

MATHEMATICS TEACHER EDUCATORS USING SELF-BASED METHODOLOGIES

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Narrative inquiry, self-study, and autoethnography (i.e., self-based methodologies) are becoming a more common choice of mathematics teacher educators (MTEs). This has opened new possibilities and challenges for early career MTEs as they try to disseminate their findings in mathematics education journals. Building from our working group at PME-NA 2018 and 2019, we respond to the need for creating a community where MTEs can feel supported in their study design, implementation, representation of findings, and publication using self-based methodologies. This year, we continue our focus on mentoring and scholarship on self-based methodologies. We invite English- and Spanish-speaking MTEs with research projects in any stage of preparation to join us in discussions meant to promote growth, sustainability, and continued insight into the use of self-based methodologies.

Keywords: Mathematics Teacher Educators, Research Methods, Narrative Inquiry, Self-study, Autoethnography

Context and Significance

Building from Hamilton, Smith, and Worthington (2008), we have adopted the language of *self-based methodologies* (Chapman et al., 2020) to refer to narrative inquiry (Clandinin & Connelly, 2000), self-study (LaBoskey, 2004), and autoethnography (Ellis & Bochner, 2000). These research methodologies focus on self-understanding based on personal professional experiences and are often used in teacher education (e.g., Grant & Butler, 2018; Grant, 2019; Kastberg et al., 2019; Ross, 2003; Sack, 2008; Samaras & Freese, 2009). In mathematics education, self-based methodologies are growing in use in journals (e.g., Chapman, 2011; Chapman & Heater, 2010; Cox et al., 2014; Grant & Butler, 2018; Kastberg et al., 2018; Kastberg et al., 2019) and conferences (Brand, & Jung, 2019; Clark et al., 2019; Cox & D'Ambrosio, 2015; Gallivan, & Rumsey, 2019; Kinser-Traut, 2018; Kosko, 2019; Lischka et al., 2018; Lischka et al., 2019; McGraw & Neihaus, 2018; Richardson & Zhou, 2019; Towers et al., 2019; Truxaw & Rojas, 2019). Yet, using self-based methodologies is still less widespread in the mathematics education field. Our goal is to keep growing our international community of MTEs, in which they feel sustained and empowered in their use of self-based methodologies.

History of the Working Group

Over the past two years, we have been building a community with the goal to support each other and to expand our network of MTEs who use self-based methodologies (Suazo-Flores et al., 2018; Suazo-Flores et al., 2019). After receiving positive responses from conference attendees in North America, our goal now is to diversify our membership by providing spaces for Spanish-speaking

MTEs who want to learn, or are already using, self-based methodologies. We resonate with Whitcomb et al. (2009) call for creating spaces where MTEs feel energized. Over the last two years we have felt energized, which motivates us to continue providing spaces at conferences where MTEs who use self-based methodologies feel sustained and empowered in their professional practices (Jaworski & Wood, 2008). We think organizing such spaces contributes to the diversification in the use and acceptance of self-based methodologies (Bullock, 2012; Stinson & Walshaw, 2017).

Plan for the Working Group

We anticipate that many of the attendees at PME-NA 2020 will be Spanish speaking MTEs. Therefore, our working group will be facilitated in both Spanish and English. Given the personal nature of studies conducted under self-based methodologies, we will work on creating an atmosphere of trust and care. Day 1 will be a professional development day where the audience will learn about (1) communities of practice, (2) focus, (3) characteristics, (4) methods, and (5) professional growth in these methodologies. On Day 1 MTEs will also start drafting questions or topics they would like to explore. On Day 2, participants who have used self-based methodologies will be invited to share their work so that MTEs, who are new to such methodologies, can ask questions. We envision Day 2 also as an opportunity for the presenters to receive feedback on their ongoing work. On Day 3, MTEs will work in small groups where they can feel vulnerable and receive more personal feedback. MTEs who are new to these methodologies will continue planning inquiries to puzzling questions or topics of their interest using self-based methodologies. We will conclude our time together on Day 3 with the group planning for future meetings and projects, so that we keep nurturing each other in the use of self-based methodologies.

Conclusion

As MTEs increasingly use self-based methodologies, communities are needed to support their research practices including study design, implementation, representation of findings, and publications in mathematics education journals. This working group intends to be such a community, where over time MTEs feel supported and sustained in their use of self-based methodologies.

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