1145-Q5-2773   **Craig M. Johnson*** (`johnsonc@marywood.edu`), 2300 Adams Ave, Marywood University, Scranton, PA 18509. *Mathematical Modeling in the Liberal Arts Course.*

I strongly feel that the liberal arts math students should be exposed to easily mastered methods of creating their own mathematical relationships from data sets they have actually collected themselves. The construction of functional relationships strikes at the heart of what people in "real world" jobs often do who depend on mathematics as their operative tool. The emphasis here is on finding an appropriate model of a two-variable phenomenon from a table of paired data rather than the traditional approach of being given the model at the outset. Linear fits are found using the much simpler Wald Method rather then memorizing the daunting formulae of linear regression. Then exponential functions are also constructed again with a more intuitive approach.

The hope is that long after the student has forgotten a collection of formulae he needed to memorize in order to pass a test, he will retain a general methodology or "sense" for identifying a quantitative relationship in a set of data. This approach not only highlights the exploratory nature of mathematics, but also comes significantly closer to truly mathematically empowering the liberal arts student. Examples of data sets from past semesters will be presented. (Received September 25, 2018)