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Educational Leadership in Teaching Excellence (EnLITE): A Peer-Driven Faculty Development Program

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Educational Leadership in Teaching Excellence (EnLITE): A Peer-Driven Faculty Development Program

Abstract

Educational Leadership in Teaching Excellence (EnLITE) is an 11-month faculty development program at the University of Guelph, Ontario. Created and led by faculty members and educational developers, EnLITE is designed to engage participants in the principles, practice and theory of teaching and learning in higher education and to promote a learner-centred approach to teaching. Participants critically examine and discuss scholarly topics on teaching and learning and in their own disciplines; collaborate with one or more teaching mentors; engage in peer classroom observation; and participate in other teaching-related activities informed by their individual learning plans. Our objective was to determine the perceived impact of EnLITE on participants' teaching-related practices and experiences. We collected pre-, post- and one-year post-program quantitative and qualitative survey responses from each of the 2014-2015, 2015-2016 and 2016-2017 EnLITE cohorts (N = 17 participants representing a variety of disciplines; 71% female). There were significant improvements in participants' perceived teaching practices related to critical self-reflection (13% increase from pre- to one-year post-program), student engagement (+28.2%), collaborative learning (+31%) and learner-centred pedagogy (+22.9%, all $p < 0.05$). There was little to no change in use of technology, student assessment, leadership, participation in communities of practice, or dissemination of teaching-related scholarship. These results provide empirical evidence of the effectiveness of a peer-driven faculty development program in promoting a learning-centred approach to teaching. Future research should determine whether these changes translate into improved student learning, and whether such programs demonstrate longer term improvements in engagement in teaching-related leadership, communities of practice and dissemination.

Le programme de leadership éducationnel en excellence de l'enseignement (Educational Leadership in Teaching Excellence - EnLITE) est un programme de développement professoral de 11 mois offert à l'Université de Guelph, en Ontario. Créé et dirigé par des professeurs et des conseillers pédagogiques, le programme EnLITE est conçu pour éveiller l'intérêt des participants sur les principes, la pratique et la théorie de l'enseignement et de l'apprentissage en enseignement supérieur et pour promouvoir une approche à l'enseignement centrée sur l'apprenant. Les participants examinent de façon critique et discutent des sujets érudits sur l'enseignement et l'apprentissage et dans leur propre discipline, ils collaborent avec un ou plusieurs enseignants-mentors, ils s'investissent en observation de pairs dans la salle de classe et ils participent à d'autres activités liées à l'enseignement influencées par leurs plans d'apprentissage individuels. Notre objectif était de déterminer l'impact perçu du programme EnLITE sur les pratiques et les expériences des participants liées à l'enseignement. Nous avons recueilli des réponses quantitatives et qualitatives à des questionnaires avant le programme, après le programme et un an après le programme de chacune des cohortes de participants au programme EnLITE en 2014-2015, en 2015-2016 et en 2016-2017 (N = 17 participants représentant une variété de disciplines, 71 % de femmes). Nous avons constaté qu'il y avait eu des améliorations importantes dans les pratiques d'enseignement telles que perçues par les participants en ce qui concerne l'auto-réflexion critique (13 % d'augmentation entre les réponses d'avant le programme et celles d'un an après le programme), la participation des étudiants (+28.2 %), l'apprentissage en collaboration (+31 %) et la pédagogie centrée sur l'apprenant (+22,9 %, en tout $p < 0,05$). Il y a eu peu ou pas de changement dans l'utilisation de la technologie, dans les évaluations faites par les étudiants, dans le leadership, dans la participation à des communautés de pratique ou dans la diffusion des recherches liées à l'enseignement. Ces résultats fournissent des preuves empiriques de l'efficacité d'un programme de développement professoral dirigé par les pairs pour promouvoir une approche à l'enseignement centrée sur

l'apprentissage. Des recherches futures devraient déterminer si ces changements se traduisent par un meilleur apprentissage des étudiants et si de tels programmes démontrent des améliorations à plus long terme dans la mobilisation en leadership lié à l'enseignement, dans les communautés de pratique et dans la diffusion.

Keywords
faculty development program, community of practice, learning network, learner-centred, scholarly teaching, scholarship of teaching and learning; programme de développement professoral, communauté de pratique, réseau d'apprentissage, centré sur l'apprenant, enseignement intellectuel, haut savoir en matière d'enseignement et d'apprentissage

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Background

A community of practice, or learning network, is a group of people with a shared concern or a passion for something they do and, through regular interactions with each other, learn how to do it better (Wenger-Trayner & Wenger-Trayner, 2015). It is characterized by a domain or common area of interest (members value their collective competence and learn from each other), a community ("members engage in joint activities and discussions, help each other, and share information") and a practice (member practitioners who "develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems") (Wenger-Trayner & Wenger-Trayner, 2015, p. 2).

One kind of community of practice found increasingly on university campuses is the faculty development program. Such programs began in the U.S. in the 1970's and were designed to provide early-career academics with an opportunity to work in learning communities to enhance their teaching (Cox, 2013). In the largest study of its kind to date, Gibbs and Coffey (2004) studied the effectiveness of faculty development programs, mostly those targeting early-career academics, in 22 universities across eight countries. Faculty participants were more likely to adopt a learner-centred teaching practice, and their teaching skills and global teaching effectiveness scores improved. In a follow-up scoping review, Cox (2013) found that faculty who participated in such programs were tenured at a significantly higher rate compared to those who did not, had greater interest in the teaching process, were more comfortable as members of the university community, and had greater understanding of, and interest in, the scholarship of teaching and learning.

While encouraging, reported outcomes of faculty development programs typically relate to newer faculty members' experience. At the University of Guelph, Ontario, Canada, we were therefore interested in creating a development program primarily for mid-career faculty. We were motivated, in part, by the research of Gibbs and Coffey (2004). Results suggested that early-career instructors who do not engage in faculty development programs decrease the extent to which they adopt a learner-centred teaching approach and become more reliant on instructor-centred teaching practices one year after participating in the program (Gibbs & Coffey, 2004). We reasoned that, as with their early-career colleagues, mid-career faculty members (and indeed those of any career stage), could benefit from a constructivist faculty development program, which as described by Adams (2009) is internally constructed and socially mediated, includes discussions on a wide selection of topics suited to the interests of participants, and is guided by a facilitator who encourages individual sense-making and problem-solving in a collaborative environment which encourages self-reflection and sharing best teaching practices and principles. In short, we wanted to encourage faculty members to move from the *what* of teaching to the *why* and *how*, consistent with a scholarly approach to teaching in which they develop strategies to shift from a teaching-centred to a learner-centred perspective (Åkerlind, 2007). Consistent with Weimer's (2013) philosophy of learner-centredness, we wanted to further develop educators by encouraging a shift in instructors' focus from their own teaching to their students' learning.

Educational Leadership in Teaching Excellence (EnLITE) Program

With this goal in mind, in 2009, a small group of educational developers and faculty members created the Educational Leadership in Teaching Excellence (EnLITE) program, housed in the Office of Teaching and Learning at the University of Guelph. Two faculty members enrolled in 2009; since, 51 additional instructors have participated. Originating from an informal peer-

driven teaching circle called Teaching on the Edge, EnLITE became a formal professional development program, also peer-driven. It was designed to promote educational leadership through faculty engagement in the principles, practice and theory of teaching and learning in higher education, to foster teachers' on-going professional development and engagement in the scholarship of teaching and learning, to promote a learner-centred approach to teaching in higher education, and to establish and support a faculty community of practice which provides mentorship and leadership in implementing scholarly approaches to teaching and learning in higher education.

EnLITE is an 11-month (Sept-July) peer-led program which enrols five to eight participants per year. While we had originally designed the program for mid-career instructors, and indeed participants are mostly tenured mid-career Associate Professors, we did not wish to preclude instructors from other career stages. Thus, cohorts also include Assistant Professors, full Professors, sessional instructors, and contractually-limited instructors. They meet as a cohort, with one or more members of the EnLITE committee, twice monthly. One meeting is to collaboratively explore and reflect upon scholarly readings (assigned) related to teaching and learning in higher education as well as in participants' own discipline (self-selected). The themes for the monthly cohort meetings are Scholarship of Teaching and Learning, Power and Authority in the Classroom, Critically Reflective Teaching Practice, Student Assessment, Student Engagement with Learning, Inclusive, Diverse and Collaborative Learning (prior to 2018, Collaborative Learning), and Technology in the Classroom. In lieu of theme-driven readings, in the final few months, participants present a topic related to teaching and learning. The other monthly meeting is an Action Learning Set (Pay, 2003), which is facilitated by an EnLITE committee member or EnLITE graduate and designed to encourage a smaller set of three to four participants to support one another through the achievement of personal learning goals. Most participants attend meetings in person, although one to two each year may virtually attend one or more meetings. Participants are also expected to meet regularly (i.e., monthly) with one or more teaching mentors selected to help them meet learning goals identified in an independent learning plan created in the first month of the program. Thus, consistent with Wenger-Trayner and Wenger-Trayner's (2015) characteristics of a community of practice, EnLITE participants share the common domain of teaching and learning in higher education, the community created by belonging to a structured faculty development program with regular meetings, and the practice of rich discussions, exploration and sharing of resources that occur throughout the program.

Each participant's EnLITE experience is unique because it is based on an independent learning plan which includes S.M.A.R.T. (specific, measurable, action-oriented, realistic, time-limited) teaching- and learning-related goals. However, there are common elements of the program for all participants irrespective of their learning plan, and which amount to a commitment of approximately five hours per week:

- Attendance at a minimum of 75% of monthly cohort meetings;
- Pedagogical discussion in cohort meetings driven by the monthly theme, in Action Learning Sets and in meetings with mentor(s);
- Teaching observations, as observer and "observee," with peers in the EnLITE program, colleagues across campus and/or with the mentor(s);
- Written reflections and final meta-reflection on readings, teaching practice and progress through the learning plan;

- A final presentation on a teaching-related topic of participants' choosing to EnLITE cohort and committee; and
- End-of-program portfolio, a repository of all EnLITE-related activities and outputs, such as the learning plan and if/how S.M.A.R.T. goals were met, reflections on readings, final meta-reflection, any teaching-related presentations or publications, etc. The portfolio may be submitted in hard or electronic copy.

The EnLITE program is accredited by the U.K. Staff and Educational Development Association (SEDA, www.seda.ac.uk), a professional association for faculty, staff and educational developers and which promotes innovation and good practice in higher education, under the Named Award, "Developing People and Enhancing Practice." Participants who complete all of the above elements of the program receive a SEDA certificate. If participants do not complete all elements of EnLITE, they do not receive the SEDA certificate. This is consistent with our philosophy of learning in a community; if participants wish to go further, they can get the certificate but that is not a requirement.

Assessment of participants' progress in EnLITE is participant-driven, peer-driven and committee-driven. It occurs throughout, and at the conclusion of, the program. Participant-driven assessment involves participants reflecting on their progress relative to their own learning plan via written reflections, and during the monthly Action Learning Sets. Peer-driven assessment involves participants receiving feedback from teaching mentor(s), and from EnLITE peers and EnLITE committee members during Action Learning Sets and on research proposal presentations (if participants wish to pursue a project related to the scholarship of teaching and learning). Committee-driven assessment focuses on participants' progress relative to EnLITE program and SEDA outcomes, learning plans, and on end-of-program portfolios. We have developed pass/fail evaluation criteria to assist us in evaluating participants' progress at the conclusion of the program, including reviewing the completed learning plan using a first reader/second reader process. Participants also meet with the EnLITE committee mid-way through the program, allowing us to determine how they are progressing in meeting their learning plan goals and if needed, to assist them in continuing to meet their goals.

The EnLITE committee is composed of an Educational Developer (JW, Office of Teaching and Learning) and three faculty members who are also EnLITE graduates (ACB, Dept Family Relations and Applied Nutrition; JV, Dept Sociology and Anthropology; AR, Dept Animal Biosciences). We review program applications and participants' learning plans and end-of-program portfolios, develop the EnLITE curriculum including selecting the readings, facilitate monthly cohort and Action Learning Set meetings, and meet with each participant individually three times: at the beginning of the program, mid-way (typically in January) and at the end (typically in August/September). Committee members may also serve as mentors to EnLITE participants.

Evaluation of the Effectiveness of EnLITE

Educational programs can always benefit from regular review. In addition to the reviews conducted for purposes of SEDA accreditation, anecdotal evidence from program graduates reassured the EnLITE committee that the program was meeting its aim of helping faculty members to move from teachers to educators. However, we also sought empirical evidence of EnLITE's impact on participants through a formal evaluation, to continuously improve the program and to

ensure sustained institutional support. Thus, the objective of this study, based on our program evaluation, was to determine the impact of EnLITE on participants' teaching-related practices and experiences.

Method

As part of our EnLITE program evaluation, participants were asked to complete each of three surveys designed to assess their perceptions of their teaching practices: pre-program (within one month of starting EnLITE, presented in the Appendix), post-program (within one month of completing EnLITE) and one-year post-program. Participants were emailed a link to each survey using Qualtrics® (2019). They were given two weeks to complete the survey, with one reminder emailed midway. The surveys were not anonymous and hence we could link demographic data, the latter which were collected at the time of program enrolment, with survey data for analysis. The University of Guelph Research Ethics Board (REB) deemed evaluation of the EnLITE program as being exempt from requiring REB clearance.

The framework for the survey, created by the EnLITE committee and pilot-tested by educational developers, was informed by the themes of monthly cohort meetings and by both the core survey and scholarship of teaching and learning module of the Faculty Survey of Student Engagement (Center for Postsecondary Research, Indiana University School of Education). The survey contained 16 question blocks that asked participants to reflect on various aspects of their teaching experiences and practices. Question styles included a mix of Likert-style items, ranking items, rating items and open-ended items. Likert-style items (such as the extent to which participants integrate technology into pedagogy), asked participants to rate the level of activity in which they engaged with a particular item in each block, on a five-point scale (1 = none to 5 = a lot). The nine teaching-related constructs captured in this manner included: Critically Reflective Teaching Practice (Q6, Q8), Student Engagement (Q19), Collaborative Learning (Q21, Q23, Q25), Learner-Centred Pedagogy (Q38, Q39), Technology Use (Q28), Student Assessment (Q10), Leadership (Q32: 10 possible items to select), Participation in Communities of Practice (Q34: 4 possible items to select), and Dissemination (Q36). Items for each scale were averaged to create a composite measure of the construct. The pre-program and post-program surveys also asked participants to rank their reasons (from a list of eight) for enrolling in EnLITE, as well as their perceptions of the most and least helpful elements of EnLITE.

The data reported in this paper include pre-program, post-program and one-year post-program survey responses from three EnLITE cohorts: 2014-2015 (n = 5), 2015-2016 (n = 7) and 2016-2017 (n = 5). Not all items in the survey were included in the analyses reported in this paper: some items (12/14 and 16/18) are used by participants for self-reflection.

Data Analyses

Quantitative data were analyzed using Excel and IBM SPSS Statistics (Version 25, IBM Corporation) software packages to assess descriptive and comparison data. Data are reported as means, standard deviation (*SD*), and statistical significance when appropriate (p-value). Changes across time for each of the nine teaching-related constructs were assessed using repeated measures analyses of variance (ANOVA) (Kim, 2014). To further explore any significant ANOVA results between survey post hoc tests were conducted. ANOVA, controlling for career stage (early-career

vs. mid-career), was also assessed for statistical significance. The level of significance for all analyses was set as α=0.05.

As regards qualitative analysis, the corresponding open-ended items related to the nine teaching-related constructs were: Critically Reflective Teaching Practice (Q7, Q9, Q13), Student Engagement (Q20), Collaborative Learning (Q22, Q24, Q26, Q27), Learner-Centred Pedagogy/Student Assessment (Q4, Q5, Q7, Q13), Technology Use (Q29, Q30), Leadership (Q33), Participation in Communities of Practice (Q35), and Dissemination (no designated Q, but sometimes within responses to Q45). In some cases, open-ended questions provided an opportunity to capture responses not covered by the closed-ended questions (e.g., by providing a space to capture additional motivations (for pre-program and post-program surveys). In other cases, the open-ended questions provided an opportunity to list examples (e.g., "Provide examples / additional information about how you incorporate learner-centredness in your courses / classroom" (asked in all three surveys); to elaborate (e.g., "Explain your perspective on technology in the classroom" (all three surveys); or to reflect (e.g., "Has your teaching practice changed as a result of your enrollment in EnLITE? If so, how? If not, why do you think this is?" (post-program survey only)). These open-ended questions were coded and analyzed using NVivo 12 (Qualitative Solutions & Research, Melbourne, Australia). Where relevant, a sample range of codes or specific quotes are provided in the results.

Results

A total of 17 instructors participated in the 2014-2015, 2015-2016, and 2016-2017 EnLITE cohorts combined. Of these, 15 completed all three surveys (pre-, post-, and one-year post-program), and two participants (one early-career, one mid-career) completed two of the three surveys (pre- and either post- or one-year post-program). Demographic data of the 17 participants are shown in Table 1.

Table 1
Demographic Characteristics of the 17 Instructors Enrolled in the 2014-2015, 2015-2016 and 2016-2017 Cohorts of the Educational Leadership in Teaching Excellence (EnLITE) Faculty Development Program

	n (%)
Gender	
Male	5 (29%)
Female	12 (71%)
Career stage[a]	
Early career	6 (35%)
Mid-career	11 (65%)
Discipline	
Veterinary medicine	5 (29%)
Social sciences	3 (18%)
Biological sciences	3 (18%)
Other[b]	6 (35%)

[a]Early career defined as within the first five years of first academic appointment. Mid-career defined as beyond five years of first academic appointment.
[b]*n* = 1 physical sciences, *n* = 1 business, *n* = 1 arts and humanities, *n* = 1 agriculture, *n* = 2 professional staff with teaching responsibilities

The most common reasons for enrolling in EnLITE, identified in the pre-program survey, were (in order of prevalence): (1) to meet others interested in teaching, (2) to become familiar with the scholarship of teaching and learning, (3) to take a structured program, (4) to participate in a community of practice, (5) I had the time, (6) suggested by a colleague, (7) feel like I've reached a plateau, and (8) SEDA accreditation. Additional motivations in the follow-up open-ended question (in the pre- and post-program surveys) included "to become a better educator" (13 participants), with some participants also noting "to network with other educators" (three participants), "to obtain support with their pedagogical research aspirations" (three participants), or "to increase chances for full-time employment" (two participants). The components of EnLITE perceived to the most to least useful in the post-program survey, were (in order of prevalence): (1) monthly cohort meetings, (2) assigned readings, (3) Action Learning Sets, (4) matched readings, (5) written reflections, (6) meeting with mentor, (7) one-on-one meetings with the EnLITE committee, and (8) end-of-program portfolio.

Nine teaching constructs were analysed to determine the impact of EnLITE on participants' teaching-related practices and experiences. Each construct was included in all three surveys to determine any changes over time. As shown in Figure 1, there were significant improvements over time in scores for Critically Reflective Teaching Practice (13% increase from pre- to one-year post-program), Student Engagement (+28.2%), Collaborative Learning (+31%) and Learner-Centred Pedagogy (+22.9%). A set of quotes from the open-ended questions demonstrates the qualitative shifts in thinking over time in these same constructs (Table 2).

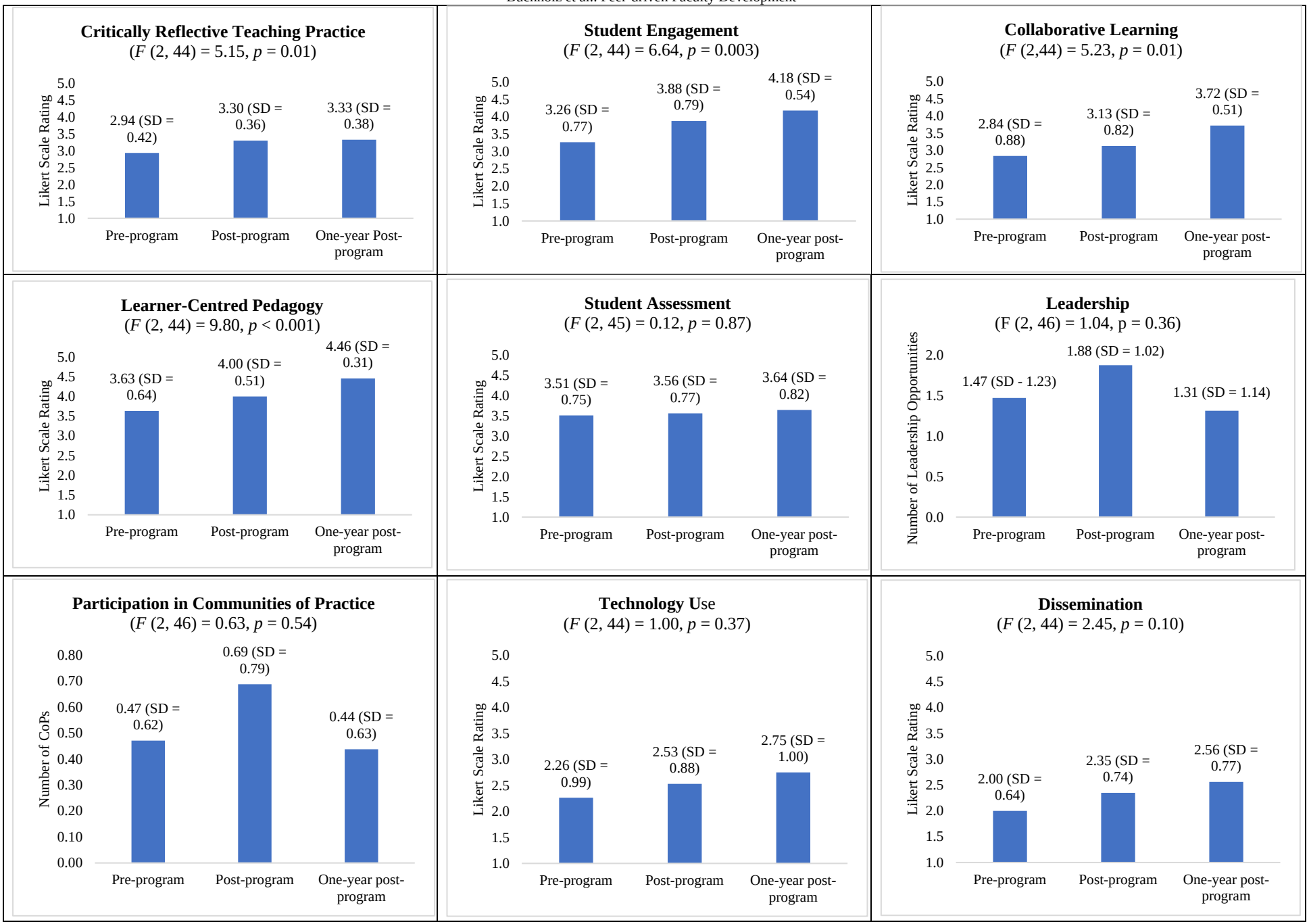

Figure 1. Responses (1 = none, 5 = a lot) from pre-, post- and one-year post-program surveys to items in nine teaching-related constructs of 17 instructors enrolled in the 2014-2015, 2015-2016 and 2016-2017 cohorts of the EnLITE faculty development program in (mean (*SD*))

Table 2

Quotes Denoting Shifts in Select Teaching-Related Constructs from Instructors Enrolled in the 2014-2015, 2015-2016 and 2016-2017 Cohorts of the EnLITE Faculty Development Program

Construct	Pre-Program	Post-Program	One Year Post-Program
Critically Reflective Teaching Practice	"n/a" (Male, Mid-Career, Veterinary Medicine)	"I feel more informed on teaching practice, learned how to reflect better, and gained valuable tools going forward from the collaborations and advice gathered during [EnLITE]." (Male, Mid-Career, Veterinary Medicine)	"[EnLITE] has helped me review my teaching practice, and take to focus off myself and on to the students more" (Male, Mid-Career, Veterinary Medicine)
Student Engagement	"question and answers, have students look up on computer and reveal what they find to answer the questions, not sure if this is what is meant [by examples of student engagement]?" (Female, Mid-Career, Social Sciences) "NOT giving students the answers immediately, but rather having them discuss and share in groups an discovering the answers themselves." (Male, Early Career, Other)	"have students demonstrate an online technology app" (Female, Mid-Career, Social Sciences) "Discussion questions/case scenarios of… problems related to the course materials, online activities such as Kahoot" (Male, Early Career, Other)	"Conducting personal interviews with older people" (Female, Mid-Career, Social Sciences) "Peer assessment/feedback on lesson plans and presentations" (Male, Early Career, Other)

Collaborative Learning	"When working through problem sets students are encouraged to work with those that are beside them to get an answer." (Female, Mid-Career, Biological Sciences)	"Formalized discussion time is not allocated but I ask many questions that students must answer and do not move on until I get the answer, so most of the time they begin discussing the issues with each other, further, if they do not give me an answer I leave the question hanging, after which I will receive many e-mails trying to answer the questions indicating that outside of class they are still discussing." (Female, Mid-Career, Biological Sciences)	"I have designed a new course with these interactions in mind. The problem solving component of my course is better approached if students get together and work on problems together. In the past I have just hoped that they were studying this way. My course now involves a specific component where they are organized into groups and made to solve problems." (Female, Mid-Career, Biological Sciences)
Learner-Centred Pedagogy	"My courses are centered around math & physics material, but there are sections which are strictly 'memory' material. I find it difficult to incorporate learner-centredness in these sections - it is fact based, things are what they are (e.g. structure of a tendon)." (Male, Mid-Career, Biological Sciences) "-discussion in class -ask students for feedback about course periodically throughout course -I will often change or refocus lectures/ classes based on class dynamic/ personalities/ response/ student performance, etc." (Female, Early Career, Other)	"Small group exercises / Thematic learning / Problem based learning / On demand learning (e.g. video tutorials)" (Male, Mid-Career, Biological Sciences) "-assignments that include student-centred/ directed learning / -Assessments that consider outcomes for students moving through program/ into professional life / -Giving students choice re material and Assessments / -Highlighting different skill sets in different assignments and activities" (Female, Early Career, Other)	"included more relevant/practical/applied content that is of interest to the students in order to promote learning, included learning on demand features such as instructional videos whose content is based on student feedback, polls to garner feedback on the course, etc..." (Male, Mid-Career, Biological Sciences) "I didn't quite understand the meaning of learner-centredness until I joined EnLITE, and now have a clearer understanding of what this is. Rather than thinking about my teaching, I now think about what skills and experiences students are deriving from the material and organization of the course and its components/ activities. In general, this has meant handing over many of the decisions regarding learning goals and directions to students--which, while initially nerve-racking, has been worth it 100%. Students in my courses now take responsibility for their own learning and feel empowered as a result." (Female, Early Career, Other)

While there were no statistically significant changes over time as assessed by ANOVA in the remaining constructs of Technology Use (p = 0.37), Student Assessment (p = 0.89), Teaching Leadership (p = 0.36), Participation in Communities of Practice (p = 0.54), or Dissemination (p = 0.10); paired t-tests revealed marginally significantly increases in Technology Use from pre-program to one-year post-program (t (13) = 2.31, p = 0.038), and in Dissemination from pre-program to post-program (t (15) = 2.28, p = 0.038) and pre-program to one-year post-program (t (13) = 2.54, p = 0.025). All remaining t-tests were non-significant (p > 0.05).

Controlling for career stage (early vs. mid) did not impact the results for any of the nine constructs, with one exception: in the pre-program survey, the ANOVA results showed differences in Teaching Leadership activities undertaken by participants between the two career stages (F (1, 15) = 8.45, p = 0.01). A subsequent one-sample t-test revealed that early career participants engaged in fewer leadership-related teaching and learning activities than their mid-career counterparts (t (5) = 6.71, p = 0.001).

Supplemental data gathered in the surveys asked participants to identify the extent to which they felt their pedagogical approach is learner-centred (Q3), whether they felt their instructional approach is aligned with that of a lecturer, coach or facilitator (Q40), whether they had served in an administrative capacity on a committee (Q31), and whether they had received funding to support their own pedagogical research (Q37). ANOVA analysis of the item, “In your undergraduate courses, to what extent do you feel your pedagogical approach is learner-centred?”, shown in Figure 2, revealed statistical significance across the three surveys (F (2, 46) = 7.23, p < 0.01). Subsequent paired t-tests revealed differences between the pre-program to post-program (t (15) = 2.82, p = 0.01) responses, and between the pre-program and one-year post-program survey responses (t (15) = 4.86, p < 0.01). Career stage did not influence participants’ perceptions of learner-centred pedagogy.

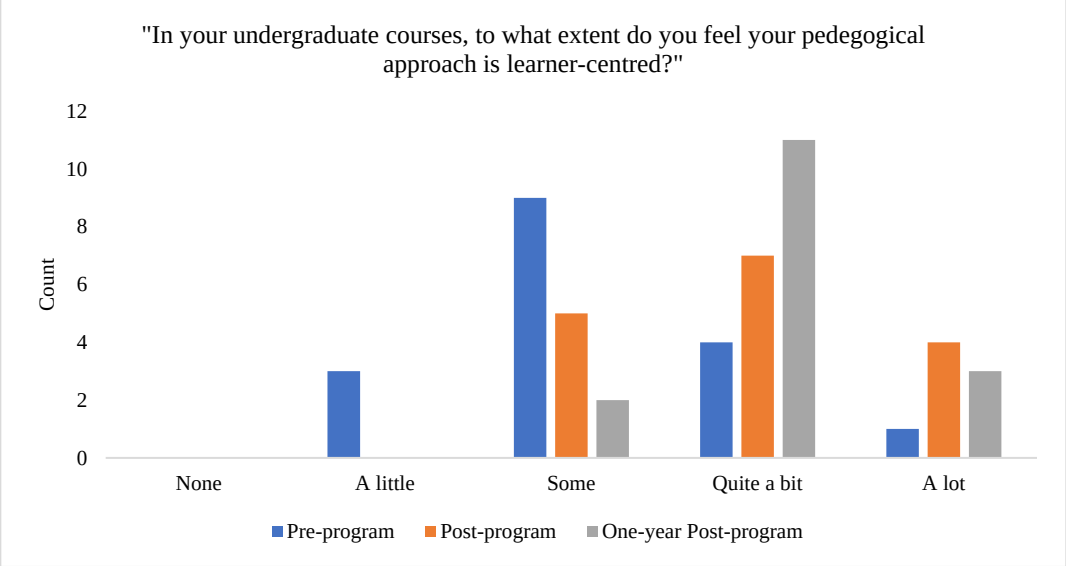

Figure 2. Perceptions of learner-centredness from pre-, post- and one-year post-program surveys of 17 instructors enrolled in the 2014-2015, 2015-2016 and 2016-2017 cohorts of the EnLITE faculty development program

Participants were also asked to indicate which style best represented their instructional approach. The results, shown in Figure 3, indicated a shift toward that of facilitator on completion of the EnLITE program, and one-year post-EnLITE.

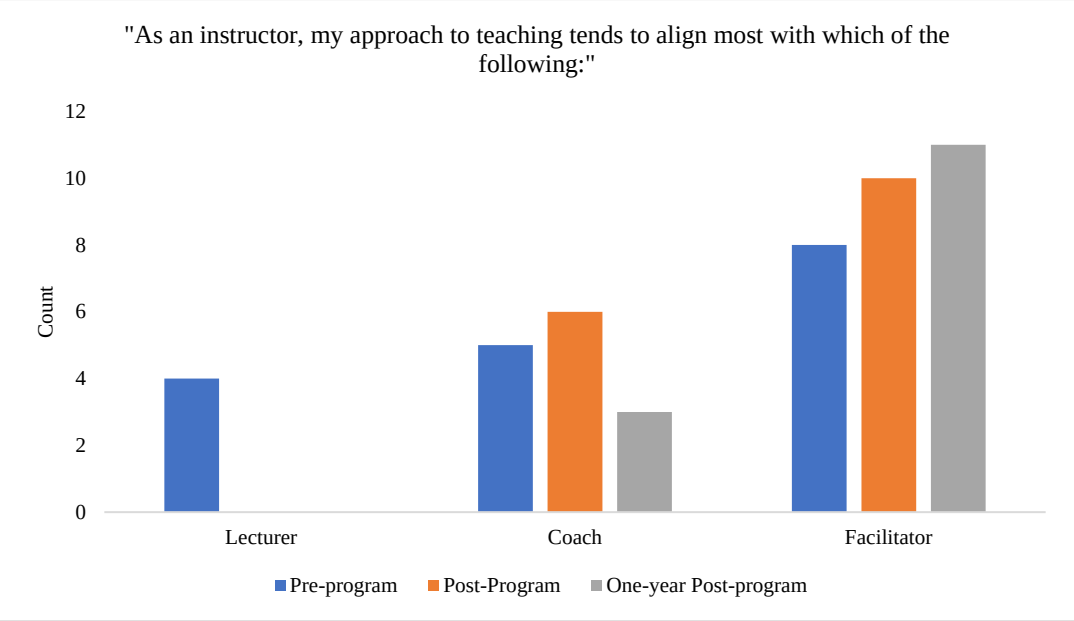

Figure 3. Perceptions of teaching approach from pre-, post- and one-year post-program surveys of instructors enrolled in the 2014-2015 (n = 17), 2015-2016 (n = 16) and 2016-2017 (n = 14) cohorts of the EnLITE faculty development program

There were no differences over time in participants' engagement in teaching and learning activities external to the classroom (such as leading a teaching and learning circle), in their service in an administrative role or on a faculty committee that focused on assessment of students' educational experiences and learning, or in receiving funding for pedagogical research (data not shown).

Discussion

Our objective was to determine the impact of structured faculty development, the EnLITE program, on instructors' teaching-related practices and experiences. Findings revealed 13% to 39% improvements ($p < 0.05$) in participants' perceived teaching practices related to critical self-reflection, student engagement, collaborative learning and learner-centred pedagogy, even up to one year after completing EnLITE. These results were supported by qualitative findings, which revealed that in the pre-program survey, participants appeared to be unclear as regards what might fit into a particular teaching-related construct, to be challenged in incorporating a construct into their teaching, or to be unaware of the range or types of activities that exemplified each construct. There were clear shifts in each construct with an increased number and types of learner-centred activities described by participants in the post-program survey, and further progression to experiment or push boundaries within each construct in the one-year post-program survey, consistent with the perceived shift in participants' approach to teaching aligning with that of facilitator. Together, these results provide empirical evidence of the effectiveness of EnLITE in promoting a learning-centred approach to teaching.

Our findings are consistent with those of Gibbs and Coffey's (2004) multi-country study of the effectiveness of faculty development programs targeting early-career academics. As with Gibbs and Coffey's (2004) study sample, our participants also identified adopting more learner-centred teaching practices. EnLITE facilitates participants' engagement with and implementation of scholarly learning because its components are consistent with the three specific working conditions identified by O'Meara, Rivera, Kuvaeva and Corrigan's (2017) as being needed to support faculty scholarly learning. The first two working conditions are making connections with colleagues and supporting cross-disciplinary collaboration. EnLITE, which attracts instructors from disciplines ranging from veterinary medicine to sociology to music, is a community of practice; connections with colleagues are woven into the regular and diverse meetings. Further, the EnLITE committee encourages participants to conduct classroom observations, and to secure the guidance of one or more teaching mentors outside of their discipline to foster disciplinary "cross pollination." Participants identified meeting others interested in teaching as the primary reason for enrolling in EnLITE and, by extension, ranked the monthly cohort meetings as being the most useful component of the program. These working conditions are consistent with the work of Chambliss and Takacs (2014). The authors followed nearly one hundred students at a liberal arts college, over eight years, and found that personal relationships made significant academic and social impacts (Chambliss & Takacs, 2014). Our results suggest the same may apply to professors: creating personal connections with others interested in teaching has an impact. Conversely, the written reflections and end-of-program portfolio were ranked lower (5^{th} and 8^{th}, respectively), perhaps reflecting that relative to the "lived experiences" of monthly cohort meetings focused on readings, the written elements are solitary and may not result in the same kinds of insights that arise during active, facilitated discussions.

The third working condition identified by O'Meara et al. (2017) to support faculty scholarly learning, is having time. The expected time commitment of approximately five hours per week is clearly communicated to EnLITE applicants; participants are aware, before starting the program, of the need for classroom observations, reading, written reflections and various meetings. Of note is that none of the 17 participants in our study sample identified the time commitment as being a barrier to participating in EnLITE.

Our longitudinal results from pre- to post- to one-year post-program revealed little to no significant change in other teaching practices over time. That there was only a marginal change in teaching technology use is neither surprising nor disappointing. It is not the intent of EnLITE to encourage the use of a specific technology, but rather to raise participants' awareness of tools related to classroom engagement, assessment, peer review, content engagement etc., and to encourage participants to assess the pedagogical benefits and limitations of these tools as part of critically reflective teaching practice. The lack of change in student assessment practices (providing feedback to students on a draft or work in progress, providing prompt/detailed feedback on tests or completed assignments) *was* surprising. It may be that participants drawn to EnLITE perceive themselves as already engaging in such practices prior to enrolling in the program, and thus do not have as much opportunity for growth during or subsequent to EnLITE. Indeed, mean pre-program survey scores for student assessment practices (3.51/5) were second only to those for learner-centredness (3.63/5). Qualitative analyses further support this, with one participant indicating on the post-program survey, "We already used a learner-centred approach at [our college]," and another, "I believe that my approach to student learning is the same, and EnLITE reinforced the approaches that I take in my teaching are appropriate and positive."

There were also little to no significant change in participants' engagement in teaching-related leadership, communities of practice, or dissemination. In reviewing learning plans over the years, we have observed that the majority of goals relate to participants' individual teaching and learning. Rarely does a participant identify teaching-related leadership as a goal; it follows that we did not observe changes in associated leadership activities. It is also possible that such leadership may emerge in subsequent years not captured in our two-year data collection period, as may also be the case for teaching-related dissemination. While participants identified monthly cohort meetings as the most useful element of the EnLITE program, this engagement in a community of practice was not sustained beyond EnLITE. Engagement in such communities takes time, which instructors may have wished to reclaim after participating in the weekly five-hour commitment of the nearly year-long EnLITE program. We recommend that future research on the impact of a faculty development program on engagement with educational leadership, and teaching-related communities of practice and dissemination be extended beyond two years.

It bears mention that 35% of our study sample identified as early-career. In developing EnLITE, we envisioned and designed the program to be targeted to mid-career faculty members. However, we regularly receive applications from early-career instructors, suggesting that reaching a plateau in teaching is not a requirement for the appeal of the program. Indeed, of the reasons identified by participants in the pre-program survey for enrolling in EnLITE, "feel like I've reached a plateau" was ranked seventh out of eight. This suggests that the theory and practice of teaching and learning in higher education can appeal to all instructors and that all can benefit from structured faculty development programs, regardless of career stage. This is reinforced by our results, which were largely unaltered after controlling for career stage. We therefore see the inclusion of instructors at various career stages to be a strength of the EnLITE program.

Limitations

While our study extends the literature in this area, we acknowledge that the non-mandatory nature of EnLITE may mean that teaching-motivated instructors enroll in the program. However, pre-program survey scores for many constructs suggest that participants perceived there to be room for improvement in their teaching practices. The significant increases in these same constructs suggest that the program positively impacts teaching practices. Anecdotally, the EnLITE committee can also attest to many participants misunderstanding "learner-centredness" prior to enrolling in the program, with one participant acknowledging, "I thought being learner-centred meant you were nice to students." Because our data are self-reported, we cannot be certain that participant perceptions extend to actual teaching practices, nor can we be certain that students' learning is positively impacted by the teaching of EnLITE participants. However, O'Meara et al. (2017), in their review of the literature, suggest that scholarly learning is personal, best understood from the individual perspective and thus "the best examination of scholarly learning will include at least some measure of self-reporting" (p. 357). As well, many participants do not teach the same course(s) during and following EnLITE, thus any student-derived pre/post measures for many teaching-related constructs would not be comparable.

Conclusions

We sought to determine the impact of a peer-driven faculty development program on instructors' teaching-related practices and experiences. From our quantitative and qualitative

longitudinal exploration of EnLITE outcomes, we conclude that the program promotes a learning-centred approach to teaching. We have documented sustained improvements in participants' teaching practices related to critical self-reflection, student engagement, collaborative learning and learner-centred pedagogy. Longer-term follow-up may be needed to explore the impact of EnLITE on engagement in teaching-related leadership, communities of practice and dissemination.

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Appendix

EnLITE Pre-Program Survey

(Note: only the pre-program survey is presented as each of the pre-program, post-program and one-year post program surveys contained many of the same questions.)

Q1: Thank you for taking the time to complete this EnLITE pre-program survey. Please tell us your: *(Text Entry)*

- First Name
- Last Name
- Department

Q2: To which EnLITE cohort year do you belong? *(Select One)*

- 2014 - 2015
- 2015 - 2016
- 2016 - 2017

Q3: In your undergraduate courses, to what extent do you feel your pedagogical approach is learner-centred? *(Select One)*

- None
- A little
- Some
- Quite a bit
- A lot

Q4: Provide examples / additional information about how you incorporate learner-centredness in your courses / classroom: *(Text Entry)*

Q5: Provide examples / additional information about where you feel learner-centredness may not necessarily be appropriate in your courses / classroom: *(Text Entry)*

Q6: When you design or make changes to your courses, what informs your decisions? *(Likert Scale)*

	None	A Little	Some	Quite a bit	A Lot
Student feedback (formal course evaluations, informal feedback from former or current students, etc.)	○	○	○	○	○
Student performance on assignments, exams, or formal assessments	○	○	○	○	○
Self-assessment/Reflection	○	○	○	○	○
Institutional influences (institution- or department-level influences, collaboration with other faculty, peer feedback, etc.)	○	○	○	○	○
External influences (accreditation standards, advances and trends in your disciplinary area/industry or trends in teaching and learning, etc.)	○	○	○	○	○

Q7 What else might inform your course design? Please elaborate. *(Text Entry)*

Q8 In which of the following activities do you engage to improve your teaching? *(Likert Scale)*

	None	A little	Some	Quite a bit	A lot
Self-reflection	○	○	○	○	○
Meeting with educational/academic developers	○	○	○	○	○
Attending teaching workshops	○	○	○	○	○
Conducting research on your own courses	○	○	○	○	○
Reading in the teaching and learning literature	○	○	○	○	○
Attending teaching conferences	○	○	○	○	○

Q9: In what other activities do you engage to improve your teaching? *(Text Entry)*

Q10: In your undergraduate courses, to what extent do you do the following? *(Likert Scale)*

	None	A little	Some	Quite a bit	A lot
Provide feedback to students on a draft or work in progress	○	○	○	○	○
Provide prompt feedback on tests or completed assignments	○	○	○	○	○
Provide detailed feedback on tests or completed assignments	○	○	○	○	○

Q11: For the following questions on this page, select one of the courses you teach. Enter the course code and name in the box below. Please describe this course (e.g., year taught, required for some /all, etc.). *(Text Entry)*

Q12: How much does the coursework in this course emphasize the following:

	None	A little	Some	Quite a bit	A lot
Memorizing course material	○	○	○	○	○
Applying facts, theories, or methods to practical problems or new situations	○	○	○	○	○
Analyzing an idea, experience, or line of reasoning in depth, by examining its parts	○	○	○	○	○
Evaluating a point of view, decision or information source	○	○	○	○	○
Forming a new idea or understanding from various pieces of information	○	○	○	○	○

Q13: What factor(s) influence the design of this course? *(Text Entry)*

Q14: What percentage of class time for this course is spent on the following: *(Select One)*

	0%	1-9%	10-19%	20-29%	30-39%	40-49%	50-74%	75% or more
Lecture	○	○	○	○	○	○	○	○
Discussion	○	○	○	○	○	○	○	○
Small group activities	○	○	○	○	○	○	○	○
Student presentations or performances	○	○	○	○	○	○	○	○
Independent student work (painting, writing, designing, etc.)	○	○	○	○	○	○	○	○
Movies, videos, music, or other performances not involving or produced by students	○	○	○	○	○	○	○	○
Assessing student learning (tests, evaluations, surveys, polls, etc.)	○	○	○	○	○	○	○	○
Experiential activities (labs, field work, clinical or field placements, etc.)	○	○	○	○	○	○	○	○

Q15: For the following questions on this page, select one of the courses you teach. Enter the course code and name in the box below. Please describe this course (e.g., year taught, required for some/all, etc.) *(Text Entry)*

Q16: How much does the coursework in this course emphasize the following: *(Likert Scale)*

	None	A little	Some	Quite a bit	A lot
Memorizing course material	○	○	○	○	○
Applying facts, theories, or methods to practical problems or new situations	○	○	○	○	
Analyzing an idea, experience, or line of reasoning in depth, by examining its parts	○	○	○	○	○
Evaluating a point of view, decision or information source	○	○	○	○	○
Forming a new idea or understanding from various pieces of information	○	○	○	○	○

Q17: What factor(s) influence the design of this course? *(Text Entry)*

Q18: What percentage of class time for this course is spent on the following: *(Select one)*

	0%	1-9%	10-19%	20-29%	30-39%	40-49%	50-74%	75% or more
Lecture	○	○	○	○	○	○	○	○
Discussion	○	○	○	○	○	○	○	○
Small group activities	○	○	○	○	○	○	○	○
Student presentations or performances	○	○	○	○	○	○	○	○
Independent student work (painting, writing, designing, etc.)	○	○	○	○	○	○	○	○
Movies, videos, music, or other performances not involving or produced by students	○	○	○	○	○	○	○	○

Assessing student learning (tests, evaluations, surveys, polls, etc.)	○	○	○	○	○	○	○	○
Experiential activities (labs, field work, clinical or field placements, etc.)	○	○	○	○	○	○	○	○

Q19: In your undergraduate courses, to what extent do you do the following? *(Likert Scale)*

	None	A little	Some	Quite a bit	A lot
Use student-relevant examples or illustrations to explain difficult points.	○	○	○	○	○
Use active learning strategies	○	○	○	○	○

Q20: Provide examples of any active learning strategies that you use. *(Text Entry)*

Q21: In your undergraduate courses, to what extent do you create opportunities for **student-student** interactions? *(Select One)*

None
A little
Some
Quite a bit
A lot

Q22: Please provide examples of **student-student** interaction opportunities that you create: *(Text Entry)*

Q23: In your undergraduate courses, to what extent do you create opportunities for **student-instructor** interactions? *(Select One)*

None
A little
Some
Quite a bit
A lot

Q24: Please provide examples of **student-instructor** interaction opportunities that you create: *(Text Entry)*

Q25: In your undergraduate courses, to what extent do you do the following? *(Likert Scale)*

	None	A little	Some	Quite a bit	A lot	N/A
Differentiate between collaborative learning and group work	○	○	○	○	○	○
Create opportunities for collaborative learning	○	○	○	○	○	○

Q26: Please provide any examples of collaborative learning opportunities that you create: *(Text Entry)*

Q27: Describe how the example(s) you provided represent collaborative learning opportunities: *(Text Entry)*

Q28: Technology in the Classroom refers to anything beyond the basic projection of course material on the screen. In addition to the usual definition of electronic gadgets, it can include instruments and other topic-specific items that are used in an exploration of a subject.

In your undergraduate courses, to what extent do you do the following? *(Select One)*

	None	A little	Some	Quite a bit	A lot	N/A
Use any technology beyond basic presentations in the classroom	○	○	○	○	○	○
Integrate technology into pedagogy	○	○	○	○	○	○

Q29: Please provide examples of technology that you use in the classroom and how you use that technology to enhance the student experience in your course: *(Text Entry)*

Q30: Explain your perspective on technology in the classroom. *(Text Entry)*

Q31: Have you served in an administrative role or on a faculty committee that focused on assessment of students' educational experiences and learning? *(Select One)*

Yes
No

Q32: In the last 3-5 years, indicate in which of the following teaching and learning activities you have actively engaged or been involved. Check all that apply:

Teaching award committee
Undergraduate Curriculum committee
Program committee
Leading or facilitating an institutional level teaching circle
Leading or facilitating a departmental level teaching circle
Mentoring colleagues in a teaching and learning or SoTL capacity
SoTL grant review committee
SoTL journal reviewer or editor
SoTL or teaching and learning conference organizing committee
Other, please specify below

Q33: If you checked "Other" in your response to the question above, please elaborate: *(Text Entry)*

Q34: I am a participant / actively engaged / involved in one or more teaching-related community of practice. Check all that apply:

Institutional-level teaching circle
Departmental-level teaching circle
SoTL journal club
Teaching and Learning journal club

Q35: If you indicated participation in any Communities of Practice in the question above, has the Community of Practice had an impact on your teaching? If so, how? Please elaborate below: *(Text Entry)*

Q36: To what extent have you incorporated the following into your work? *(Likert Scale)*

	None	A little	Some	Quite a bit	A lot
Systematically collecting information about the effectiveness of your teaching beyond standard end-of-term course evaluations	○	○	○	○	○
Using assessment findings to inform changes made to your course	○	○	○	○	○
Publicly presenting (e.g., lectures, workshops) information about teaching or learning	○	○	○	○	○
Publishing on Teaching and Learning	○	○	○	○	○
Collaborating with colleagues on improving Teaching and Learning	○	○	○	○	○

Q37: Have you received funding to conduct scholarly inquiry about Teaching and Learning? Check all that apply:

Yes, from sources external to my institution
Yes, from sources internal to my institution
Grant in progress
Grant under review
I have not applied for funding

Q38: Indicate the extent to which you agree with the following statements. As an instructor: *(Likert Scale)*

	None	A little	Some	Quite a bit	A lot	N/A
I design courses to respect diverse ways of learning.	○	○	○	○	○	○
I encourage a collaborative atmosphere in my courses	○	○	○	○	○	○
I ensure course content matches the course objectives.	○	○	○	○	○	○
I ensure that learning activities are integrated into my courses.	○	○	○	○	○	○
I ensure that my course objectives, learning activities and assessment methods are aligned.	○	○	○	○	○	○
I make effective and appropriate use of teaching technologies (e.g. CourseLink, i>clickers, social media, etc.).	○	○	○	○	○	○

Q39: Indicate the extent to which you agree with the following statement. As an instructor:

	None	A little	Some	Quite a bit	A lot	N/A
I encourage my students to actively participate in learning.						
I encourage my students to become deep rather than shallow learners.						

Q40: As an instructor, my approach to teaching tends to align most with which of the following: *(Select One)*

Lecturer
Coach
Facilitator

Q41: What components of EnLITE do you feel will be MOST helpful to your teaching practice? Please drag and drop the following in order from 1 = highest to 8 = lowest.

Portfolio
Reflections
Assigned reading
One-on-one meetings with the EnLITE committee
Meetings with your mentor
Monthly cohort meetings
Matched readings from your discipline
Action Learning Sets

Q42: Please elaborate on your two **highest** and two **lowest** choices. *(Text Entry)*

Q43: What motivated you to enroll in EnLITE? Check all that apply.

- Feeling like I reached a plateau in my teaching
- Wanting to meet other teaching-motivated instructors on campus
- Wanting to become more familiar with SoTL and/or Teaching and Learning literature
- Being part of a teaching-related Community of Practice
- Taking a structured program in SoTL and/or Teaching and Learning
- SEDA accreditation of the EnLITE program
- I had the time (i.e., research / study leave opportunity, etc.)
- It was suggested to me by a colleague (i.e., Dean, Chair, EnLITE grad, EnLITE committee member, etc.)
- Other

Q44: If you chose "other", what else motivated you to join EnLITE? *(Text Entry)*

Q45: Thank you very much for completing the survey. Please feel free to use the space below for additional comments. *(Text Entry)*