Erin R Moss* (erin.moss@millersville.edu), Allison Toney and Caitlin L Ryan. When All of the Above Isn’t the Answer: Examining Mathematics Pedagogy through a Lens of Social Justice.

In our geometry courses for future teachers, we implemented an interdisciplinary literature, mathematics, and social justice project that was marked by good intentions and unintended consequences. Our students read Shelley Pearsall’s novel All of the Above, then engaged in a related class discussion and writing assignment. The book, based on a true story, describes the attempt of inner-city middle school students to construct the world’s largest tetrahedron. Beyond exploring connections between the tetrahedron and the structure of the text, our goal was for students to experience a counternarrative to traditional views of students of color by studying a novel that positions the young characters as mathematicians. Our students’ verbal and written responses suggest that we fell woefully short on our second goal. Upon further reflection, we realized the traditional approach to pedagogy presented in the novel served to disempower the characters mathematically, preventing it from providing a compelling counternarrative. Where there is a challenge though, there is opportunity. As we discuss the inherent complexities in trying to teach for social justice, we share the humbling lessons we learned in the process and propose modifications to bring outcomes more in line with our intentions. (Received September 17, 2019)