***Mathematics Teaching in the Middle School (MTMS)***

**Tasks to Develop Language for Ratio Relationships**

The authors describe tasks that were developed to build a foundation for the meaning of ratios. The discussions provide readers with a deeper understanding of the mathematical concepts underlying ratio and proportional reasoning.

Rathouz, M., Cengiz, N., Krebs, A. & Rubenstein, R. (August 2014). Tasks to develop language for ratio relationships. *MTMS 20*(1), 38-44.

**Advice for Mathematical Argumentation**

Three middle school teachers engage students in argumentation by *telling* and *showing* them how to argue. A mathematical graphic organizer with three sections (Conjecture, Justification, and Conclusion) was used to help students organize their mathematical arguments.

Knudsen, J. & Lara-Meloy, T. (April 2014). Advice for mathematical argumentation. *MTMS 19*(8), 494-500.

**Beyond the Write Answer**

The authors describe four writing strategies that promote reasoning, sense making, mathematical connections, and clear communication. Examples are included.

Haltiwnger, L. & Simpson, A.M. (April 2013). Beyond the write answer: Mathematical connections. *MTMS 18*(8), 492-498.

**Putting Mathematical Discourse in Writing**

Sixth-grade teachers view student work and learn about student thinking through a problem-solving pen pal project between preservice teachers and sixth graders.

Lynch, S.D. & Bolyard, J.J. (April 2012). Putting mathematical discourse in writing. *MTMS 17*(8), 486-492.

**Assessing Understanding Through Reasoning Books**

When students are asked to explain their reasoning, they often struggle to clearly communicate or justify their reasoning. The strategy discussed is the use of *My Mathematical Reasoning Book*to help students communicate their thought processes to a larger audience.

Roberts, S. & Tayeh, C. (March 2010). Assessing understanding through reasoning books. *MTMS 15*(7), 406-414.