

# FACULTY MENTORING FOR TEACHING

## Research Report

CENTRE FOR TEACHING SUPPORT & INNOVATION  
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# ACRONYMS AND ABBREVIATIONS

Centre for Teaching Support & Innovation (CTSI)

Course Evaluations (CE)

Faculty of Arts & Sciences (FAS)

Life Sciences (Life Sci)

New Faculty Orientation (NFO)

Online Community of Practice (Online CoP)

Physical Sciences (Phys Sc)

Research Ethics Board (REB)

Scholarship of Teaching and Learning (SoTL)

Social Sciences (Soc Sc)

Teaching Academy Member (TAM)

Teaching Stream (TS)

University of Toronto Mississauga (UTM)

University of Toronto Scarborough (UTSC)



## EXECUTIVE SUMMARY

Faculty mentoring programs have a lengthy history within institutions of higher education but vary in their models, approaches and topics of focus. This University of Toronto (U of T) study emerged from three situational factors. First, a Dean's request to the Centre for Teaching Support & Innovation (CTSI) regarding mentoring for teaching approaches deemed to be effective within a research-intensive institution such as U of T. Second, in our ongoing work at CTSI we offer consultative support for faculty members' ongoing efforts to enhance their teaching. Throughout many of our centre's activities and offerings we regularly observe many ways in which faculty of all career stages seek to create and regularly engage in mentoring relationships ranging from one-to-one consultations to larger network groups.

A third key factor that stimulated this study, and contributes to its significance within the U of T context, was two key survey reports that identified gaps in faculty mentoring and support. The 2012 Collaborative on Academic Careers in Higher Education (COACHE) survey (Harvard, 2012), indicated that while 82 per cent of U of T faculty believed mentoring was fulfilling and 79 per cent reported that mentoring was important in a department, only 48 per cent felt mentoring was effective. A subcategory within the COACHE report found that U of T faculty have received widely varying formal feedback on progress toward: Tenure (77%) and Promotion (22%). The survey identified gaps in U of T mentoring activities as it scored lower in comparison to its peer institutions, especially for mid-career faculty. Of note, over 50 per cent (57%) of tenure stream faculty reported never to occasional conversations with departmental colleagues regarding effective teaching practices.

The second survey, 'Speaking Up' (University of Toronto, 2014) found that faculty engage in peer teaching-related discussions (61% of teaching respondents reported regular to frequent conversations about student learning). Over one-fifth (21.5%) of combined teaching and tenure stream faculty reported 'extensive' stress associated with their teaching responsibilities -- almost half (45%) of new teaching stream faculty experienced 'extensive' stress levels. Both 'Speaking Up' and COACHE surveys provide a quantitative snapshot of faculty mentoring support at U of T; however, there exists a need to capture qualitatively a more nuanced understanding of these survey results focused on mentoring for teaching initiatives, approaches and activities, specific to the U of T context.

## PURPOSE OF THIS STUDY

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This descriptive and exploratory qualitative study examines faculty mentoring for teaching at U of T, with a view to better understand the results of the COACHE and 'Speaking Up' survey data, and to explore themes emerging from CTSI interactions with instructors at U of T. Evidence-based CTSI resources developed from this study will build on broader research, faculty mentoring programs and resources from other higher education institutions, and include promising/ best practices within U of T that can support future mentoring activities.

## DEFINITION OF KEY TERMS

**TENURE STREAM:** This group included tenured/tenure stream professors with continuing appointments.

**TEACHING STREAM:** This group included faculty lecturers and instructors with continuing appointments in teaching focused roles with little or no research responsibilities.

## EXECUTIVE SUMMARY

### SPECIFIC QUESTIONS

This qualitative report draws on findings from an extensive Literature Review and Document Review, combined with data from a U of T Divisional Scan (n=15) and interviews (n=44) with tenured/tenure stream and teaching stream faculty. The following questions guided our report:

- What is the evidence-base for effective faculty mentoring (for teaching) programs, approaches and models?
- What is the current state of faculty mentoring programs at U of T? Is mentoring for teaching included in these programs? What processes, if any, are used to match mentors with mentees?
- How do faculty participants describe their formal/informal experiences as teaching mentors and/or mentees?
- What do faculty participants describe as current promising mentoring for teaching practices at U of T?
- What mentoring gaps, challenges and recommendations do faculty participants share?

### KEY FINDINGS

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#### FACULTY MENTORING LITERATURE

While there is a robust and extensive faculty mentoring literature, we identified a gap in “mentoring for teaching” studies and this research report, associated conference presentations, and a forthcoming academic publication will contribute to this void in the academic literature. The literature reviewed identified core threads and emerging topic areas at many higher education institutions.

Faculty mentoring, more broadly, can:

- “Humanize the workplace” as relationship building is more likely to become embedded in the organization’s culture and the “ripple effect” may occur in that mentoring can have a positive effect on others, including those outside of the mentoring relationship (Zachary, 2005).
- Assist faculty in building new relationships and strengthening existing ones (Boyle & Boice, 1998).
- Benefit new faculty who are likely to receive guidance from both formal and informal mentoring whether the model is a traditional dyad or it involves support from peers, in groups and, increasingly, in larger teaching and learning support communities and networks.
- Focus on “what do I need” and “how can I get my needs met”? This model shifts “from one that is centered around your ability to find a relationship with a senior faculty member on your campus to one that focuses on identifying your needs and getting them met” (Rockquemore, 2011, p. 18).

Faculty mentoring for teaching, more specifically, can:

- Support instructors in their journey from the “relatively abrupt transition from graduate student to faculty positions” (Britnell et al., 2010, p. 14).
- Positively impact new faculty members’ teaching effectiveness (Boice, 1998; Carr, Bickel & Inui, 2003). For example, course evaluations improved and instructors enhanced their teaching practices through a peer-assisted teaching mentoring scheme (PATS) (Carbone, 2014).
- Engage instructors in formal, institutionally supported faculty mentoring programs to prepare them to be “more effective as they seek to develop and refine their teaching” (Jones, 2008, p.93).
- Build strong cultural support within departments and institutions by bolstering the number of mentorship partners who engage in teaching and learning-focused discussions (Roxå & Mårtensson, 2009).
- Be instrumental in identifying future mentors for teaching, offering support for faculty of all career stages who seek continual enhancement in their students’ learning and their teaching approaches.

## EXECUTIVE SUMMARY

### DIVISIONAL ENVIRONMENTAL SCAN: UNIVERSITY OF TORONTO

A U of T Divisional Environmental Scan captured the current state of faculty mentoring programs and gathered details and documents on mentoring guidelines across all three campuses. In addition, we captured whether mentoring for teaching was explicitly addressed in any guidelines, and finally, explored any processes to match mentors with mentees. We recruited from a list of 18 divisions. Our findings include:

- n=15 divisions participated in the scan (86% response rate)
- n=9 divisions reported formal mentor matches, for both tenure and teaching stream faculty
- n=4 divisions reported informal mentor matches described by one divisional respondent as “mentoring on an ad-hoc basis, typically for those faculty [who are] up for tenure review.”
- n=2 divisions assigned a teaching mentor
- n=2 divisions offered mentor skills training

The Divisional Scan offered a snapshot of mentoring activities but does not tell a full picture. For example, divisions that reported formal matches made at the time of hire did not always align with the experience of interview participants (e.g., Dept/Divisions often lacked a process to follow-up with matched pairs).

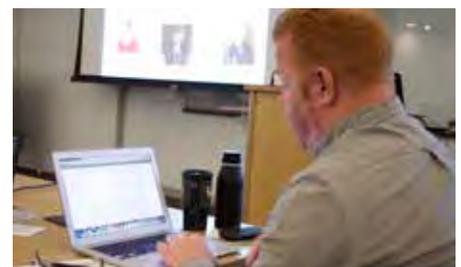
Such unclear mentoring processes tended to cloud an understanding of the faculty mentoring landscape at U of T. Thus, the Divisional Scan findings are addressed throughout the report, situated within the voices of faculty who experienced a wide range of formal and/or informal mentor matches.

### INTERVIEWS

Interviews with tenured, tenure stream and teaching stream faculty (N = 44) revealed the following insights.

#### Mentoring matches

Faculty shared mentoring for teaching experiences and the varied types of matches they had experienced. Participants offered varied descriptions of mentoring, including reciprocity, coaching and collegial relationships. They mentioned that this shared learning journey served to further the mentor’s own professional development, hence both mentee and mentor gained professionally from the experience. Faculty engaged in both formal and informal mentor models – some had no mentor match but this did not preclude these participants from describing other valuable informal mentoring matches that they had initiated. Approximately half of interviewees had been formally matched (e.g., via a departmental letter) and most frequently within their stream (e.g., tenured faculty mentored tenure stream). Faculty also described being mentored by someone *outside* their discipline more often than meeting *within* one’s discipline. One Teaching Academy faculty member expressed a core theme that emerged from several participants: cross-disciplinary mentoring discussions revealed more similarities than differences when discussing teaching practices and strategies.



## EXECUTIVE SUMMARY

Despite lacklustre and/or unrealized formal mentor matches participants described a range of informal mentoring that occurred. Mentors and mentees both spoke of the oft-cited phrase “sink or swim” as new faculty struggled to keep up with the demands of their new tenure or teaching stream appointments and in such cases sought to initiate and champion informal mentoring/guidance that they felt they needed to thrive in their teaching roles. Many mentors described their own experiences from several years ago that aligned with their mentees’ teaching anxieties. Fortunately, those mentors had enthusiastically become informal and/or formal mentors, and stated that they sought to give back (“reciprocate”) after having experienced similar feelings. As one participant noted: “I’d like to make the academy a human place.” Of note, less hesitant faculty described just how important a formal match was to their feelings of isolation, especially if new to the university, and in some cases to the city and country.

### **Mentoring Scenarios: Enablers and Challenges**

The Divisional Scan highlighted the current focus on one-to-one faculty mentoring matches at U of T. During interviews, faculty shared what elements they deemed as effective or positive for the development of new faculty at U of T. Included here were enthusiastic and committed faculty who relished their mentoring roles, provided documentation to mentees, and engaged in more structured mentoring formats. Of note, a few participants shared that mentoring for teaching discussions faltered when research topics and associated pressures were at the fore of mentoring meetings. As well, participants noted that a lack of goal setting hampered their mentoring experience and journey. Finally, when mentees chose to take initiative to form mentoring relationships in the face of limited departmental support they feared being labelled as ‘incompetent’ or requiring remedial services.

The literature notes trends in mentoring that start with identifying faculty needs and meeting these, whether via dyads, with peers and/or from broader institutional networks and teaching and learning communities. In this research study U of T faculty emphasized specific avenues for teaching support/ mentoring, where advice and coaching (described as mentoring), took place. New faculty felt that they gained support and became socialized into learning about - and incorporating - myriad effective teaching practices via: Teaching & Learning Centres, peer groups, New Faculty Orientation, department initiatives, ‘Open Doors’ (an institutional peer observation opportunity with award-winning instructors), and Networks (e.g., Online Community of Practice, Scholarship of Teaching & Learning Network).

### **Common Teaching-Related Concerns**

Aside from faculty members’ ongoing teaching preparation and planning activities, this study sought to identify their broader teaching-related concerns and topics to inform future resources to support mentoring relationships. A core theme emerged: the role of teaching cultures and climates within a research-intensive university. On the one hand, participants shared the challenges of working within U of T, sometimes described as “an intimidating place”, and frequently recounted the absence of spaces to engage in teaching-related discussions.

On the other hand, several participants described their experiences of what positive and supportive teaching cultures looked like, more often facilitated by seamless and open spaces for highly effective mentoring to occur (structured and intentional combined with informal opportunities such as coffee/common spaces to congregate). Participants shared insights on the intricacies of how such teaching cultures emerge, and the ways in which they are supported. Further, they described that such strong sites of support for teaching can assist in the shaping of recommendations for other departments faced with less supportive teaching environments.

To that end this report includes key considerations and suggestions directed at various stakeholders at U of T for each of the most highly cited teaching related concerns: Teaching culture/climate; Parsing tenure and promotion guidelines for teaching; summative assessment of teaching; course evaluations; and, how to locate teaching ‘experts’ or ‘champions.’

## EXECUTIVE SUMMARY

### RECOMMENDATIONS

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#### MENTORING MODELS AND APPROACHES

The literature and this study shed much light on the range of mentoring approaches and models that exist. Our report offers a range of evidence-based options for faculty, administrators and staff to consider when embarking on a formal program and/or revamping an existing one. Our recommendations for developing and enhancing mentoring for teaching guidelines, activities or more formalized approaches may be used in conjunction with existing faculty mentoring models/guidelines already in place.

Effective mentoring for teaching can stem and thrive from a wide range of relations – dyadic, larger supportive peer groups (co-mentoring, mutual mentoring), and networks of enthusiastic and committed instructors who are intent on building and enhancing their teaching repertoires and confidence. The majority of U of T faculty in our study defined mentoring within dyadic model terms but it may be that this is the most familiar to them and historically the one-to-one model is most often discussed within higher education. However, participants tended to discuss more fluid relationships with their colleagues, sometimes in a dyadic, formal focused relationship with specific activities, while at other times they sought and engaged with instructors through larger network events. Participants described all of these activities and relationships in ways that aligned with the range of mentoring definitions and descriptors in the literature.

Dawson's (2014) framework for designing and specifying mentoring models provides evidence-based guidance for educators, faculty and administrators responsible for designing and assessing mentoring programs and making important decisions about key components. Dawson's work is especially valuable in helping define the mentoring model(s) being developed or researched, and his design elements framework is a useful resource for important discussions at the departmental and/or divisional levels that can trigger thinking on key topic areas such as choice of design of a mentoring model (why, for example one-to-one?). By addressing each of the elements, the resultant choices become more transparent, and communications are clarified as models are selected and assessed.

Included below are a few considerations from the full list in the main report that may serve as starting points for interested parties to consider as they examine appropriate mentoring for teaching models best suited to their division/department's teaching-related goals and objectives.

#### **Dyadic Model (One-to-One)**

Considerations:

##### Department Chair or Divisional Dean:

- conduct an informal assessment/scan of whether there are current dyadic mentoring relationships in one's department and/or division, and if so how these are formed, the format, frequency, content, resources/tools used, and insights on what has worked well and where gaps remain in existing mentoring relationships. Such information-gathering may lend insights into what mentoring model is supported by the key players in the department.
- if formal and structured mentor models are not the preferred approach, consider avenues for new faculty to be intentionally introduced to peer and larger department and divisional groups and networks (e.g., at a minimum identify a teaching 'expert' or point person).
- consider whether mentor selection includes requirements for mentor skills training (or equivalent).
- consult widely with faculty when examining how mentoring can be viewed as service/leadership and be recognized for its contribution to the department and division as a whole.

## EXECUTIVE SUMMARY

- in making decisions on the voluntary/mandatory aspects of mentoring for teaching, use a best practice that clearly articulates the benefits to be gained for both parties in the match. In this way, the mandatory element is not deemed to be punitive but rather, about enhancing one's teaching and embarking on steps to fully prepare for one's academic position (e.g., preparation of strong tenure and promotion documentation for teaching).
- departments may also choose to monitor and evaluate how (or if) these mentoring programs are being implemented and if/how effective they are at achieving desired outcomes. Such intentionality will result in continual improvement of mentoring relationships and in reaching stated objectives and outcomes of the mentoring teaching models, guidelines and approaches.

### Teaching & Learning Centres:

- through its campus contacts, and its ongoing network of workshop/program facilitators and insights regarding effective teachers, a Teaching & Learning Centre may provide support in identifying a list of potential mentors to share with departments/divisions.

### **Peer Supported Mentoring Model**

Calderwood and Klaf (2015) reported that peer mentoring constructs a community with a "shared engagement in common practice" (e.g., teaching) who learn from and with each other - a different configuration from the dyadic model. Participants in this study noted that peer mentoring is a collaborative practice that occurs, for example, between new hires meeting with one another to discuss a specific topic (e.g., a particular teaching strategy). Peer supported mentoring can also involve a more senior faculty member meeting with more than one junior faculty member. In other cases, mid-career faculty meet with another instructor of a similar career stage to reciprocally share (for example, to observe their colleague's classes to strive for continual enhancement of their teaching). This is noteworthy as many formal mentoring programs target new faculty hires and yet faculty at all stages of their careers seek out ways to challenge themselves in their teaching and seek opportunities to do so.

Departmental teaching-focused initiatives are key sites for emerging leaders to be both mentored and to provide mentoring opportunities, both in more formalized dyadic and peer-focused models, and also within broader groups, learning communities and networks. As reported in this study, several participants, particularly in the Teaching Stream, cited the dearth of leadership roles available for them. They have initiated many departmental events or sporadically – and in an ad hoc manner – served as informal teaching mentors to new and more senior faculty. The following list of considerations can guide departments and divisions in achieving and enhancing a strong teaching culture and climate. Interviewees had suggested many of these ideas as positive next steps.

Considerations:

### Department Chair or Divisional Dean:

- conduct an informal scan of existing peer-supported mentoring relations that foster support for teaching. Such information can identify existing gaps and opportunities to highlight existing collaborations.
- increase the number and quality of departmental avenues to recognize effective teaching practices taking place and opportunities to discuss teaching-related topics (e.g., more frequent inclusion of teaching topics/updates at faculty meetings, highlighting teaching innovations or successes in departmental or divisional newsletters or communications).
- consider selecting a teaching champion and incorporating opportunities for these leaders to in turn meet, mentor, guide and essentially be available for new faculty or any instructor with teaching-related questions. Such leaders play a key role in building other teaching leaders and in instructional capacity-building.
- intentionally create physical spaces for lunch-hour or other meetings, both formal and informal on a specific teaching topic identified by instructors (e.g., Brown Bag series, coffee/meet-and-greet teaching discussions).

## EXECUTIVE SUMMARY

- invite faculty to share their ongoing involvement in external teaching and learning communities (e.g., Online Community of Practice, Scholarship of Teaching & Learning (SoTL Network), CTSI programming, participation in Society for Teaching & Learning in Higher Education (STLHE)).
- regularly communicate teaching and learning events (formal and informal) via department/divisional channels.

### Teaching and Learning Centres:

- serve as a space where peer support for teaching can emerge; faculty in this study reported that the advice, coaching and guidance they received from Teaching & Learning Centre staff at U of T and from colleagues in other departments and disciplines participating in centre programming, helped them see the value of peer-supported mentoring for teaching.
- help foster intentional linkages between faculty of all career stages through, for example, introducing faculty to colleagues with similar teaching and learning interests and/or who are experiencing a positive departmental teaching culture. Such connections can help faculty experience rich teaching discussions, a factor that can impact and enhance a faculty member's view of teaching and lead to a desire to enhance one's own departmental teaching climate and culture.
- continue to showcase/highlight effective disciplinary or departmental teaching and learning practices to raise awareness for new faculty as they embark on forging new mentoring networks.
- continue to promote innovative teaching and learning activities across all campuses to raise awareness, and share the 'pulse' of positive spaces and places where conversations around teaching enhancement and shifts in teaching cultures are happening.
- CTSI to promote and disseminate faculty mentoring for teaching resources to departments and divisions. These resources will offer a range of ideas for supporting peer mentoring models.

## **CONCLUSION**

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Mentoring for teaching at U of T currently takes a variety of forms. While formal approaches (mentor- mentee matches) occur in several divisions, there is a gap in the clarity of the matching process, and few mechanisms in place for ensuring optimal matches are made, sustained and of benefit to both parties. There is almost non-existent ongoing monitoring and/or formative and summative evaluation of existing mentoring programs.

This report offers evidence that faculty of all career stages, but particularly those new to U of T, can benefit from a formal, matched dyadic mentoring for teaching model that enables both skilled mentors and committed mentees to engage in purposeful and intentional activities to meet the identified needs of the junior faculty member. Such matches offer myriad opportunities for reciprocal learning to take place, as noted by even the most experienced and accomplished U of T faculty (e.g., President's Teaching Award winners). Importantly, these formal matches can serve as a foundation to learning about additional mentoring opportunities at U of T: peer supported, co-mentoring groups and larger networks and learning communities that frequently meet in-person and/or in an online community on a focused topic. Faculty, staff and administrators who work directly or indirectly with faculty of all career stages may draw upon the most appropriate mentoring approach and/or model highlighted from the evidence-base presented in this study. Such options can be made available based on what best suits a faculty member's unique learning needs.

Finally, four steps are outlined in this report that will guide CTSI in our efforts to support continued enhancement of mentoring for teaching practices and resources at the University of Toronto.

# INTRODUCTION

## SETTING THE CONTEXT

Faculty mentoring programs have a lengthy history within institutions of higher education but vary in their models, approaches and topics of focus.

Several factors coalesced to serve as the impetus for this study. First, the Dean of a University of Toronto (U of T) faculty sought information from the Centre for Teaching Support & Innovation (CTSI) regarding mentoring for teaching approaches deemed to be effective within a research-intensive institution such as U of T. The CTSI Director felt this was an important opportunity to consult the literature, seek promising practices within U of T and at peer institutions, and to develop practical resources to support Deans, Chairs, faculty, administrators, and teaching and learning centre staff as they seek input on matters related to mentoring for teaching.

Second, in our ongoing work at CTSI we offer consultative support for faculty members' ongoing efforts to enhance their teaching. We regularly engage with instructors on teaching-related topics, issues, and challenges and in turn offer evidence-based approaches to address their questions. Faculty have, for example, sought our expertise and guidance to build their pedagogical toolkit to effectively conduct formative in-class peer review observations in a collegial atmosphere, which is an informal mentoring activity. CTSI also coordinates a Scholarship of Teaching & Learning (SoTL) Network that offers support and structured programming and opportunities for faculty members across the institution to connect around teaching interests. In addition, we witness informal teaching networks develop organically between faculty who meet and sustain relationships beyond our CTSI sessions. Throughout these activities and offerings we regularly observe many ways in which faculty of all career stages seek to create and regularly engage in mentoring relationships ranging from one-to-one consultations to larger network groups.

A third key factor that stimulated this study, and contributes to its significance within the U of T context, is survey results from two key reports: first, the 2012 Collaborative on Academic Careers in Higher Education (COACHE) survey (Harvard, 2012), distributed to U of T faculty in tenure stream roles<sup>1</sup>, and second, the 2014 'Speaking Up'<sup>2</sup> survey conducted by the University of Toronto (University of Toronto, 2014). Results from the faculty mentoring category in the COACHE survey show that 82 per cent of faculty believe mentoring is fulfilling<sup>3</sup>; 79 per cent feel that mentoring is important in a departments, however, only 48 per cent feel mentoring is effective. A subcategory within the COACHE report found that faculty have received widely varying formal feedback on progress toward: tenure (77%) and promotion to full professor (22%). The survey identified gaps in U of T mentoring activities as it scored lower in comparison to its peer institutions, especially for mid-career faculty.

Both the COACHE and 'Speaking Up' survey results highlighted some important findings concerning mentoring for teaching topics and issues:<sup>4</sup>

## COACHE (2012): TENURE-STREAM RESPONDENTS

- half of respondents never to occasionally engaged in conversations with departmental colleagues regarding undergraduate student learning. Faculty reported regular to frequent conversations regarding graduate student learning (63%).
- over 50 per cent (57%) of faculty reported never to occasional conversations regarding effective teaching practices with departmental colleagues.
- over half (52%) of respondents felt satisfied to very satisfied with their institution's support for improving one's teaching.

<sup>1</sup> COACHE is a consortium of over 200 colleges and universities across North America (U of T and McGill University were the only two Canadian universities in the 2012 survey) committed to making the academic workplace more attractive and equitable for faculty. COACHE is based at the Harvard Graduate School of Education (<http://sites.gse.harvard.edu/coache>). Note that the COACHE survey does not capture the equivalent of U of T teaching stream faculty members. The U of T 'Speaking Up' survey, addressed in this section, adapted survey items from COACHE to ensure perspectives from teaching stream faculty were captured.

<sup>2</sup> A joint initiative of the Offices of the Vice-President & Provost and the Vice-President, Human Resources & Equity, the 'Speaking Up' Faculty & Staff Experience Survey includes a number of questions that are designed to give a 'big picture' view of the staff and faculty work experience at U of T. Specific examples of how the results have stimulated change at U of T include the mentoring program for staff that focuses on management and leadership development. For more information: <http://www.hrandequity.utoronto.ca/about-hr-equity/survey.htm>

<sup>3</sup> It is not clear if respondents are referring to their role as a mentor or a mentee.

<sup>4</sup> Survey responses are rounded to the nearest percentage in this section.



## SPEAKING UP (2014)<sup>5</sup>: TENURE AND TEACHING-STREAM RESPONDENTS

- well over half (61%) of teaching stream respondents reported regular to frequent conversations about student learning
- just over one-fifth (21.5%) of combined teaching and tenure streams reported extensive stress associated with their teaching responsibilities. Of note, teaching stream faculty reported the highest stress levels on this item: extensive stress (45%). Tenured faculty reported the lowest levels of stress in this category: not at all (34%).
- teaching stream respondents were overwhelmingly satisfied (somewhat to very: 89%) with the resources U of T provides to support their teaching.

Collectively, these survey results demonstrate that while many faculty members do engage in discussions with colleagues regarding teaching there exists a need to better understand what these survey data are telling us about teaching and the development of university teachers. COACHE findings focus on comparisons between peer institutions and U of T currently has lower ratings within the mentoring category, especially for associate professors. Respondents within the teaching stream in particular reported high stress levels with respect to teaching but given the nature of the survey we are uncertain regarding what this specifically means. The next section describes the current research study components and steps taken to explore questions such as those found in the survey data.

## PURPOSE OF THIS STUDY

This descriptive and exploratory qualitative study examines faculty mentoring for teaching at U of T, with a view to better understanding the results of the COACHE and Speaking Up survey data, and to explore themes emerging from CTSI interactions with instructors at U of T.

### This report is in two parts:

- **SECTION A:** Reviews the academic literature to explore and examine evidence-based faculty mentoring models and approaches. Through data collection methods within U of T (interviews and a divisional environmental scan) we provide insights on current faculty mentoring for teaching initiatives and faculty experiences at U of T.
- **SECTION B:** Outlines considerations for U of T faculty, staff and administrators with an interest in developing and/or enhancing mentoring for teaching activities, programs, and/or guidelines.

A series of CTSI evidence-based resources, informed by this study (the literature and data specific to the U of T context), are currently being developed for U of T faculty, staff and administrators interested in developing and/or enhancing mentoring for teaching activities and initiatives across the institution. The resources will build on faculty mentoring programs and resources from other higher education institutions and include promising/best practices within U of T that can support future mentoring activities.

Findings and resources developed as products from this study will also serve to advance some of the key priorities at the U of T, as reflected in the Provost's response to the COACHE (2012) findings that call for a need to work with chairs and deans, in "enhancing leadership development and mentoring for all faculty," among other areas.<sup>6</sup>

While this study report itself is a detailed overview of our research findings, we will also endeavour to disseminate some of the major findings in a future academic publication, given the gap in the literature regarding mentoring for teaching within higher education.

<sup>5</sup>This survey was conducted prior to the inclusion of the new teaching stream provision amendment in the Policy and Procedures on Academic Appointment (PPAA) approved on June 25th 2015, hence the previous Ranks and Titles are included here.

<sup>6</sup><http://www.faculty.utoronto.ca/reports/coache-2012/provost-letter/>

## SPECIFIC QUESTIONS

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This qualitative report draws on findings from an extensive Literature Review and Document Review, combined with data from a U of T Divisional Scan (n=15) and interviews (n=44) with tenured/tenure stream and teaching stream faculty. The following questions guided our report:

- What is the evidence-base for effective faculty mentoring (for teaching) programs, approaches and models?
- What is the current state of faculty mentoring programs at U of T? Is mentoring for teaching included in these programs? What processes, if any, are used to match mentors with mentees?
- How do faculty participants describe their formal/informal experiences as teaching mentors and/or mentees?
- What do faculty participants describe as current promising mentoring for teaching practices at U of T?
- What mentoring gaps, challenges and recommendations do faculty participants share?

## DEFINITION OF KEY TERMS<sup>7</sup>

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For the purposes of this study and within a U of T context, we refer to participating faculty as falling within these groups:

**TENURE STREAM:** This group included tenured/tenure stream professors with continuing appointments.

**TEACHING STREAM:** This group included faculty lecturers and instructors with continuing appointments in teaching focused roles with little or no research responsibilities.

## LIMITATIONS/DELIMITATIONS

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For this study we focused primarily on continuing appointment faculty. The mentoring resources developed from the evidence and experiences described in this study can inform how the University, via departments and divisions, might choose to support its appointed teaching staff.<sup>8</sup>

It is imperative to note that this study is not a comprehensive account of all departmental mentoring initiatives but includes many that were brought to our attention through the faculty interviews, consultations with Teaching Academy<sup>9</sup> members, Scholarship of Teaching and Learning (SoTL) Network activities, CTSI consultations, among many other such avenues. We acknowledge that innovative mentoring initiatives continue to emerge, and not all are captured in this report. Due to time and resource constraints our study was limited in reaching a representative population sample. While two-thirds of participants were teaching stream faculty it is important to note that we received many of these respondents from the Call for Participants recruitment email sent out via various institutional communication channels and other recruitment strategies addressed in the Methods section of this report.

## ETHICAL CONSIDERATIONS

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The U of T Social Sciences, Humanities, and Education Research Ethics Board (REB) granted approval for this study (Protocol Reference # 32443). All participants have remained anonymous in the report and confidentiality has been ensured by including the participant's discipline (Social Sciences, Humanities, Life and Physical Sciences) and academic position (Assistant Professor, Teaching Stream (TS); Associate Professor, Teaching Stream; Professor, Teaching Stream, Assistant Professor, Associate Professor, Full Professor) only, and, where appropriate whether the individual spoke from their mentor or mentee role.

<sup>7</sup>Interviews with faculty were conducted prior to the inclusion of the new teaching stream provision amendment in the Policy and Procedures on Academic Appointment (PPAA), approved on June 25th 2015: <http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppoct302003.pdf>. For the purposes of this report we have changed the previous Ranks and Titles (e.g., Lecturer) to the new ones (e.g., Assistant Professor, Teaching Stream) to be consistent with current language.

<sup>8</sup>We are cognizant of the teaching needs of sessional instructors and understand it is a key area that warrants future inquiry, in line with the findings included in this document.

<sup>9</sup>The university-wide President's Teaching Award recognizes sustained excellence in teaching, research in teaching, and the integration of teaching and research. Recipients of a President's Teaching Award are designated by the University as a member of the Teaching Academy for a minimum period of five years; those wishing to continue participation in the Academy after this term may elect to do so. The Academy meets regularly as a body to discuss matters relevant to teaching in the University, offer advice to the Vice President and Provost and the Director of the Centre for Teaching Support & Innovation (CTSI), assist in the assessment of teaching when required and function as advocates for excellence in teaching within and without the University ([http://www.provost.utoronto.ca/awards/presidentaward/about\\_pta.htm](http://www.provost.utoronto.ca/awards/presidentaward/about_pta.htm))

# SECTION A

## METHODS

This qualitative report includes the following study components: Literature Review, Document Review, Divisional Scan of U of T faculty mentoring activities, and Interviews with continuing appointment faculty at U of T.

**TABLE 1: RESEARCH METHODS**

<b>METHOD</b>	<b>KEY ELEMENTS</b>
<b>Literature Review</b>	<b>Faculty mentoring broadly; mentoring for teaching</b>
<b>Document Review</b>	<b>U of T divisional mentoring documents and resources</b> <b>Samples of mentoring programs/models from higher education institutions<sup>10</sup></b>
<b>Divisional Environmental Scan: U of T</b>	<b>N=15 divisions (9 phone interviews &amp; 6 email responses)</b>
<b>Interviews with Continuing Appointment Faculty</b>	<b>N=44</b>

## LITERATURE REVIEW

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The literature search focused predominantly on peer-reviewed journal articles but also sought scholarly research within educational books and reports. This review guided our investigation and was conducted prior to, and during other data collection methods.

## DIVISIONAL ENVIRONMENTAL SCAN: UNIVERSITY OF TORONTO

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We conducted a U of T Divisional environmental scan to determine the current state of faculty mentoring programs and to gather details and documents on mentoring guidelines across all three campuses. In addition, we sought to capture whether mentoring for teaching was explicitly addressed in any guidelines, and finally, explored any processes to match mentors with mentees. Our recruitment pool included a list of 18 divisions. The criterion for inclusion was that the division had to include teaching as a core function.<sup>11</sup> We received fifteen (n=15) divisional responses (86% response rate): nine responses via phone interview and six by email between September- December 2014.

## INTERVIEW INSTRUMENT AND PROTOCOL

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The Interview Guide was developed from key mentoring themes located in the literature, consultation with CTSI staff with an extensive background in faculty development, and with input from the Teaching Academy. For the latter group we requested feedback on a one-page condensed interview protocol. Suggestions were included in the final documents for each of the Mentor and Mentee Interview Guides.<sup>12</sup>

Through these interviews we sought to gain insights from continuing-appointment faculty on:

1. their formal/informal experiences as teaching mentors and/or mentees;
2. current promising practices, gaps, challenges and recommendations for mentoring for teaching at U of T.

More specifically, interviews allowed for broad discussions on faculty members' previous teaching experiences, mentoring for teaching experiences, effective and promising practices, format and frequency of existing mentoring arrangements, and current gaps, challenges and recommendations for mentoring programs at U of T. These interviews also served to provide a qualitative approach to delve deeper into the U of T COACHE and Speaking Up survey results.

In-depth interviews were conducted in-person between February-December 2014 and one in February 2015. Interviews were between 30-75 minutes and were audio-recorded and transcribed.

<sup>10</sup>This resource search will inform the practical resource guide material.

<sup>11</sup>We excluded the School of Graduate Studies (SGS), and The School of Continuing Studies.

<sup>12</sup>Please contact CTSI, ctsi.teaching@utoronto.ca, for copies of the Interview Guides.

## PARTICIPANT SAMPLE

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Utilizing various institutional communication channels and a snowball-sampling procedure, forty-four (n=44)<sup>13</sup> faculty members in continuing appointments participated in an in-depth interview to discuss their own experiences as teaching mentors and/or mentees. Two of these faculty members also served in teaching and educational development centre roles and one participant was a staff member in a teaching and learning centre. This study sample included representation from four major disciplines (humanities, social sciences, life sciences and physical sciences), across five faculty appointment positions: Teaching Stream (Assistant Professor, Associate Professor), Tenure Stream (Assistant, Associate and Full Professor). See Table 2 for a breakdown of interview participants.

## QUALITATIVE DATA ANALYSIS

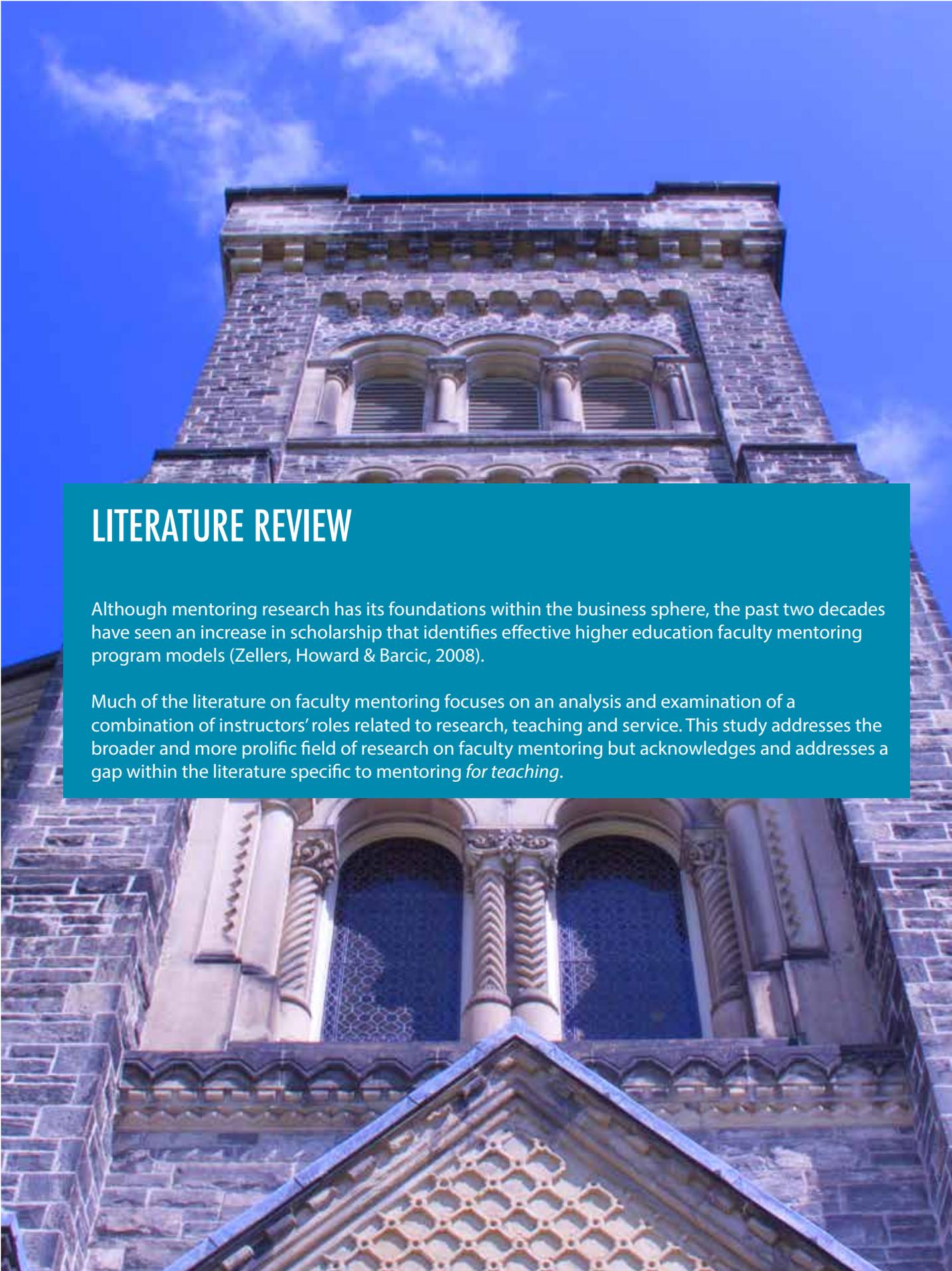
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We utilized Nvivo 10 to ensure effective data management. We employed a thematic analytic approach and through an inductive analysis, identified themes, coded, and organized them as they arose from the raw interview data. Quotes served as units of analysis (Glaser & Strauss, 1967).

**TABLE 2: INTERVIEW PARTICIPANTS**

INTERVIEW PARTICIPANTS: TOTAL N = 44 FACULTY MEMBERS	
Academic Appointment	Number
Associate Professor, Teaching Stream	16
Assistant Professor, Teaching Stream	13
Associate/Full Professor	9
Assistant Professor	5
Other	1

<sup>13</sup>There are 2472 full-time academic staff at U of T: Teaching Stream faculty (328); and within the Professorial Stream: Professor (1027); Associate Professor (832); Assistant Professor (439); Assistant Professor (conditional) (28). Retrieved from <https://www.utoronto.ca/about-u-of-t/quick-facts>



## LITERATURE REVIEW

Although mentoring research has its foundations within the business sphere, the past two decades have seen an increase in scholarship that identifies effective higher education faculty mentoring program models (Zellers, Howard & Barcic, 2008).

Much of the literature on faculty mentoring focuses on an analysis and examination of a combination of instructors' roles related to research, teaching and service. This study addresses the broader and more prolific field of research on faculty mentoring but acknowledges and addresses a gap within the literature specific to mentoring *for teaching*.

## INSTITUTIONAL CLIMATE AND SUPPORT FOR FACULTY

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There are no comprehensive studies on the existence of faculty mentoring programs (teaching is subsumed here) within higher education. Authors make assumptions and estimates on the availability of such programs, and there is a general understanding that mentoring for faculty has been deemed an important area within higher education (Jones, 2008; Yun, Baldi & Sorcinelli, 2016; Zellers et al., 2008). Austin, Sorcinelli and McDaniels (2007) contend that early career faculty seek and value a “culture of collegiality” and,

want to pursue their work in a community where collaboration is respected and encouraged, where colleagues serve as mentors and role models, where friendships develop between colleagues within and across departments, and where there is time and opportunity for interaction and talk about ideas, one’s work and the institution. (p.61)

Unfortunately, research draws attention to faculty reports of isolation and dissatisfaction within the early years of their careers (Bode, 1999; Hemer, 2014). Boice’s (1992) seminal work on faculty mentoring focused on the gaps in such systematic programs, challenging the notion that *laissez faire* or ‘natural mentoring’ would suffice in meeting the needs of new faculty. The more recent work of Bean et al. (2014) states that,

University administrators should take heed that one of the most important elements of developing and retaining promising, probationary level faculty members and maintaining satisfaction of more senior faculty members is to ensure that there are opportunities to enter into formal support systems, that is, mentoring partnerships. (p. 68)

**Few opportunities to discuss teaching.** Zellers et al.’s (2008) comprehensive critical review of faculty mentoring programs states that “one must view these relationships within the organizational or cultural contexts in which they occur,” and Britnell et al (2010) and Mathias (2005) acknowledge that specific to mentoring for teaching, one’s institutional context (e.g., research intensive) may lessen the focus on the need for formalized and intentional mentoring programs. Mathias further contends that department

administration frequently assume that sending new faculty to teacher development courses will adequately meet both the personal goals of the faculty member and the departmental priorities for teaching. Gran (2006) refers to a related common faculty development problem: that of the ‘return problem’ in which instructors participate in pedagogical workshops and events but face few avenues for follow-up discussions with colleagues and/or opportunities upon returning to their home departments. Ultimately, specific to mentoring for teaching practices, one’s broader institutional climate is a key factor in understanding how mentoring relationships evolve, and are sustained over the long term (Jones, 2008). Jones notes:

Essentially most new faculty members have two major obstacles to overcome in order to be exemplary teachers: they must strive to move beyond their natural tendency of egocentrism in the classroom, and they must challenge the culture of their institutions, which in many cases has belittled in either deed or in thought the role of faculty as teacher. (p.95)

Developing and enhancing effective teaching practices within higher education faculty requires sustained efforts at many levels within an institution to tap into the enthusiasm that new faculty often bring to their teaching appointments. While participating in pedagogical workshops or other such educational development activities is a key step for many instructors, a broader institutional commitment is required. Evers and Hall (2010) assert: “it is important for universities to develop appropriate teaching and learning programs to promote faculty development and support student learning” (p. 2-3). Mentoring for teaching is one such avenue that may address faculty concerns that address both the individual and the wider context in which they teach and discuss their pedagogy.



## TEACHING ISSUES AND CONCERNS FOR FACULTY

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Austin, Sorcinelli, and McDaniels (2007) cited several studies that agree teaching is a “primary source of anxiety among new professors, many of whom begin their first academic positions with little or no preparation in teaching” (p.65). The authors noted, however, that these new and junior faculty are “deeply committed” to teaching.

**Gaps in mentoring for teaching.** Within the context of Ontario universities, Britnell et al.’s (2010) report showed that “there is still a relatively abrupt transition from graduate student to faculty positions, with little or no support for learning how to teach” (p. 14). The report included data from focus groups coupled with an online survey of faculty at six participating universities. More than 50 per cent of new faculty members had engaged in educational development for the first time through new faculty orientations at their respective institutions. “Mentoring” was undertaken by 37 per cent of the sample (mainly the more senior faculty), while 18 per cent (mainly those earlier in their faculty careers) were “being mentored.” Just over half of mentees in Britnell et al.’s study reported that they never discussed teaching and learning with mentors. Aside from mentor-mentee findings, less than one third of respondents discussed teaching and learning with their colleagues on a weekly basis and overall, many respondents wished they had had opportunities to discuss teaching with colleagues earlier in their careers. As Britnell et al. (2010) state:

Therefore, inasmuch as informal discussion with colleagues has proven to have merit, it is also important to note that more formal guidance or structure is desired and needed in order to foster an exchange among faculty members about their teaching experiences. In addition, many faculty members expressed a desire for collegial support and

for validation from chairs and deans that teaching is valued beyond its intrinsic rewards. (p. 60-61)

Britnell et al. cited Theall and Centra (2001) and Brookfield (1995), who suggested that activities that contribute to a shared public account of teaching are valuable for one’s growth as a teacher - and that sharing with colleagues is an activity that fosters this type of public sharing (p.50). Specifically Fagan-Wilen et al., (2006) strongly recommended that institutions provide faculty development in a range of areas to enhance teaching. The authors listed the following topics where current gaps in mentoring often occur:

Effective teaching strategies (components of effective instruction, adult education theory, demonstrations of active, collaborative, and experiential learning); curriculum development; information about forces that shape the curriculum; policies and procedures (grading, syllabus preparation, departmental and university policies); and anticipating potential problems (challenging classroom situations). (p. 43)

Added to this list are the following teaching-related concerns drawn from the literature: teaching to a diverse student body, heavy teaching loads, course evaluations, insufficient preparation for lectures, and a lack of a teaching community with which to address these sources of anxiety (Austin, Sorcinelli, & McDaniels, 2007).

## DEFINITIONS OF MENTORING AND MENTORS

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Mentoring within the higher education context has historically focused on a one-to-one relationship, often hierarchical in approach (Harnish & Wild, 1994; Johnson, 2006). Mentors have been variously described as someone who is deemed an effective teacher, trusted guide, sponsor, counselor, advisor, coach, trainer, colleague, and role model (Harnish & Wild, 1994; Gaskin et al, 2003; Fraser, 1998; Mawer, 1996).

More recent shifts in faculty mentoring approaches have described a more reciprocal dyad that enhances learning for both individuals involved (mentor, mentee/protégé) (Ambrosino, 2009; Luecke, 2004). This collaborative relationship is “characterized by trust, respect, and commitment, in which a mentor supports the professional and personal development of another by sharing his or her life experiences, influence, and expertise” (Zellers et al, 2008, p. 555). Such relationships grow over time and have been described as intentional, purposeful and interpersonal. Participants in Boice’s (1998) mentoring study showed strong agreement about “the essence of mentoring: support and guidance in socializing new faculty” (p.169).

According to Clutterbuck and Lane (2004), “to some extent, definitions do not matter greatly, if those in the role of mentor and mentee have a clear and mutual understanding of what is expected of them and what they should in turn expect of their mentoring partner” (p. xvi). This comment points to the important aspect of mentoring relationships: the need for specific expectations to ensure that mutually agreed-upon outcomes are realized.

## BENEFITS OF MENTORING

Mentoring can meet numerous personal, professional development and institutional goals. Bean, Lucas, and Hyers (2014) highlight many qualitative and quantitative research studies that demonstrate the positive effect of faculty mentoring programs on faculty satisfaction, retention, tenure, and promotion rates. Kilter and Sketris (2003) provided a summary of benefits to organizations such as strengthening capacity, easing transition for new faculty, both attracting and retaining new faculty, succession planning (mentee), among others. Faculty mentoring has been reported to build networks amongst mentors and mentees (Gray & Birch, 2008; Lumpkin, 2011). Mathias (2005) described a mentoring programme for new university teachers that revitalized and empowered collegiality.

Zachary (2005) discusses how mentoring “humanizes the workplace” as relationship building is more likely to become embedded in the organization’s culture and the “ripple effect” may occur in that mentoring can have a positive effect on others, including those outside of the mentoring relationship. Mentoring has been reported to help people build new relationships and strengthen existing ones (Boyle & Boice, 1998); people become more collaborative in their performance and learning, and individuals feel more prepared to offer themselves

as mentors to others (Bean, Lucas, & Hyers, 2014, p.58). Formal mentor programs can grow the seeds for informal mentoring to occur – “mentorship has a resonating phenomenon – and indicates that mentees are more likely to become a mentor later on in their career” (Ragins & Cotton, 1999; Stewart & Krueger, 1996).

***Mentoring “humanizes the workplace”.***  
***(Zachary, 2005)***

Finally, mentoring has been found to positively impact new faculty members’ teaching effectiveness (Boice, 1998; Carr, Bickel & Inui, 2003). For example, Carbone (2014) sought to explore the benefits of a peer-assisted teaching mentoring scheme (PATS) to improve course evaluations and teaching practices and found that 17 of 25 participating courses showed an increase in their course evaluation rating for the item: ‘Overall, I was satisfied with the quality of the unit [course]’. In addition, focus group sessions with mentors and mentees revealed the benefits attributed to this structured programme. Carbone summarized their feedback: “PATS was valuable and provided opportunities for academics to reflect on their own teaching and share ideas in a non-threatening, friendly and relaxed environment” (p. 437). Denecker (2014) shared qualitative comments from faculty who participated in the Teaching Partners Program (TPP) (Holgrem, 2005) whereby new and mid to senior career faculty together sought to shift teaching discussions and support for pedagogical innovation within the university. One participant noted:

I particularly enjoy a regular, structured, social time to think about my teaching within a big picture framework. This has been directly applicable to my classes – after each TPP I have learned something that I use in the next class that I teach. (p.64)

The quality of the relationship between mentor-mentee is key to successful mentoring programs (Bean et al., 2014). Mathias (2005) rigorously evaluated the UK Postgraduate Certificate in Academic Practice (PCAP), a mandatory two-module, part-time and work-based programme for new lecturers, and found that both mentors and mentees benefitted. The author noted that ‘collegial mentoring’ in teaching is a key skill in “developing effective researchers and effective staff management practices. Such a wider range of pay-offs may well justify the investment of time” (p. 103).

***“Early on, new teachers need to realize that real instructional issues are much more complex and much more intellectually intriguing”.***  
***(Weimer, 2010)***

Maryann Weimer (2010) emphasized the important role of mentors for teaching - one that socializes new faculty into their academic roles. The author argued that, “Early on, new teachers need to realize that real instructional issues are much more complex and much more intellectually intriguing (para. 2).” Similar to Britnell et al. (2010), Weimer stressed that mentors can guide new faculty into raising questions and discussions that take teaching to a higher level, one that is “without easy answers” (para. 2).

## **MENTORING CHALLENGES**

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Traditional, hierarchical mentoring models within both business and academic settings have been criticized for a reported lack of diversity in leadership positions, with women and racialized faculty experiencing differential access to mentors in some institutions (Boice, 1993; Johnson-Bailey & Cervero, 2004; Touchton, 2003). Concerns have also been raised regarding whether mentors can in turn be involved in an evaluative component of the tenure and promotion process. A further concern that has been reported is the social stigma that has been associated with ‘remedial’ notions of new faculty hires who may be in need of assistance (Beans, 1999; Murray, 2001). As Zellers (2008) noted: “Junior faculty members are especially vulnerable to being stigmatized in academic settings in which mentoring is not embraced as a cultural value or accepted as a core academic responsibility” (p. 562). Furthermore, a new faculty hire may be “wary or fear the mentoring process based on evaluative components, particularly if mentors are from the same departments and may be involved in retention, tenure, and promotion decisions” (Diehl & Simpson, 1988, p.159). However, Mathias (2005) reported markedly different results from his study of subject- based collegial mentors in an initial teacher development program for new lecturers as departmental mentors served as both collegial partners and formal assessors.

Logistical challenges may occur when recruiting mentors and mentees due to time constraints within academic environments that stress a combination of research, teaching and service roles and responsibilities (Carbone, 2014). For more structured, formalized programmes that build in recognition and rewards, a mentor’s teaching and research responsibilities may be adjusted to support such mentoring relationships. Such incentives are often tied to a positive climate that values and supports reflective teaching practices (Mathias, 2005).

While institutional, departmental and personal goals can be met through mentoring programs, a dyadic format may have limitations in that one person is identified to take the lead in the mentoring relationship and the onus is placed on that mentor to fulfill a number of roles (e.g., provide advice/guidance on research, teaching and service). As Ganser (1996) remarked: “[administrators] may inaccurately look upon the mentor as the only person responsible for assisting the beginner rather than being an integral part of a complex process that includes them as well.” The pressure is likely to be removed from the Department or division to provide other options for multiple mentors. Ultimately, the overall climate in the department is most likely to determine the support for and value of teaching and teaching development.

***“[Administrators] may inaccurately look upon the mentor as the only person responsible for assisting the beginner rather than being an integral part of a complex process that includes them as well”.***  
***(Ganser, 1996)***

## **APPROACHES TO MENTORING: A CONTINUUM**

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Different approaches to mentoring can be viewed on a continuum (Angelique, Kyle, & Taylor, 2002; Cawyer, Simonds, & Davis, 2002). Zellers et al. (2008) reviewed mentoring programs in the United States in business and academe and argued that while debates continue regarding the superiority of formal over informal mentoring the crux of the issue remains, that:

Most researchers conceded that contemporary workplaces do not afford all of their members equitable access to informal mentoring relationships; therefore, some type of institutional intervention is deemed as necessary. Establishing a formal mentoring program is one organizational approach. (p. 564)

The intentionality and formality of mentoring programs has also been addressed by Jones (2008) who discusses how “institutional support for new faculty members can make them more effective as they seek to develop and refine their teaching (p.93).” Chism (2004) further noted that institutional and departmental contexts can play a strong advocacy role in nurturing individual growth in teaching, via rewards for example.

**Informal approaches.** Mentoring in this style has been found to benefit mentees within the realms of business and academe (Ragings & Cottone, 1999) and effective mentoring can occur spontaneously (Weimer, 1990). McLaughlin (2010), however, suggested that mixed opinions exist about the relative effectiveness of informal (self chosen, voluntary, organic) versus formal (assigned, programmed) mentors and mentoring. But Boice’s (1992b) early analysis of mentoring suggested that more informal, casual arrangements include “... optimistic expectations, unfortunately, [that] overlook the fact that “natural mentoring” occurs for only about a third of new teachers.” Such informal relations are often irregular and short-lived (Boice, 1990; Diehl & Simpson, 1989). Britnell et al. (2010) reported that almost half of the respondents prior to their first academic appointment and almost three quarters of respondents indicated that they had informal discussions with peers about teaching at the beginning of their academic careers. Focus group participants discussed the importance of talking to peers early in their careers. Such discussions were deemed as an important aspect of their growth as teachers and that they benefitted from observing and working closely with more seasoned faculty. Yun, Bladi and Sorcinelli (2016) shared that isolated pockets of mentoring had occurred across their large, research-intensive university,

but such activities were inconsistent at best, and ineffective or inequitable at worst. Further complicating matters was the lack of clear institutional message about the importance of faculty mentoring and the requisite guides and resources to encourage the adoption of good practices across departments and schools/colleges. (para. 4)

**Formal approaches.** Intentionality in structure is a core characteristic of more formalized mentoring programs (Beane-Katner, 2014), as well as explicit program activities (Mathias, 2005), and systematic approaches (Boice, 1998). Such opportunities are often administered centrally, are non-voluntary and include shared expectations and monitoring of the relationship (COACHE 2010; Meister & Willyerd, 2010; Zellers et al, 2008). Being deliberate in an approach is more likely to ensure that, “there is a difference between mentoring and remediation” (COACHE, 2010). Further to this point, Gaff and Simpson (1994) suggest that some of these remedial notions and underlying beliefs about faculty mentoring can inhibit mentoring programs from serving those who could most benefit. More formal mentoring structures and practices make it more likely that new or junior faculty will participate as informal mentor matches are often neglected often due to the “busyness” of academic life (Boyle & Boice, 1998; Diehl & Simpson, 1989).

Boice’s (1998) study demonstrated that systematizing mentoring programs ensures that paired mentors met regularly, over a longer period of time and experienced greater program (and even campus) involvement. Both mentors and mentees/protégés who may have traditionally been left out of mentoring programs, were engaged in the formally structured programs. Furthermore this study identified the added benefit in that mentors learned from each other which resulted in further mentoring involvement: “without the structure and interactive learning of programs like these, mentors tend to carry out their roles more narrowly and less confidently” (p.173). In Mathias’ (2005) analysis of mentoring new university teachers he suggests that “using mentoring as a mainstream development tool... needs to be well managed and organized rather than left as a relatively informal arrangement between mentor and mentee” (p. 102).

***“Using mentoring as a mainstream development tool ... needs to be well managed and organized rather than left as a relatively informal arrangement between mentor and mentee” (Mathias, 2005)***

## FACULTY MENTORING MODELS

In higher education, various models exist that highlight the increasing shift and multiple ways that faculty seek and receive guidance, advice, and coaching, in their academic positions and specifically, in their efforts to enhance their teaching. The next section addresses 3 models: dyad (one-to-one) mentoring; peer/group/mutual mentoring; and networks and broader community support of teaching. There is much fluidity within and between these models, as faculty members may be engaged in any or all of them simultaneously.



**Dyad mentoring.** The most widely known mentoring model is a one-to-one mentor-mentee/ protégé match (Lumpkin, 2011; Zellers et al., 2008). Lumpkin states that a mentor has historically been viewed as a senior, more experienced faculty but that junior mentors may be just as effective. Boyle and Boice (1998) discussed that it is not the match as much as what the mentor and mentee do in the relationship that counts. Mentees who have a greater input into the match selection report greater satisfaction with the experience, as their agenda will more likely be met (Allen, Eby & Lenz, 2006).

Carbone (2014) advocated a dyadic mentor model that engages both parties in “regular meetings, completion of a workbook, and peer review of each other’s teaching” (p. 139). Boice (1998) supported mentoring matches as early as possible in a new faculty’s hiring appointment, with brief, weekly mentor meetings as well as regular (monthly) group meetings between sets of mentored pairs across disciplines.

The research on dyadic relationships is inconclusive regarding the characteristics of ‘best’ practice models. For example, Zellers et al.’s (2008) review of voluntary versus involuntary matches was indecisive. However, within the academic environment it was noted that a mandated program might serve to counter concerns that faculty who choose to participate in mentoring are not seeking remedial assistance. When all new and junior faculty are assigned mentors it is likely to become a norm that one can gain important and beneficial guidance, support and/ or insights from a more experienced mentor.

Notably, Boyle and Boice (1998) demonstrated that one of the most beneficial aspects of systematic mentoring was the group meetings with other paired mentor-mentee matches in this program:

Group meetings provided the participants with a sense of campus involvement they did not find in their own departments, especially around the topic of teaching... fostered an openness in sharing experiences...and in providing possible solutions to problems. Also, it allowed mentors to observe (and subsequently attempt) alternative styles of mentoring. Thus, they broadened their roles as coaches and models. (p. 176)



### Group and mutual peer mentoring models.

Boyle and Boice (1998) discussed group meeting structures and provided insights into the reciprocal peer or mutual-mentoring (Sorcinelli & Yun, 2009) literature that described support

beyond the more traditional dyadic mentoring model. Kinsella (1995) defined peer coaching/mentoring for teaching as:

A structured, formative process by which trained faculty voluntarily assist each other in enhancing their teaching repertoires within an atmosphere of collegial trust and candor through: a) development of individual instructional improvement goals and clear observation criteria; b) reciprocal, focused, nonevaluative classroom observations; and c) prompt, constructive feedback on those observations. (p. 111)

Similarly, Reder and Gallagher (2007) studied senior faculty engaged in a peer mentoring program that involved more senior faculty facilitating a year-long seminar for all incoming tenure-track faculty. Both the director of the teaching and learning centre as well as a senior faculty fellow played a broker role. Yun, Baldi and Sorcinelli (2016) described the “Mutual Mentoring Initiative” that currently is a “fully operational, campus- wide initiative” in which, their research findings demonstrated that faculty members who participated in networked mentoring via grants (either team or micro grants were awarded) achieved more career-enhancing and mutually beneficial mentoring relationships than non- participants. In one case an engineering faculty

member chose to focus on pedagogical skills and built a network of support from senior faculty -- many from within his own faculty, but also from outside the department.



**Networks and broader community teaching support.** Both de Janasz and Sullivan (2004) and Sorcinelli and Yun (2007) focused on a decentralized, flexible mentoring model that included broader networks of support:

No single person is expected to possess the expertise required to help someone navigate the shoals of a faculty career.... early-career faculty build robust networks by engaging multiple “mentoring partners” in nonhierarchical, collaborative, cross-cultural partnerships to address specific areas of faculty activity...benefit not only the person traditionally known as the “protégé” but also the person traditionally known as the “mentor,” since all members of an academic community have something to teach and learn from each other. (p. 58)

Rockquomore (2011) similarly reframed the notion of mentoring, and focused on “what do I need” and “how can I get my needs met”? This model shifts “from one that is centered around your ability to find a relationship with a senior faculty member on your campus to one that focuses on identifying your needs and getting them met.”<sup>14</sup> Calderwood and Klaf (2014) examined whether Centers for Teaching and Learning, acting as localized communities of practice for faculty development, help faculty to become more expert in teaching and scholars of their own teaching and learning. Their findings indicated that the teaching and learning community prompted dyadic mentoring via the “signature activities (workshops, consultations, learning communities, collaborations).” These shared practices fit a model of integrated mentoring within a community of practice (CoP) (Smith et al, 2013). Smith et al (2016) studied this CoP model in more depth in their examination of three CoPs, finding: “Our analyses indicate that CoP can be fruitful sites of mentoring for all faculty when members mutually engage in shared practices required by the institution.” Included here for example were faculty who met to discuss tenure dossier preparations. The roles of expert and novice were “fluid and shared among group members” (p. 16). Mårtensson, Olsson and Roxa (2006) and Roxå and Mårtensson (2009) presented a unique

mentoring model description for teaching. They surveyed 106 faculty members from various disciplines.

[Participants] described situations where they had sincere and honest discussions about problems or ideas in relation to teaching. The number of reported conversational partners per study participant converged at around ten individuals. This parallels the observation in Becher and Trowler’s study (2001) about the typical size of the smaller research networks. (p.213)

Similar to Rockquomore’s work (2011), faculty in Roxå and Mårtensson’s (2009) study reported valuable conversations on teaching,

...almost anywhere: sometimes in the same department, or in the same discipline at another institution, sometimes in another discipline, or in spaces without any connection to academia at all...they find the particular person suited for the particular issue at hand. (p. 213)

Results from Roxå and Mårtensson’s study highlight that strong cultural or climate support within departments and institutions tended to increase the number of mentorship partners who engage in teaching and learning-focused discussions: “Having conversations with colleagues that are part of the local teaching culture is important, since the effect on a TLR [teaching and learning regime] probably increases if the conversation can address it from within” (p. 214). The authors’ phrase ‘significant networks’-- whereby smaller networks engaged individual faculty having “sincere conversations about teaching and learning” included some core elements described in the previous section on mutual mentoring, but ultimately Roxå and Mårtensson referred to “networks”: “It is here that they put their teaching and learning experiences into words and it is here that they genuinely pay attention to the responses they receive” (p.214). Overall, despite the individualist and frequently competitive models and awards in higher education, Smith et al (2016) argue that efforts to promote collaborative mentoring and work run counter to these prevailing norms and values that characterize many institutions.

<sup>14</sup> See the National Center for Faculty Development and Diversity (NCFDD) Mentoring Map (2011) for an excellent resource: [https://www.insidehighered.com/sites/default/server\\_files/files/Mentoring%20Map\[1\]\(1\).pdf](https://www.insidehighered.com/sites/default/server_files/files/Mentoring%20Map[1](1).pdf)



**Mentoring model framework.** A useful framework from Dawson (2014) pulls from the three models presented above, providing insight and evidence-based guidance for any educator who is designing a mentoring program and must make important decisions about key components. His work is especially valuable in helping define the mentoring model(s) being developed or researched, based on specific evidence-based design elements. Dawson identified sixteen design elements in the literature and tested these with two different mentoring models, including Carbone's (2014) Peer Assisted Teaching Scheme (PATS) mentoring model, piloted in the Faculty of Information Technology at Monash University, Australia that addressed low student satisfaction within units (courses). The peer-assisted model falls within a dyadic mentoring model, and focuses on improving the quality of units (courses) through mentoring partnerships between university teachers.

Dawson's extensive list of design elements can be a reference point for any of the mentoring models listed in this section (e.g., one-to-one, peer/group/mutual mentoring, community of practice or network).

**Appendix A** details his framework. It can be adapted for building a mentoring program. For example, it is essential that a mentoring model explicitly outline the objectives, aims or intentions of the program and/or approach. Such clarity is likely to ensure that other key design elements - such as stating the roles and responsibilities of each mentoring party - map onto the overall purposes of the model.

Further extensive research by Zellers et al (2008) succinctly lists core mentoring program success factors. Included in their list are,

visible support of senior administration; alignment with organizational goals and objectives... allocated sufficient resources; voluntary participation of mentors; criteria and process for qualifying mentors... formative evaluation for continuous improvement and summative evaluation to determine outcomes. (p.579)

While this list is quite extensive it is key to note that combining a range of mentoring models may meet many, if not all of these factors.

## MENTORING BEYOND NEW AND JUNIOR FACULTY

Faculty mentoring has shifted from a focus on hierarchical support and coaching for new hires and junior faculty to addressing the mentoring needs of individuals across their career spans. Ponce et al. (2005) share that mentoring between traditional junior-senior faculty members can potentially hinder the growth of more experienced faculty who may too benefit from being mentored. Britnell et al.'s (2010) study of faculty engagement in teaching development activities reported on faculty advice and recommendations for mid-career teachers and those approaching retirement. The authors' suggestions inform the role of mentor: become a liaison person for the department by sharing information about best practices and innovation within and external to one's department (and at disciplinary conferences); collaborate with a network of newer faculty which can be a reciprocal learning experience (e.g., becoming familiar with teaching innovations from new or junior faculty). Mid-career faculty were also advised to spread the word about the value of pedagogical research in order to increase the profile of research about teaching.

Leslie's (2014) research, while specific to the medical disciplines, notes that while many senior health professionals have much support to offer their new and junior faculty, they too often do not have their mentoring needs met: "mentoring initiatives and resources tend to be focused on more junior faculty" (p. 104). Zellers et al., (2008) also noted that mid-career faculty do not generally receive the mentoring that they would like, but more often that this gap pertains to faculty research rather than teaching.

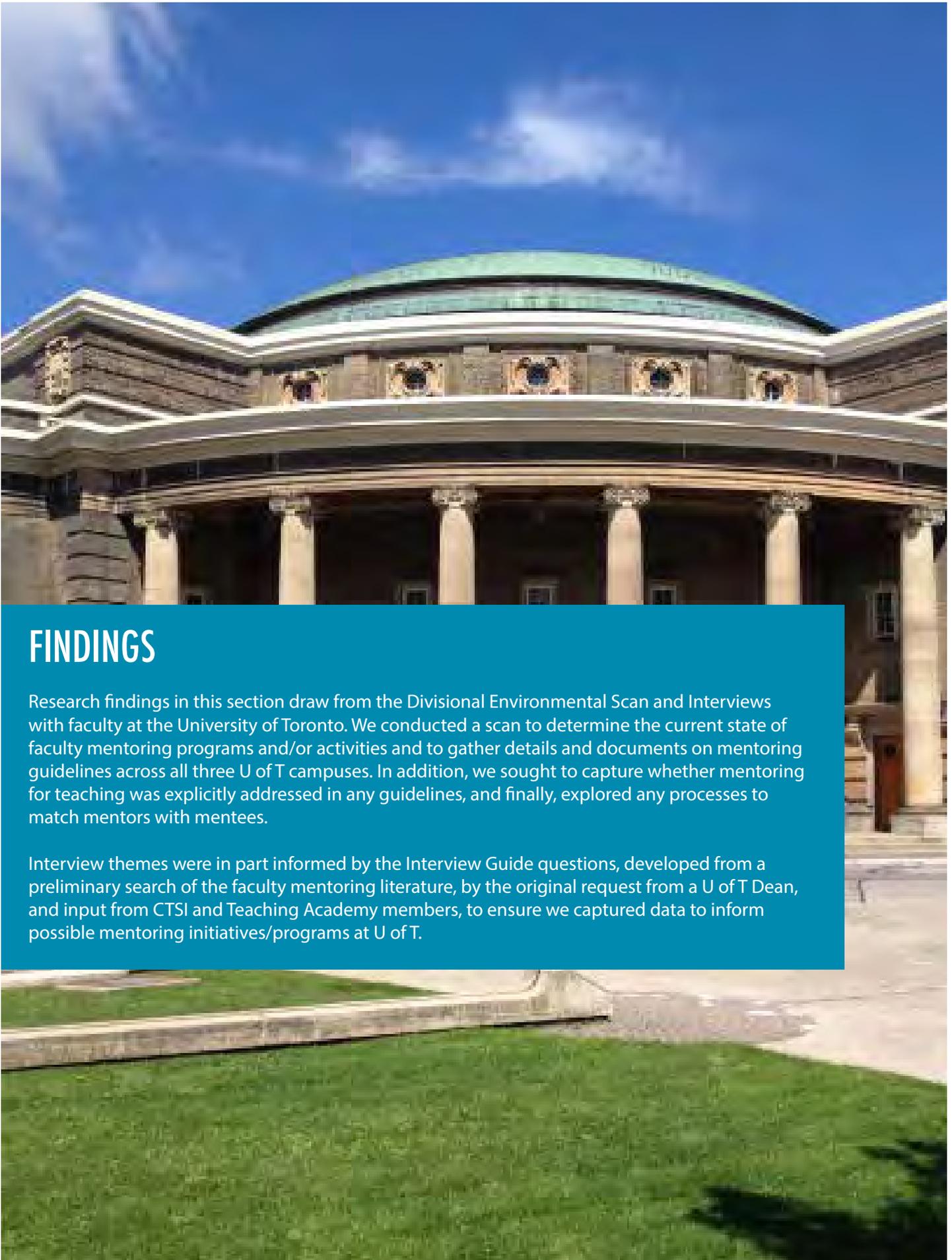
***"Faculty mentoring has shifted from a focus on hierarchical support and coaching for new hires and junior faculty to addressing the mentoring needs of individuals across their career spans."***

***(Ponce et al., 2005)***

## SUMMARY OF LITERATURE REVIEW

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There is limited academic literature on faculty mentoring specific to teaching as the focus tends towards broad mentoring for faculty as they embark on their new appointments. However, there are several promising mentoring models emerging in the literature. Faculty who are new to their teaching roles are likely to benefit from both formal and informal mentoring whether the model is a traditional dyad or it involves support from peers, in groups and, increasingly, in larger teaching and learning support communities and networks. Formal matches may offer opportunities for mentees to be matched with a mentor or group of peers who may take different approaches to teaching, thus shifting a mentee outside their comfort zone if they informally had sought a mentor with similar ideas. Finally, while much mentoring for teaching focuses on new faculty hires it is important to recognize that faculty of all career stages seek continual enhancement in their students' learning and their teaching approaches. The evidence supports mentoring for teaching resources that include multiple mentoring model options. Faculty, staff and administrators who work directly or indirectly with faculty of all career stages may draw upon the most appropriate mentoring approach and/or model highlighted from the evidence-base presented here. Such choices can be made available based on what best suits a faculty member's unique learning needs.



## FINDINGS

Research findings in this section draw from the Divisional Environmental Scan and Interviews with faculty at the University of Toronto. We conducted a scan to determine the current state of faculty mentoring programs and/or activities and to gather details and documents on mentoring guidelines across all three U of T campuses. In addition, we sought to capture whether mentoring for teaching was explicitly addressed in any guidelines, and finally, explored any processes to match mentors with mentees.

Interview themes were in part informed by the Interview Guide questions, developed from a preliminary search of the faculty mentoring literature, by the original request from a U of T Dean, and input from CTSI and Teaching Academy members, to ensure we captured data to inform possible mentoring initiatives/programs at U of T.

## DIVISIONAL ENVIRONMENTAL SCAN: UNIVERSITY OF TORONTO

**Mentoring processes/structures.** The Divisional Environmental Scan identified formal mentor matches<sup>15</sup> for 9/15 divisions that participated in this study, which includes both tenure and teaching stream faculty. Four divisions reported informal mentor matches described by one divisional respondent as “mentoring on an ad-hoc basis, typically for those faculty [who are] up for tenure review.” Of the formal mentor matches, five divisions provide mentoring guidelines/documentation to mentorees at the time of their match. Embedded in these guidelines are limited teaching-focused guidelines.<sup>16</sup>

### TABLE 3: OVERVIEW OF DIVISIONAL RESPONSES

n = 15	participated in the scan (86% response rate)
n = 9	reported formal mentor matches, for both tenure and teaching stream faculty
n = 4	reported informal mentor matches
n = 2	assigned a teaching mentor (both were also formal matches)
n = 2	offered mentor skills training

*Assign a teaching mentor.* Only two divisions assigned a teaching mentor, as described in an email by one divisional staff person:

The Chair is asked to assign them a mentor from within the unit. That mentor will generally address both teaching and research, although we do suggest that Chairs can consider assigning both a teaching mentor and a research mentor, depending on the culture and resources of the unit, and the needs of the new faculty member.

The second division reported that new faculty may request a teaching mentor but they must initiate this match. It is not known whether the Chair would provide a list of teaching mentors from which to select. The following example elucidated this practice more fully: “They can use anyone else they want to. One example of a tenure stream faculty who has since received tenure is that they had poor course evaluations and got a teaching mentor to enhance their teaching.” A third division

described an “optional” teaching mentor in that the new faculty member would be encouraged to contact the divisional Teaching Fellow but no formal match would occur.

*Provide mentor skills training.* Divisions reported very limited mentor skills training. Two divisions offered this activity, but provided no details in their responses. Four divisions reported informal training. For example, one respondent indicated that if a mentor used the teaching centre, they would have strong skills in this area, and would also be able to build their mentoring abilities further while working under the direction of the head of the centre. One divisional respondent emphasized that mentor training is ‘essential and should be university-wide,’ and followed by sharing these suggested core elements of mentoring relationships and programs:

Clear expectations for each mentor and mentee are required. There should be a mechanism in place for the match; monitoring and evaluation of how these mentoring programs or guidelines are being implemented, and how well they are doing; evaluation is also required. Also include specific guidelines on frequency, voluntary/mandatory aspects of mentoring relationships.

**Teaching topics addressed through mentoring.** When prompted to share typical teaching requests (from the mentee perspective) divisional respondents included a wide range of teaching-related topics with the most frequently cited at the top of this list:

- course development and syllabus design (e.g., how do I design a new course?)
- University and faculty guidelines for assessment of teaching (e.g., how to achieve ‘excellence in teaching’– what are the criteria? how are they measured? etc.)
- how to prepare for classes efficiently, to ensure some time is available each week for scholarship activities, interactive learning, deliverables, assessment (e.g., (1) techniques for engaging students in classroom discussion and more generally, for promoting active learning; (2) how to design assessments that serve identified teaching objectives)
- in-class observation and provision of formative feedback
- how to present and use course evaluation data in assessing one’s teaching effectiveness in cases of tenure and promotion and ensuring these data is not the sole focus of the assessment of teaching.

<sup>15</sup> Formal here means both mentor and mentee were introduced or identified to each other via departmental/divisional letter/email

<sup>16</sup> One division embeds general teaching guidelines in its Academic Handbook for instructors.

One of the teaching centres ensures that many of the teaching-related questions and requests included in the above list are addressed by specific individuals who serve as mentors and have been identified to support many of these key pedagogical areas. In the case of one of the large divisions, their response to the divisional scan request was to share “Typical Issues” drawn from its Mentoring Programme document<sup>17</sup>, including for example: What criteria are used for teaching excellence, how is teaching evaluated, and what is a teaching dossier? What are the grading guidelines for courses? How does one obtain feedback concerning teaching? What resources are available for teaching enhancement? What teaching assistantships are available? What should be done about TA training? (p. 3).

**Recommendations/key observations.** Finally, when prompted, eight divisional respondents offered suggestions for CTSI’s role in the area of faculty mentoring for teaching. Most frequently cited was that new faculty in their divisions are encouraged and and/or directed to CTSI programming/services to ensure they receive strong pedagogical grounding. Two respondents felt that a ‘Frequently Asked Question (FAQ)’ - type document would be a useful resource from this study, directed to each of the mentors and mentees. Finally the following verbatim responses included unique contributions to this overall topic:

- how to formulize the mentoring infrastructure
- provide a literature review; guidelines to inform our own [mentoring] policies but if possible these should be adopted university-wide (consistent)
- mentoring contracts (usually found in business) adapted to the academic sphere
- partnerships and support; any mentoring documentation; develop research and scholarship in supporting community-based teachers and faculty
- the Graduate Supervision Guidelines<sup>18</sup> are very helpful – both parties receive a copy – consider a similar format

<sup>17</sup><http://www.artsci.utoronto.ca/faculty-staff/teacher-info/pdfs/mentoring.pdf>

<sup>18</sup>These guidelines can be accessed: <https://www.sgs.utoronto.ca/Documents/supervision+guidelines.pdf>

## INTERVIEW THEMES

**THEME 1:** Defining mentoring

**THEME 2:** Mentoring models and approaches experienced/ described: A broad continuum

**THEME 3:** Other avenues for teaching support/ mentoring

**THEME 4:** Common teaching-related concerns

A central goal of this study was to capture the mentoring approaches and practices that exist at U of T. Faculty participants (N=44) were therefore first asked to share what, if any, faculty mentoring for teaching guidelines existed in their department (or faculty, division). Early into the interview process it became apparent that mentoring for teaching was not well-known or common practice with limited to no guidelines available (or at least known) to faculty. The interview questions shifted slightly to prompt for any knowledge and experience with faculty mentoring guidelines that included formal mentor matches undertaken for new faculty hires in continuing appointments. Participants were then asked to identify the type of mentoring for teaching practices that occurred in their department and to describe these experiences from their perspectives as either mentee or mentor roles (or both). Specific probes captured teaching-related typical requests/questions from mentees, mutual goals for engaging in this relationship and suggestions and recommendations for CTSI regarding future resource documents that would address mentoring for teaching needs.

### THEME 1: DEFINING MENTORING

Interview participants were not directly asked to define a 'mentor' and/or a 'mentee' but in numerous cases a range of definitions or descriptions of the relationship arose during the discussion. Mentoring was discussed and included a range of possibilities, such as a one-to-one relationship, within peer groups and larger networks within the institution. However, participants most often discussed mentoring in the more traditional sense of a dyad, as mentor-mentee, especially in light of their understanding of what their departments and divisions are currently offering in this area.

Reciprocity: Comments from participants addressed a description of mentoring but raised a key theme: that engaging in mentoring is beneficial to both parties:

- "Mentoring is when reciprocal learning takes place" (Assoc Prof, TS, Life Sc, mentor)
- "Mentoring is a positive beneficial activity" (Assoc Prof, TS, Phys Sc, mentor)



- For a few mentors this reciprocity reinvigorated their own teaching as they were keen to share teaching activities and strategies with mentees. The mentors shared that there were too few other opportunities to engage in such teaching-specific discussions.

Coaching: While both mentors and mentees described the positive mutual benefits, several participants used the term 'coach' to describe some of the activities in their relationship:

- "A mentor is a coach; a mentor for life" (Full Prof, Phys Sc, Mentor)
- "Someone who knows where to connect you for what you need...coach on one hand who helps me find my way and on the other a clearinghouse who knows who to go to for what" (Assoc Prof, Life Sc, in mentor role).

Collegial relationships: Participants discussed one-to-one mentoring relationships and collegial interactions that offered ongoing and sustained support for both teaching- related and academic matters. The collegiality often occurred daily and these relations were described for both one-to-one and larger more networked activities: "Mentors are for high level issues. For day to day stuff you may not need an official mentor but a mentoring colleague." (Assoc Prof, TS, Phys Sc, UTM)

Reasons to mentor: Mentors felt that they have much to offer ("after learning the ropes through the sink or swim method") and would like to ensure new hires do not experience the challenges they faced when they started teaching. Many were fortunate to have experienced strong mentors for teaching either at the graduate student level or as a new faculty hire and saw the value of both giving back to others but also gaining benefits through the relationship.

Mentors who had experienced no early career mentoring were very supportive of mentoring relationships and valued the impact of sharing their insights through such matches. One participant stressed: "I'd like to make the academy a human place and we'd all enjoy it more based on my own bad experiences" (Assoc Prof, Life Sc, UTM). Another participant shared similar disappointment in early career mentoring:

My own experience had been to be just thrown into a class and I wanted to help those faculty with [similar situations] in their teaching. I think back on good teachers I had to guide my own mentoring... it's nice to see people change. (Full Prof, Phys Sc, mentor)

Finally, a faculty member enjoyed sharing teaching experiences learned throughout their career, despite not having had a mentor: "I'd like to make someone's teaching and life a bit better" (Assoc Prof, TS, Life Sc).

In a few other cases mentors had gained much from a positive mentoring experience and wanted to continue what they deemed as an important relationship, especially within a research intensive setting:

I had a fabulous experience during my degree [many years ago] and a faculty member in [named discipline] was really good at teaching and invited me to co-teach with her and we recorded every two hour class and then would meet in our reading course where we would talk about what was going on in that class. She was interested in group dynamics - she was a role model... she exposed me to looking at teaching and learning from the student's perspective. Turning the paradigm on its head. Innovative in her teaching. Being exposed to this was very unusual at the time as teaching was done behind closed doors. (Full Prof, Soc Sc, TAM)

As noted previously, reciprocity was a positive element of many of the one-one to relationships as both parties benefitted via shared teaching practices and experiences with emerging technologies, pedagogies, and so forth. Participants mentioned that this shared learning journey served to further the mentor's own professional development. In these cases the mentee was viewed as a colleague who had as much to share as they had to give.

Mentoring beyond teaching. While the focus of this study is on capturing mentoring for teaching approaches and experiences, it is important to note that a few participants contended that mentoring for teaching is too disjointed or segmented a view when describing the

human relationships that develop. One Assistant Prof, TS, stated, "you are mentored to be a faculty member and not just a teacher - [it's] hard to separate the two." Tenured faculty mentors stressed that the demand to excel in three areas (research, teaching and service) means mentoring for teaching needs to be considered as part of a holistic picture, as illustrated by the following instructor:

Nothing ever prepares you for being a professor... you can't just talk about mentoring for research or teaching but how to handle all of this (research, teaching and service) because you have to think detailed in every one and then big picture and then juggle all of these, not just teaching. The whole big mountain is the problem - it is artificial to think of three parts. The reality is that we have mentors for different things. (Assoc Prof, Life Sc, mentor)

A second professor shared similar ideas and felt that, "A mentor is broader than teaching... it is both professional and personal" (Associate Prof, Med). These perspectives point to other project findings that describe multiple mentoring relationships that can meet varied needs in new and junior faculty, in both the teaching and tenure streams.

## THEME 2: MENTORING MODELS AND APPROACHES EXPERIENCES/ DESCRIBED: A BROAD CONTINUUM

It was a challenge during the interview process to accurately capture mentoring numbers for each of formal, informal or no match, for a variety of reasons. For example, divisions included in the environmental scan may have reported that formal matches are made at the time of hire; however, interview participants from that particular division shared different accounts of these processes, which further clouds what matches are actually occurring. For example, one Assistant Professor, TS, recounted a formal match through the division (via letter) but they never met this assigned mentor and the Dean's office never followed-up about the relationship (e.g., if they had met, the suitability of the match, and so forth). This participant did, however, develop a lengthy 'informal' mentoring relationship with a more senior faculty member in a more closely aligned disciplinary area.

Participants described their experiences in both formal and informal mentor models. Some faculty shared that no mentor match had been made for them, but this did

not preclude these participants from describing other valuable informal mentoring matches that they initiated. Because several participants were not aware of formal mentoring for teaching activities and/or guidelines, they shared their current/recent 'informal' mentoring for teaching experiences and provided input on re-envisioning what an effective mentoring for teaching relationships might look like, in part based on gaps they experienced as new hires and/or as mentors.

Of note, two participants shared that mentors were to be assigned based on the assumed teaching ability of the new hire:

I had no match and I feel there may have been assumptions about my background in teaching and learning and an assumed competence - as another Assist Prof, TS, got one...in my first class with 200+ students I could have used a mentor for advice on a number of teaching topics. (Assoc Prof, TS, Phys Sc)

Similarly, an Assistant Professor, TS (UTM) had built up a strong reputation from numerous sessional teaching experiences and was deemed by the department to be 'competent' and therefore did not require a mentor for teaching. While this instructor felt quite confident in teaching-related matters, they felt it was important that formal mentoring for teaching be included for all new hires, given that being an effective instructor includes a complex array of factors.

## FORMAL MATCH

Formal match. Approximately one half of the interviewees (both mentor and mentee) had been involved with a formal faculty mentoring match process. In most of these cases the formal match was

initiated by a letter from their department that included the name of the faculty mentor and some very general guidelines to launch the meeting between both parties. For example, FAS and UTM included a faculty mentoring document in the letter of offer. As part of this research, several participants shared mentoring documents, and logistic-type teaching materials (e.g., instructor handbook). In a couple of cases participants provided emails that they received at hiring which included a mentor match.

*Stream matches.* Formal matches frequently occurred within streams: tenured faculty mentored tenure stream and Associate Professors, TS, mentored Assistant Professors, TS. For example, an Associate Professor, TS had sought feedback on her work from another Associate Professor, TS, emphasizing the key role teaching stream faculty play in promoting effective teaching strategies:



I see them as the 'experts' in teaching, or supposed to be and that they provide that service in the department; however, they are not a mentor for research stream. Traditionally the idea is that the mentoring for tenure stream will comment on, for example, NSERC proposals but this is a one-off thing. But this is the image people in our department have rather than the more in-depth coaching and support role (Assoc Prof, TS, Phys Sc, Mentor).

However, several tenure stream faculty members received one sole mentor to address all their needs (research, teaching, service) and a couple of these participants described this scenario as a poor mentoring for teaching experience.

Teaching and tenure stream matches were deemed successful in a case in which two teaching stream faculty shared very positive experiences in learning effective teaching approaches from their tenured mentor. Much of this particular success stemmed in large part to their mentor's expertise in higher education educational approaches (Phys Sc mentees). In other cases an Assistant Professor, TS, was matched to a tenure stream faculty member to assist/guide them with in-class teaching strategies. Similarly a Chair in Physical Sciences asked an Associate Professor, TS, to discuss low course evaluation scores with an Assistant Professor. In the latter case, the Chair's intentional prompting was the key for this match to occur; otherwise across-stream matches were uncommon, even though mentors generally perceived these as positive relationships.

Overall, the majority of participants shared that tenure stream mentees require guidance and insights on research-specific topics and in many (not all) cases a teaching stream faculty member may be limited in their capacity to advise on such research-focused matters. In one noteworthy case, an Associate Professor, TS (Phys

Sc, TAM) firmly believed and advocated (alongside their Chair) that teaching stream faculty should receive research mentors to ensure they have options and guidance for both discipline and pedagogical research (SoTL). Similarly, an Associate Professor, TS, recalled that his own mentor prompted him to explore research on his classroom teaching:

He asked me, 'What are you doing to evaluate what you are doing in class – how do you know that it's good?' So for me and what I discuss and encourage with my mentees is that SoTL research is, for me, my research. (Phys Sc, Mentor)

*Discipline matches.* While a few participants experienced within discipline matches, as one mentor noted: "Shared subject matter is key as it's a shared language" (Assoc Prof, TS), far more participants described *between discipline (interdisciplinary)* matches. Such matches did occur due to small departments with too few mentors available. The following comment highlights one mentor's introduction to between-discipline matching:

I mentor two faculty outside of my discipline and when I was first approached I said, 'I don't know anything about [social science dept name]' but they responded that there are people in their department to talk about how to navigate their department and that my role is to conduct a very independent, truly separate perspective on being a teacher at [names dept]...where are there resources, etc. Most mentors now tend not to be in the same department, no official numbers on this though. (Assoc Prof, TS, Phys Sc)

Faculty matched outside their discipline cited positive benefits as they gained a different perspective from discussing teaching topics outside their own department: "In practice our fields were quite different but it was an advantage and he was teaching a course in an area that I would be taking on." (Assoc Prof, Humanities, in mentee role). An added benefit was the enhanced sense of confidentiality in their meetings.

On a related topic, one Teaching Academy member - and mentees who utilized the CTSI 'Open Doors' program - spoke highly of their interdisciplinary relationship. They suggested that there are more similarities than differences when discussing and sharing teaching practices and strategies across disciplines (Assoc Prof, TS, Phys Sc, TAM, Mentor). More findings from 'Open Doors' will be discussed later in this report.



Informal Match. Participants were more likely to discuss the informal mentoring relationships that they have experienced and built over the course of their careers at U of T rather than formal mentoring

relationships. Several participants (all from the teaching stream and across varied disciplines) indicated that a lack of mentor matches at hire meant they sought informal, supportive, relationships elsewhere. One Associate Professor, TS, observed that while it appeared that new hires were to be matched with a mentor, this did not transpire.

I recall that at the New Faculty Orientation and Back-to-School events it was emphasized that we [new hires] should have a mentor but I was never offered one...to my knowledge there have been three tenure track hires in the past three years with no mentor offered. (Phys Sc, UTSC)

One Associate Professor, TS had no mentor and this was a core reason he became one. Currently he informally mentors up to six new faculty (including a post doctorate) who are 'floundering' in both the teaching and tenure stream (Life Sc), a feeling he had been all too familiar with when first hired.

Finally one participant described their departmental response to the availability of a faculty mentor:

There is no history of providing mentors and therefore none available to recommend... I looked for a mentor but couldn't find one...[so] I began an informal mentoring relationship with another Associate Professor, TS, in my department and mainly because they were next door...came from a different discipline [within an interdisciplinary department].

Unfortunately, this informal mentoring for teaching was limited as the mentor had more expertise with graduate level seminar courses, while the mentee sought guidance on large class undergraduate teaching (Assoc Prof, TS, Life Sc).

For many faculty members who described receiving no formal mentor match at hire, they still shared beneficial informal mentoring experiences. These faculty can be best described as 'initiators' as they sought relationships with other faculty and opportunities to network with peers, in spite of non-existent formal mentoring. Within such relationships there is a greater likelihood that Associate Professors in the teaching stream provided

teaching- specific guidance and support to tenure stream faculty (in comparison to the formal matches noted previously). One Associate Professor, TS, remarked: “As a teaching stream faculty the Chair reflexively refers people to me” (Life Sc, mentor).

Participants described informal mentorships both between and within disciplines. The following scenario illustrates a within-discipline match, although with a unique impetus for the match. Students prompted a tenure stream instructor to seek out what they perceived to be effective teaching strategies used by the department’s Associate Professor, TS. The tenure- stream instructor did informally seek assistance but in a ‘drop-in’ manner (Assoc Prof, TS, Phys Sc). This informal mentor had offered to take on a mentor leadership role and to formalize mentoring for teaching relationships in the department but has not been successful in launching this type of activity. In the meantime, this participant continues to offer mentoring/assistance with teaching-related matters. In a similar vein, an Associate Professor, TS, (Life Sc) served in an informal mentor capacity to a new teaching-stream faculty member in another department within the Life Sciences. Much of their focus centred on navigating teaching-stream expectations and what is required for teaching stream. For the mentor, they described the importance/reciprocity of learning that occurs as “[getting] a different perspective from outside my department.”

The majority of participants in this study described informal mentoring relationships. These reportedly are not overseen in any formalized manner. For example, one Assistant Professor, TS (Humanities, FAS) described the ‘formal’ mentor match made in accordance with the Divisional Mentoring Guidelines but a meeting never took place – it merely existed in a letter. However, this instructor quickly found an ‘informal’ mentor from another division who has offered tremendous insights on a range of teaching- related questions/enquiries that emerged in the first couple of years of the faculty member’s appointment.

A few participants - self-described as mid-career - sought new ways to enhance their teaching approaches. These faculty members included teaching award winners who felt that there was much to be gained by observing other colleagues’ teaching and/or engaging in sharing course materials. This example illustrates such a relationship – the participant had reflected back on being a mentee throughout most of the interview but, when prompted, thought about what they had shared with others: “Yes, I have mentored. A senior colleague has asked me to discuss teaching activities – for example about discussion techniques – they had reviewed my file [for tenure] and

saw the evidence and wanted to chat with me” (Assistant Prof, Soc Sc speaking in role as an informal mentor).

Positive one-to-one mentoring experiences. U of T divisions and departments primarily focus on one-to-one faculty mentoring matches. This section captures elements described as effective or positive for the development of new faculty at U of T.

1. *Enthusiastic & committed mentor.* Mentors spoke passionately about their commitment to teaching and support for new faculty who may be struggling to engage in teaching-focused discussions. The following comments illustrate important qualities in their mentoring relationships, “Being empathetic works well” (Assoc Prof, TS, Phys Sc, in mentee role), and:

I want to be available, free to meet and enthusiastic about meeting up with mentees...make them feel they can contact me anytime, contact me whenever they want – go for lunch, as simple as it sounds I took that away from my own experience as a mentee. Not just that I put up with it but I enjoy it. I don’t have a lot of people in my department to talk to about teaching –only one downtown – a couple of research stream that have an interest in teaching but they are not people with whom I’d have regular conversations on teaching. (Assoc Prof, TS, Phys Sc, Mentor)

A recent new arrival to Toronto shared the positive aspects of her formally matched mentor. The mentee arrived close to the start of the fall term and immediately received constructive feedback on her large-class teaching approaches and strategies:

My mentor focused on and stressed my own style, writing out all lecture notes in my own writing and focusing on reducing time to prep for lectures. Time demands of the mentoring relationship are high but worthwhile as it’s a wonderful opportunity. My mentor supported me when I did a good teaching practice. (Assistant Prof, Phys Sc, mentee)

2. *Provided documentation to mentee.* Several mentees and mentors spoke favourably of formal mentors who provided documentation of teaching activities. Mentors demonstrated a commitment to the mentoring relationship by including this formal component – one that identified a mentee’s ongoing efforts to enhance their teaching. In one case an Associate Professor, TS (Life Sc) ensured that her mentee received course feedback from two of the mentee’s guest lectures. She observed his second lecture and met to share feedback both verbally and in writing in which she provided formative comments that focused on (1) lecture notes (2) pacing

<sup>19</sup> For a full description and sample Teaching Squares Program see: [http://www.uwo.ca/tsc/faculty\\_programs/teaching\\_squares.html](http://www.uwo.ca/tsc/faculty_programs/teaching_squares.html)

and time management (3) volume, and (4) PowerPoint slide design.

In two other cases, an Associate Professor, TS, provided both an in-class observation letter and shared how to incorporate the Teaching Squares<sup>19</sup> activity, including guidelines for providing feedback to each instructor. In a similar vein, a formal mentor who primarily focuses on in-class teaching activities ensures that instructors receive detailed notes and that these are discussed fully at each lecture debrief meeting.

### 3. *A structured mentoring format enhances relationships.*

Less mentioned, but of note, were those mentoring matches that allowed for alignment of mentor-mentee needs. In the first instance a participant described that the match process began with a mentor characteristic list circulated within a division and it included requests for mentor nominations. This step avoided receiving mentors who may not have these characteristics. Nominees would be informed and asked if they wanted to serve as a mentor, and what the position entailed. Mentors would then receive an orientation, mentor training, and then be randomly matched to someone outside their division to ensure mentees did not work alongside them. A few months into the match, both parties would be asked follow-up questions such as meeting frequency, and how the relationship was advancing. At this point this review could result in a “no fault divorce proceeding – if it didn’t work out they could contact me to connect with someone else” (Assoc Prof, Med, mentor).

In a second case a participant described trial and error formats/processes to determine mentor-mentee matches and that the most effective format engaged her in her role (as Dean) to meet with the new hire to solidify a “prime” mentor. This would launch a series of discussions between both of them,

To figure out who in their faculty would sort out who to work with. For example I connect two [names research area] faculty to others on campus – I watch their back. I don’t teach the same disciplinary area but they meet with me every 4-6 weeks. (Assoc Prof, Soc Sc, TAM)

Several participants spoke highly of structured meeting formats that ensured “dependability and predictability.” Formal processes were deemed to establish expectations between both parties. One participant met her mentor prior to the first lecture to review the course syllabus and focus in on delivering a solid first lecture and ensured that “I start off on the right foot.” They scheduled meetings before and after every lecture (Assistant Prof,

Phys Sc, mentee). Finally an Associate Professor, TS, noted that the Department Chair provided the mentee funds to cover the lunchtime mentoring meeting: “What a nice idea and nice way to have some value for the mentoring but psychologically you have an hour and a half dedicated to this conversation” (Assoc Prof, TS, Phys Sc, mentor).

Challenges/limitations in one-to-one mentoring. This section identifies those matches in which the relationship - for any number of reasons - posed challenges for one or both parties, and in this climate, a beneficial relationship was not wholly realized.

1. *Predominant focus on research.* A few participants noted that a predominant focus on research production (at departmental and/or divisional levels) hinders the amount of discussion time spent on teaching-related matters during mentoring meetings. One faculty member’s formalized teaching role exposed them to such situations, noting, “we hear a lot of stuff where the Chair has said, ‘we don’t want to do teaching excellence... we need excellence in research’” which shifts how new faculty approach competing demands amongst research, teaching and service. In a similar vein, an Assistant Professor described an “awkward meeting” with her mentor (the Department Chair) that primarily focused on logistics and being told to “crank out my research.” Without mentoring guidelines she felt that there was limited time to discuss teaching and what really mattered from her vantage point. Fortunately this mentee did receive advice to seek out support from university teaching centres for more detailed teaching-focused workshops, although she expressed disappointment in not receiving some teaching support from an assigned mentor. Overall, this mentoring experience fell flat, especially when she sought to conduct inquiry into her teaching: “I have a ton of ideas that include SoTL work and how to make my classes better... I am jealous of some faculty who have a good mentor” (Assistant Prof, Life Sc, mentee).

***“I have a ton of ideas that include Scholarship of Teaching and Learning work and how to make my classes better... I am jealous of some faculty who have a good mentor”  
(Assistant Prof, Life Sc, mentee).***

<sup>20</sup> Progress here is in reference to her course evaluation results and also she had assigned student grades deemed to be too high.

A few participants were wary of mentor matches with tenured professors who had little teaching experience or expertise in teaching-related topics. For one Assistant Professor (Life Sc) more 'hands-on' mentoring and guidance would have gone far in avoiding teaching issues that stalled her progress and raised questions about her teaching<sup>20</sup>. She had not been provided guidance early enough in the term and suggested that the constant research focus in her department negatively impacted the time she could spend asking questions about her teaching (e.g., questions about student grading). Another participant who had been matched with a tenured professor noted: "I don't respect this mentor as a teacher" (Assoc Prof, TS, Life Sc, in mentee role).

2. *Lack of goal-setting*. One participant described a key limitation in their mentorship relationship in that, "it was hard to tell if I had improved...there was no goal setting specifically." (Assistant Prof, Phys Sc, mentee). Another mentee shared that in focusing too much on "nuts and bolts" there was little discussion of how to continually improve as an instructor in preparation for promotion processes. The participant's Chair did conduct an in-class evaluation last year and met with her a couple of weeks later. She commented: "but this was not pedagogically sound advice in my opinion...I'm on a three-year contract and this places me in a precarious position. There is no time to talk about any teaching or faculty issues" (Assistant Prof, TS, Life Sc, mentee).

3. *Mentee must initiate match*. In several instances participants were wary of department mentoring approaches that lacked structure as those faculty who sought mentoring on teaching topics felt that if they admitted to needing teaching support they may be labelled as 'incompetent' or requiring remedial services. This theme also touched on ensuring confidentiality in the mentoring relationship. Matches that occurred in such a department or divisional climate were less likely to be fulfilling for the mentee, in particular.

4. *Disinterested mentee*. Mentoring relationships thrive under a range of situational factors. Participants noted that mentees who are either disinterested or lacking time can pose challenges to the success of the match. For example, one mentor had been strongly 'forced' to engage with a mentee that he did not initiate, and found that the mentee did not fully commit or see the benefit to spending valuable time on teaching matters. In a similar case an Associate Professor, TS, offered to observe a mentee's lecture but was not taken up on this: "My mentee receives solid course evaluations and doesn't feel he needs much guidance on his teaching, based only on these" (Phys Sc, mentor). Finally, within disciplines that have limited teaching (e.g., clinicians in health sciences) there is "some push back there...as they are so busy – teaching is a small part of what they do and in the big scope of things they are not prepared to spend a lot of time on this part of their academic position" (Assoc Prof, Med, mentor).





### THEME 3: OTHER AVENUES FOR TEACHING SUPPORT/MENTORING

At the onset of this study there was a sense that mentoring would likely be captured as the traditional one-to-one mentoring relationship, in part because U of T includes formal guidelines in several divisions that focus primarily on such dyadic models. However, faculty described a number of other avenues where support, advice, coaching (described as mentoring), took place. New faculty felt that they gained support and became socialized into learning about, and incorporating, myriad effective teaching practices via these activities and initiatives. In order of most frequently cited: Teaching & Learning Centres, peer groups, and institution-wide or central mentoring opportunities (e.g., Open Doors on Teaching, New Faculty Orientation, broader networks).

The following section addresses each of these positive and enabling activities and sites of support.

**Teaching & Learning Centres.** Teaching and learning centres are viewed as ‘hubs of experts,’ whether for seeking guidance on dossiers, in-class observations or more general teaching-related topics offered through workshops. An Associate Professor, TS, shared that her department worked in partnership with one centre faculty developer to create a key resource for new faculty hires focused on ‘nuts and bolts,’ that includes and addresses teaching-related frequently asked questions. This participant noted that the department felt that such a document could free up a new faculty member’s time for other teaching, research, and service-related matters.

Participants cited the value of the Teaching Centres across the three U of T campuses that enabled connections and mentorship to happen: “CTSI serves as the default or first response.” Several participants from both mentor and mentee perspectives explicitly directed or were directed to workshops, and specialized services offered via the three campuses’ teaching centres. An Assistant Professor recounted her surprise at the “virtually non-existent orientation” within her own department and “one person told me about CTSI and I booked everything in my calendar - every faculty event that was running” (Soc Sc, mentee).

One mentor reported that: “Many of our faculty have worked with [names faculty developer] on learning outcomes, mapping with them and the digital side with two other staff (at a teaching and learning centre) and the liaison librarian.” An Associate Professor, TS, who did not receive a formal mentor, relied heavily on attending various teaching workshops, his experience as a doctoral student in THE500<sup>21</sup> and “I didn’t hesitate to go to sources of support at two of three campus teaching centres” (Phys Sc).

Finally an Associate Professor, who also serves as a formal mentor and as an educator within a teaching and learning centre in a large science faculty, shared that many faculty are not provided mentoring in teaching and will rely heavily on workshops and extensive longitudinal programs offered at the teaching and learning centre (e.g., 40 hour intensive learning sessions and once/month participation in an Educational Journal club). More specialized and intensive programs include a focus on educational scholarship and leadership. To further mentor or guide faculty facing teaching-related concerns/problems, the teaching and learning centre also offers online modules that include, for example, brainstorming some teaching strategies. All of these initiatives add more opportunities for faculty to enhance their teaching repertoires.

**Peer group.** Interviews included numerous references to the value and importance of peer group relations that participants shared within the broad concept of mentoring, guidance, and support for teaching matters. Included here were: 1) in-class observations; 2) team or collaborative teaching; 3) tenure and promotion support; and, 4) departmental initiatives.

1. *In-class observations.* Several faculty members shared occasions in which peers from within and outside their department had sought feedback on their in-class

<sup>21</sup>THE 500H - Teaching in Higher Education has been offered since 1994. The objective of THE500 (Teaching in Higher Education) is to support Ph.D. students and Post-Doctoral Fellows from all divisions at U of T in their professional preparation for academic careers. Retrieved from <http://www.wdw.utoronto.ca/index.php/programs/the500/overview>

teaching. In one case three teaching-stream faculty (two of which participated in this study) met at the New Faculty Orientation and shared with each other their anxieties about their new academic positions and mutually sought ongoing support for their teaching-related questions and concerns. Two were from the same department and the third faculty member was from another department. They conducted peer observations with one another but lacked guidelines for this activity.<sup>22</sup>

Another department (Phys Sc) has a lengthy history of peer support for in-class observations that are further enhanced by including students in the formative assessment process. Participants in their paired interview reflected on the value of this activity and support for observing one another's teaching to gain new insights regarding strategies, approaches, and educational technologies. A strong teaching culture in their department has opened the spaces to discuss and make public one's teaching. In addition this particular department has a large contingent of teaching-stream faculty with extensive training in pedagogy, including SoTL research, described as key factors in supporting peer activities.

**2. Team or collaborative teaching.** Participants further identified peer support in relation to co-teaching and collaborations in the development of course syllabi. Opportunities existed to share teaching experiences, to discuss and problem-solve any course teaching issues immediately after they occurred. One Assistant Professor (Soc Sc) described colleagues who promptly responded to her 'SOS' email regarding a student matter – she received the advice and support she needed at a time that she most needed it, and was grateful for peers who stepped in when it really counted.

In a unique teaching arrangement a 'teaching team' includes faculty alongside sessional instructors and graduate students that allows for peer group teaching support to occur. The Associate Professor from this department described the teams in this way:

There's lots of learning going on. Peer teaching in many ways. Teams are around an area or a particular course - and that's where the teaching techniques, approaches, problem solving about teaching happen, a peer mentorship kind of thing. The course coordinator is in charge.

**3. Tenure and promotion support.** Participants also described the importance of peer support for tenure

***"[We] created a culture here where pedagogy is something that there is room for"***

***(Associate Prof, TS, Soc Sc, TAM, mentor).***

and promotion processes. A few participants sought out faculty who were experiencing a similar stage in the process. As one Assistant Professor, TS, commented: "I was working on my 3rd year review package and got support from another Lecturer, a good friend and colleague who was also going through the process, alongside me." She also sought out a couple of Assistant Professors, TS, who had recently been successfully promoted, to provide advice in looking ahead to her own promotion to Associate Professor, TS. Similarly an Assistant Professor (Soc Sc) sought support from two pre-tenure colleagues at slightly different stages to share annual review experiences: "what fits, what to talk about, who could share their annual review forms to see the structure of those." An Assistant Professor, TS, with no formal mentor, sought insights from an Assistant Professor, TS, colleague who had been hired just six months prior to him: "I discussed with him what's working [teaching-wise], frustrations about the department, resources and support for our courses" (Phys Sc).

Briefly, two enabling factors emerged in participant interviews closely connected to peer mentoring and collaboration: first, the availability and provision of physical spaces to congregate informally to discuss teaching experiences. This theme is addressed more fully in the next section where positive faculty interactions can occur within inviting spaces, rooms, and lounge areas to engage in conversations that matter to their teaching. Second, peer mentoring opportunities can emerge first from faculty development sessions and can be the catalyst for other avenues of support:

Newer models - peer mentoring - are increasingly occurring or are more group based that allow faculty to think about their teaching and come to a workshop to do this. They can sit with someone else to discuss your course evaluations and can improve.

<sup>22</sup> Following the interview, participants requested CTSI in-class observation checklists to ensure they used some guidelines during their peer observations.

They develop their own little community of practice or peer mentoring in some departments and it works well (Assoc Prof, Med, mentor).

4. *Departmental initiatives.* Departmental series/rounds or as one participant referred to as “mentoring at a larger scale”, were frequently described by teaching- stream faculty. These participants deemed such departmental opportunities useful for hearing and sharing about a range of teaching topics with other faculty (and instructors, graduate students). Of note is that a couple of these series/rounds impacted a large number of faculty and highlights both the importance of such events as avenues to mutually share, guide, assist, coach and mentor others of varied experience levels, but also the important leadership role many of the teaching stream faculty have taken on in supporting or initiating such activities.

One Assistant Professor, TS, re-launched a discussion-based, twice monthly lunch hour meeting round with guest speakers, that included a focus on seminal teaching topics and peer reviewed articles identified by the instructors and graduate students who attended these sessions (Phys Sc, mentee). Further still, another Assistant Professor, TS, described a faculty retreat, that:

Opened opportunities to try new initiatives such as hosting a student engagement workshop and I spearheaded an Innovation Committee Lunch ‘n Learn to address topics such as educational technologies and to get instructors on board. We meet once per month but I’d like to start a peer- peer facilitated session (Life Sc, mentee).

Both an Associate Professor, TS, and an Assistant Professor, TS, organized a discussion- only lunch series on pedagogical topics. She reflected during our interview that this series can be viewed as “mentoring at a larger scale.” The first lunch included 15-20 attendees. This group decided to meet a few times to decide on pedagogical topics and arranged for informal lunch sessions, “to just talk about it [topics] so people don’t think they have to present something...for example we did one session on student mentoring and talked for two hours and it was fabulous.” This departmental initiative moved beyond the initial group when an outside speaker was invited to discuss writing activities. On this particular occasion 100 faculty attended and while the session topic was originally to be contained within the department, “there was so much interest it went bigger. It was a network and people followed up with each other.” A follow-up topic on inverted learning was similarly described as a success, as participants found a space to really listen and discuss teaching topics:

And they [faculty] gave a sigh when they came in one time for the topic of inverted classrooms with [names faculty member], just relaxed, got a sandwich and were part of a learning community. Created a culture here where pedagogy is something that there is room for. (Assoc Prof, TS, Soc Sc, TAM, mentor)

One Assistant Professor, TS, (Life Sc, mentee) sought to build a learning community within her department to offset the lack of formal mentoring she had received upon hiring. Her Chair suggested that she seek out teaching leadership opportunities by meeting with new hires including tenure stream hires, to answer teaching-related questions. This committed faculty member shared course materials even though the new hires may already have had a formal match within their division (FAS). The instructor received questions about peer assessment examples, writing assignments, how to avoid giving high marks (“a big concern about this, a culture about it”), and how to ask different questions to facilitate student discussion during lectures. In spearheading a monthly lunch series focused on teaching topics this instructor also sought and received \$500 from the Department Chair to provide lunch for attendees. This series is intended for continuing appointment faculty, Course Instructors and interested graduate students. The Chair played an instrumental role in contributing to the series success and uptake by regularly communicating the event to all faculty, not just teaching stream. Such leadership was deemed to be important in building a departmental learning community.

Two other participants shared similar ‘Lunch ‘n Learn’ events that included a Book Club, Journal Club and opportunities to share amongst peers, whether from the continuing appointment stream or graduate students who were keen to hear about teaching topics. One case illustrated the pitfalls that well-intentioned Chairs may fall into – relegating teaching/pedagogical topics to a lower priority within the department. An Associate Professor, TS, described a Brown Bag lunch series held 3-4 times per year that had been launched prior to his appointment but was lacking pedagogically-focused topics. When the Chair invited him to speak at a faculty meeting on a specific teaching topic and suggested that he “be no longer than five minutes,” the faculty member offered to conduct a one hour Brown Bag session for all interested instructors on a pedagogical topic/initiative he had recently launched - and for which he had received broader support and recognition from outside his department. The Chair provided little encouragement, suggesting there may be too few interested faculty who would attend (Assoc Prof, TS, Phys Sc, mentor).

Several other participants mentioned other departmental mentoring activities that provide a space for frequent teaching topic discussions in their departments, viewed by participants as opportunities that may fall within a broader mentoring culture. In one case an Associate Professor, TS, described faculty discussions in this way:

Our [small] department meets every week and all departments should do it – as a result we share a lot of stuff – not really mentoring in that sense, but we share a lot about what’s going on in our teaching and our courses...we deal with admin stuff frequently which frees up time to discuss teaching and course-related topics. If you want to get assistance with field trips with a large course I know who to talk to about this, same with online learning, and faculty then don’t have to reinvent the wheel. (Phys Sc, UTM, mentor).

An Associate Professor, TS, shared details about an informal faculty group that meets 3-4 times per year, consisting of three continuing appointment faculty and one contract faculty. They worked to create a lounge space,

to think about community and a big room was cleaned out with seating and carpeting – a space to eat lunch, meet with students and book the space. There is no formal agenda, just whatever was going on in our course – big and small picture discussions” (Humanities, UTM, mentor).

This faculty member recently spearheaded a related initiative to launch peer observations of teaching within both teaching and tenure streams, asking faculty, “would you be interested in seeing someone else’s class and vice versa?” The interest in this particular department is growing for such informal, peer-supported, formative-focused teaching activities. Finally, another department shared that they collaborate across the three U of T campuses to host an annual “Teaching Day” in August.

#### Institution-wide or central mentoring opportunities.

The academic literature includes ways in which larger peer networks and communities of faculty instructors work to advance mentoring activities. The following section highlights participants’ discussions regarding U of T (institutional) and centrally administered mentoring activities: Open Doors on Teaching, the New Faculty Orientation, and a more organically-driven community of practice that focuses on online learning.



***“For me it’s two-way - I observe others to learn, especially from people away from my department and discipline and ask, ‘why do you do it that way? I’d never have thought of that way”  
(Associate Prof, TS, Phys Sc, TAM, mentor).***

1. *‘Open Doors on Teaching’*. Open Doors on Teaching is a unique mentorship program for U of T faculty. Organized through CTSI, and facilitated by members of the University of Toronto’s Teaching Academy (faculty who have received U of T’s highest teaching honor, the President’s Teaching Award), Open Doors provides faculty of all career stages with the opportunity to learn from the experience and expertise of their colleagues.

Both mentors and mentees in Open Doors shared their positive experiences and overall felt strongly that it should be bolstered and communicated throughout the U of T community because of its positive impact on mentee’s ongoing efforts and commitment to enhance their teaching. Participants described their relationship as the more traditional mentor-mentee dyad but also spoke of the reciprocity in learning, as noted previously in this report within the literature on peer-supported relationships. Teaching Academy Member (TAM) mentors felt that they too benefitted from observing and discussing teaching and keeping in touch with new strategies and approaches: “For me it’s two-way – I observe others to learn, especially from people away from my department and discipline and ask, ‘why do you do it that way? I’d never have thought of that way” (Assoc Prof, TS, Phys Sc, mentor, TAM).

2. *New Faculty Orientation (NFO)*. As noted previously, several participants described the full-day NFO as an opportunity to launch new peer groups and academic support systems. Specific to the event itself, one Associate Professor, TS (Soc Sc, mentor, TAM) described the institutional NFO as a broad initiative to mentor new faculty based on what teaching-related questions they bring to the lunch to discuss with an invited Teaching

Academy member. Her experience at the lunch has been to hear questions from new faculty regarding large class sizes, tenure and promotion guidelines, and specifically what to include in their dossier content. Some of her key advice focuses on advising faculty to enhance their teaching and related practices by selecting something that they want to focus on that is a current strength (e.g., community or service learning) and one weakness to focus on and improve and seek ways to learn in this area (e.g., new media). This particular mentor keeps abreast of new faculty hot topics, concerns and anxieties to, in turn, incorporate them back into their own mentoring relations.

3. *Broader networks*. Teaching and learning networks serve as an invaluable avenue to share teaching concerns, and strategies to address these needs. In a more notable case an Associate Professor, TS, shared his leadership in creating an online community of practice (CoP):

That [CoP] has been a catalyst to get to know people. A lot of conversations happening. This type of network means you can have more than one mentor – but it’s not for everyone and it’s really hit and miss... the strength at U of T is the size and the ability to network (Phys Sc, mentor).

Two mentors shared their perspective on what mentoring networks can add to a new faculty’s academic experience. One participant (Associate Prof, Med) noted:

The lingo I like is developmental network – a collection of individuals who help you in developing certain aspects, for example, teaching, or meeting an admin person on time management or you probably meet a range of people – some stay and some are added depending on what you need.

## THEME 4: COMMON TEACHING-RELATED CONCERNS

This section addresses participants' broader teaching-related concerns and topics that occur outside the ongoing teaching preparation and planning activities. These are listed in order of most frequently cited.

**TABLE 4: COMMON TEACHING-RELATED CONCERNS**

<b>A</b>	Teaching Culture/Climate
<b>B</b>	Parsing tenure and promotion guidelines
<b>C</b>	Summative assessment of teaching guidelines for teaching
<b>D</b>	Course evaluations
<b>E</b>	How to locate teaching 'experts' or 'champions'
<b>F</b>	How to address the 'nuts and bolts' of teaching

*A. Teaching Culture/Climate.* A central theme that emerged in this study is the varied descriptions of a 'teaching culture' within a research-intensive university. Participants shared the challenges of working within U of T, described as "an intimidating place" (Assoc Prof, TS, Phys Sc) with "not much institutional support for teaching" (Assoc Prof, TS, Life Sc), and its impact on their continual growth as university instructors. Similar to the COACHE and 'Speaking Up' data presented in the introduction, several faculty members recounted few teaching-related discussions occurring within their departments. Many in the tenure stream felt pressured to produce research first and develop their teaching second:

I'm not sure about other faculty just getting tenure but I feel like I can put more time into teaching now that tenure has been granted...invest some R and D [research and development] time into my teaching... another tenure stream faculty decided to take some time to develop her teaching and put aside her research for a while and she is one of the best instructors and I learned a lot from her but I think it wasn't good for her tenure case and she took a hit for that. (Assoc Prof, Humanities)

Participants described feelings of 'isolation' when it comes to seeking departmental colleagues to discuss teaching.

Happens in hallways but not at all in faculty meetings – can't remember when we had a teaching oriented item on our agenda – how to teach better, how to teach across our areas, or how to implement better teaching. (Assoc Prof, Soc Sc)

Positive teaching climates, on the other hand, tended to include seamless and open spaces for highly effective mentoring to occur (structured and intentional combined with informal opportunities such as coffee/common spaces to congregate). Participants shared insights on the intricacies of how such teaching cultures emerge, and the ways in which they are supported. Further, they described that such strong sites of support for teaching can assist in the shaping of recommendations for other departments faced with less supportive teaching environments.

Several participants also illustrated ways in which various departments have heightened awareness of the importance of effective teaching. They shared ways in which faculty are supported in sharing and discussing this knowledge within faculty meetings, brown-bag series, receiving funding for SoTL activities, conferences, etc. (a facilitating environment). Participants identified how the physical space in which faculty work can enhance positive teaching climates (i.e., shared spaces, coffee/lunch opportunities). One very supportive teaching climate included a champion, a 'visionary Chair' whom faculty within that department credit with enhancing the culture: "the quality of teaching increased tremendously with different expectations developed for teaching. Instructors ratcheted each other up...tried something others were doing." A few examples exist in which isolated faculty either continue to work in such environments or actively seek out informal mentors or colleagues from other departments to pursue teaching-related discussions.



Faculty hired for their 'teaching expertise' have similar experiences as tenure stream hires. They perceived that they were being left to 'sink or swim' in their new academic roles, and they hesitated to share their feelings of perceptions of being an incompetent instructor because in their mind they felt they were hired based on excellence or competence in teaching. New faculty (mentees) and their mentors shared anxieties about teaching-related matters that can interfere or limit efforts to become effective teachers. Participants offered a range of ways to convey anxieties and a general lack of support in teaching-related matters: "sink or swim, flying blind, lost, isolated, floundering, relying on trial and error, judged as incompetent," or "People will presume you know what you are doing, that you figure it out...sink or swim."

I felt stupid if I asked about teaching, logistics, policy admin, workload in 1st year...more in survival mode with big classes, classes that students don't want to take and you had to figure this out for yourself the first time and having the luxury of finding the finer points of course design may not be there – just 'what can I cover tomorrow morning in class' (Assoc Prof, TS, Phys Sc, speaking as a mentee and mentor)

A tenure stream participant who described her experience as "flying blind" expressed very real concerns about her emotional well-being and being negatively impacted by some of the more difficult classes that did not go well during the first year or two of her appointment. This anxiety spilled into research endeavours resulting in a less productive time period: "I experienced actual psychological strain when returning to the same class...and these experiences had a negative impact on my research" (Assistant Prof, Phys Sc). One mentor in Life Sciences similarly described the psychological toll for a mentee "whose knees were shaking when teaching at Convocation Hall" (Assoc Prof, TS, Life Sc).

#### *B. Parsing tenure and promotion guidelines for teaching.*

The majority of participants (mentors and mentees) described the uncertainty in meeting divisional guidelines for teaching, referred to as 'vague', 'crude', 'murky', 'blurred', or as another participant remarked: "Promotion was a challenge but I relied heavily on CTSI for guidelines – definitely would have been helpful if I'd seen someone else's documentation" (Assoc Prof, TS, Life Sc, speaking as a mentee).

A mentor with extensive experience sitting on promotion committees felt that new faculty face uncertainties in this important process that can impact their overall teaching and documentation of teaching effectiveness:

***"Happens in hallways but not all in faculty meetings - can't remember when we had a teaching oriented item on our agenda - how to teach better, how to teach across our areas, or how to implement better teaching"***  
(Associate Prof, Soc Sc).

When some feel they have to publish research in the teaching stream, this isn't the case and they can publish a curriculum document – doesn't necessarily have to be published in a scholarly journal and this focus on publishing may in fact be taking away from interesting pedagogical work they could be doing. (Assoc Prof, TS, Humanities, Mentor)

A Tenure Stream new hire sought out/initiated meetings to ensure that they gained the correct information on the tenure process: "I initiated guidance - in the face of limited mentoring – with three senior professors one year in advance of tenure because the guidelines were uncertain" (Assistant Prof, Soc Sc, mentee).

*C. Summative assessment of teaching.* Participants discussed that they rarely, if ever, had been provided an opportunity to enhance their teaching during the summative assessment of teaching that can occur very late in the promotion stages. Several participants noted that they would prefer more formative feedback that could allow for steady improvements in their teaching and also prepare them for the stress of the in-class observation that would play a part in their tenure and promotion summative process.

*D. Course evaluations.* According to a few faculty members, course evaluations played a role in heightening their anxiety about teaching matters. Departments that tend to emphasize course evaluations as the primary focus for summative purposes, often added to an instructor's anxiety, rather than using these data to inform ongoing teaching improvement, and as a source to guide class observations. One of these participants felt that the summative use of course feedback tends to hinder trying new activities in one's classroom and the tendency is to, "just stick to what you know." One participant cited the "competition between

new hires to get our course evaluations at a high level" combined with the isolation of having to "fill in the gaps in your own teaching" as a source of anxiety (Assistant Prof, TS, Life Sc), mentee).

E. *How to locate teaching 'experts' or 'champions'.* Several participants expressed uncertainty with who is a 'connector' or 'champion' of teaching, whether in their department or beyond it: "there are pockets of people" but how or where to locate "experts" on teaching topics such as classroom management ("how do I manage students who yell and talk loud in large classes?"), large classes, assessment, course syllabus design, different student learners (e.g., low student standards on pre-tests and needing to make accommodations and differentiate learning), diversity, use of textbooks, interpreting course evaluations, and educational technology. Furthermore, several participants had pressing questions such as how to coordinate/manage teaching teams with multiple TAs and co- instruction of lectures when teaching styles did not match. Of note, a tenure stream interviewee felt that knowing who or what resources to access early in one's career would definitely be complicated if a new faculty hire was a multi- lingual learner: "I know [Department name] and the culture generally, but departments can't leave it to chance that some faculty know their way around to locate resources, and others don't" (Associate Prof, Soc Sc, mentee).

F. *How to address the 'nuts and bolts' of teaching.* Overall, many participants felt there were gaps in answering the 'nuts and bolts'/logistics/administration- type questions (a few participants provided examples of Instructor Handbooks and additional documentation that address new faculty concerns in these areas). For many mentees and mentors, however, they spent valuable time setting up and administering courses (not including course syllabus design) making for inefficient and ineffective models at play. One Physical Sciences mentor felt strongly that many mentees needed to address teaching preparation in a more efficient manner – not downplaying the importance of this activity but shifting the "disproportionate amount of time on it" (Full Prof, mentor). For one Associate Professor (Soc Sc, mentor) the focus became "minimizing busy work for instructors and TAs to free up time to spend prepping for lectures and heading off problems before they start - crisis management before the crisis starts."

***"I know [Department name] and the culture generally, but departments can't leave it to chance that some faculty know their way around to locate resources, and others don't"***  
(Associate Prof, Soc Sc, mentee).

## SUMMARY OF FINDINGS

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This section has addressed existing evidence on faculty mentoring practices and approaches more generally, and the added teaching focus, germane to the work of CTSI. Both interview data and the Divisional Environmental Scan at U of T provide context-specific material to inform CTSI-developed resources for a range of audiences at the University of Toronto. Section B elaborates on how these data can be further considered for such resource development.

# SECTION B

## DISCUSSION AND CONSIDERATIONS: TEACHING AND THE MENTORING OF TEACHING

Part One of the following section discusses and provides suggested teaching topics and content for mentoring meetings that draws on data from this study of mentors and mentees across U of T, and the existing literature and resources collected from other institutions of higher education.

Part Two discusses and offers considerations for mentoring processes, structures and formats.



## PART ONE: TEACHING TOPICS AND CONTENT FOR MENTORING MEETINGS

**TABLE 5: FIVE CORE TEACHING AREAS**

Table 5 lists core teaching-related content areas that are predominantly drawn from interviews with both mentors and mentees.

<b>A</b>	Tenure and promotion guidelines for teaching
<b>B</b>	Locating teaching resources and accessing expertise
<b>C</b>	Teaching-related topics
<b>D</b>	Informal and formal inquiry into teaching: Scholarship of Teaching and Learning (SoTL)
<b>E</b>	Course evaluations (CE)

### **A) Tenure and promotion guidelines for teaching.**

Tenure and promotion processes are a central concern for new faculty (and mentors) seeking ways to understand what being a competent or excellent instructor entails.

Comments and suggestions came from an Associate Professor, UTM, Social Science who felt strongly that mentors should be able to identify and discuss with mentees how to access opportunities for service and their own professional development. One Assistant Professor, TS (Life Sc, mentee) sought more information from a senior administrator in FAS in order to clarify what is meant by excellence in teaching, and felt that mentors should advise mentees to seek teaching leadership in their own departments and increase their presence in this realm, not just at workshops.

One participant noted that,

The role of the 3rd year review [now termed interim review] committee is to provide the formal... requirements and assessment. The mentor helps the mentee to discuss and be available and to develop their strategy and to reflect on where they are... and how is it done in practice – everyone has access to the regulations but what does this look like in practice and that's not written anywhere. (Assoc Prof, UTM, Life Sc, mentor)

Participants also recommended that teaching scholarship

be subsumed within tenure and promotion discussion topics. Several participants preferred more formative feedback throughout their early teaching appointment to ensure that they have opportunities to make steady improvements and to optimally prepare them for the stress of the in-class observation and other activities or expectations that may be a part of the tenure and promotion decision.

Key considerations. The following suggestions and considerations can guide mentors and department chairs in their ongoing support roles for faculty and enable them to provide mentees with as much information as possible related to institutional, divisional and departmental expectations and resources related to teaching effectiveness.

*Department Chair or Divisional Dean:*

- provide all the necessary resource supports and information on tenure, promotion, and continuing status guidelines for teaching effectiveness early in a faculty member's appointment (e.g., Provostial Guidelines and Divisional Guidelines for Teaching).
- ensure an administrative (point person) or a mentor discusses the Provostial Guidelines for Teaching and Divisional Guidelines for Teaching very early in the mentoring relationship (in many cases, at the first meeting). Often faculty appreciate discussions on what constitutes evidence of student learning and strategies for improving teaching.
- promote discussions early in the new faculty's appointment on how to document teaching activities for tenure and continuing status, Progress Through the Ranks (PTR) and annual merit processes. Activity reports can include documentation of efforts to enhance teaching; mentors could play a key role in guiding some of this process.
- encourage new faculty to attend the range of support workshops provided through the Provost's Office, and CTSI to support them through the various stages of preparing for tenure and promotion.
- encourage early feedback on statements of teaching philosophy and teaching dossiers, either with mentors, or through staff in teaching centres.
- allow space and time for new faculty to learn about inquiry into one's teaching and the current guidelines in this area with respect to tenure and promotion requirements.

- promote mentoring as a learning process. Seek to pursue and support the broader goals of developing strong, resilient faculty who aspire to be continually improving teachers.
- consider attending workshops held by the Provost's Office on the assessment of teaching in tenure and continuing status processes
- avoid making assumptions regarding faculty competence in all aspects of teaching, especially for teaching stream faculty.
- Offer mentoring support (one-to-one, peer networks, etc.) for all faculty.

### **B) Locating teaching resources and accessing expertise.**

A positive example of accessing teaching expertise occurs at one U of T teaching centre in which faculty ambassadors or designates ("point person") are assigned to assume a mentor role in each department, specific to teaching. In this role they share what the centre offers and inform faculty about resources available to them. One participant commented that teaching stream faculty mainly assume these leadership roles and noted that this initiative has resulted in a positive "cross communication happening." This expertise is readily available to new faculty (and more experienced faculty), and addresses teaching concerns early in their appointments.

Another participant supported the idea that "just in time" supports may work best if they come from experienced teaching faculty with expertise in specific pedagogical areas. These "pods of people" could be available, for example, if a faculty member would like to learn more about flipped classrooms or clickers: "one document [on clickers] may not mean much at the time it is presented... an 'ask when you need it' model is better" (Assoc Prof, UTM, Life Sc).

Furthermore, these roles might be best served by teaching stream faculty who are seeking leadership experiences and often have such teaching-specific expertise.

Key considerations. The following suggestions can guide various U of T stakeholders in supporting faculty of all career stages to meet their teaching-related goals, namely via connections to people and resources that meet their needs.

#### *Department Chair or Divisional Dean:*

- provide resources such as a department information guide or an orientation led by more experienced and/or senior faculty to learn about the wide range of

***Create departmental spaces (e.g., lounge area or a 'teaching corner') to post special departmental or institutional teaching-related events. Such visibility also serves to bring teaching discussions into the mainstream, normalizing and making public these important conversations.***

teaching-related resources that mentors for teaching might learn about in order to support mentees. In these cases mentors gain valuable information on how to guide mentees in accessing expertise both within and external to their department.

- consider targeting identified mentors with key information prior to the university-wide New Faculty Orientation, including possibly holding an event geared specifically to new faculty at the start of the academic cycle.
- consider building a community or network of mentors that could further contribute to the teaching and learning community by leading teaching-focused community-building events/gatherings throughout the year.
- consider nominating faculty to become teaching mentors and consider those with a strong commitment to this activity. Ensure mentors understand the levels of commitment and what they can participate in – perhaps they can choose from a list of events to ensure they do not overextend themselves throughout the year.
- provide mentors with a list of teaching-focused resources and initiatives to discuss early in the mentoring relationship. Such resources would include Open Doors, Online CoP, SoTL Network, SoTL LibGuide, subscriptions to relevant listservs, newsletters (e.g., Tomorrow's Professor, Faculty Focus, listservs, CTSI Newsletter, department listservs, etc.)
- create departmental spaces (e.g., lounge area or a 'teaching corner') to post special departmental or institutional teaching-related events. Such visibility also serves to bring teaching discussions into the mainstream, normalizing and making public these important conversations.

- suggest that the mentor and mentee review together the upcoming programming being offered at U of T teaching centres (e.g., CTSI, UTM, UTSC, the Centre for Faculty Development) and develop a pathway approach in which a manageable list of teaching-related professional development activities are aligned with the mentee's teaching goals and aspirations. These activities might also include a range of professional development activities beyond those offered by teaching and learning centres. For example, the mentee may set goals for attending the CTSI 2-day Course Design-Redesign Institute early in their position, and attend with a faculty mentor or teaching partner. The mentor may advise the mentee to consult with colleagues who have attended such programming and who may be able to suggest specific workshop sessions or events.



Such a document can be reviewed in a mentoring meeting very early in an appointment so that both parties can ensure where the gaps are and how best to move forward on certain topics.

### C) Teaching-related topics

#### Course administration and planning.

*Nuts & bolts.* Many participants felt that dealing with administrative and/or logistical tasks can deter from time spent on teaching (e.g., prep and meeting with students). Participants referred to this as the 'nuts and bolts' of teaching and Weimer (2010) referred to these as the 'mechanics of teaching'. Such information would be best included in a resource document – either in the form of an Instructor Handbook that currently exists in some divisions and was mentioned, or as a resource included in a departmental/divisional mentoring resource package. One Associate Professor, TS, felt that key mentoring documents, such as preparing a course syllabus should include the following elements:

These must be very specific, how to do this and what you have to do...required elements of the syllabus, department policies for consistency, wordings that are required for the syllabus, optional or desirable elements, wording for optional pieces, samples of syllabus elements and checklist – so your syllabus is not approved until these elements are met. (UTM, Phys Sc, mentor)

One participant's suggestion stemmed from a new faculty member who grappled with grading and used a 4.0 GPA scale rather than a scale out of 100: "he hadn't been told and hadn't read this detail anywhere." He shared that a mentoring resource would include links to certain topics and/or to CTSI, and sections that include requirements for one's own course, and also what is optional to include.

It was also suggested that divisions might adopt/develop a template on the nuts and bolts of course set-up and management and that commonalities on teaching-related matters can be included with room for unique department-specific content (Assoc Prof, TS, UTM, TAM). Finally, mentoring meetings can address these logistical topics early on and allow time for more in-depth teaching topics:

People look at their teaching as a very personal thing and I don't know how to ask them... that's where I feel being proactive you provide a tool box (like the colleges) at day one instead of seeking it out when you need it, and those who need it the most, seek it the least. (Assistant Prof, Soc Sc, mentee)

A mentoring meeting can therefore include a checklist of course-related teaching activities, being proactive, for example, in discussing assessment/rubrics and dealing with grades for the first time (e.g., what are important departmental or divisional considerations or processes?) especially for the first course a new hire is teaching at the University.

*Course planning & course syllabus.* While course syllabus planning may well fit within resources and discussions about course administration and logistics, there was firm support for mentors to play a role in providing guidance in advance of the course start date around pedagogy more generally, and not just the course management "nuts and bolts." One participant viewed ongoing course development as a key topic to address. A mentor might, for example, provide feedback and guidance over time

for a few courses and offer a subsequent 'check-in' (Assoc Prof, TS, Life Sc, mentor/mentee). One Associate Professor suggested an early meeting (e.g. one month prior to the start of the term) regarding the structure of the course (topics, order of lecturing or activities, encourage mentee to get notes from previous instructors). However, according to another Associate Professor, the key is to strongly encourage mentees "to develop their own notes and write in their own words, not someone else's." However, sharing and reviewing course syllabi was considered important by a number of participants in terms of understanding what happened previously in a course and what direction the course might take going forward.

One UTM department provides all faculty members with a regularly updated handbook to ensure key changes are provided in a timely manner. This document encourages consistency in content regarding course policies and ideas for enhancing one's course. While the faculty member describing this resource noted that there can be some resistance to certain elements in the document (e.g., backward design suggestions/resources), "sharing these well-developed course syllabi with new hires can be helpful." Of note, another participant felt that the "key is to ensure that sample course syllabi serve to guide new hires and not limit or stifle their own creativity" (Assoc Prof, TS, Humanities, UTM, mentor).

A 'have to know' template or a checklist can offer mentors a basic guide to ensure mentees are provided the key information they need to successfully and effectively plan and develop a course with optional suggestions/ recommendations. While it is understood that a mentor may not have all the essential knowledge, this template can be used to locate other sources of expertise from within the department and/or external to it. A participant recommended that a divisional faculty mentoring document might include information common to all departments. In addition to course design and syllabus design, such a document could touch on assignment design as many participants expressed an interest in learning more about rubrics, setting student expectations, and supporting them in their learning.

#### *Broader curriculum discussions and curriculum mapping.*

Participants expressed an interest in knowing and understanding their department's courses and content. A mentor might address the following:

- how does the mentee's course align with other courses in their area or department? Such discussions can prompt important conversations of "how does it fit?" As one mentee noted, "shared course syllabi will ensure that there is less overlap with our courses,

content-wise, as I can't understand how course syllabi exist that are developed with no oversight on this, so strange how much freedom there is" (Assistant Prof, TS, Phys Sc, mentee).

- how to participate in curriculum mapping activities.

Overall, a mentoring relationship can address many teaching topics but a key goal is to consider how to ensure that instructors receive valuable information that enables efficiencies, while supporting more quality time to reflect on, plan and have opportunities to discuss teaching approaches, strategies, teaching development and improvement, etc.

#### In-class observations.

*The identified need for formative feedback.* Conducting a class observation of teaching is a highly recommended activity that to be most effective should ideally occur early in the mentoring process, and be one part of a wider array of data related to teaching development and effectiveness. Chism (2007) is a strong proponent of formative evaluation (peer review) and recommends that mentoring activities use course materials to 'alert mentors to the areas in which a given instructor excels and to areas where improvement can be cultivated' (p.77). Preliminary discussions on the value of formative feedback opportunities and how to develop and achieve teaching goals can serve to open the possibilities for enhancing one's teaching.

Participants recommended this formative in-class observational feedback should ideally be viewed separately from formal summative tenure and promotion processes. As part of going forward for tenure or continuing status, many divisions require or encourage faculty members to be observed teaching, with a subsequent report on the in-class observation provided to the tenure or promotion committee. Leading up to this observation, as reported by participants, there can be little to no preparation for or feedback on in-class teaching. Preparation in such cases might include a formative "check in" by a mentor prior to the more formalized observation. One Associate Professor, TS, (TAM, mentor) shared the value in providing formative feedback in both hiring and tenure and promotion processes as many new and early career faculty will only experience one in-class observation that is primarily a summative activity. This then becomes a major "high stakes activity" that creates inordinate anxiety for pre-tenure or pre-promotion faculty. Several mentees and mentors shared positive experiences in engaging in formative in-class observation sessions and the post-observation debrief meetings.



*Department-level observations.* A group of participants who had participated as mentees in weekly in-class observations with a senior faculty member felt that such sessions were very helpful and formed the basis of a meaningful mentor-mentee relationship. One mentor recommended that this approach can 'offer a bird's eye view of the course' and can also help inform the mentee about content overlap (Full Prof, Phys Sc, Mentor). A mentee, in this case, felt that including in-class observations were key to "developing one's own teaching style" (Assistant Prof, Phys Sc, mentee). Two additional participants who were mentored within this model said the formality of this frequent activity was positive and worked well (Assistant Prof, TS and Assoc Prof, TS, mentees, Phys Sc). These observations differ from the formative and summative processes more often shared by participants, ones that can focus too much on only what transpires in the classroom/lecture hall: "this activity is focusing on only one aspect of teaching and learning (this is a limitation)". Another participant felt that it is the follow-up discussions of the in-class observations that are sorely lacking: "there are plenty of evaluations of classroom teaching but not necessarily opportunities to discuss how to improve and enhance our teaching – the focus should be on the formative" (Assistant Prof, TS, mentee, Phys Sc).

Other key recommendations from participants regarding class observations as a mentoring activity include gauging what your mentee can handle or absorb in the first year of their appointment

I support in-class observations but there may be too much stress or pressure on a new hire – wait for a while, while they settle. It's good to ask but don't push them – [the mentee] needs a sense of trust as they feel very vulnerable. (Assoc Prof, Life Sc, UTM)

In the case of this mentor's own mentee they waited until the second year to approach in-class observations within their mentoring activities (Assoc Prof, Life Sc, UTM). Another participant emphasized that creating a teaching culture that elevates interest in observing and learning from others' teaching requires a careful approach:

The interest is there and depends on how it is approached. I have done these in-class observations with a few people and time is an issue but we created a culture in that people felt comfortable and I could ask, "do you mind if I sit in today...?"...seeing what someone else does causes you to reflect on your own teaching. (Assoc Prof, TS, Soc Sc, TAM)

*Documenting in-class formative observation.* Participants expressed keen interest in documenting in-class observations for enhancing their dossier file and to demonstrate efforts to become more effective instructors. This documentation is not always completed, however, and it is recommended that mentors and mentees discuss how this in-class observation might be documented as a means of capturing their efforts to showcase innovations and take risks in their teaching, as well as efforts to improve their practice. Observation checklists can provide some guidance for mentors to share with mentees ahead of observation sessions and as a debriefing tool in the immediate meeting afterwards. Strategies for moving forward can emerge from such discussions and can be included in mentor letters for a mentee's file. Of note, Department Chairs are urged to consider any conflicts of interest between mentors who are providing formative peer observations and feedback, and those providing summative observations for tenure and continuing status purposes.

Of note, if mentors are in any way part of tenure and promotion committees that involve their mentee then generally they will not also perform a summative observation, if required, for tenure or promotion processes.

*Peer support for in-class observations.* Peer-supported mentoring for in-class observations can offer a more supportive environment for new faculty who are seeking to enhance their teaching effectiveness. The Teaching Squares model<sup>23</sup> offers a supportive space to create small communities of faculty who can be guided by one mentor (e.g., teaching award winner, TAM) who takes participants through a series of in-class observations that expose them to other instructors at their experience

<sup>23</sup> For a full description and sample Teaching Squares Program see: [http://www.uwo.ca/tsc/faculty\\_programs/teaching\\_squares.html](http://www.uwo.ca/tsc/faculty_programs/teaching_squares.html)

level in a formative environment. As noted previously, Open Doors is an evidence-based model that provides a flexible means of observing and discussing the teaching of peers. In some scenarios of peer supported mentoring in the classroom, observational guidelines or checklists can be circulated and discussed in advance of introducing this activity.

### Additional Teaching Topics

Several participants identified the need to consider the following topics:

- *classroom management*, citing inexperience in large class teaching. It was felt that such discussions may occur with mentors from across disciplines.
- *discipline-specific content*: problem-based learning, case study examples and how to incorporate these at different stages in the term.
- *time management*: to learn helpful strategies and tips to ensure, for example, effective and efficient lecture/class preparation. Such discussions also overlap with broader mentor-mentee meeting topics on time management and achieving balance between teaching, research and service or as described in this study as, “what to say no to” and “the power of the positive no.”
- *use of technology in teaching* and how to make decisions for when to consider such usage, and second, to have a mentor who can connect a mentee for more specialized information and/or training. In the case of UTM one mentor ensures that faculty are “kept in the loop with the ed tech group.”
- *teaching teams*, many participants are keen to gain more experience and “know-how” with teaching teams (e.g., how to organize and lead such a team).

### Key Considerations

#### *Department Chair or Divisional Dean:*

- ensure each new faculty member receives an available department or divisional instructor handbook as part of a hiring package. Such documents may include many of the logistical elements of teaching in order to free up more time for faculty to engage in deeper teaching discussions and preparations.
- identify or designate a departmental point person for teaching-related questions and concerns. There may be more than one person on this list, especially if it is a large department.
- consider a specific point person with experience and expertise in the use of educational technology.

Departments with close-knit teaching cultures usually know who can provide insights and advice for this topic. New faculty may be encouraged to connect to others in their own department who have such experience, but also to the range of supports available such as the Online Community of Practice (CoP) and associated listservs, divisional media or information technology offices, library resources and teaching centres – including centralized support through CTSI.

- if strong teaching teams exist in the department (e.g., sessional instructors, TAs, course administrator, etc.) consider hosting a departmental workshop that highlights the importance of developing strong and positive relationships on such large teaching teams in order to successfully coordinate a course, content-wise and administratively speaking.<sup>24</sup>

#### *Mentors and departmental and divisional administrators:*

- CTSI has developed guidelines around in-class observations for formative assessment purposes to share as a mentor-mentee resource. This document is also valuable for administering summative assessments of teaching.

#### *Mentors and mentees:*

- work together to develop a teaching activities checklist of questions/concerns that arise early in a new faculty member’s position, ensuring that the mentee takes the lead to both contribute to, and be proactive in addressing, common pitfalls. Consider collaboratively identifying resources and supports to develop effective strategies (e.g., from teaching and learning centres).

### **D) Informal and formal inquiry into teaching: Scholarship of Teaching and Learning (SoTL).**

Increasingly, new teaching stream faculty (and more senior faculty who have not previously engaged in SoTL activities) opt to pursue inquiry into one’s teaching within their teaching-related activities. While a number of the tenure stream faculty interviewed in this study described SoTL activities, the majority of instructors interviewed were from the teaching stream. Participants sought ways they can both formally and informally capture evidence of student learning and ways to improve their teaching. Several participants from both mentor and mentee groups were uncertain of expectations for scholarship and the links to promotion and recommended that divisional guidelines need to address these and be discussed within mentoring meetings. Some mentors

<sup>24</sup>This example links to existing CTSI/TATP documents (e.g., Working with TAs)

may have extensive backgrounds in conducting SoTL while others may serve to direct mentees to sources of support and information (e.g., the CTSI SoTL Network and program activities). A few participants felt that they would welcome recommendations on how to bring scholarship to the classroom and how to incorporate their own research (both SoTL and disciplinary research) into their teaching.

### Key Considerations

#### *Departmental and divisional administrators:*

- include University of Toronto SoTL Network activities and other related events within departmental and/or divisional communications to draw attention to the SoTL work of colleagues.
- communicate availability of U of T educational grants to faculty (e.g., Instructional Technology Innovation Fund (ITIF), Learning and Education Advancement Fund (LEAF), etc.)

#### *Mentors and mentees:*

- early in the mentoring process discuss possibilities to explore inquiry into one's teaching in the event the mentee is interested in reflective, scholarly and/or more systematic approaches to SoTL.
- share SoTL and other levels of inquiry into one's teaching that you have conducted, and the value of these activities to enhancing one's teaching and student learning.
- discuss how best to effectively document SoTL activities in teaching dossier documents.
- seek CTSI SoTL website resources or programs/workshops/activities to share with your mentee.

### **E) Course evaluations (CE).**

Participants felt that mentoring meetings should be an opportunity to discuss CE, especially in departmental cultures that "support a sole focus on CE" as the means to assess teaching. As a TAM noted, CE are only one source of data related to teaching effectiveness, but important to address. While a department's cultural norms regarding course evaluations are important to consider,

a couple of mentors felt strongly that these early CE discussions can reduce "the angst surrounding annual reviews, tenure and promotion." To that end, mentoring meetings might serve as a space to discuss and develop "strategies from the CE results on what works, what doesn't, in a safe, supportive environment" (Assistant Prof, TS, Life Sc). Mentees who feel incompetent or discouraged if they performed poorly on their CE will benefit from supportive discussions regarding CE. Confidentiality is a key concern, as instructors seek ways to improve and enhance their teaching. They need an experienced, empathetic and supportive mentor to be part of this coaching experience.

Other types of formative feedback can be included in CE discussions. One participant noted that they frequently recommend the use – and value – of sharing mid-course formative feedback.

### Key consideration

#### *Department Chair or Divisional Dean:*

- provide information to mentors and other faculty members on available resources to guide the appropriate choice of items from the University of Toronto's course evaluation item bank that align with teaching goals and the interpretation of CE data.
- during departmental meetings and/or other activities that involve teaching-related discussions, encourage faculty to highlight the ways in which both formative and summative feedback can offer insights into one's teaching practices and assist in pedagogical goal-setting.
- promote a culture/climate in which faculty can discuss in safe spaces their concerns about their teaching, strategies to improve and enhance their teaching, and ways to accurately read and interpret their CE ratings.
- ensure faculty who have questions and/or concerns regarding CE scores have access to informed departmental colleagues to discuss or share appropriate resources (e.g., CTSI resources and staff, and accessing CE educational materials and documentation via the U of T Portal).

***Mentoring meetings might serve as a space to discuss and develop "strategies from the [Course Evaluations] results on what works, what doesn't, in a safe, supportive environment." (Assistant Prof, TS, Life Sc).***

## PART TWO: DISCUSSION AND CONSIDERATIONS FOR MENTORING MODELS AND APPROACHES

### OVERVIEW

The literature and this study shed much light on the range of mentoring approaches and models that exist. This section addresses these findings and discusses possible options for faculty, administrators and staff to consider when embarking on/launching a formal program and/or revamping an existing one. Our recommendations for developing and enhancing mentoring for teaching guidelines, activities or more formalized approaches can be used in conjunction with existing faculty mentoring models/guidelines. They may also serve to engender new thinking about faculty mentoring that includes an in-depth teaching component. The literature included in this study offers multiple lenses into these processes, depending on the needs of each division and in turn, department.

As described throughout this study, effective mentoring for teaching can stem and thrive from a wide range of relations – dyadic, larger supportive peer groups (co-mentoring, mutual mentoring), and networks of enthusiastic and committed instructors who are intent on building and enhancing their teaching repertoires and confidence. The majority of faculty in our study defined mentoring within dyadic model terms but it may be that this is the most familiar to them and historically the one- to-one model has been the most visible model within higher education. However, participants tended to discuss more fluid relationships with their colleagues, sometimes in a dyadic, formal focused relationship with specific activities, while at other times they sought and engaged with instructors through larger network events. All of these activities and relationships were described in ways that align with the range of mentoring definitions and descriptors in the literature.

Faculty mentoring in general can address a range of academic position-related concerns and topics that emanate from the mentee -- teaching is not a stand-alone component of this model. Mentoring for research, in particular, includes more topics that tenure stream faculty members are apt to be concerned about (e.g., striving to gain research funds), however these issues cannot be discussed in isolation from teaching and service. Faculty in both tenure and teaching streams face related challenges such as time management, stress, and general anxiety and isolation. These concerns have been

***“Mentoring program success factors include buy-in from university administrators, to ensure that faculty efforts to enhance their teaching are not a remedial notion but a core goal of the department and division.”***  
***(Boyle & Boice, 1998)***

documented in this study and elsewhere (Boice, 1998).<sup>25</sup> Evidence that supports successful and effective mentoring for teaching alongside participant experiences is included in this study and suggests that the more that faculty experience cultural support, the greater the number of conversational partners that they have within their context (Roxa & Maartenson, 2009). Such conversations and teaching development opportunities can bolster stronger and more engaged teaching communities. Boyle and Boice (1998) attest that mentoring program success factors include buy-in from university administrators, to ensure that faculty efforts to enhance their teaching are not a remedial notion but a core goal of the department and division. As Zellers et al. (2008), similarly note, this mentoring success stems from “visible support of senior administration” (p. 579).

Overall the various mentoring models may be situated along a continuum of formal/structured to informal/unstructured approaches. Generally speaking, the dyadic model as discussed first in this section has historically been a formal part of matching programs at many higher education institutions. As the U of T Divisional Scan indicates, there remains an interest in this more traditional model, perhaps because it has existed within a division for several years and no evaluations of its effectiveness have been conducted, or that there is no familiarity with other more recent evidence-based models. The list of considerations may serve as a starting point for interested parties to brainstorm what mentoring for teaching model can best suit the

<sup>25</sup>The University of Toronto has recently obtained an institutional membership to the National Center for Faculty Development & Diversity that supports academics in making successful transitions throughout their careers: [www.FacultyDiversity.org](http://www.FacultyDiversity.org)

**Recognize that mentors invariably serve a greater purpose, beyond support for the mentee and building their own leadership skills - they also play a key role in capacity building.**

department's teaching-related goals and objectives. The other model addressed in this section-peer mentoring support is more apt to occur as an informal format but complements and enhances more formal, administrative-supported dyad models.

## DYADIC MODEL (ONE-TO-ONE)

As noted previously in this report, the Divisional Environmental Scan at U of T shows that 9/15 responding divisions indicated that a formal mentor-mentee match was made at the time of hire. However, there is a lack of accompanying documents that address the specifics of this relationship (including the goals, processes, structure and content that might be applied towards guiding these mentoring matches). Dawson (2014) (**Appendix A**) emphasizes that there is a need for clarity in defining mentoring. The author's framework is a useful resource for important discussions at the departmental and/or divisional levels that can trigger thinking on key topic areas such as choice of design of a mentoring model (why, for example, one-to-one?). By addressing each of the elements in Dawson's framework the resultant choices become more transparent and communications are clarified as models are selected.

The literature and findings in this study suggest that dyadic mentoring relationships can serve as a foundational model for faculty to build their repertoire of skills in their new academic environment. Intentional and purposeful one-to-one mentoring, however, is more likely to be successful and effective if the mentor-mentee match involves a number of elements/criteria (Dawson (2014), with a key focus on experienced, informed/skilled mentors in these roles. In this way, mentors serve as the point person to ensure teaching-related concerns and interests are met. Skilled mentors have the information and knowledge of existing supports to share with the mentee across the university (and in some cases, beyond) – be that intra/ inter-departmental peer support groups and/or broader teaching and learning communities.

It is important to ensure that all faculty and senior administration are cognizant that mentoring for teaching activities should be viewed as a positive activity, not a remedial notion.

A key issue throughout dyadic mentoring relationships remains how to identify skilled mentors for teaching, and locating faculty with pedagogical expertise that is key to a positive mentoring relationship for both parties. Departments and divisions planning for mentoring are encouraged to carefully consider the criteria for selection and the process and mechanisms for orienting mentors into their voluntary roles. Dawson's (2014) research also offers guidance and probes for examining the mechanisms to be developed/enhanced when inviting skilled mentors into a more formalized mentoring structure. Several elements of Dawson's work are included in the list of considerations below and this list of elements is invaluable when moving forward with a mentoring for teaching model, whether formal or informal.

### Key considerations

#### *Department Chair or Divisional Dean:*

- conduct an informal assessment/scan of whether there are current dyadic mentoring relationships in one's department and/or division, and if so how these are formed, the format, frequency, content, resources/ tools used, and insights on what has worked well and where gaps remain in existing mentoring relationships. Such information-gathering may lend insights into what mentoring model is supported by the key players in the department. Related to this scan/search/data gathering consider these points:
  - recognize that mentors invariably serve a greater purpose, beyond support for the mentee and building their own leadership skills – they also play a key role in capacity building. Reflect on the ways in which both mentors and mentees might spur new thinking regarding the specific needs for advancing teaching and learning in the department (e.g., being advocates for engagement in activities to enhance faculty teaching).
  - be cognizant that new faculty may not have pre-existing academic, cultural and personal connections in the department or broader institution (e.g., new to Toronto, the country and our higher education systems). Consult broadly, as noted above, to ascertain what new faculty are seeking in a mentoring relationship, specific to their particular teaching issues.

- if formal and structured mentor models are not the preferred approach, consider avenues for new faculty to be intentionally introduced to peer and larger department and divisional groups and networks (e.g., at a minimum, identify a teaching 'expert' or point person).
- strongly consider Dawson's (2014) framework (**Appendix A**) and keep in the forefront the U of T context in stating the objectives of a mentoring model. This may, for example, mean explicitly stating what is to be achieved teaching-wise in one's department or division. Perhaps the key objectives stem from departmental teaching and learning initiatives or broader university-wide priorities.
- when developing specifics on mentor and mentee roles consider the elements (Dawson 2014) of 'relative seniority' in defining who is recognized as a mentor (e.g., experience levels? award winning teachers?) For the U of T context perhaps an Associate Professor, TS in the department has developed specific pedagogical expertise that is of value for a mentee. This report identified the dearth of leadership opportunities for teaching stream faculty, in particular.

→ departments and/or divisions might generate a list of possible (interested and voluntary) mentors and their identified expertise and/or request that interested mentors submit five brief responses to questions regarding their approaches to teaching and student learning, the variety of teaching contexts in which they have experience and skillsets (seminar, large class), to provide information on varied skills and expertise available.

→ each department and/or division may in turn develop its own database of teaching 'experts.'

- consider whether mentor selection includes requirements for mentor skills training (or equivalent).
- consult widely with faculty when examining how mentoring can be viewed as service/leadership and be recognized for its contribution to the department and division as a whole. Participants in this study shared that this is important and part of enhancing mid-career leadership opportunities.
- in making decisions on the voluntary/mandatory aspects of mentoring for teaching, use a best practice that clearly articulates the benefits to be gained for both parties in the match. In this way, the mandatory element is not deemed to be punitive but rather, about enhancing one's teaching and embarking on steps to fully prepare for one's academic position (e.g., preparation for strong tenure and promotion documentation).

- departments may also choose to monitor and evaluate how (or if) these mentoring programs are being implemented and if/how effective they are at achieving desired outcomes. Such intentionality will result in continual improvement of mentoring relationships and in reaching stated objectives and outcomes of the mentoring teaching models, guidelines and approaches.

#### Teaching Centres:

- through a teaching centre's campus contacts, and its ongoing network of workshops facilitators and insights on effective teachers, identify a list of potential mentors to share with departments/divisions.

## **PEER SUPPORTED MENTORING**

While more structured peer mentoring is described in the literature as a key avenue and model for supporting faculty as they navigate their new roles, the literature and views of participants in this study point to a more informal approach that differs somewhat from the foundational, more structured and in the case of some divisions at U of T, dyadic model. Also referred to in the literature as co-mentoring, Calderwood and Klaf (2015) reported that peer mentoring constructs a community with a "shared engagement in common practice" (e.g., teaching) who learn from and with each other - a different configuration from the dyadic model. Participants in our study discussed peer support and mentoring much like this, demonstrating an overlap between what a dyadic relationship entails, and other one-to-one models. From the literature and participant reflections on their own mentoring relationships, it appears that dyadic models tend to include a more formalized approach and peer, co-mentoring, or mutual mentoring retains a more informal approach.

***Peer mentoring constructs a community with a "shared engagement in common practice" (e.g., teaching) who learn from and with each other - a different configuration from the dyadic model.***  
***(Calderwood & Klaf, 2015)***

As participants in this study noted, peer mentoring is a collaborative practice that occurs, for example, between new hires meeting with one another to discuss a specific topic (e.g., a teaching strategy). Peer supported mentoring can also involve a more senior faculty member meeting with more than one junior faculty member. In other cases mid-career faculty meet with another instructor of a similar career stage to reciprocally share (for example, to observe their colleague's lectures to strive for continual enhancement of their teaching). This is noteworthy as many formal mentoring programs target new faculty hires and yet faculty at all stages of their careers seek out ways to challenge themselves in their teaching and seek opportunities to do so.

Peer review of teaching can focus on formative approaches within a mentoring model that seeks to enhance one's teaching and student learning. Many universities, such as the University of Windsor, have developed a Peer Collaboration Network that allow for faculty to meet and reciprocally observe and debrief in a safe, confidential, non-evaluative environment their teaching activities, beliefs and goals. This peer initiative developed observation checklists and includes a three stage meeting structure with faculty reporting the following about their experience in a pilot study of this project: "enthused," "confidential," [we get to be] "vulnerable" and "ultimately [of] benefit [to] your students."<sup>26</sup>

Departmental teaching-focused initiatives are key sites for emerging leaders to be both mentored and to provide mentoring opportunities. These occur in both a more formalized dyadic arrangement as well as in peer-focused models but also within broader groups, and learning communities and networks. As reported in this study, several participants, particularly in the teaching stream, cited the lack of teaching-related leadership roles available for them. They have initiated many departmental events or sporadically served as informal teaching mentors to new and more senior faculty. The following list of considerations can guide departments and divisions in achieving and enhancing a strong teaching culture and climate.

### Key considerations.

#### *Department Chair or Divisional Dean:*

- similar to dyadic mentoring relationships, conduct an informal scan of existing peer-supported

- mentoring relations that foster support for teaching. Such information can identify existing gaps and opportunities to highlight existing collaborations.
- the findings in this report highlight the important role that department Chairs/Deans can play in encouraging, enabling and intentionally supporting peer mentoring networks that serve as important vehicles to furthering teaching and learning goals.
- increase the number and quality of departmental avenues to recognize effective teaching practices taking place and opportunities to discuss teaching-related topics (e.g., more frequent inclusion of teaching topics/updates at faculty meetings, highlighting teaching innovations or successes in departmental or divisional newsletters or communications)
- the more discussions or increased number of "conversational partners" (Roxa & Martensson, 2009) in a department, the greater the likelihood that a culture will take hold and create the necessary climate for important teaching discussions to be had.
- consider selecting a teaching champion and incorporating opportunities for these leaders to in turn meet, mentor, guide and essentially be available for new faculty or any instructor with teaching-related questions. Such leaders play a key role in building other teaching leaders and in capacity-building. There is an element of buy-in required to bring new faculty into the fold and to bring attention to the importance of teaching in the department.
- intentionally create physical spaces for lunch-hour or other meetings, both formal and informal on a specific teaching topic identified by instructors (e.g., Brown Bag series, coffee/meet and greet opportunities)
- invite faculty to share their ongoing involvement in external teaching and learning communities (e.g., Online CoP, SoTL Network, CTSI programming, participation in the Society of Teaching and Learning in Higher Education (STLHE)).
- support community of practice but without a deliberate act to institutionalize them. As Smith et al note (2016), "CoP arise naturally in organizational life, and it is this organic and voluntary nature that make them thrive. Mandating their existence can undermine their very nature and success" (p. 4).
- regularly communicate teaching and learning events (formal and informal) via department/ divisional avenues; such communication has been deemed a positive step to enhancing teaching cultures.

<sup>26</sup> <http://www.uwindsor.ca/pcn/15/testimonialsfeedback-pcn-participants>. The University of Waterloo is currently conducting research on its Teaching Squares program

## CONCLUSIONS

Mentoring for teaching at the University of Toronto currently takes a variety of forms. While formal approaches (mentor-mentee matches) occur in several divisions, there is a gap in the clarity of the matching process, and few mechanisms in place for ensuring optimal matches are made, sustained and of benefit to both parties. Few matches from our U of T faculty, for example, described specific goal setting or processes to recognize a mentor's dedication and commitment to the mentoring relationship. There is almost non-existent ongoing monitoring and/or formative and summative evaluation of existing mentoring programs.

The context-specific data included in this research report, alongside the most relevant and compelling research on mentoring, highlights a number of mentoring models and approaches that can be adopted at U of T. We encourage key players in faculty mentoring to consider core success factors that are detailed in the literature and from promising practices currently occurring in various departments at U of T, as they work to strengthen future mentoring opportunities. Included in these success factors are a supportive administration, both at the departmental and divisional levels, that recognize the benefits of a range of mentoring opportunities and in turn prioritizes these alongside broader institutional priorities and objectives related to the enhancement of teaching and the provision of faculty leadership opportunities. Mentoring for teaching can play an integral role in aligning with and offering the support needed by many continuing appointment faculty, whether new to their appointments or within a mid-career stage and seeking to enhance their leadership capabilities.

This report offers evidence that faculty of all career stages, but particularly those new to U of T, can benefit from a formal, matched dyadic mentoring for teaching model that enables both skilled mentors and committed mentees to engage in purposeful and intentional activities to meet the identified teaching/learning needs of the junior faculty member. Such matches offer myriad opportunities for reciprocal learning to take place, as noted by even the most experienced and accomplished U of T faculty (e.g., President's Teaching Award winners). These formal matches serve as a foundation to learning about additional mentoring opportunities at U of T: peer supported, co-mentoring groups and larger networks and learning communities that frequently meet in-person and/ or in an online community on a focused topic (e.g., SoTL or the Online Learning CoP). Faculty benefit most when engaged in a combination of these formal and informal learning activities, as aligned with their needs. Many of these activities emerge from supportive departmental cultures that create 'teaching climates' – spaces, both physical and figurative where faculty can openly discuss and celebrate the role of effective and innovative teaching at the University of Toronto. As well, such climates draw on and contribute to the broader institutional resources and expertise available through teaching and learning networks and centres across the University of Toronto.

***Mentoring for teaching can play an integral role in aligning with and offering the support needed by many continuing appointment faculty, whether new to their appointments or within a mid-career stage and seeking to enhance their leadership capabilities.***

## NEXT STEPS

This report has drawn attention to the gap in mentoring for teaching literature and has been a valuable exercise in drawing on effective practices situated in a strong evidence base in order to enhance our understanding of effective mentoring for teaching at the University of Toronto. We gained important insights for our own work at CTSI that build on COACHE (2012) and 'Speaking Up' (2014) survey results as we seek ways to address gaps in faculty development and mentoring for teaching specifically identified by participants in our study. Our next steps include:

**(1)** CTSI to share this report with U of T senior administrators, faculty and staff involved in faculty development to provide insights and considerations for faculty mentoring broadly, and “for teaching” more specifically, as they seek to develop or build upon existing faculty mentoring activities and initiatives.

**(2)** CTSI to draw on the report’s findings to further its ongoing efforts to enhance teaching and support student learning at U of T by creating evidence-based resources to support departments/divisions, faculty and staff in faculty mentoring for teaching.

**(3)** CTSI to pilot a peer mentoring model, based on the Peer Assisted Teaching Scheme (PATS) (Carbone, 2014) research shared in this report. The CTSI pilot study will be tailored to the specific teaching context at U of T.

**(4)** CTSI to distribute the report via a number of CTSI communication channels and through academic conferences and publications. There has been significant interest in the findings of this report from other institutions, generated through presentations of this work at recent national and international teaching and learning conferences. CTSI has received multiple requests both internally and externally to view the report in order to discuss and share ideas and resources. Our goal is to continue this important conversation and to, in turn, influence practices that result in more effective mentoring for teaching.

***CTSI to draw on the report’s findings to further its ongoing efforts to enhance teaching and support student learning at U of T by creating evidence-based resources to support departments/divisions, faculty and staff in faculty mentoring for teaching.***

# APPENDIX A

Dawson, P. (2014). Beyond a definition: Toward a framework for designing and specifying mentoring models. *Educational Researcher*, 43(3), 137-145.

Dawson proposes 16 design elements that should be included when describing mentoring and for developing a common framework. Those items include:

1. **Objectives:** The Aims or Intentions of the Mentoring Model
2. **Roles:** A Statement of Who is Involved and Their Function
3. **Cardinality:** The Number of Each Sort of Role Involved in a Mentoring Relationship
4. **Tie Strength:** The Intended Closeness of the Mentoring Relationship
5. **Relative Seniority:** The Comparative Expertise, Expertise, or Status of Participants
6. **Time:** The Length of a Mentoring Relationship, Regularity of Contact, and Quantity of Contact
7. **Selection:** How Mentors and Mentees are Chosen
8. **Matching:** How Mentoring Relationships are Composed
9. **Activities:** Actions that Mentors and Mentees Can Perform During Their Relationship
10. **Resources and Tools:** Technological or Other Artifacts Available to Assist Mentors and Mentees
11. **Role of Technology:** The Relative Importance of Technology to the Relationship
12. **Training:** How Necessary Understandings and Skills for Mentoring Will Be Developed in Participants
13. **Rewards:** What Participants Will Receive to Compensate for Their Efforts
14. **Policy:** A Set of Rules and Guidelines on Issues Such as Privacy or the Use of Technology
15. **Monitoring:** What Oversight Will Be Performed, What Actions Will Be Taken Under What Circumstances, and by Whom
16. **Termination:** How Relationships Are Ended

## REFERENCES

- Akerlind, G. S. (2003). Growing and developing as a university teacher—variation in meaning. *Studies in Higher Education, 28*(4), 375.
- Akerlind, G. S. (2007). Constraints on academics' potential for developing as a teacher. *Studies in Higher Education, 32*(1), 21.
- Allen, T.D., Eby, L.T., & Lenz, E. (2006). Mentorship behaviours and mentorship quality associated with formal mentoring programs: Closing the gap between research and practice. *Journal of Applied Psychology, 92*(3), 567- 578.
- Ambrosino, R. (2009). Mentors as fellow travelers. *Adult Learning, 20*, 31–34.
- Austin, A., Sorcinelli, M.D., & McDaniels, M. (2007). Understanding new faculty: Background, aspirations, challenges and growth. In R. Perry, J. Smart (Eds.), *The Scholarship of teaching and learning in higher education* (pp. 39-89). Dordrecht, the Netherlands: Springer.
- Baroness, J.A. (1997). On mentoring. *Journal of the Royal Society of Medicine, 90*, 347-349.
- Bean, N., Lucas, L., & Hyers, L. (2014). Mentoring in higher education should be the norm to assure success: Lessons learned from the Faculty Mentoring Program, West Chester University, 2008–2011. *Mentoring & Tutoring: Partnership in Learning, 22*(1), 56–73.
- Beans, B. E. (1999, March). Mentoring program helps young faculty feel at home. *APA Monitor Online, 30*(3). Bode, R. K. (1999). Mentoring and collegiality. In R.J. Menges and Associates (Eds.). In *Faculty in new jobs: A guide to setting in, becoming established, and building institutional support* (pp. 118-144). San Francisco: Jossey-Boss.
- Boyle, P. & Boice, R. (1998). Systematic mentoring for new faculty teachers and graduate teaching assistants. *Innovative Higher Education, 2*(3), 157-179.
- Boice, R. (1992a). Lessons learned about mentoring. In M.D. Sorcinelli & A.E. Austin (Eds.), *Developing new and junior faculty: New directions for teaching and learning: No. 50* (pp. 51-61). San Francisco: Jossey-Bass.
- Boice, R. (1992b). *The new faculty member*. San Francisco: Jossey-Bass.
- Boice, R. (1993). New faculty involvement for women and minorities. *Research in Higher Education, 34*, 291- 341.
- Boice, R. (1996). *First-order principles for college teachers: Ten basic ways to improve the teaching process*. Bolton, MA: Anker Publishing.
- Boice, R. (2000). *Advice for new faculty members*. Boston: Allyn & Bacon.
- Britnell, J., Brockerhoff-Macdonald, B., Carter, L., Dawson, D., Doucet, L., Evers, F., Hall, S., Kerr, D., Liboiron- Grenier, L., McIntyre, G., Mighty, J. Siddall, G., and Wilson, J. (2010). *University faculty engagement in teaching development activities - Phase II*. Toronto: Higher Education Quality Council of Ontario.
- Buller, J. (Fall, 2014). Mentoring the “Terminal Associate Professor”. *The Department Chair: A Resource for Academic Administrators, 25*(2).

- Calderwood, P.E. & Klaf, S. (2014). Facilitating mentoring across three models of faculty work: Mentoring within a community of practice for faculty development. *Journal for Centers of Teaching and Learning*, 6, 59-91.
- Carbone, A. (2014). A peer-assisted teaching scheme to improve units with critically low student satisfaction: Opportunities and challenges. *Higher Education Research & Development*, 33(3), 425-439.
- Carbone, A., & Wong, J. (2011). *Peer assisted teaching scheme (PATS) Guide (3rd ed.)*. Melbourne: Monash University.
- Carr, P. L., Bickel, J., & Inui, T. S. (2003). *Taking root in a forest clearing: A resource guide for medical faculty*. Boston: Boston University School of Medicine.
- Cartwright, D. (2008). *Mentorship in academia*. The University of Western Ontario Teaching Support Centre. Retrieved from [https://www.uwo.ca/tsc/resources/pdf/PG\\_2\\_mentoring.pdf](https://www.uwo.ca/tsc/resources/pdf/PG_2_mentoring.pdf).
- Chism, N. (2004). Using a framework to engage faculty in instructional technologies. *Educause Quarterly*, 2, 39-45.
- Crawford, K. (2010). Influences on academics' approaches to development: Voices from below. *International Journal for Academic Development*, 15(3), 189-202.
- Crisp, G., & Cruz, I. (2009). Mentoring college students: A critical review of the literature between 1990 and 2007. *Research in Higher Education*, 50, 525-545.
- Denecker, C. (2014). The Teaching Partners Program: A place for conversation, collaboration, and change. *Journal of Faculty Development*, 28(1), 59-65.
- Darwin, A., & Palmer, E. (2009). Mentoring circles in higher education. *Higher Education Research & Development*, 28(2), 125-136.
- Dawson, P. (2014). Beyond a definition: Toward a framework for designing and specifying mentoring models. *Educational Researcher*, 43(3), 137-145.
- de Janasz, S. C., & Sullivan, S. E. (2004). Multiple mentoring in academe: Developing the professional network. *Journal of Vocational Behavior*, 64(2), 263-283.
- Evers, F. & Hall, S. with Britnell, J., Brockerhoff-Macdonald, B., Carter, L., Dawson, D., Kerr, D., Mighty, J., Siddall, J., and Wolf, P. (2009). *Faculty engagement in teaching development activities – Phase 1: Literature review*. Toronto: Higher Education Quality Council of Ontario.
- Fagan-Wilen, R., Springer, D.W., Ambrosino, B. & White, B.W. (2006). The support of adjunct faculty: An academic imperative. *Social Work Education*, 25(1), 29-51.
- Gaskin, L., Lumpkin, A., Tennant, K. (2003). Mentoring new faculty in higher education. *Journal of Physical Education, Recreation & Dance*, 74(8), 49-53.
- Gray, T., & Birch, A. J. (2008). Team mentoring: An alternative way to mentor new faculty. In D. R. Roberston & L. B. Nelson (Eds.). *To improve the academy: Resources for faculty, instructional, and organizational development* (Vol.26) (pp. 230-241). Bolton, MA: Anker.
- Harvard Graduate School of Education. (2012). COACHE Survey.
- Hemer, S. (2014). Finding time for quality teaching: An ethnographic study of academic workloads in the social sciences and their impact on teaching practices. *Higher Education Research & Development*, 33(3), 483-495.

- Holgrem, R. A. (2005). Teaching partners: Improving teaching and learning by cultivating a community of practice. In S. Chadwick-Blossey (Ed.), *To improve the academy: Resources for faculty, instructional, and organizational development* (Vol. 24) (pp.211-219). San Francisco: John Wiley & Sons.
- Huizing, R. (2012). Mentoring together: A literature review of group mentoring. *Mentoring & Tutoring: Partnership in Learning*, 20(1), 27-55.
- Johnson-Bailey, J., & Cervero, R. M. (2004). Mentoring in black and white: The intricacies of cross-cultural mentoring. *Mentoring and Tutoring: Partnership in Learning*, 12(1), 7–21.
- Johnson, W. B. (2006). *On being a mentor: A guide for higher education faculty*. Mahwah, NJ: Lawrence Erlbaum.
- Jones, A. (2008). Preparing new faculty members for their teaching role. *New Directions for Higher Education*, 143, 93-100.
- Kilcher A, Sketris I. (2003). *Mentoring resource book: A guide for faculty, researchers and decision makers*. Halifax, NS: Dalhousie University.
- Kinsella, K. (1995). Peers coaching teaching: Colleagues supporting professional growth across the disciplines. In E. Neal (ed.), *To improve the academy*. Stillwater, OK: New Forums Press.
- Lumpkin, A. (2011). A model of mentoring university faculty. *The Educational Forum*, 75, 357-368.
- McGuckin, D., & Ladhani, M. (September 13, 2013). Advice for new faculty: Six lessons from the front lines. Faculty Focus. Retrieved from <http://www.facultyfocus.com/articles/teaching-careers/advice-for-new-faculty-six-lessons-from-the-front-lines/>
- McLaughlin, C. (2010). Mentoring: What is it? How do we do it and how do we get more of it? *Health Services Research*, 45, 871-884.
- Miles, C.A., & Polovina-Vukovic, D. (2012). *The role of new faculty orientations in improving the effectiveness of university teaching – Part 1: University sector*. Toronto. Higher Education Quality Council of Ontario.
- Murray, M. M. (2001). *Beyond the myths and magic of mentoring: How to facilitate an effective mentoring process*. San Francisco, CA: Jossey-Bass.
- Ponce, A., Williams, M. K., & Allen, G. J. (2005). Toward promoting generative cultures of intentional mentoring within academic settings. *Journal of Clinical Psychology*, 61, 1159–1163.
- Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology*, 84(4), 529–550.
- Reder, M., & E. V. Gallagher (2007). Transforming a teaching culture through peer mentoring: Connecticut College's Johnson Teaching Seminar for incoming faculty and the Scholarship of Teaching and Learning. In D. R. Robertson and L.B. Nilson (Eds.), *To Improve the Academy: Resources for faculty, instructional, and organizational development* (Vol. 25) (pp. 327-344). Bolton, MA: Anker Publishing.
- Rockquemore, K. A. (2011). Don't talk about mentoring. *Inside Higher Ed*, October 3. Retrieved from [http://www.insidehighered.com/advice/mentoring/debut\\_of\\_new\\_column\\_on\\_mentoring\\_in\\_higher\\_education\\_careers](http://www.insidehighered.com/advice/mentoring/debut_of_new_column_on_mentoring_in_higher_education_careers)
- Roxa, T., & Martensson, K. (2009). Teaching and learning regimes from within. In Carolin Kreber (Ed.), *The university and its disciplines: Teaching and learning within and beyond disciplinary boundaries* (pp.209-218). New York: Routledge, Taylor and Francis.

- Shapiro E. S., & Blom-Hoffman J. (2004). Mentoring, modeling, and money: The 3 Ms of producing academics. *School of Psychology Quarterly*, 19(4), 365-381.
- Smith, E., Calderwood, P., Dohm, F., & Gill Lopez, P. (2013). Reconceptualizing faculty mentoring within a community of practice model. *Mentoring & Tutoring: Partnership in Learning*, 21(2), 175-194.
- Smith, E., Calderwood, P., Storms, S., Gill Lopez, P., & Colwell, R. (2016) Institutionalizing faculty mentoring within a community of practice model. *To Improve the Academy: A Journal of Educational Development*, 35(1), 35–71. Advance online publication. doi: 10.1002/tia2.20033
- Sorcinelli, M., & Yun, Jung, H. (2007). From mentor to mentoring networks: Mentoring in the new academy. *Change*, Nov-Dec: 58-61.
- Sorcinelli, M., & Yun, J. (2009). *Mutual mentoring guide*. University of Massachusetts Amherst.
- Steinert, Y. (2011) . Commentary: Faculty development: The road less traveled. *Academic Medicine*, 86(4), 409–411.
- Steinert, Y. (2010). Faculty development: From workshops to communities of practice. *Medical Teacher*, 32, 425-428
- Steinert, Y., Mann, K., Centeno, A., Dolmans, D., Spencer, J., Gelula, M., et al. (2006). A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: *BEME Guide No. 8. Medical Teacher*, 28(6), 497–526.
- Stewart, B., & Krueger, L. (1996). An evolutionary concept analysis of mentoring in nursing. *Journal of Professional Nursing*, 12(5), 311-321.
- University of Toronto. (2014). *Speaking Up*.
- Weimer, M. (Oct 15, 2010). When mentoring new faculty, don't ignore these issues. *Faculty Focus*. Retrieved from <http://www.facultyfocus.com/articles/faculty-development/when-mentoring-new-faculty-don%e2%80%99t-ignore-these-issues/>
- Yun, J., Baldi, B., & Sorcinelli, M. (2016). Mutual mentoring for early-career and underrepresented faculty: Model, research, and practice. *Innovative Higher Education*. Advance online publication. doi: 10.101007/s10755-016-9359-6.
- Zachary, L. J. (2005). *Creating a mentoring culture: The organization's guide*. San Francisco, CA: Jossey-Bass.
- Zellers, D., Howard, V., & Barcic, M. (2008). Faculty mentoring programs: Reenvisioning rather than reinventing the wheel. *Review of Educational Research*, 78(3), 552-588.