

## CONCEPTUALIZING ACCESS KNOWLEDGE FOR TEACHING MATHEMATICS

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Drawing from critical approaches to disability such as neurodiversity and Disability Justice this paper focuses on developing understanding of teacher knowledge necessary for successful engagement of students with disabilities in meaningful mathematics. Students with disabilities have long been conceptualized through deficit frames within both special and mathematics education and denied opportunities to engage in sense-making (Lambert 2018). Utilizing data from a previous study (Lambert, Sugita, Yeh, Hunt, & Brophy, 2020), this paper is a call to reframe teacher knowledge in mathematics to understand the importance of *access knowledge for teaching mathematics*, knowledge about how math class and math learning feels to students with different *bodyminds* (Price 2011).

Disability Justice (Berne 2017) is an emerging political movement in the disability community that includes attention to intersectionality and embodiment. Access is understood not as not only being able to enter a space, but relational engagement within that space (Mingus 2017). The concept of access-knowledge comes from the work of Aimi Hamraie (2018) who analyzed how disabled maker culture and the founders of Universal Design redefined access-knowledge towards creative problem solving based on close understanding of user experience, as well as understanding the complexity and diversity within disability.

I define Access-Knowledge for Teaching Mathematics (AKTM) as knowledge about how math class and math learning feels to students with different bodyminds, including an approach to solving access issues for students that locates difficulties in classroom spaces, practices and school systems rather than within individual students. Solving access issues necessarily involves collaboration between the student and the teacher. Access is not just being able to enter a classroom, or be given alternative to particular forms of presentation, but also access to relationships, interaction and a feeling of safety that are at the core of student's experiences in school. This paper expands current scholarship in mathematics education teacher education by theorizing new forms of teacher knowledge necessary to include students with disabilities in meaningful mathematics.

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