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Mara Alagic* (mara.alagic@wichita.edu). *Nurturing Preservice Elementary Teachers' Creative Mathematical Thinking.*

This abstract provides a snapshot from a longitudinal study focused on developing math related pedagogical content knowledge (Ball, 2000) in the context of visual and creative digital environments. In a classroom culture in which teachers view math most often as the completion of algorithms and usually associate creativity only with arts, they struggle to understand how creativity, art and technology might improve math learning. “A worst-case scenario would involve newly qualified teachers entering the classroom unable to recognise creativity, ultimately discouraging those creative pupils from pursuing mathematics or, at least, from being mathematically creative” (Bolden, Harries, & Newton, 2010, p. 154). Preservice elementary teachers were required to design an artistic, visual and dynamic representation of a math concept of their choice and provide an extensive (guided) explanation of how they might use their work in a math classroom. The resulting research presentation will consists of two parts: (i) sample student’s projects (e.g., dynamic GIFs), and (ii) data analysis of teachers’ 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 26, 2017)