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Engagement and the Role of SoTL in Assessment Change

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Engagement and the Role of SoTL in Assessment Change

Abstract

This study follows a network-based Assessment Redesign Project at a Canadian university to investigate engagement and sustained implementation. The following strategies were employed in the project: mini-grants, embedded support, a community of practice, and social networks. Assessment facilitators worked in discipline clusters to achieve mutual goals for assessment reform targeted at the authentic assessment of critical thinking and problem-solving. Interviews were conducted with nine of the 25 project members one-year post-implementation. The study adopted a motivational theoretical lens to investigate how the experience of the Assessment Redesign Project affected motivation and the continued adoption or propagation of assessment strategies. Participants commented on how helpful the embedded support had been in building their assessment skills or knowledge. The mini-grants were used (in some cases) to fulfil scholarship of teaching and learning (SoTL) goals. All of those engaged in SoTL demonstrated intrinsic motivation for assessment change and had propagated assessment techniques or activities into other courses. In the few cases where motivation was purely extrinsic, there was no SoTL or continuation of assessment activities. This study highlights the links between SoTL and the longer-term impact of the Assessment Redesign Project. Suggestions are provided for institutions wishing to replicate outcomes from the project.

Cette étude suit un projet de refonte de l'évaluation en réseau mené dans une université canadienne pour étudier l'engagement et la mise en oeuvre durable. Les stratégies suivantes ont été employées pour le projet : des mini-bourses, un soutien intégré, une communauté de pratique et des réseaux sociaux. Les facilitateurs et les facilitatrices d'évaluation ont travaillé au sein de groupes de disciplines dans le but de réaliser des objectifs mutuels d'évaluation ciblée sur l'évaluation authentique de la pensée critique et de la résolution de problèmes. Des entrevues ont été menées avec neuf des 25 membres du projet un an après sa mise en oeuvre. L'étude a adopté une approche théorique de la motivation pour enquêter sur la manière dont l'expérience du projet de refonte de l'évaluation avait affecté la motivation et l'adoption continue ou la propagation des stratégies d'évaluation. Les participants et les participantes ont expliqué combien le soutien intégré avait été utile pour renforcer leurs compétences ou leurs connaissances en matière d'évaluation. Les mini-bourses ont été utilisées (dans certains cas) pour répondre aux objectifs d'avancement des connaissances en enseignement et en apprentissage (ACEA). Toutes les personnes impliquées dans l'ACEA ont montré une motivation intrinsèque pour les changements en matière d'évaluation et ont propagé les techniques ou les activités d'évaluation dans d'autres cours. Dans les quelques cas où la motivation était purement intrinsèque, il n'y a eu aucun ACEA ni aucune continuation des activités d'évaluation. Cette étude met en valeur les liens qui existent entre l'ACEA et l'effet à plus long terme du projet de refonte de l'évaluation. Des suggestions sont présentées à l'intention des établissements qui souhaitent reproduire les résultats du projet.

Keywords

motivation, support, rubric, learning outcomes, scholarship; motivation, soutien, rubrique, résultats de l'apprentissage, recherche

Over the past decade, higher education institutions have been compelled to better prepare students for 21st Century skills, such as critical thinking and problem-solving (Gallagher, 2010), skills attained through meaningful learning activities (Bellanca, 2010). Institutions across Canada came together to "to support the integration and use of learning outcomes by institutions, programs and faculty members" (Lennon et al., 2014, p. 3), with similar projects conducted in other countries (Barrie et al., 2011; Jankowski et al., 2013; *Tuning Asia-South East (TA-SE)*, 2016). The Organization for Economic Co-operation and Development (OECD) conducted a global investigation underlining the need for reliable, scalable methods to assess learning outcomes in higher education (Tremblay, 2013). The Higher Education Quality Council of Ontario (HECQO) supported a series of learning outcomes assessment projects (*Higher Education Quality Council of Ontario: Learning Outcomes*, n.d.; Weingarten & Hicks, 2018). One of the common threads through these Canadian assessment projects was that introducing new methods for assessment presented a challenge in acceptance, uptake, and shared understanding (Deller et al., 2015).

Achieving change in assessment practices in higher education is a difficult undertaking (Deneen & Boud, 2014). There are concerns about assessment cultures devoid of inclusivity, a lack of consensus or understanding, limited stakeholder buy-in, and being mired with issues of accountability (Baas et al., 2016; Duff, 2010; Fuller, 2013). Approaches need to align with the institutional culture because "using concepts foreign to the values of the academy will most likely fail to engage the very people who must bring about the change" (Kezar, 2011, p. 7). Henderson (2017) argued that change strategies focused on convincing individuals are insufficient to bring about large-scale change. Fisher and Henderson (2018) contrasted prescribed strategies (Kotter, 1996) versus emergent strategies derived from complexity leadership theory. The prescribed strategies are leader-driven and authority-based, where a leader recruits others and creates a coalition to implement planned changes. Prescribed strategies are contrasted with emergent strategies, or *middle-out* approaches, as innovation-based, adaptive, and promoting institution-level learning.

Chen (2021) proposed Kotter's 8-step change model as a tool for the acceptance and willingness of faculty members to change their existing teaching practices through the scholarship of teaching and learning (SoTL). SoTL encompasses a broad set of practices for the critical investigation of student learning, using evidence to answer questions and refine student activities, assignments, and assessments (Hutchings et al., 2011). The most frequently cited purpose of SoTL is to enhance university teaching (Trigwell, 2013). While evidence suggests that SoTL is an effective mechanism for improving student learning (Brew, 2007), engagement in SoTL is dependent on understanding, incentives, and commitment to improving teaching and learning (Webb, 2019).

Engagement and Motivation

Engagement influences an individual's choices at different levels of awareness (Kahn, 1990). It affects "the degree to which an employee puts discretionary efforts into his or her work over and above required time, brainpower or energy" (Rama Devi, 2009, p. 3). Self-determination theory (Deci & Ryan, 2008) suggests that actions are driven (directly or indirectly) by psychological needs manifested within different types of motivation. "The term extrinsic motivation refers to the performance of an activity in order to attain some separable outcome and, thus, contrasts with intrinsic motivation, which refers to doing an activity for the inherent satisfaction of the activity itself." (Ryan & Deci, 2000, p. 71).

Engagement is particularly important in Canadian universities, where academic freedom is bound by collective workplace agreements (MacKinnon, 2018). That is to say, each faculty member deems where to place their discretionary efforts on how they fulfil their job role. If a faculty member is not motivated to engage in an institutional change initiative, they do not need to do so. As such, the need to engage faculty is a tenet of institutional change initiatives in Canada. The Assessment Redesign Project was an example of an assessment change initiative that engaged faculty in a project funded by the Higher Education Quality Council of Ontario (HEQCO).

Assessment Redesign Project

Following their involvement in the Canadian Outcomes Tuning (Lennon et al., 2014), institutional leaders "were struck by the lack of evidence around student learning at our own institution" (Scott et al., 2018, p. 28). The project was designed to include faculty engagement strategies from teaching change initiatives that had demonstrated empirical merit:

- Mini-grants for incentivization (Berman & McLaughlin, 1975; Coleman & Thomeczek, 2003; Loshbaugh et al., 2004). Successful project proposals were awarded a mini-grant of \$5000. The funds were provided to support academic goals for improvement.
- The use of embedded experts for facilitating change (Chasteen & Code, 2018; Wieman & Perkins, 2005). Embedded experts need to have disciplinary expertise and be known (and trusted) within a faculty or discipline. In the Assessment Redesign Project, the embedded experts were called assessment facilitators. They worked with faculty to achieve mutual goals.
- A community of practice (Wenger, 2000) was used in the project to build the theoretical basis of assessment knowledge, develop consistency of approach, for clarification of terminology, and to provide an avenue for collective problem-solving.
- Social networks (Kezar, 2011; Moolenaar & Sleegers, 2010) were utilized in the project for peer support and knowledge-sharing.

The above strategies were combined to achieve constructive alignment of learning activities, assignment guidelines, and assessment criteria for student achievement of target learning outcomes. The network included 25 faculty members, grouped into five disciplinary hubs, each supported by an assessment facilitator. The assessment facilitators shared knowledge and built understanding, acting in the role of a 'critical friend' (Handal, 1999). They facilitated discussion of ideas, listened to concerns, worked collaboratively to articulate cognitive skills achievement in disciplinary contexts, and clarified assessment criteria. At the end of each semester, members of the project presented lightning talks, sharing their ideas, actions, issues and outcomes. Further details are available in the Guide for Institutional Assessment of Cognitive Skills (Simper et al., 2018).

The project report (Simper et al., 2019) provided metrics for the achievement of student learning and validation of assessment. The report also stated that it was the first time that 40% of the faculty members had used rubrics in their course. However, the initiative was not evaluated as a change mechanism, and further research was needed to investigate the longer-term impact. The Assessment Redesign Project had stakeholder commitment and support to achieve goals within the project, but as Henderson et al. (2015) point out, successful initiatives tend to regress when funding is withdrawn. Henderson et al.'s (2015) recommendation was that success is gauged in the longer term through dissemination, sustained adoption, and propagation activities. The current

study is a follow up (one-year post-implementation) of the Assessment Redesign Project. The purpose was to investigate the effectiveness of the project engagement strategies and whether there was sustained adoption of assessment strategies.

Research Questions

- 1. How did the experience of the Assessment Redesign Project influence engagement in assessment change?
- 2. In what ways, if any, did the Assessment Redesign Project lead to sustained adoption or propagation of assessment strategies?

Methodology and Method

The exploration of meaning constructed within assessment change is based on interactions between personal dispositions, the institutional approach, and change mechanisms (Kezar, 2011). These are factors that are not easily quantified, hence adopting a qualitative methodology. Narrative inquiry (Clandinin, 2006) enables the exploration of lived experience (of assessment change) through storytelling, where "we can present what we've learned from our narrative inquiries so that each of us contributes to the overall story with a particular voice" (Clandinin, 2006, p. 147). The exploration of the construction of meaning "depends heavily on naturalistic methods (e.g. interviewing, observations, etc.) conducted in situ; requires sufficient interaction between the researcher(s), participant(s), and the research phenomenon" (Varpio et al., 2017, p. 42). A narrative methodology was selected because storytelling can help transfer tacit social knowledge with implied meaning (Linde, 2001). Participant stories were reflected on through a socio-cultural lens to observe the impact of behaviour within the institutional and disciplinary context.

Purposeful sampling was employed (Patton, 1990) to seek detailed descriptions of experiences from the Assessment Redesign Project members. Recruitment invitations were sent to the 25 faculty members involved in the Assessment Redesign Project. Ethical approval was granted by the university's General Research Ethics Board, and nine participants provided informed consent (38% of the project members). Data collection took place a year after the project's completion. Participants were allocated ID letters; three of the participants were from the Engineering cluster (E), three from Health Sciences (HS), and three from Social Sciences (SS).

The lead researcher conducted three-part interviews to capture assessment perspectives and reflections on experiences. The appendix lists the full interview protocol; in summary, part one was directed at the disciplinary setting and professional context. It comprised open questions about the participant's role, teaching experience, assessment practices and processes for changing assessment in their discipline. In part two, participants were asked to recount their assessment change in as much detail as possible, including the reason for the change. The third part of the protocol focused on social interactions within their small significant network (Poole et al., 2018). Participants were prompted to draw a network diagram and explain the people in their network. Once the diagram was finished, participants were asked to identify the people they felt were significant to the assessment change. Interviews lasted approximately one hour and were audio-recorded and transcribed.

Analysis

The first step was a close read of transcripts to focus on evidence to answer the research questions, highlighting comments that were related to what was changed, the reason for the change, how the change was facilitated, and whether there was sustained adoption of assessment techniques. The data were then hand-coded in a deductive process (Braun et al., 2018) to explore how motivation and engagement resulted from the experience of the Assessment Redesign Project. Comments were managed in a spreadsheet format with columns representing the categories of intrinsic and extrinsic motivation, support and reflective practice related to engagement, and sustained adoption or propagation of assessment strategies. Participant comments were added in rows down the spreadsheet to enable the comments from participants to be examined within the and across the categories.

The first author did the initial coding or the raw data, and then the coding was discussed within the research team. The category of SoTL emerged when the research team discussed comments coded to reflective processes. During the coding of the sixth participant's comments, it was observed that no new information was being added to the analytical set, suggesting thematic saturation. That is to say, coding of the seventh to ninth participants enabled validation of the themes but did not present any significant alternative perspectives. Data interpretation and deductive reasoning were facilitated by creating a concept map to display the codes visually. A reflexive discussion between the research team led to the refinement of the concept map representing findings (Figure 1).

Findings

Motivations Behind Assessment Change

In response to research question one, in what way did the experience of the Assessment Redesign Project influence engagement in assessment change, thematic analysis suggested intrinsic and extrinsic motivational factors. Faculty members were extrinsically motivated to implement assessment changes through the mini-grant incentives, accreditation requirements, and student feedback. Faculty members were intrinsically motivated by the desire the engage students in meaningful learning, clarify criteria and, for one participant, to generate consistency in assessment across multiple markers (teaching assistants). For most participants, there were both extrinsic and intrinsic factors involved in their assessment change. For three of the participants, the incentive of funding was the main reason for their involvement in the project. They used their mini-grant to pay teaching assistants (TAs) to facilitate learning sessions and assist with marking. There were other extrinsic motivators: accreditation requirements and negative feedback from students. Intrinsic motivation was inferred through participants' descriptions of the need to clarify criteria, stimulate meaningful learning, and the desire to generate consistency. Table 1 lists the type of change made to assessment and example quotes demonstrating motivational themes.

Table 1

The Nature and Purpose of the Assessment Changes

ID	What was changed	Extrinsic motivation	Example quotations	Intrinsic motivation	Example quotations
E1	Developed rubric in line with accreditation criteria	Accreditation	We wanted to match up with CEAB (Engineering Accreditation requirements), Graduate attributes and all these things.	Clarify criteria	The redesign work was motivated by the design of a new lab, students need some scaffolding, so they know how well they're going to do when they get to certain outcomes, and what outcome they're shooting for.
E2	Technology enabled formative feedback	Mini-grant	If it wasn't successful in the grant, I wouldn't have resources when I say resource it mostly has to do with time.		
E3	Redesigned rubric for peer assessment of critical thinking	Accreditation	We try to teach 'professional skills' where there is no specific answer. It's more subjective on whether you have achieved some level of competence we didn't have a specific marking guide.	Meaningful learning	Last year, based on some input from a conference I had been to, I thought about peer assessments
HS1	Redesigned rubric; trained TAs for consistent marking; Moderated grading	Student feedback	After the feedback was released we had so many requests for re-marks because the students couldn't understand why they got the mark they did, even though there was rubric that was very clear.	Clarify criteria	They've had a lot of multiple-choice examinations. It's the first time that they had to write something that had to be coherent, the writing quality wasn't so great which is what created the barrier to how we assess using the rubric.
		Mini-grant	and we had funds to pay the TAs	Generate consistency	Working out how can we be consistent between TAs?

ID	What was changed	Extrinsic motivation	Example quotations	Intrinsic motivation	Example quotations
HS2	Designed rubric for interpersonal skills			Meaningful learning	I wanted to put the onus onto the students, individually and within their small groups trying to get into their cognitive level of thinking rather that regurgitating memorized facts.
HS3	Peer assessment; assessing peer assessment	Accreditation	External accreditation standards drive so much of what happens, including the fact that students need to be informed about expectations.	Clarify criteria	Learning outcomes related to different competency roles, and one of them is a collaborator. Specifically designing rubrics concerned with how their contributions were recognized appropriately.
SS1	Created rubric for new assignment	Student feedback	I had students who come to me and say 'I did everything on the rubric, why did I only get a B?'	Meaningful learning	I think memorization and regurgitation is not appropriate. The redesign was motivated by the desire to revisit the grading structure, inject more active learning components, and develop stronger rubrics.
SS2	Created rubric for new assignment			Meaningful learning	I had been feeling for some time that I wasn't getting at their critical thinking skills. I realized that I need to assess them on how well they can think.
SS3	Adapted assignment and rubric for critical thinking	Mini-grant	The TA was a part of the instructional team; she was supported through the funds that we got.	Clarify criteria	There's a focus on more conceptual and applied things and really being able to see the boundaries of the concepts and where they apply and where they don't apply.

Engagement in Assessment Change (Support and Reflective Practice)

All of the participants mentioned advice from peers, indicated in comments such as: my philosophy is that if I don't know how to do it, then I'll learn from someone that knows how to do it. It doesn't necessarily mean that I have to do it all by myself, I can get others involved (HS2). There were comments suggesting reflective practice indicated by actively seeking feedback. Participants greatly valued the assessment facilitators, but following the project, there was no funding for support. This was lamented in the following comment:

I see (assessment facilitator's name) of very, very high value to me and I miss her dearly.... In some senses she just helps me talk through things myself, she was always putting in the right word or two to get me to see where I could be more specific about the criteria for the assessment rubrics (SS5).

The following participant mentioned that they had to rethink their rubric and described how the assessment facilitator worked with them on training their TA for consistent assessment:

So, we developed this draft rubric and then it came time to train the group of seven TAs in how to use the rubric. The facilitator came to meet with us, and the TAs were given a chunk of assignments that they had to mark. They were asked to come to this meeting having already looked at the rubric and after having tried to work through a few of the student assignments. So that they could ask questions about the things they didn't necessarily understand about the assignment or the rubric. We wanted to get consistency and it took a lot longer than we anticipated just because they had a lot of questions about how to interpret students' information. (HS1).

TA training was not a regular practice in the participant's department; success in the endeavour spurred confidence for this participant. They had reflected on the experience and refined the process for subsequent TA training sessions.

Sustained Adoption or Propagation of Assessment Strategies

In response to research question 2, did the Assessment Redesign Project lead to sustained adoption or propagation of assessment techniques? Six of the nine participants mentioned that they had transferred their assessment strategy to other courses or cohorts. This was evidenced by comments such as: *I do it now also even at the four-hundred and three-hundred levels* (SS2); and *I'm still doing the same general kind of things but with a different student group and it's a different work environment* (HS3). There were also comments suggesting assessment change activities promoted reflection and continuous improvement. For example, *the project helped me think about training TAs to mark consistently in assessing students. So, I continue to do that (train TAs)* (HS1). One of the participants mentioned their intention to use the strategy again, but they hadn't had the opportunity to do so. None of the participants made claims that their work had directly changed the assessment behaviours of others, but there was a suggestion of the influence of their assessment initiatives. As in the example, *some of my ventures have been used as a template for the bigger, broader aspect of the life-science program* (HS2). Some of the participants used consultation and

collaboration to engage their peers, such as this comment: this year I went to my key folks in the department and said 'okay, this is what we're thinking of doing, what do you think?' (E3).

Further exploration of the three participants who did not mention any ongoing implementation suggested that personal goals may have played a part. These participants all mentioned student evaluations of teaching (USAT). For example, this comment: on the tenure-track side, I want to get high USAT scores. I want the students to understand the material, do well, have a positive experience. But of course, to get a high USAT score (E1). The other participant received negative comments on their USATs about the assessment change, and mentioned that students were not consulted about the new assessment: we never asked the students whether they wanted to do it or not (E2). To mitigate negative comments, they proposed that if they were to change their assessment in the future, they would consult students first.

The Role of SoTL in Sustained Change

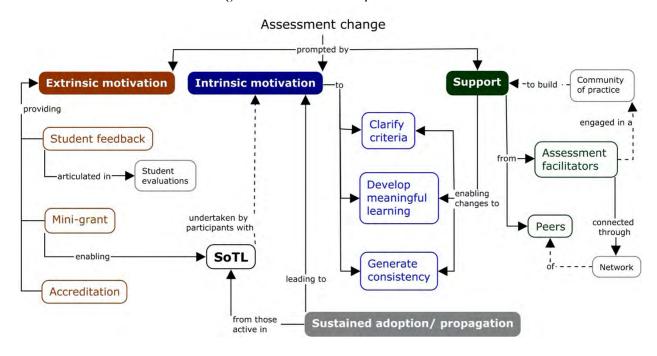
The scholarship of teaching and learning (SoTL) is described as a systematic inquiry into student learning that advances teaching and learning in higher education by making inquiry findings public (Hutchings et al., 2011). The five of the six participants who mentioned sustained implementation had actively engaged in SoTL activities. One participant collected pre- and posttest data of student achievement, correlated with the standardised rubric assessment. Another evaluated their assignment design with iterative submissions and feedback, incorporating comparative assessment data. There was a participant who conducted focus groups regarding student experience of the redesigned assessment. The other two SoTL activities were less formal, with reflections of practice in the context of their disciplinary teaching literature, culminating in conference presentations or book chapters. For example, when I developed the design course, I had some ideas, guidelines, and a syllabus and an outline. I had things for them to do, but I didn't have a rubric, and I didn't realize I needed one. That was prior to writing the conference paper (E1). Each of the participants who were engaged in SoTL attended teaching conferences, finding them valuable. Two participants cited input from a conference as the inspiration for their assessment redesign:

Based on some input from a capstone design conference I had been to the year before where somebody had talked about peer assessments, and I thought 'oh, that sounds interesting' and so I did some more research; how does it work, what do you do? (E3) I'm doing a lot of what we call non-funded research, scholarship, attracting interest in 'doing what I'm doing'. We got it to the point where this approach was presented at the educational venue of an international conference, and it won an award (HS2).

An additional participant partnered with a peer to publish a book: we kept discussing writing a textbook together, which we did (SS3), and another published results of their qualitative investigation of their assessment change initiative in a medical teaching journal.

Participants mentioned that the mini-grant helped them with their SoTL activities, such as paying for a research assistant or freeing up time because they could employ TAs. However, the mini-grant did not appear to be an instigator for SoTL. All participants got the mini-grant, but not all engaged in SoTL. Figure 1 provides a visual representation of analytical findings, demonstrating faculty engagement in assessment change, promoted by motivational factors and support. Intrinsic motivation was linked with SoTL and sustained adoption or propagation.

Figure 1
Links Between Assessment Change and Sustained Adoption



Discussion

Few would suggest that change in higher education is an easy undertaking. Research indicates that sustainable change must be owned by faculty members (Barth et al., 2007; Corbo et al., 2014; Stensaker & Vabø, 2013). The Assessment Redesign Project was designed to engage and support faculty to make changes aligned with institutional goals. It makes sense to measure success in the long term, but as Eckel & Kezar (2003) point out, long-term change is seldom tracked. The funding for the project did not include the facility to track ongoing implementation. Hence, the current study was conducted (without funding) to investigate the effectiveness of the project.

Engaging Faculty Members

As in many other higher education settings, faculty members have high autonomy and academic freedom in the Canadian context. As such, leading changes to assessment strategies or design is difficult. Some say to "bring about changes in approaches in teaching and learning, you must first bring about changes in conceptions of teaching and learning" (Watkins et al., 2005, p. 306). The project provided the framework, but participants were active in goal setting. The faculty member's goals needed to align with the institutional goals to be awarded the mini-grant. The mini-grant provided incentives, and the provision of assessment facilitators further spurred the participants. Still, intrinsic motivators were more commonly mentioned as drivers for change.

The desire to engage students in meaningful learning was the most common reason given for changing assessment toward critical thinking and problem-solving. Clarifying criteria was also prominent in participant comments. We can infer from these comments that most participants had a foundation of assessment knowledge. Yet, they had not made these changes before involvement

in the project. Support from the assessment facilitators was graciously accepted, enabling the mutual goals to be implemented.

The changes took time and expertise to develop and implement. In some cases, changing assessments presented a risk in terms of student push-back. Students can be reluctant to change and provide negative feedback (or low scores) in teaching evaluations. These evaluations are critical because they form part of the basis for tenure or promotion at this institution. Assessment facilitators worked with faculty as a sounding board, providing technical advice and feedback on iterations of assignments and criteria. The assessment facilitators' community of practice informed the feedback that they provided to the faculty members. The larger network met periodically in catered networking events attended by senior leaders. Interestingly, participants did not mention these events but did speak more generally about interactions with people from the network in less formal settings. The inference was that learning from peers had greater importance to participants than sharing ideas more formally.

Benefits of SoTL

Participant responses suggested that engaging with the educational and assessment literature affected their thinking about and approach to the assessment, and there was a link between engagement in SoTL and sustained change. The faculty member's initiative prompted research on their teaching and assessment. Still, involvement in the Assessment Redesign Project may have offered insight into scholarly processes such as methods and procedures, ethical approval, recruitment, informed consent, or data analysis. We know that the path to publication can be long, emotional, and bewildering (Normandeau et al., 2020). Thus, university supports were available where requested. In addition to recognizing that SoTL can be an effective tool for evidence-based approaches to improving teaching practice (Openo et al., 2017), the findings of this study support the proposition of SoTL as a key element in sustained change. However, we need to know more about the impact of such projects. It would be valuable to further explore a project or program where SoTL was encouraged or even mandatory, to better understand the link between engaging in SoTL and sustained implementation of assessment change. Authors encourage others to use a research-based approach for assessment initiatives in higher education, with purposeful inclusion of SOTL activities to expand our understanding of the role of SoTL as a sustainable change mechanism.

If an institution was looking to replicate an Assessment Redesign Project with limited funding, the evidence here supports the following suggestions:

- A stimulus of some kind is important, but specify that funds be used to pursue SoTL goals.
- Assign people within the faculty or department to become assessment facilitators to support the desired change. They don't need to be assessment experts; there only needs one expert and a community of practice to build assessment knowledge and skills.
- Recognize the benefits of peer support, and encourage members to build these into their SoTL exploration.

Limitations

The sample comprised participants from three disciplinary groupings, but there was no representation from the humanities or sciences. The sample in the current study was limited due

to availability and was possibly biased by their interest in improving assessment. Yet, there was informational power of the sample (Malterud et al., 2016) as participants were critical informants for the narrow aim of the study, informed by theory, utilizing a method to capture quality dialogue, and applied through a formulated analysis strategy. However, further research would be needed to determine how to engage faculty across other disciplines and engaging those more reluctant to improve assessment.

Additional data may have enabled triangulation of data analysis. However, due to ethical separation between the Assessment Redesign Project and the follow-up study, data collection was limited to interview components. The facilitator reports that were collected as part of the project were not included in the current study. That constraint aside, it may have aided the trustworthiness of findings to include an alternate data collection device, such as a survey targeting a broader sample. The current study was conducted one year after completing the Assessment Redesign Project. Additional research would be necessary to determine the impact beyond the one-year duration.

Conclusion

Queen's University conducted an Assessment Redesign Project with support from HEQCO. Interviews with nine of the 25 project members were completed one year after the project concluded. A motivational theoretical lens (Ryan & Deci, 2000) was utilized to investigate the experience of the Assessment Redesign Project related to motivation and the continued adoption or propagation of assessment strategies. Analysis of interviews found that assessment changes were promoted through a combination of factors. Faculty members were extrinsically motivated by funding, accreditation requirements, or student feedback; they were intrinsically motivated to clarify criteria and generate consistency or engage students in meaningful learning. Support from assessment facilitators was also found to promote change. Sustained implementation appeared to hinge on engagement in the scholarship of teaching and learning (SoTL). The mini-grant helped to enable SoTL activities, but results suggested that funds were not an instigator for SoTL. The link between SoTL and sustained adoption is presented here as a possible mechanism for sustained change. These findings resulted from a small sample, thus, further research is suggested to expand our understanding of the sustained assessment change.

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Appendix Interview protocol

The interview protocol comprised three sections: Firstly establishing the setting and context, then exploring assessment change, and thirdly drawing the network diagram.

3.3.1 Setting and Context (Part One)

This section comprised five questions designed to encourage the interviewees to feel comfortable, establish the participant's level of experience in assessment in higher education, and the norms of practice in their setting. The questions were:

- Tell me a little about yourself and your role at the university.
- How would you describe the typical way of assessing your faculty/ department?
- Is that generally the way you assess your students?
- In you faculty/department, how do academic staff or lecturers get inducted into assessment?
- If someone wanted to change an assessment, how would they go about it?

3.3.2 Assessment Change (Part Two)

This section provided the following as a prompt to elicit a narrative response describing a significant example of assessment change:

• Please describe a time when you changed the way you assessed student learning. Provide as much detail as possible, including the context of the unit, the approximate number of students, year group, needs of the students, and explain the reasons behind the change, and whether it turned out the way you thought it would.

3.3.3 Social Network Diagram (Part Three)

Participants were provided with paper, coloured markers, and the six prompts to guide them in drawing a social network diagram, using the following prompts:

- Think of the people you interact with professionally and draw circles to represent them.
- Draw a second circle around those people with whom you have conversations that involve literature or research (related to pedagogy/ teaching/ assessment).
- How frequently do you interact with each of these people? Use the coloured markers provided, (as per the key in Figure 2), and draw arrows connecting them, putting arrows at both ends if the conversation is two-way.
- How valuable are/were each of these people to you? Use check marks to represent the value of the network members to you.
- How similar is that person to you (write a number between 1 and 5) in terms of the beliefs they hold about teaching and learning?

• How would you define a significant social interaction? In what way, if any, did your significant social interaction(s) play a role in this assessment change? Please explain, and mark where they are on the diagram with a box.

In the participant's social network diagrams, the word node was used to represent the people in the network, and the relational ties referred to the nature of the interactions (frequency, direction of interaction, similarity between individuals, the discussion of literature, and perceived value of the interactions).

Figure 2 *Protocol Key for the Frequency, Value and Similarity of Network Connections*

