

## Combining Writing and Math

**Summary:** While writing is often used in other subjects such as social studies and science, it is rarely combined with math. Two Brigham Young University instructors write in an article for *The Reading Teacher* about ways to integrate writing and math and thereby increase students' skills in both areas.

### Practical Applications

The authors break their suggestions into two categories: writing that doesn't involve revision (generally these are strategies which are quicker but less sophisticated), and writing that does.

#### *Writing without Revision:*

- **Learning Logs:** By giving students a few minutes at the beginning and/or end of class to write a summary of what they learned either the day before or during that lesson, they have a chance to reflect on what they learned. Teachers who use learning logs and have students share their ideas with peers find that the quality of discussion increases.
- **Think/Write/Share:** A variation of the popular think/pair/share method, this involves posing a math question and giving students a minute or two to write their ideas before discussing it with partners or the class
- **Note-Taking/Note-Making:** With this strategy, students fold the paper on which they are taking notes in half vertically. The left side of the paper becomes for following along with the teacher, while the right side is for jotting down their own thoughts and questions. An example the authors give is a student who, in a lesson on integers, wrote in his note-making section, "It is weird that -2 is greater than -5" and later made up his own analogy.

#### *Writing with Revision:*

- **Shared Writing:** The teacher leads the students in creating a class writing piece (e.g. a letter) about what they have been studying in math. By taking student input, students are able to practice their writing and revising skills.
- **Class Book:** A follow-up to the shared writing piece, the teacher can label the different sentences or paragraphs of the piece and have each student take one and expand it into a page for a class book about the topic (e.g. a book about geometry). Similarly, a class book can be created out of student-crafted word problems about the topic being studied.
- **Math Stories (revision optional):** This is an idea the authors cite from a different teacher who has her students create fictional stories based in mathematical concepts, such as "The Hexagon Adventure" or "The Magical Subtracting Frying Pan."

### Conclusion and Citation

Integrating writing into other subjects has been shown to increase students' achievement in both subjects. Yet, writing and math often remain separate. These are just the tip of the iceberg in terms of possible ways to combine the two and to give students a richer experience both in their writing and in their mathematics.

Monroe, E. & Wilcox, B. "Integrating Writing and Mathematics." *The Reading Teacher*, 64.7 (2011), pp. 521-529. <http://tinyurl.com/3g4ontf> (subscription only).