure rate units (lead by the Task Force under the leadership of the author); and, identification of a curriculum organization model (lead by the Director of Connected Learning – a centralised team of faculty developers and learning designers). Hereafter the Task Force lead the combining of these elements into the Block Model with the author taking overall Project Ownership and key staff across the University taking a variety of leadership and change management roles.

The examples above, of what was and continues to be, a highly complex program of work embedding a new approach to learning and teaching, necessitated leadership elements as reflected by

the Five Pillars. For example:

- The identification of high impact teaching practices and indicators of learning gain were drawn from **Pedagogical Research**. Outcomes from the Block Model and the change management are informing scholarly, published works.
- **Affective Qualities** were employed by positional and distributed leaders in the establishment of good will and enthusiasm for the change.
- The project was very clearly **Action Oriented**: being inherently risky as a disruptive innovation; establishing changes to resourcing, systems, services and process to ensure long-term transformation; and, yielding a number of significant innovations in technology enhanced teaching, student support, and curriculum design.
- The implementation took a highly collegial approach to curriculum design and development, the creation of co-curricular activities, the reimaging of front and back office services and systems, demonstrating **Mentorship and Empowerment** as colleagues were guided and supported to work in cross functional teams for collaborative advantage.
- **Teaching Excellence** was foregrounded as we systematically and systemically implemented active and collaborative learning in small groups, rapid grade turnaround and feedback, promoted a sense of belonging for students and staff, improved communication channels, and radically improved learning experiences.

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NETWORKS

Universities Australia Deputy Vice Chancellor (Academic) Group

Former President of The Council of Australian Directors of Academic Development (CADAD), now Council of Australasian University Leaders in Learning and Teaching (CAULLT)

Faculty Member, Australian Council of Open and Distance Education (ACODE) Learning Technology Leaders Institute

IMPACT

All students have benefited; in 2018, compared with 2017, Victoria University has almost halved the failure rate, increased the pass rate by 10.7%, increased Distinctions by 6.8% and High Distinctions by 6.6% all the while ensuring maintenance of academic standards. The impact on pass rates for students from equity groups or educationally disadvantaged backgrounds has been particularly outstanding; for example, the pass rates of students from Indigenous backgrounds improved by 19%; those with low socioeconomic status backgrounds by 15.3%; non-English speaking backgrounds by 14.7%; the pass rate for students entering the University with very low matriculation points increased by 20%, whilst those with average entry points between increased by 7.2%, ensuring that by the end of the first year, there is no difference in student success based on any of the factors analysed.

Clear, consistent and high expectations of students and staff have contributed to a culture of success and motivation and elevated student satisfaction and sense of belonging. Underpinning the innovation is a 'driver-based model' that monitors all parameters to ensure viability and return on investment. Load (a measure of the number of equivalent full-time students starting and finishing the year) improved by 8%, through increased retention and with a unique opportunity to have a new intake point half way through the first semester at block 3, 140 'new' students enrolled in 2018 and another 507 in 2019. Together, these resulted in a positive return on investment, contributing to the

first VU budget surplus in five years. We are seeing trends of improved retention and performance continuing in 2019 along with increases in enrolment. The University is now extending block mode to all year levels under the First Year and Beyond initiative.

VU's block mode is a highly modified, unique version of a model developed by Professor David Helfand of Quest University, Canada. During a visit to Victoria University to see the initiative first hand, he intimated that, "It has been a true inspiration and a matter of complete wonderment to me that this institution has managed in the space of eight months to transform the education of 4500 students and is now eight months later doing it for the other 10000 or 15000. You have already by far a block programme with more students than all the other universities in the world combined that have block systems" (Helfand, 2019). It has been encouraging to see that unique models such as the Block Model can be scaled while maintaining high quality outcomes for students.

RELATED REFERENCES

- Dodd, T. (2018, August 22). University boss goes back to the classroom. *The Australian*. Retrieved from <https://www.theaustralian.com.au>
- Helfand, D. (2019, June 11). Lecture on The Joys and Challenges of Teaching on the Block. Victoria University.

CASE #19

DESIGNING A STUDIO CLASSROOM TO PROMOTE ACTIVE LEARNING PEDAGOGY

OLIVIER ST-CYR, UNIVERSITY OF TORONTO, CANADA

DISCIPLINE: User Experience Education, Higher Education

RESEARCH AREAS: Active learning pedagogy, classroom design, studio-based pedagogy, hands-on learning

PURPOSE / CONTENT

In fall of 2018, the Faculty of Information at the University of Toronto opened a brand-new design studio (Figure 1). The space was envisioned and designed by a faculty member to support the User Experience Design (UXD) concentration, a discipline that fosters active learning pedagogies through hands-on activities and projects. The new classroom transformed teaching in our program by introducing studio-based courses. This is an example of how educational leadership in the design of space influences the learning possibilities for both instructors and students.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

A studio is a “coherent system” where surface structures, pedagogical activities, and epistemology work together to create unique learning environments (Shaffer, 2007). Using Shaffer’s framework, our new studio

“This is an example of how educational leadership in the design of space influences the learning possibilities for both instructors and students.”

was designed to first ensure that appropriate physical and logistical components were in place to support a mix of active learning and hands-on teaching approaches. Then, specific studio-based pedagogical activities were considered. Finally, the relationships between the surface structures and pedagogical activities were analyzed with respect to the epistemological constructs that support the knowledge formed in our studio classroom. Our leadership in the classroom design process demonstrates that thoughtful considerations must be given to the human factors of space design, to ensure coherence between the



BIOGRAPHY

Olivier St-Cyr is an Assistant Professor, Teaching Stream in User Experience Design (UXD) at the Faculty of Information, University of Toronto. He leads the UXD concentration, part of the Master of Information (MI) degree. Prior to joining the Faculty, he spent eight years in industry working on UXD related projects.

▶ [linkedin.com/in/profstcyr](https://www.linkedin.com/in/profstcyr)



Figure 1. The Faculty of Information (iSchool, University of Toronto) User Experience Design Studio

architecture of the physical space, the methods of teaching deployed in the space, and the knowledge acquired by student

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

The design of our studio classroom can be analyzed using the 5-Pillar Model of Educational Leadership (Fields, Kenny, & Mueller, 2019). First, our design supports **affective qualities**. By configuring the physical space with tables for four students and chairs of different colours, the space helps instructors facilitate relationship-building amongst students.

Moreover, the physical proximity of the instructor to the students helps establish trust, as the instructor becomes a facilitator in the classroom and has privileged access to students.

Second, our new classroom is a space where instructors can learn from one another. It is a sandbox in which instructors experiment and share their teaching and learning practices. It allows instructors to grow their repertoire of active learning activities and brings teachers from different areas together to exchange information about their experiences interacting with a new classroom setting. Therefore, the studio affords **mentorship and empowerment** amongst the instructors embracing this unique classroom.

Third, our studio is **action-oriented**. This transformational project from a traditional classroom into a studio space was initiated to promote a different kind of teaching in our Faculty. Instructors using the space must be willing to take risks and change their pedagogy, as the space was created with the intent to experiment and demonstrate teaching innovations. The studio helps create and facilitate long-term teaching transformations, in which instructors will iterate their active learning approaches over several semesters.

Fourth, our space is student-centric and fosters **teaching excellence**. It enables and empowers students to become active learners and design thinkers. It builds confidence in learners as they are able to gain hands-on knowledge and receive individualized guidance from instructors. The space and its active learning activities result in a collaborative environment in which students are in constant communication and are exposed to rich learning experiences. Fifth, our studio is a testbed that allows instructors to conduct research on their teaching practices. Having been designed as a prototype and sandbox for studio-based pedagogy, the space can be used to conduct **pedagogical research** related to active learning, group work, critiques, peer-reviews, etc.

IMPACT

We can assess the value of our new studio classroom by looking at its adoption from professors in our Faculty. Thus far, after one full academic year, the space has been primarily utilized to teach UXD courses in the Master of Information degree, although it has also been used by instructors from other programs and faculties. Our studio has been the classroom of choice for 18 different courses, ranging from UXD, critical making, library science, information system design, information workshop, and museum studies. Debriefing sessions were conducted with instructors who taught in the space and feedback is currently being analyzed to inform minor adjustments. Overall, instructors have commented positively on the surface structures of the space (e.g., movable tables, collaborative features of the furniture, and inspiring ambient colours). Students have also commented positively on the space in course evaluations. Comments related to the surface structures, pedagogical activities, and the knowledge acquired during studio-based courses

CURRENT ROLE

Along with his role of professor at the Faculty of Information, Olivier also serves as the Director of the Knowledge Media Design (KMD) Collaborative Specialization, and holds a cross-appointment in the Department of Mechanical and Industrial Engineering, University of Toronto. In the Faculty of Information, Olivier created the curriculum for the UXD concentration, a new area of specialization concerned with a user's total experience when interacting with traditional and digital artefacts. Olivier is a proponent of active learning and designed the UXD concentration to promote a mix of theoretical and hands-on approaches though project-based, design-oriented classes. In the summer of 2018, he led a major classroom transformation project and design of a studio classroom to establish studio-based pedagogy in the Faculty of Information. In his courses, students work collaboratively and intensively on a variety of wicked design problems ranging from traditional digital systems to recent advances in the field of Human-Computer Interaction.

were reported and these will inform future course design and allow for iterative changes in the space.

Overall, the transformation of a traditional classroom into a design studio drastically changed the pedagogy for the delivery of courses at the Faculty of Information. Its success in promoting active learning pedagogy has attracted several instructors to use the space and innovate their teaching practices.

RELATED REFERENCES

- Fields, J., Kenny, N.A., & Mueller, R.A. (2019). Conceptualizing educational leadership in an academic development program. *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211
- Shaffer, D. W. (2007). Learning in design, in R. A. Lesh, E. Hamilton and J. J. Kaput (Eds). *Foundations for the Future in Mathematics Education* (pp. 99–125). Mahwah, NJ: Lawrence Erlbaum.

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NETWORKS

EduCHI – A Community of Practice dedicated to Human-Computer Interaction (HCI) Education

The Association for Computing Machinery (ACM) Special Interest Group on Computer-Human Interaction (SIGCHI)

The ACM Education Advisory Committee

The SIGCHI Education Task-Force

CASE #20

FACULTY LEARNING COMMUNITY ON INDIGENIZING THE ACADEMY

MICHELLE YEO, MOUNT ROYAL UNIVERSITY, CANADA

DISCIPLINE: Education, Educational Development, SoTL

RESEARCH AREAS: Faculty development, student experience, decolonizing practices in higher education

PURPOSE / CONTENT

Like many institutions across Canada, Mount Royal University is working towards decolonization and Indigenization as called for in the 2015 Truth and Reconciliation Commission's Calls to Action. In practice, at the classroom level, many faculty members do not know how to begin this process. For two years, in partnership with the Office of Academic Indigenization, our Academic Development Centre ran a Faculty Learning Community (FLC) on Indigenizing the Academy.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

FLCs on a range of topics have been offered for more than a decade at our teaching and learning centre. The FLC on Indigenization was led by Michelle Yeo, an educational developer and settler, and Liam Haggarty, a settler scholar and associate professor of Indigenous Studies. We also partnered with Siksikai'tsitapi, Îyârhe Nakoda, and Tsuut'ina communities in southern Alberta, Treaty 7 territory. Battiste, Bell, and Findlay (2002) argue that decolonization within

the academy "requires multilateral processes of understanding and unpacking the central assumptions of domination, patriarchy, racism, and ethnocentrism that continue to glue the academy's privileges in place" (p. 84). The intent was to provide participants with opportunities for structured, collegial conversations around Indigenization that meaningfully incorporated Indigenous voices throughout the learning experience.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

While we had not considered the Five-Pillar Model in designing this program, upon reflection it can be seen to incorporate the five elements outlined by Fields, Kenny, and Mueller (2019).

Affective qualities were paramount in the design and implementation of this FLC, for facilitators and participants. Aspects such as humility were required when learning from Indigenous community members. **Mentorship and empowerment** were found in the community created among participants, where 12-13 colleagues

"The intent was to provide participants with opportunities for structured, collegial conversations around Indigenization that meaningfully incorporated Indigenous voices throughout the learning experience."



BIOGRAPHY

Dr. Michelle Yeo is an associate professor and Academic Director of the Institute for the Scholarship of Teaching and Learning at Mount Royal University. Michelle has a PhD in Language and Literacy from the University of Victoria. She conducts SoTL research on faculty development, student experience and learning, and decolonizing practices.

were brought together from across Faculties and disciplines to explore complex issues of decolonization. This aligns with Fields, Kenny & Mueller's finding regarding the importance of an interdisciplinary community, and the experience of receiving resources from the institution in offering the program and support from the facilitators and other group members. Participants noted that after the FLC experience, they were more willing to speak up on issues of Indigenization with their departmental colleagues, and more likely to undertake appropriate advocacy and action. The FLC was **action-oriented** in the sense that part-way through the year, the focus shifted from thinking about the issues to exploring how faculty members' classes could be decolonized or indigenized. Our discussion of **teaching excellence** was particularly focused on making the classroom more hospitable to Indigenous students.

Finally, we relied on the written work of Indigenous scholars such as Taiaiake Alfred, Shauneen Pete, Leanne Betasamosake Simpson, John Snow, and Chelsea Vowel, along with the wisdom of Indigenous knowledge keepers and Elders in the local community. At the end of the first year of the program, we conducted an interpretive study on the experience of the participants. As **pedagogical research**, three of the FLC participants, along with two Indigenous knowledge keepers, co-authored a paper - "Unsettling Faculty Minds: A Faculty Learning Community on Indigenization" (Yeo, Haggarty, Wida (Snow), Ayongman, Pearl, Stogre, & Waldie, 2019) - based on interviews conducted with participants.

Related to the idea of educational leadership is the significant role our Indigenous community partners held in terms of leading educational experiential components for our group. Full explanations of these experiences were contributed by the 2019 Indigenous educators

within the paper. These experiences were chosen and facilitated by the Indigenous educators, in response to their assessment of what would be most beneficial. According to participants, these elements were the most impactful aspects of the experience. As one participant told us, "I think I knew that before, but the clarity you get when you start to spend some time with Indigenous people who are also working in the same area, that collaboration is probably the most important thing at the core.... When you ask about 'sense making' for me it brought clarity ... that sole thing about collaboration, and about listening, and about how important it is to allow Indigenous peoples to lead the way in Indigenization." Importantly, this may be seen as further expanding Fields, Kenny, and Mueller's notion of distributed educational leadership as an "emergent and collaborative process" (p. 10) beyond the walls of the university into the community. They suggest that this kind of leadership "is core to building strong teaching and learning cultures that become suffused across an organization through collective action" (p. 10). In this case, the change we sought was on a broader societal level, and meaningful reconciliation that required making the 'walls' of the institution more porous.

IMPACT

Our interviews with participants demonstrated impact in terms of their ways of knowing, being, and practicing. Participants were surprised to come away with a different sense of place. Numerous participants acknowledged that the outcomes of this experience extended far beyond knowledge and practice relating to their roles as faculty. These experiences also influenced ways of being and identity. As one participant

CURRENT ROLE

Michelle Yeo is Academic Director of the Institute for Scholarship of Teaching and Learning at Mount Royal University. In this role she works with faculty members on developing SoTL research, administers a grants program, and is the current president of the International Society for the Scholarship of Teaching and Learning. She is also associate professor and faculty development consultant within the Academic Development Centre.

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NETWORKS

International Society for the Scholarship of Teaching and Learning (ISSOTL)

Society for Teaching and Learning in Higher Education (STLHE)

Educational Developer's Caucus (EDC)

explained, "Having the opportunity to listen to the stories of Elders and experience ceremony in such a beautiful way definitely changed me." Another participant expressed the impact of the FLC experience on their sense of what it means to live on Treaty land, in changing how they think about the community they live in and their personal responsibility to Treaty. Participants also described how their practice in the classroom has also changed. It is both about incorporating more Indigenous content, but also developing relational pedagogies as Lindstrom (2018) describes.

RELATED REFERENCES

- Battiste, M., Bell, L., & Findlay, L.M. (2002). Decolonizing education in Canadian universities: An interdisciplinary, international, Indigenous research project. *Canadian Journal of Native Education*, 26(2), 82-95.
- Fields, J., Kenny, N.A., & Mueller, R.A. (2019). Conceptualizing educational leadership in an academic development program. *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211
- Lindstrom, G..(2018). How do we Indigenize post-secondary curriculum? Accessed June 21, 2019. <https://www.ucalgary.ca/utoday/issue/2018-01-11/how-do-we-indigenize-post-secondary-curriculum>
- Yeo, M., Haggarty, L., Ayoungman, K., Wida, W. (Snow, T.), Pearl, C., Stogre, T., & Waldie, A. (2019). Unsettling faculty minds: A faculty learning community on Indigenization. *New Directions in Teaching and Learning*, 157(Spring), 27-41. DOI: 10.1002/tl.20328

CASE #21

ENGAGING STAFF IN A PROFESSIONAL DEVELOPMENT PROGRAM

VICKI ZHANG, UNIVERSITY OF TORONTO, CANADA

DISCIPLINE: Actuarial Education, Professional Education

RESEARCH AREAS: Pedagogical methodologies in professional education, teaching in higher education, international students' experiences

PURPOSE / CONTENT

The actuarial profession is marching into the age of Big Data. Increasingly, employers in various actuarial fields require university graduates to have sophisticated knowledge in statistics and data science. The profession has also become diverse in its knowledge and skill base. The external credentialing body is changing the educational component to accommodate those demands. The major curriculum redesign at the University of Toronto aims to stay current with new trends and demands from the profession.

CASE EXAMPLE OF EDUCATIONAL LEADERSHIP

During the 2017-2018 academic year, the undergraduate associate chair in actuarial science led a team to undertake major curriculum redesign in the actuarial science Specialist program at the University of Toronto. The associate chair worked with various stakeholders to develop a new curriculum that will better meet the demands of the profession and the larger data economy. Data science and computational courses were added into the actuarial program to improve training in those areas. Various pathways that cater to different subfields of the actuarial profession were provided so that faculty members and students can choose courses that best match their own academic and professional interests. The curriculum redesign

team demonstrated action-oriented leadership both within the university community but also in the greater actuarial programs across Canada.

REFLECTING ON AND APPLYING THE FIVE-PILLAR MODEL

The 5-Pillar Model Educational Leadership model (Fields, Kenny, & Mueller, 2019) is useful to conceptualize and reflect on our major curriculum redesign process. From the outset of the project, the undergraduate Associate Chair emphasized the use of **affective qualities** and a collaborative approach to curriculum redesign. Adopting an **action-oriented** stance, the Associate Chair undertook an extensive needs assessment process where she consulted with all stakeholders - students, faculty members, external credentialing body, and industry professionals. From a careful study of the needs assessment results, it was clear that there were competing interests and priorities among stakeholders. The profession has become more diverse in the past decade and the amount of technical content and professional requirements have significantly increased, which was reflected in the new curriculum set by the external credentialing bodies. It presented a challenge for our undergraduate program to accommodate the growing body of professional knowledge. In the meantime, the actuarial science Specialist program needed to comply with the Faculty-wide rule of limiting the



BIOGRAPHY

Assistant Professor, Teaching Stream, Vicki Zhang is the Associate Chair of Undergraduate Studies in Actuarial Science at the University of Toronto (U of T). She has been a passionate course designer/redesigner as well as a pedagogical researcher at U of T's Department of Statistical Sciences since 2013.

number of required courses to 14 full-year courses (i.e. 28 semester-long courses). The Associate Chair and her team devised innovative ways to accommodate various stakeholders given the limited curriculum space. The team started by identifying the most important knowledge, skills, and values to be obtained through our Specialist program, given the changes in the industry and profession, as well as the broader economy. We then recognized that students have different academic and professional interests in pursuing an actuarial degree and that there are various paths to success within the profession. With those understandings, we redesigned the upper-year curriculum from a fixed set of required courses to a combination of core courses and two lists of “key elective” courses, the first of which includes advanced theory courses for each pathway, and the second a set of “practicum” courses covering a variety of subfields. Students were then able to construct their own pathways to complete the program requirements, after obtaining core knowledge and skills from a set of foundational courses.

“The new curriculum reflects mentorship and empowerment, in that it builds capacity for growth for our teaching staff by allowing them to strengthen their teaching practices in fields that are most relevant to their expertise and academic interests.”

The new curriculum reflects **mentorship and empowerment**, in that it builds capacity for growth for our teaching staff by allowing them to strengthen their teaching practices in fields that are most relevant to their expertise and academic

interests. In this process, we also facilitated **teaching excellence** in the long term, by eliminating barriers to learning and matching teachers’ and students’ academic interests in each pathway. After this major curriculum redesign and based on information gathered from the Canadian Institute of Actuaries (CIA), the University of Toronto became the first Canadian university to have an undergraduate curriculum fully aligned with the recent professional curriculum. Because of our “early-bird” status, the professional organization and credentialing bodies have invited us to present our new curriculum to other universities and the broader profession at academic and professional conferences. We are currently undertaking **pedagogical research** resulting from these presentations and conversations, which will support further redesign and improvement at both the course and the program levels.

IMPACT

The University of Toronto’s actuarial science Specialist program has long been recognized as one of the most rigorous academic programs in Canada. In the past, the program had a focus on theories and practices of “long-term” insurance coverages (i.e. life, annuities, pensions). After the curriculum redesign, the program has achieved further balance between theories and practices related to long-term and short-term coverages (property and casualty). More importantly, students in the new program will have a better statistical foundation and be better prepared to work with data. The first student cohort benefiting from the new curriculum was enrolled in March 2019. We plan on following this cohort over 2019-2021 to assess their performance in both professional exams and entry-level positions. The preliminary feedback from fifteen insurance executives who reviewed our curriculum indicated that it has great potential to boost students’ knowledge in data science and modern statistical methods, which will

CURRENT ROLE

As Associate Chair of Undergraduate Studies in Actuarial Science at the University of Toronto, Vicki oversees all aspects of actuarial undergraduate programs. She is also the Accreditation Actuary for the University Accreditation Program (UAP), which is a partnership between U of T and the Canadian Institute of Actuaries (CIA). She teaches both undergraduate and graduate courses in actuarial science, insurance mathematics, and financial regulation. She has created a capstone actuarial course which explores the complex history of the life insurance product design and regulation in the US and Canada, while providing students with hands-on experience with the widely-used industry software AXIS. She wrote the textbook for the capstone course (Uncalculated Risks, Canadian Scholars’ Press, 2014). She also developed a pedagogical approach of “narrative mathematics” to improve concept linkage and active-learning among students in large-classroom courses.

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NETWORKS

Society for Teaching and Learning in Higher Education (STLHE)

Canadian Institute of Actuaries (CIA)

Society of Actuaries (SOA)

International Society for the Scholarship of Teaching and Learning (ISSoTL)

be extremely valuable in their future careers as insurance professionals. With the new addition of “practicum” courses to the elective list in the upper years of study, students will be better equipped to connect theories with real world applications. Those courses taught by seasoned industry professionals will provide students with hands-on knowledge in modeling, together with business and communication skills. Finally, the new program enhances students’ learning experiences in the actuarial science Specialist program by providing pathways that best suit an individual’s academic and professional goals and interests, especially as the profession itself becomes increasingly diverse. This curriculum has become a pioneering model that represents the gold standard among such programs in Canada.

RELATED REFERENCES

- Fields, J., Kenny, N.A., & Mueller, R.A. (2019). Conceptualizing educational leadership in an academic development program, *International Journal for Academic Development*, DOI: 10.1080/1360144X.2019.1570211
- Macdonald, A. S. (2006). Actuarial education: Does it compute? *Annals of Actuarial Science*, 1(2), 199-201.
- Michael, S. (2006). Actuarial education and research: A perspective from down under. *ASTIN Bulletin*, 36(1), 1-3.
- Staples, S. G. (2014). The role of an actuarial director in the development of an introductory program. *PRIMUS*, (24)9-10, 883-890.



Advance HE. UK Professional Development Standards Framework (UKPSF). Retrieved from <https://www.heacademy.ac.uk/download/uk-professional-standards-framework-ukpsf>

Carbone, A., Evans, J., Ross, B., Drew, S., Phelan, L., Lindsay, K., Cottman, C., Stoney, S. & Ye, J. (2017). Assessing distributed leadership for learning and teaching quality: A multi-institutional study. *Journal of Higher Education Policy and Management*, 39(2), 183-196.

Fields, J., Kenny, N. A., & Mueller, R. A. (2019). Conceptualizing educational leadership in an academic development program. *International Journal for Academic Development*, 24(3), 218-231.

Friberg, J. (2016). Might the 4M framework support SoTL advocacy? [Web log post]. Retrieved from <https://illinoisstateuniversitysotl.wordpress.com/2016/07/11/might-the-4m-framework-support-sotl-advocacy/>

Jones, S., Hadgraft, R., Harvey, M., Lefoe, G., & Ryland, K. (2013). A user guide for benchmarking distributed leadership. Office for Learning and teaching. Department of Industry, Innovation, Science, Research and Tertiary Education. Sydney, Australia.

Kenny, N., Berenson, C., Chick, N., Johnson, C., Keegan, D., Read, E., & Reid, L. (2017, October). A developmental framework for teaching expertise in postsecondary education. In International Society for the Scholarship of Teaching and Learning Conference, (14-17 October), Calgary, Canada. Available at: http://connections.ucalgaryblogs.ca/files/2017/11/CC4_Teaching-Expertise-Framework-Fall-2017.pdf (accessed on November 27, 2017).

Lieff, S. J., & Yammarino, F. J. (2017). How to lead the way through complexity, constraint, and uncertainty in academic health science centers. *Academic Medicine*, 92(5), 614-621.

Simmons, N., & Taylor, K. L. (2019). Leadership for the scholarship of teaching and learning: Understanding bridges and gaps in practice. *The Canadian Journal for the Scholarship of Teaching and Learning*, 10(1), 1-18.



Invitation email by the co-chairs to ISSOTL Scholarship of Leading Special Interest Group (SIG) members:

Dear ISSOTL Members,

The Scholarship of Leading (SoL) is an Interest Group within the International Society for the Scholarship of Teaching and Learning (ISSOTL). Committed to pursuing scholarly work on the relationships between leading, teaching and learning, this interest group's mission is to create opportunities for dialogue, to promote scholarly research on the topic, and to provide support to ISSoTL members interested in and engaged in leadership.

As co-chairs of SoL since 2017, we surveyed our members regarding their interests in and perceptions of the SoL and presented the findings at our SoL Annual Meeting in Calgary, Canada, 2017. The survey helped illuminate the many ways that SoL is defined, including through formal roles, structures and activities, as well as through other less formalized activities that provide leadership for the improvement of postsecondary education and one's own growth. Based on discussion with SoL members at this year's ISSOTL Annual Meeting in Bergen, Norway, we are putting out this call for proposals regarding what SoL in education looks like in practice – in other words, how are you or others you are working with leading or influencing others in teaching or education? What models of leadership are influencing your work or what models are you generating?

May 1, 2019: Mini-case Submission to carol.rolheiser@utoronto.ca OR acarbhone@swin.edu.au

Please see the following link for a submission template, 2 examples of mini-case studies, and further information regarding the call for proposals.

Kind regards,

Professor Carol Rolheiser, Director of the Centre for Teaching Support & Innovation (CTSI) and Professor, Curriculum, Teaching and Learning, University of Toronto, Canada

Professor Angela Carbone, Associate Dean Learning Innovation in the Faculty of Science, Engineering and Technology, Swinburne University of Technology, Australia

Scholarship of Leading (SoL)
call for proposals.
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