Mara Alagic* (mara.alagic@wichita.edu). Learning mathematics through mathematical modeling of crafts.

An ongoing interdisciplinary longitudinal study focused on developing math-related pedagogical content knowledge (Ball, 2000) in the context of visual and creative digital environments resulted in a collection of projects clustered around different themes. The cluster that this abstract is focusing on is a result of preservice elementary teachers creating mathematical representations/models of everyday crafts, actually crafts from a culture different from their own.

The resulting research presentation will take you through a gallery of bridges between mathematics and the arts/crafts in three ways: First, a selected set of students’ constructed mathematical models of crafts will be presented; Second, the sample of students’ interpretations/reflections will be included; and Finally, data analysis of students’ mathematical thinking about their own learning processes and changing (or not) perceptions about ways in which they intend to teach while nurturing creative ways of understanding/doing math. (Received September 17, 2019)