

Lessons Learned: Fostering Reflective Teaching Through Peer-to-Peer Mentoring

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Introduction and Overview

This “lessons learned” paper reports on the ongoing efforts of a small group of junior full-time teaching faculty to better establish a norm of reflective teaching and systematize the informal mentoring and support that junior faculty provide for each other.

While many colleges and departments host formal mentoring programs that pair junior faculty with more senior colleagues to support their development, there is also significant mentoring and support that junior faculty find amongst their peers. The presence of both of these support systems - a formal system with an experienced colleague and an informal system with near-peer colleagues - is itself beneficial. However, the informality of the latter often leads to near-peer mentoring activities falling by the wayside as schedules fill up with teaching, service, and research requirements. This issue is further compounded by the need for faculty to chase department or university metrics for promotion which can cloud or even overtake the actual practice of improving one’s teaching.

We set out to create a program that retained or increased the benefits of existing informal peer-mentoring in our group while adding just enough structure to ensure regular mentoring activities. This work took place at Northeastern University, a private R1 university located in the United States, and the effort was initiated by an approximately \$3000 “mutual mentoring” grant from the institution in January of 2024. The first three months of work focused on information gathering, reviewing existing literature on both reflective teaching and topics that were relevant to our current classroom experience (i.e. inclusive teaching, alternative assessment). That effort culminated in a draft set of reflective teaching prompts collected in a journal. The following semester, all members of the group responded to one selected journal prompt weekly and met outdoors, in a reserved space, or at an off-campus cafe for casual discussion. Upon completion of this semester of semi-formal peer mentoring, the journal prompts were finalized and distributed to the larger team as either a physical or digital journal or set of “conversation starter” playing cards. Through this effort we learned that adding a small amount of structure to informal peer mentoring can increase the extent to which it occurs within a group, and that the combination of a structured meeting schedule and informal or unstructured discussion was very successful. Anecdotally, even as the most active period of this work has concluded, participants in the group remain more likely to reach out to each other to discuss teaching-related queries and concerns than they otherwise would have been. The weekly coffee meetings have evolved into a department-wide, bi-weekly, drop-in lunch as faculty members not participating in the program saw the benefits of making time to reflect together in a low-stakes way. We hope that sharing this success will inspire other faculty to build similar peer-mentoring activities that encourage participation and prioritize authentic reflective interactions.

The rest of this paper outlines our process for developing this program, and the information will be presented as a poster at the annual conference.

Summary of Practice

Research and Preparation

The project team was composed of all four junior faculty in the First Year Engineering group. This group was self-selected based on our interest in making more time to co-reflect on our teaching in spite of increasing professional demands. Early in the project, during the Spring term, the team members met with teaching and learning staff at the University to kick off exploration of existing literature related to reflective teaching and discuss methods of implementing our planned journal. With this advice, we used the summer term to produce a draft journal with more than 20 reflective teaching prompts. Some prompts were sourced from external resources purchased with grant funds and others were generated by the team throughout the project as we reflected on common teaching concerns.

Weekly Reflecting

The project team selected one prompt from the draft journal to complete and discuss each week of the subsequent fall term. Individuals personally wrote their reflections in their physical copy of the journal. An example prompt and response can be found in Figure 1, and the entirety of the journal is provided as an appendix to this paper. Every Monday, the team went out together for coffee and pastries (funded by the grant) and discussed their reflections. Conversations moved freely between informal discussion (i.e. “How’s class going this week?”) and the formal, prepared reflections. The team found this combination especially effective and rewarding.

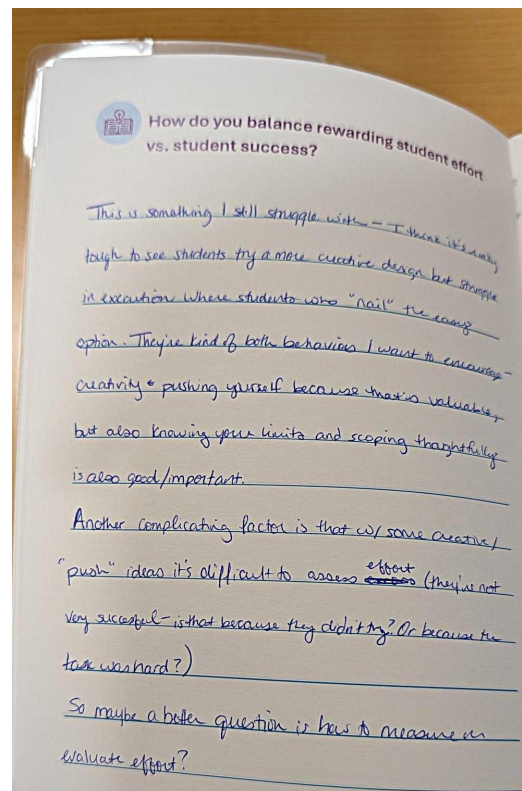


Figure 1: Sample journal prompt and written reflection.

Post-Program

The team utilized a portion of the awarded budget to purchase several reference books to address common themes arising from their conversations (e.g., inclusive teaching, student engagement, promoting creativity). Some resources were distributed to individual faculty members while other resources were shared by the whole department. Examples of texts purchased include *Teaching to Transgress: Education as the Practice of Freedom*; *Make It Stick: The Science of Successful Learning*; *Design Make Play for Equity, Inclusion, and Agency*; and *The Evolving Landscape of Creative STEM Learning*.

The grant funding was also used to purchase hard-copies of the finalized reflective journal and professionally printed card decks containing the same reflection prompts. These journals and card decks were distributed to all faculty in the department. Examples from the card deck can be found in Figure 2.



Figure 2: Examples of reflective teaching prompts in card deck format.

At the end of the project, the group filled out a short self-administered survey and met once in person to reflect on the project as a whole. Even after the program's completion, the faculty involved continue to reach out to each other regularly for professional advice. All participants expressed a kind of sadness that the program was ending, which led to the creation of a bi-weekly informal department lunch the following semester where all members of the department are welcome (but not required) to attend, bringing their own lunch and joining in casual conversation. These conversations may focus around timely teaching topics (e.g., managing student team dynamics or AI use) but just as often may not - instead focusing on weekend plans or family updates. The optional nature of these meetings and the openness of the conversation topics are fundamental aspects of their success (i.e. continued faculty engagement).

While unfunded casual meetings are beneficial for the long-term sustainability of a mentorship program like this, we note that the provision of funding at least in the short term is what built the foundation for these adaptations. Perhaps intermittent funding for small groups of junior faculty would generate the familiarity and comfort level needed to support the success of longer-term unfunded programming.

Limitations

While the authors believe a program like this can be beneficial for all engineering faculty, we would like to acknowledge several factors that may have impacted our results.

Firstly, this small group of junior faculty (4) is from a small department (15). The familiarity that this size allows introduced a certain comfort-level between participants before the program began. Secondly, the participants in this program were all teaching faculty trained in or with a sustained interest in engineering education research. The motivation to want to improve teaching certainly impacted the success of these conversations. It would be difficult or impossible to bring people to the table who did not have a strong desire to improve their teaching.

Lessons Learned

- **Structure can be a double-edged sword.** The added structure of scheduled weekly meetings provided the greatest benefit for participants. However, participants also note that much of the valuable mentoring conversation evolved naturally at these meetings, while ‘venting’ about the day or sharing a recent victory or struggle. These conversations were beneficial just as often, or even more often, than sticking to the planned journal prompt for the week. Programs should provide structure that can be relied upon when helpful, but not enforce a structure so rigorously as to prohibit productive digressions.
- **Short-term programming can have long-term impact.** While it may not be possible to permanently fund casual coffee-and-conversation-type events, we found that the use of funding to establish a habit of co-reflection and foster community in junior faculty yielded continued support and engagement not only within the participant group, but in the department as a whole. What began as funded weekly coffee meetings of four junior faculty evolved into bi-weekly un-funded casual lunch conversations within the whole department.
- **Exposure to the funding process.** The proposal for this program was originally rejected for 2023 before being revised and resubmitted to the funding office for January 2024. Rejection is a common occurrence when applying for funding, and while this was funded by an internal grant, it still provided valuable experience for the junior faculty and built resilience towards rejection in academia. While these were teaching-focused faculty, expectations for grant writing and engaging with the scholarship of teaching and learning are continually building.

Acknowledgements

The authors would like to acknowledge funding for this work from Northeastern University’s ADVANCE Office of Faculty Development..

Appendix

You can access a complete, fillable PDF version of the journal [here](#):

