

Center for STEM Learning

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TRESTLE SCHOLARS FACILITATOR REFLECTION SHEET

This reflection sheet is intended to capture your experience, feedback and advice as a facilitator of a Scholars group through the Transforming Education, Stimulating Teaching and Learning Excellence (TRESTLE) project. This report will be posted publicly as part of the group output, but you will have an option to make private comments. Please use complete sentences.

Semester and title of your TRESTLE Scholars group: Spring 2017 Faculty Scholars Group on Metacognition

Your name: Dr. Becca Ciancanelli

Please describe how the group went and its' activities ($\sim \frac{1}{2}$ page narrative. Please include: (1) the weekly list of topics, (2) how the meetings were structured, (3) any comments on the group process and how the group format was arrived at, and (4) list any products or outcomes from the group.

Week 1 - (1/23) Meet/introduce ourselves. Introduced Muddiest Point.

<u>Week 2</u> - (2/6) Discussion about what group wants from the semester, shared Muddiest Point assignments.

<u>Week 3</u> - (2/20) Discussion of Zhao metacognition research article, shared Exam Wrapper assignments.

Week 4 - (3/6) Discussion of McDonnell paper on work checking, shared Exam Wrapper assignments.

<u>Week 5</u> - (4/3) Discussion of possible Instructor metacognitive activities (COPUS, journaling, surveys).

<u>Week 6</u> - (4/10) Discussion of growth mindset starting with published research articles (Blackwell & Dweck).

<u>Week 7</u> - (4/17) Continued discussion of growth mindset using quizzes and activities for the classroom.

Week 8 - (5/1) Discussion of group final project.

We started the semester with a meet/greet session that was short because of the TRESTLE meeting happening the day. I asked the group to start thinking about how we could best direct our energy around metacognition by sharing about the activities and focus of the Faculty Scholars Group that I had participated in previously. I gave a homework assignment that day, for each participant to create a "Muddiest Point" activity to be shared at the next meeting. In the second meeting, the group discussed approaches and clearly indicated that they were interested in getting assignments and discussing evidence-based research articles. For the first few meetings, I gave assignments sheets out each week (four assignments total). Our meetings usually had two parts: discussion of a research

article and then sharing of homework assignments. As we reached the last three meetings, people continued to bring in activities that they had created from these first few assignments, and there was less interest in the research articles. At this point, the conversation was more fluid and didn't need as much structure. The group had 11 members, with strong attendance. It was important to direct the conversation so that many members would participate each time. Our conversation often floated to active learning (and how to manage it in large class settings), and I would eventually steer us back to the topic of the day. The final project includes activities that instructors created to address the "Muddiest Point" assignment and the "Exam Reflection" assignment.

How did you create a sense of community, especially in the first few weeks of meetings? (This information will be useful for future facilitators)

We started the semester with an icebreaker where people discussed their known learning style and how it has impacted a learning situation that they encountered as an adult. This activity brought some fun dynamic to meeting each other, while some people told some memorable stories. In our second meeting, each person shared their own adaptation of the "Muddiest Point" assignment. This activity also helped bring a sense of community and awareness of each other's teaching style, since it was a large group. I played the role of facilitator and managed to stay on the fringes of the conversation so that people would feel free to jump into the discussion. Since each person had an assignment to share, I could direct the conversation back on point and avoid having one or two people dominate talking time. One of our best sessions was after spring break. I asked each person to share a story from their break, and the conversation was very lively and generous that day. Afterwards, one participant shared that she was really enjoying the community and the shared conversations. There was a strong request at the beginning of the semester for discussion of research articles, which was a good start to introducing the topic at hand. However, I felt like the conversations in which a participant shared a new activity that they created and received feedback from others had more of the participants engaged in the process.

What "lessons learned" came out of this semester's Scholars Group? What recommendations would you make to another facilitator?

A big advantage for this group was the wide variety of experiences in teaching. Most people really liked the large group discussion, getting viewpoints from various disciplines, larger vs. smaller class sizes, upper division vs. lower division courses. Was the group too large? Sometimes it was hard to manage the conversation, and people didn't share ideas. It never seemed right to break the group up too much, as they all wanted feedback from each other. We did break into small groups once based on discipline with a Bloom's Taxonomy exercise. It was hard to bring them back together and have enough time to share out from each group. Perhaps if we had split up each week into smaller groups, there would have been some routine that was productive.

My recommendations to other facilitators would include the following:

• Always keep in mind what you want to discuss for the week. The participants will easily get side tracked by an interesting activity or approach that is mentioned or a political issue on campus that surfaces. Remember to guide them back to the discussion at hand, because they do want to leave each session with a sense of what they learned and what they want to take on for the next couple of weeks.



- It works to give them an actual assignment for the first few weeks. They will know exactly how to approach the new material and they will be able to bring something to share that indicates their style of teaching.
- By mid-semester, the group will have developed a personality, and it is important to check in to see how they want to proceed with the rest of the semester. Don't be too attached to your plans. It is good to have a list of topics that you want to cover, but not a set agenda.
- If you can convince a former facilitator to be a sounding board, do it! It is wonderful to spend about 20 minutes with that person a few days before each meeting to get feedback on your approach.
 Sometimes, it may only be a quick phone call. This structure will allow you to focus on the conversation at hand during each meeting instead of worrying about your approach.
- Sometimes, faculty members will want your attention one-on-one for a question about their class. Make sure to tell them, as you would with a student, that you can stay after to discuss it with them. Otherwise, the other members get slightly irritated about one person dominating the conversation.

What impacts did you observe on TRESTLE Scholars? How did conversations shift, what sorts of ideas seemed most transformative for participants, what comments were made about changes in the classroom?

The most obvious impact on the participants was a deeper understanding of how to get information from students that would help the instructor determine where the learning process was not working. The participants did quite a bit of work on designing questions to elicit the best feedback from students about their learning process and how they study. If this group continued, the next phase would involve how to respond effectively to this feedback to impact the students' ability to alter/change their study strategies/behavior.

The participants were also impacted by learning about ways that other faculty reach out to students in different disciplines and courses. There were many moments where a faculty member would share a technique that they had designed, that would encourage perserverence for example, and others would take notes and share how they might adapt that idea for their course. There was a lot of interest in how to adapt self-reflection work for large classrooms. The discussion regarding mindset was curious and passionate, but it did not translate into concrete ideas for the classroom.

There was also a good discussion about the "modes of learning" in different disciplines, and how we can be more transparent about how experts in our field process information or practice their skills. In other words, the group practiced instructor metacognitive activities inside our sessions. No one completed the assignment for this topic, focused on COPUS or Instructor Talk, indicating that they prefer to do this analysis inside of the group conversation.

Many of the participants had never read evidence-based educational research articles. They seemed very curious about this field, and they got a better understanding of what types of research are prevelant in the realm of metacognition in STEM classrooms.

Lastly, and perhaps most important, participants were exploring the shift in the classroom culture by incorporating metacognitive activities. They were speculating that students may feel safer in the classroom to share and ask questions, given that they believed that the instructor cared about their learning process.



What recommendations do you have for TRESTLE? (Consider ways that TRESTLE could have better supported you and/or participants).

Maybe cap the group at 8-10 participants? I felt like we received plenty of support. It would be nice to somehow create an ongoing connection with the group, perhaps a local conference each semester.

Also, it is challenging to pull together the final report at the end of the semester. Due to timing, most faculty are busy and then leave town. I would recommend asking for submissions of work DURING the semester. You can be compiling the final project along the way, especially if participants are signing up weekly to present work. The group reflection document could be created at the final session, if several participants bring their computers to work together. The facilitator should insist on getting it complete before ending the session. This semester, we took notes at the final meeting, but then no one took on putting them together as a good reflection.

