



IT WORKED!

Utilizing Journals to Focus on Modeling and Reasoning

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Throughout the five years I have been a Mathematics Coach in one building our instructional focus has been on writing in mathematics. To support my primary teachers, I shared many resources on how to infuse writing in their mathematics instruction. During the 2014-2015 school year, many teachers began using the *JUMP* books and journaling as a way to weave mathematical standards together to show what model the students utilized and the reasoning students used to arrive at a solution.

We found the *JUMP* books and the teachers implemented the resource in their instruction. Teachers felt they wanted more rigor and this empowered them to then write their own journals. I encouraged staff members who were finding success in writing their own journals to share with their colleagues. This created a culture in which teachers then wanted to use journals in their classroom. This culture created a school wide initiative.

Initially, teachers found the *JUMP* books to be easily infused into their daily instruction because they were aligned to the Common Core Standards. The resource allowed teachers to search by standard for a journal prompt that would either reinforce a learned standard or to find a prompt for a standard they were currently teaching. The *JUMP* books became a powerful resource for the teachers. As students responded to a prompt, they would date the entry and it became a resource for students, parents, and the teacher to look back on and admire the growth the student had made in their ability to model and reason about a concept. Some teachers created their own journals as well. Students would grapple with a problem and use tools such as ten frames, number lines, hundreds charts, part-part total mats, equations, or a picture to solve the problem and explain their reasoning when solving the problem. Additionally, students may complete other activities in the journal such as focusing on a number of the day and writing expressions equivalent to the number, representing the number with a different number of tens and ones, or representing that number using coins.

This year, teachers were able to use the framework created in the *JUMP* books and their own instructional ideas to create their own journals. During summer long-range planning, all of the math teams decided to use journaling in their mathematics classroom. We utilized this time to collaboratively write journals to use instructionally. Teachers differentiated the team journals to meet the needs of their students by enhancing the rigor as necessary.

As we move forward, I would like to have the intermediate grades emphasize when they would only like the students to write a mathematical equation to model their answer and when they would like students to explain their reasoning.

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