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EDG500

January 23, 2023

For the research project, the topic would be the use of nonlinguistic representations. The study would be specifically target manipulatives in math. Nonlinguistic representations such as manipulatives are important because it makes a math problem come to life in a real world setting. A student may have a sense of what a half looks like when you cut a sandwich in half or even what a pizza pie would look like if you cut it in half, but it has been observed that the concept of half of a number or the concept of twice as much as a number can be tricky for students at first. When a teacher uses manipulatives such as counting blocks these math problems become visual and a little easier to understand. "When teachers use nonlinguistic representation strategies, they help students represent knowledge as imagery. These strategies are powerful because they tap into students' natural tendency for visual image processing..." (Marzanop et al., 2008, p.64). The question that would be tackled is the following, should manipulatives be used to introduce a new concept or should they be used as a supplement? This is subject to change as more options for research are weighed.

Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2008). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Association for Supervision and Curriculum Development.