Su Liang*, One UTSA Circle, University of Texas, Department of Mathematic, San Antonio, TX 78249. Visualizing Connected Mathematics through Problem Solving.

Inquiry-based Learning (IBL) provides opportunities for students to understand mathematical ideas by actively engaging in the process of doing mathematics. Meaningful class activities are necessary to ensure teaching/learning effectiveness in IBL classrooms. In the session, the author is going to share a class activity that helps preservice mathematics teachers see how mathematical ideas are systematically connected across grade levels from different perspectives such as arithmetic, algebra, and calculus. This activity will demonstrate how a class task can facilitate a meaningful inquiry by engaging students in doing meaningful mathematics. (Received September 10, 2020)