Scott Baldridge* (sbaldrid@math.lsu.edu), Department of Mathematics, 380 Lockett Hall, Louisiana State University, Baton Rouge, LA 70803. Coherence in geometry: Preparing students for transformational geometry.

The prominent inclusion of transformational geometry in the Common Core State Standards sets the standards apart from every other set of standards that came before it. The inclusion is a structural change with far ranging consequences that reverberate throughout K-12 and college, which is one of the main reasons why publishers cannot simply rearrange their textbooks to remain CCSS compliant. In this talk, I will discuss the definitions, axioms, theorems, and problems embedded into the Eureka Math/EngageNY curriculum that not only prepare students for discussing transformational geometry by eighth grade, but help them to take full advantage of this powerful tool in high school and beyond. (Received September 05, 2014)