

Research Summary: TA Decision Making in the Classroom

Research Questions & Study Rationale

There is an existing body of literature examining how experienced faculty in higher education institutions respond to student cues in the classroom as they are teaching. These verbal and non-verbal cues indicate to faculty how students are learning and experiencing the teaching situation. In turn, these cues impact the 'in the moment' reflection and decision-making processes of the instructor, which influence whether they modify or continue with their teaching practices.

However, there is a gap in the literature examining how early-career educators, such as Teaching Assistants (TAs), engage in these decision-making processes. TAs often encounter unique challenges as new instructors with little prior formal teaching experience. As such, learning about how TAs respond to and reflect on cues in their classrooms provides insight into their development as instructors. With this in mind, this exploratory study examined TA decision-making processes by addressing the following research questions:

- 1) How do TAs make decisions in front of students while teaching in the classroom?
 - a) What sort of cues do TAs respond to? What do they look for in their classroom?
 - b) How do TAs experience situations in which they're making decisions in the classroom?
 - c) What experience and/or knowledge do TAs draw upon when making decisions in the classroom?

Methodology

Ten TAs leading first-year tutorials in the faculties of Humanities, Social Sciences, and Science at McMaster University consented to participate in the study. A member of the research team took observation notes and audio-recorded one of each participant's tutorials (if students in the class consented). These recordings and observation notes served as memory prompts during subsequent semi-structured interviews with the TA participants. During the interviews, participants were asked to reflect on certain moments in their tutorial and to consider how they connected to their decision-making processes in the classroom. The interviews were transcribed verbatim and then analyzed using constant comparative analysis.

Key Findings

Factors Affecting Decision Making

Participants reported modifying their teaching based on their interpretation of cues such as students' body language and facial expressions. For example, nodding, note-taking, and the presence or absence of eye contact were positioned as indicators of whether students were

engaged in learning. Class context, such as the time of day or year, also had an impact on classroom dynamics, and consequently influenced how TAs delivered content in the class and interacted with students.

Experiences and Resources Supporting Decision Making

TAs reported a wide range of past experiences, both in and outside of the classroom, which informed their decision-making processes. Most notably, participants modified their teaching based on what they found helpful or struggled with when they were a student learning similar material. Additionally, transferrable skills from extracurricular opportunities that involved mediating group dynamics and public speaking influenced how participants approached their teaching. Participants also referred to conversations with colleagues, family members, and friends, positioning these as helpful opportunities to talk about teaching.

Experiences and Affect

Participants reported experiencing a spectrum of emotions while responding to cues in the classroom. Some participants found they became more confident in their choices and actions as an instructor as they gained more experience with teaching and/or the class material. Some also reported feelings of happiness or relief when they believed their actions in the class were effective. However, this was balanced by an underlying anxiety and doubt expressed by many participants. Some felt they did not have sufficient experience to deal with the content or student questions, for example, while others described feeling unable to determine whether students were understanding what they were teaching.

Next Steps and More Information

The preliminary findings were presented at the European Conference of the Scholarship of Teaching and Learning (EuroSoTL) in June, 2017 (See http://konferens.ht.lu.se/fileadmin/_migrated/content_uploads/Nair_etal.pdf). A more extensive manuscript has been submitted to *Higher Education* for publication, and two further manuscripts are currently in preparation.