

Essay

A Multi-Institutional Alternative Assessment Faculty **Learning Community: Supporting Teaching in Higher Education**

Lawrence R. Chen¹, K. Breana Downey², and Erin L. Whitteck^{3*}

¹Department of Electrical and Computer Engineering, McGill University

²Department of Psychology, University of Central Oklahoma

³Center for Teaching and Learning, and Department of Chemistry and Biochemistry, University of Missouri–St. Louis

Abstract

Faculty learning communities (FLCs) provide opportunities for professional development for faculty, teaching staff, and educational developers in a collaborative and open environment. In this essay, we describe our experience organizing, facilitating, and participating in a multi-institutional FLC with a theme of alternative assessments in STEM. We describe our goals and objectives, the recruitment process and composition, and the structure and scholarly process of the FLC. Based on focus groups conducted with FLC participants, we discuss our collective experience, highlighting outcomes and lessons learned and identifying challenges. Finally, we provide our recommendations for organizing and facilitating multi-institutional FLCs.

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*Correspondence to: Erin Whitteck, elwbcf@umsystem.edu, 1 University Blvd. St. Louis, Missouri USA 63121

INTRODUCTION

"It was really valuable to have people from other institutions...! learned about completely different approaches that are at the department level and not the faculty level, which was really enlightening to see."

"...the opportunity to hear about completely different structures for how institutions teach their classes or examples of how you are teaching a large intro class and able to make this approach work was really good...[it] helped me when I talked to my chair about something I want to try and I can give you an example of another institution which has done this successfully..."

 From focus group discussions with faculty learning community participants

What Is a Faculty Learning Community?

Faculty learning communities (FLCs) are a form of professional development (1-4). Unlike conventional workshops, FLCs allow participants to sustain interactions and remain engaged over a longer period of time. While both workshops and FLCs provide participants with opportunities to develop new skills, the prolonged duration of FLCs allows for a deeper examination, understanding, and reflection of the specific topic (1). This is especially true in the context of teaching and learning: while workshops are less time intensive and typically focus on the what or how of implementing a particular strategy, FLCs last either a semester or academic year and allow for a deep

exploration of the why of the implementation of a strategy, and other factors such as context (for a discussion on the importance of context, see the companion essay by E. L. Whitteck, L. R. Chen, and K. B. Downey, submitted for publication). If faculty have a better understanding of the context for implementing a specific strategy, as well as the reasons that make the strategy effective in supporting student learning, they are better prepared to develop and implement corresponding activities in their teaching.

FLCs can be divided into two broad categories: cohortbased and topic-based (2). A cohort-based FLC groups together specific participants, such as mid-career faculty members or hires in a given year. The curriculum in a cohort-based FLC can span a broad range of topics associated with participants' primary academic duties, from teaching to research to service. By contrast, a topic-based FLC can involve participants with diverse backgrounds, such as teaching faculty of all ranks and educational developers. The curriculum in a topic-based FLC focuses on a particular topic, such as a specific teaching and learning strategy or need.

Regardless of the type of FLC, several requirements exist to establish a strong sense of community (1, 2). While participation is generally voluntary so that the FLC may comprise 'likeminded' individuals, it is very important to ensure safety, trust, and confidentiality. Creating such an environment, which is one of the main responsibilities of the FLC facilitator, encourages participants to discuss difficult topics with greater freedom and ease. FLCs also require context and structure and should provide participants with a challenging and engaging learning environment. These can be facilitated by the appropriate choice of components and activities, particularly how the scholarly process is organized. The scholarly process includes how participants learn about the topic, share their thoughts, and produce relevant artifacts.

What Are Alternative Assessments?

Two key challenges in teaching and learning involve engaging students and assessing student learning. Over the years, instructional strategies such as flipped learning (5), active learning (6), and retrieval practice (7) have been developed and researched to engage students with course content and improve their learning process. At the same time, assessment strategies beyond traditional assignments, papers, and tests, sometimes broadly referred to as alternative assessments (8), have emerged. Instructors can consult the rich research domain and be assisted by educational developers and professionals from university teaching and learning centers. However, many still feel overwhelmed with implementing different instructional and assessment strategies. Moreover, they struggle with ensuring constructive alignment in course design, i.e., the alignment of learning outcomes with instructional, assessment, and feedback strategies (9). The COVID-19 pandemic and transition to emergency remote teaching and learning exacerbated these challenges, especially in assessment. While instructors sought to create meaningful and engaging assessments that contributed to student learning, assessing online raised concerns, especially regarding academic integrity. This likely led to increased adoption of alternative assessments during the pandemic, and their increased use may continue as part of in-person teaching and learning, in particular with increased use of generative AI technologies (10, 11).

The purpose of this essay is to describe our experience with organizing, facilitating, and participating in a topic-based, **multi-institutional** FLC. We detail the recruitment process; the FLC composition, structure, and components; our collective experience; and recommendations.

FLC DETAILS

Goals of the FLC and Recruiting Participants

A mini-grant was awarded to author E.L.W. from FLAMEnet (Factors affecting Learning, Attitudes, and Mindsets in Education network) to create and facilitate a topic-based, multi-institutional FLC on alternative assessment. FLAMEnet is a nationwide network connecting educational developers and faculty in higher education to develop strategies that enhance overall student success in STEM. Participants were recruited to the FLC through several channels, including social media, the Professional and Organizational Development Network in Higher Education, and FLAMEnet community members. In choosing participants for the program an effort was made to give opportunities to faculty from all types of institutions, ranks, and to faculty having full or part-time status. An ideal FLC size is 8-12 participants (2), and there is an expectation for some attrition due to the possibility of changing priorities during the duration of the FLC. As a result, we chose 12 faculty participants, and one had to leave the group due to a change in their course load.

FLC Structure and Meetings

Our FLC met online (using Zoom) over a period of 9 months (August 2021 – April 2022), with each month typically involving 2 meetings, each lasting 60 minutes. The first meeting was more formal and focused on a specific topic related to alternative assessment. The second meeting was used as a community hour for optional continued discussion of the monthly topic. This structure emerged from the practical challenges of finding a shared meeting time among 12 faculty members.

The FLC facilitator structured and guided the first FLC meeting, where we generated a list of what STEM faculty value, including failure, human connection, meaning, and inclusion. It was clear from our discussion that high-stakes assessments, such as midterm and final exams commonly used in STEM courses, did not align with these values. This first meeting served to define the mission and purpose of our FLC and a set of community agreements was generated to begin the work of creating an open, trustworthy environment.

The following meetings were devoted to the scholarly process. The facilitator provided a list of alternative assessments and topics for discussion, though participants were free to choose their own topic. Along with a partner, participants facilitated one of the formal monthly meetings by leading a discussion on their chosen alternative assessment strategy. Partners were determined based on shared interest. Each pair also produced a one-page document summarizing their topic; these summaries were collated and disseminated on FLAMEnet's website and are included in this publication (see Supporting File S1). Table 1 lists the topics covered by our FLC, which extended beyond alternative assessment to alternative instructional modalities and the scholarship of teaching and learning.

 Table 1. Topics covered in alternative assessment FLC.

Month	Торіс
August	FLC context, impact of reducing emphasis on exams
September	Transparency in learning and teaching (TiLT)
October	Promoting communication skills in science
November	Complexities and challenges with group work
December	Qualitative research in STEM
January	Ungrading and grading for growth
February	Hy-Flex learning
March	e-Portfolios in STEM
April	Flexible assessments

Each pair identified a foundational resource (e.g., peer-reviewed article, blog post, or podcast) for their topic. A social annotation platform (Perusall) (12) was used to engage FLC members in an asynchronous discussion of the foundational resource before the formal meeting. The FLC facilitator uploaded documents into Perusall, and participants leading that month's session added questions to prompt discussion. The rest of the FLC participants added comments and responses highlighting their questions and experiences, generating a robust discussion before the synchronous virtual meeting. During the synchronous formal meetings, each pair presented additional information on the assessment approach

or its implementation, shared relevant personal experiences, and addressed comments raised in Perusall. A second meeting followed several days later. Participants used this opportunity to continue discussing the topic from the formal session and to share their experiences with other teaching and learning strategies. The willingness of participants to describe the challenges they faced in teaching and learning during these community gatherings helped to further a safe, open, and trustworthy environment.

Table 2 summarizes how the structure, components, and activities promoted collaboration, ensured inter-disciplinarity, and provided participants with opportunities to foster connections and remain engaged.

Table 2. Relationship between structure, components, and activities and FLC characteristics.

FLC Structure/ Component/ Activity	FLC Characteristic
FLC participants working in pairs	Interdisciplinarity, collaboration
Foundational resource (peer- reviewed article, blog post, or podcast) and Perusall	Asynchronous engagement
Formal monthly meetings	Synchronous engagement
Community gatherings	Connections; safe, open, and trustworthy environment
Artifact (one-page summary)	Collaboration, engagement
Padlet, Google Docs	Connections; safe, open, and trustworthy environment
Slack	Connections
Email communications	Engagement; connections

DETAILS OF STUDY

Following the conclusion of the FLC, a Qualtrics survey was conducted to record information on the teaching context of our FLC participants. All participants gave informed consent to participate in research activities beyond their participation in the FLC, and the Institutional Review Board at the University of Missouri – St. Louis approved all procedures.

A subset (10/12) of the FLC participants took part in focus group discussions with a semi-structured interview protocol (see Supporting File S2 for focus group questions), lasting approximately 1 hour each on Zoom. Focus groups consisted of 2–4 participants and a facilitator. Facilitators included authors L.R.C. and K.B.D. but not the FLC facilitator, E.L.W.; this decision was made to encourage unbiased responses from participants as E.L.W. led the FLC itself. We wrote guiding questions to solicit participants' feedback on the following topics: their motivations for joining the FLC, whether the experience met their expectations, strengths of the FLC structure, and areas for improvement. The focus group data was analyzed through thematic analysis. For a discussion

about the broad lessons learned about alternative assessment, and the impact of the FLC on participants' approaches to assessment please see the companion essay (E. L. Whitteck, L. R. Chen, and K. B. Downey, submitted for publication).

RESULTS

Participants in the FLC taught at various institutions across North America, ranging from community colleges to universities granting undergraduate, masters, and doctoral degrees. The majority held lecturer positions; others were tenure-track or adjunct faculty members. Participants hailed from various STEM disciplines, including engineering, mathematics/ statistics, physics, biology, chemistry/biochemistry, and psychology. All levels of collegiate teaching were covered within the group, from lower-level undergraduate courses to upper-level graduate courses. The typical class size taught by FLC participants ranged from small (30 or fewer students) to intermediate (31–100 students) to large (over 101 students).

In focus groups, participants shared that they joined the FLC for a variety of reasons, including:

- Valuing participation in prior FLCs within their department or institution
- Wanting to interact with educators from a variety of institutions and STEM disciplines
- Having specifically worked with this FLC facilitator (author E.L.W.) in the past
- Seeking to learn from others who had more experience with alternative assessment or related topics (e.g., active learning, open pedagogy)

The overwhelming consensus was that the FLC experience exceeded expectations. Participants shared that they appreciated the diversity of pedagogical strategies covered (see Table 1) and the diversity of their co-learners in terms of career stage, institution type, discipline, and class level/size. From exposure to real examples of how strategies had been implemented in different contexts, participants felt empowered to approach their institutions and justify changes they wanted to make in their courses.

Participants had a generally positive outlook on the structure of the FLC—that is, the aforementioned scholarly process by which information was shared. They found value in synchronous meetings, with the shared sentiment that one hour felt insufficient. The total duration of the FLC (one academic year) and the monthly frequency of meetings felt appropriate to participants, leaving them time to reflect in between sessions.

FLC members highlighted the importance of having a facilitator with strong organizational skills, citing the facilitator's monthly "recap emails" as useful for helping them keep track of digital resources that had been shared and dates for upcoming meetings. Participants expressed that the number of electronic platforms used for FLC activities (see Table 2) was overwhelming, instilling a fear that perhaps they had missed information.

RECOMMENDATIONS AND CONCLUSIONS

We have detailed the structure of a year-long, topic-based FLC focused on alternative assessments in STEM, which was regarded by participants as a positive experience. The FLC structure and components provided a strong sense of community in an open and trustworthy environment. For readers interested in implementing such an FLC in the future, we make the following recommendations:

- Embrace a diverse membership who teach in various contexts
- Ensure strong leadership and organization to promote cohesion from one meeting to the next and keep participants on track
- Simplify the number of electronic platforms participants are expected to use. Survey participants to gauge familiarity with technology and indicate the goal for each platform. Utilize a website (Google site) to organize all artifacts and communications.
- Consider smaller groups or dual cohorts to circumvent scheduling challenges. An ideal FLC size is 8–12 participants (2). Two cohorts of 8 would have been less logistically challenging.

We personally experienced the value of this multiinstitutional FLC, and we hope this publication provides practical guidance for others looking to replicate this approach.

SUPPORTING MATERIALS

- S1. What's the Alternative Alternative assessment information sheets
- S2. What's the Alternative Focus group questions

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