Preservice Teachers’ Noticing of Middle School Students’ Mathematical Strengths

Dorothy Y. White
University of Georgia

Abstract: Mathematics teacher educators (MTEs) design methods courses to “provide candidates with tools and frameworks to support a more asset- and resource-based instructional approach focused on students’ strengths in learning” (AMTE, 2017, p. 35). Through a strength-based orientation, MTEs can support prospective teachers (PSTs) ability to view all students as doers of mathematics, thereby recognizing that all students have mathematical strengths. Fostering PSTs asset-based orientations will require MTEs to examine how PSTs understand and notice mathematical strengths. To do so, I draw upon the research on teacher noticing aligned with Sherin’s (2001) notion of professional vision as the ability to notice and interpret significant features of classroom interactions. In this session, I present preliminary finding from a cross-site study conducted with two cohorts of PSTs enrolled in different teacher preparation programs. More specifically, I will describe the key activities and design of the research project, engage the audience in a brief task, and share the types of strengths PSTs noticed while working with middle school students. I argue that strength-based orientations can help PSTs develop more robust orientations about what it means to do mathematics and may disrupt and overcome their culturally-learned deficit orientations about students