

1154-J5-1765      **Scott Zinzer\*** ([szinzer@aurora.edu](mailto:szinzer@aurora.edu)). *Explicit Teaching Connections in Elementary Number Theory*. Preliminary report.

A course in Elementary Number Theory offers many rich connections to the K-12 mathematics curriculum. In this talk, I will describe the inclusion of explicit teaching tasks, reflections, and assignments newly added to my Elementary Number Theory course for mathematics majors. These activities are designed to highlight applications to the work of high school mathematics teachers and to encourage future secondary teachers to seek connections to the elementary mathematics curriculum. At the same time, the activities require an added depth of mathematical thinking that benefits every student. In addition to sharing sample activities, I will give an overview of student reactions to the activities and the impacts on student learning and engagement. (Received September 16, 2019)