

Impact of Reflective Practices and Videos on Graduate Teaching Assistants' Pedagogy

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The development of instructional practices, skills, and pedagogical content knowledge is a key aspect of training Graduate Teaching Assistants (TAs) (Dehsler et al., 2015). Current work like the CoMinDS resource (2021), shared at RUME conferences aim to understand and support TAs as they develop these professional teaching practices. This study was conducted in a TA seminar for an inquiry based precalculus course at a large research university to investigate the impact of guided reflection, alongside video recording, on graduate teachers' pedagogy and how it supports decentering (Teuscher et al., 2016), a process advocated for and supported in previous literature (Hauk & Speer, 2023).

This semester, we introduced a self-reflection assignment following observation and recording by one of the graduate co-instructors. This included rating their practices twice: once immediately following teaching, and again while watching a recording of themselves and discussing their findings with one of the co-instructors. Comparing the ratings students gave themselves (on a scale of 1-3) before and after, showed no significant change in overall rating. However, most of the students realized they weren't initially using student centered practices. One TA noted:

I really thought... I was engaging students... After I watched myself, I realized that I ask questions but don't give them enough time to think through it... I need to give them enough time to think about it. But, then again, when I do that I'm just pressed for time.

The narrative of 'Too much material and not enough time' is a common barrier for instructors in using student-centered teaching practices (Petersen et. al., 2010). During this teacher's second observation, it was clear they took wait time into account as they intentionally engaged with table groups and waited for the group to come to a conclusion before moving on. In the second interview when asked how they felt before and after watching their lesson:

I felt way better than I did before. There was more engagement and I used a new approach...I gave them some time to think about the question and then if I wasn't getting my answer I tried to lead the students to answer the question or rephrased it.

This TA recognized the change in their practice and even increased their self-efficacy, which was an unintended consequence, but not unheard of (Chiu et al., 2019). From the observation, the co-instructor noted that the TA also repeated student explanations and asked students to explain what expressions represented, two decentering practices used on the reflection form.

Using reflection forms that intentionally prioritize decentering techniques, and problem-solving strategies can help graduate teacher assistants come to conclusions about their pedagogical approaches. Using recordings to reflect helps them gain specific insights into how they teach and ways they can individually improve their teaching. This poster will provide additional quotes from TAs to support the current literature, which highlights video and guided reflection as tools to improve instruction and move towards student-centered teaching practices.

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