

1135-VV-1797      **Sherrie Serros\*** ([serross@mtmary.edu](mailto:serross@mtmary.edu)), 2900 River Pkwy, Milwaukee, WI 53222, **Erick B Hofacker** ([erick.b.hofacker@uwrf.edu](mailto:erick.b.hofacker@uwrf.edu)), 214C North Hall, River Falls, WI 54022, and **Ashlee LeGear** ([ashlee.legear@uwrf.edu](mailto:ashlee.legear@uwrf.edu)), 207 North Hall, River Falls, WI 54022. *The Power of Visuals when Teaching Secondary Mathematics*.

One of the eight best teaching practices as advocated in Principles to Action (NCTM, 2014) is that teachers use and connect mathematical representations. An important characteristic for a successful secondary mathematics teacher is one that embraces the use of visuals when they learn new mathematical concepts. In order to develop this sense, mathematics teachers need opportunities to engage in meaningful tasks that present the opportunity to use powerful visuals through either their undergraduate coursework, or through professional development.

We will share a series of rich mathematical tasks that provide teachers the opportunity to use and develop these visuals over multiple domains of study in secondary mathematics. Bar models and linking cubes will be examined for their usefulness when looking at equivalent algebraic expressions and solving algebraic equations. Double number lines provide an important visual when working with situations involving ratios and proportions. Area models can be used throughout a progression of topics involving multiplication and division. By emphasizing these visuals when teaching, it sends the message to students that these are appropriate and important tools that should be regularly used when studying mathematics. (Received September 24, 2017)