Equity and Justice

CAPTURING THE HIGH GROUND IN LEARNING DISABLED MATHEMATICS EDUCATION RESEARCH

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Despite the mathematics-for-all mantra, few mathematics education (math ed) scholars have studied learning disabled (LD) students' mathematical learning (Xin et al., 2015). This extremely low number of math ed studies specifically on LD students is puzzling (considering that LD students comprise at least 5% of student populations) and unfortunate (because special education scholars—steeped in behaviorist/medical-deficiency paradigms—have dominated the research landscape and largely promulgated a dehumanizing, explicit-only instructional approach for LD students' mathematics learning that directly contradicts current reform-oriented approaches embraced by the math ed community). This special education explicit-only message is so pervasive that even mainstream reform-oriented math ed publications—like the National Council of Teachers of Mathematics' position statement on intervention (NCTM, 2011)—default to this explicit-instruction-is-best-for-LD-students belief. It is time for the field of math ed to "capture the high ground" by exerting more influence on the research narrative about what instructional methods are appropriate for LD students.

It is in this context that this mixed-methods research study investigates with fine-grained analysis the embarrassingly immature condition of math ed LD research. I examine the various tiers of math ed research publications (as defined by various authors, e.g. Toerner & Arzearello, 2012; Williams & Leatham, 2017) to describe the quantity and quality of LD math ed research by math ed scholars. For example, over the last 20 years, the two top-tier math ed journals, *Educational Studies in Mathematics* and the *Journal for Research in Mathematics Education* have only published six and five studies—respectively—on LD students' mathematics learning. Even the proceedings of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA) demonstrates a paltry 1.7% ratio of LD to all studies, far below the 5% minimum threshold expected based on the number of LD students in mathematics classes. I also apply Glaser's (1965) constant comparative method to develop a theoretical matrix cataloging the various types of math ed publications that include LD issues (e.g., ones that include special education statistics without separating out LD students from those with physical handicaps). I conclude with concrete recommendations for mathematics educators to capturing the high ground of LD math ed research.

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