Reflections on a Peer-Led Mentorship Program for Graduate Teaching Assistants

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This poster will describe a peer-led mentorship program offered to Graduate Teaching Assistants (GTAs) in a Canadian University. We present the creators' rationale for implementing this program, as well as the perspectives of the two graduate student peer mentors who have taken the lead in its development and implementation.

Keywords: Graduate teaching assistants, peer-mentoring, professional development

Research concerning the professional development of mathematics graduate teaching assistants (GTAs) has been driven by two seemingly contradictory observations: (1) GTAs typically arrive at their graduate studies with little to no *formal* training in mathematics education (Kung & Speer, 2009); and yet (2) GTAs play a significant role in shaping the current and future state of undergraduate mathematics education (Speer, Gutmann, & Murphy, 2005). To assist GTAs in successfully assuming teaching-related positions like marking, one-on-one tutoring, leading tutorials, or instructing introductory courses, training programs of various natures have been developed and discussed (e.g. Belnap & Allred, 2009; DeFranco & McGivney-Burelle, 2001). With this poster, we aim to contribute to this discussion by presenting and reflecting on one possible approach to "training", in the form of a peer-led mentorship program. This represents the initial phase of a wider research project aimed at better understanding how to provide GTAs with *educational experience* (in the sense of Dewey, 1938). Our work aligns with the goal mentioned in multiple papers (Speer, Deshler, & Ellis, 2017; Speer, Murphy, & Gutmann, 2009) to use research to inform the design, improvement, and efficacy of professional development programs for GTAs.

For almost a decade, a retired professor volunteered at a mathematics department of a large, urban Canadian university to provide support to new GTAs. Following his retirement from all activities, the department decided to initiate a peer-led mentorship program in the fall of 2016. Although the initial motivation for shifting to peers as opposed to professors was mainly an issue of availability, the department grounded its choice on two main goals. First, to provide students with training and guidance from mentors who can closely relate to their current experience, both within and beyond their teaching roles. And second, to build a safe (i.e., confidential and non-evaluative) community within which graduate students come to see it as normal to receive feedback about their teaching, reflect on their teaching choices, and discuss various pedagogical and didactic issues. Two doctoral students were chosen to run the program, based on their previous experience and interest in teaching, certain characteristics of their personality (e.g., their likelihood to put a lot of effort into the development of the program, as well as to be empathetic, open, and constructive in interactions with their colleagues), and their complementarity (e.g., one researches pure mathematics, while the other researches mathematics education at the university level).

Our poster will provide details about the kinds of interactions that have occurred between the mentors and mentees, sometimes over multiple semesters, and reflect on struggles and successes, as perceived by the mentors. As a result, we hope to incite discussions about the participation of peers, who have studied both mathematics and mathematics education, in improving the experience of GTAs and the teaching and learning of mathematics at the undergraduate level.

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