

## Making Sense of Measures of Variability and Center

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Research has shown that people commonly struggle with concepts regarding measures of variability and center in statistics (Groth, 2014; Groth & Bergner, 2006; Kader & Mamer, 2008; Mokros & Russell, 1995). This study focuses on examples of how teachers made sense of interquartile range and mean absolute deviation from the mean using productive meanings for measures of center. Furthermore, we examine how teachers leverage ways of reasoning multiplicatively to develop meanings for these statistics.

Keywords: descriptive statistics, measures of center, measures of variability, multiplicative reasoning, professional development, middle school mathematics, introductory statistics



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