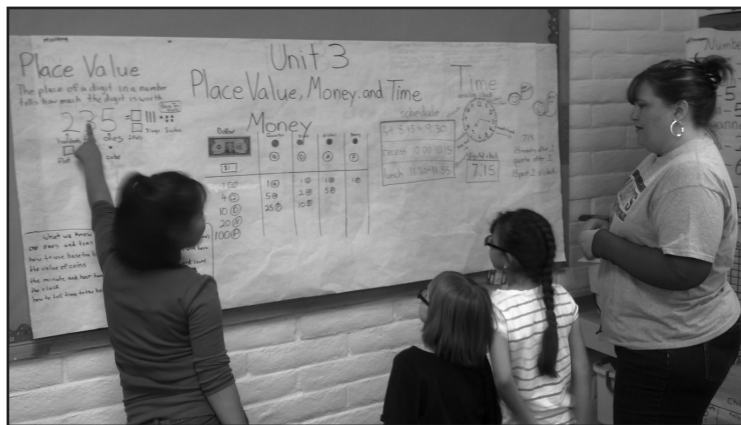


# Reflecting on AIM4S<sup>3</sup> Implementation— What are We Learning?

by Lisa Meyer—DLeNM, with Teachers from Deming, New Mexico

Promising practices...

A small group of energetic teachers recently met in Deming, New Mexico, to talk about how the AIM4S<sup>3</sup> model was impacting their mathematics instruction. On the walls they hung Compendium charts, smaller support charts focusing on one key concept, and chants—evidence of their work with students. As each teacher shared classroom charts and observations, much of their discussion focused on the Compendium: the co-construction with students, including it in on-going instruction, and finally, the initial planning of the content.



Deming teacher Dawn Ortiz and her second-grade students review their Compendium for a unit on place value.

All of the teachers agree that the Compendium has become an essential component of their practice and that it is not only a support for student learning but for their own instruction as well. With its concept frame and standards, the Compendium focuses the classroom community on the key concepts students need to master, and it includes student voice in the instruction right from the beginning with the inquiry chart. Used effectively in conjunction with other strategies, it is a powerful resource that supports students in becoming independent learners.

## Delivery of the Compendium

The teachers discussed their realization that several basic aspects of delivery were key to success with the compendium. One of these is the importance of writing big enough for students to be able to read the chart from the back desks; another is having the current chart in a prominent place, accessible to students during mathematics instruction. Carisa Gray, second-grade teacher, shared that building the chart in front of students not only supports the mathematical conceptual understanding but helps students see the process and learn how to organize their notes, using labels, examples, and visuals to support their understanding. Another teacher added that including

student voice is invaluable during both the initial construction and afterwards. The frequent use of 10/2s and learning logs/white boards allows students to process information as the compendium is being built and/or reviewed, giving students a sense of ownership

in the content on the chart. Aaron Rogers, fourth-grade teacher, is experimenting with using an essential question from the unit as the title of the Compendium, guiding student discussion and the inquiry chart, as well as meeting the district requirement to post the essential questions.

In kindergarten, teacher Karen Roberts found that building the Compendium over the course of the unit works well. She revisits the last concept put on the chart before adding the new section. The consistent use of 10/2s throughout her instruction, along with sentence stems to support student participation in mathematics games, is elevating the students' language use. She has found that, "Because I write it on here (the Compendium) and I teach it before the game, I get that language from students." In contrast, Eddie Hernández, a mathematics

---

*Sharing a completed chart with a second class is the equivalent of showing them a poster. While helpful in supporting learning, it is no longer a Compendium chart for those students. It must be created in front of them.*

---

instructional coach, shared that upper-grade teachers have found with *Everyday Math* that frontloading the unit instead of building the chart throughout the unit improved their pacing. Gen Wertz, third-grade teacher, shared that she is on unit four this year, which is well ahead of where she was last year.

Dawn Ortiz teaches math to two different groups of second graders. When asked if she can use the same Compendium with both classes, she immediately responded that students feel strong ownership of their class's specific chart, even if it is very similar to

—continued on page 5—





—continued from page 4—

that of the other class. Students look for their chart, and over time the charts differ based on student input and needs. It's also essential that students see the actual creation of the chart from the initial (penciled in) white paper because it is more memorable to create the chart in front of students than having it made in advance. We have found student retention, engagement, and achievement are all higher when students are active participants in this process. Sharing a completed chart with a second class is the equivalent of showing them a poster. While helpful in supporting learning, it is no longer a Compendium chart for those students. It must be created in front of them.

### *Continued Use of the Compendium*

A number of teachers asked for ideas on how to encourage students to use the chart as a resource. They felt successful with the initial construction, but they didn't see students actively using the Compendium throughout the unit. Other teachers shared that they use exit slips with questions that not only serve as formative assessment but also push students to use the chart as a resource. These teachers also structure some of their mathematics workshop activities to encourage use of the chart. These are some of the ideas that they offered: 1) teach someone in your group about one of the key concepts on the chart, 2) use the compendium to complete math boxes on page \_\_\_\_, and 3) put a sticky on the concept shown on the Compendium that has helped you the most and explain why.

All of the teachers who said their students regularly use the Compendium as a resource also refer to it frequently during instruction. They use it as part of their warm-up activities and are intentional in modeling for students how to use the chart and then expecting them to use it independently. So if a student asks them a question that could be answered from the chart, the teacher would ask, "Where can you get that information in the room?" Teachers intentionally do not make themselves the one with the final answer in the room. They expect students to be active learners, using their resources (charts, other students, examples) to support their own learning. Gen Wertz also noted, "Students need power to own the room. They need permission to move and an expectation that they will get up and use the resources."

This use of the Compendium as a resource doesn't end with the unit. One teacher added, "My Compendiums never die." They are hung on top of each other, creating

## *Chants Reinforce and Extend Content Language and Concepts from the Compendium*

### *Place Value* by Carisa Gray

We're gonna do place value right!  
Everybody can learn it tonight.  
No more will you lose your mind, sing with me  
and just take your time.

\_\_\_\_ PLACE VALUE \_\_\_\_  
ones, tens, hundreds, comma, thousands,  
ten thousands, hundred thousands,  
comma, millions!

Now remember to start from the right and move  
it left to do it right.

\_\_\_\_ PLACE VALUE \_\_\_\_  
ones, tens, hundreds, comma, thousands,  
ten thousands, hundred thousands,  
comma, millions!

*(Sung to Party Rock. For the naming of the  
place values, a steady beat works well.)*

### *I Know How to Make Change* by Carisa Gray

I know how to make change.  
Yeah, I know how to make change.  
Count up and think.  
Just count up and think.  
Choose which coin will work the best.  
I choose which coin will work the best.  
Penny, nickel, dime, and quarter, count them up  
in proper order!  
Count up till you find the dollar.  
Making change is easy...HOLLER!!!

a "tablet." Students go back to the charts and know where to find information on the previous charts. Other teachers said their students ask if they can take home all or part of the Compendium to hang up in their rooms.

### *Planning of the Compendium*

Near the end of our meeting, teachers discussed how they plan the Compendium and the lessons they've learned. There was consensus from the group that they put less information on the chart now but look more closely at student needs than they did initially. Their planning includes looking carefully at the Common Core Standards, the

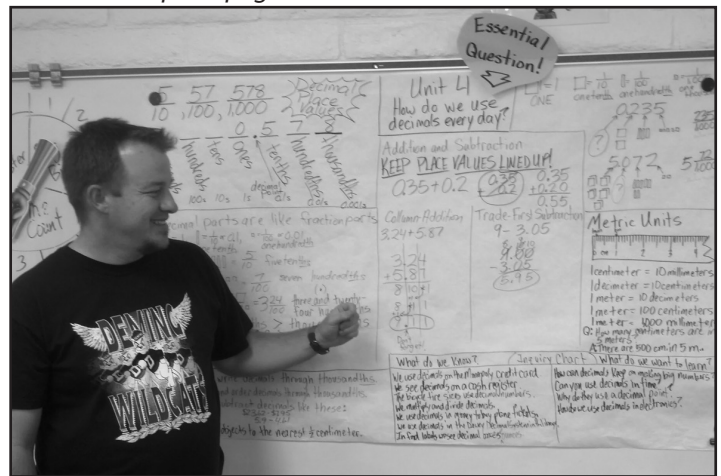
—continued on page 14—

—continued from page 3—

Our collaboration continued when we both went back to school to pursue a Master's degree. As classmates and professional colleagues, we had the opportunity to adapt and immediately apply what we were learning to our teaching situation. In addition, we have had several professional development opportunities such as GLAD and other district-level training to continue to expand our learning. We are without a doubt still learning and continually changing many aspects of our teaching. Collaboration has helped both of us reflect and implement new strategies and ideas. While we continue to grow as professionals, we feel confident that we are providing our students with quality education that meets or exceeds state- and district-level expectations.

Our classroom would not be like it is today if it were not for one or the other of us—we truly are a team. We accomplish more in less time... who wouldn't want to do that? Our flexibility and willingness to try new things and make changes have made us better teachers. We've come to the conclusion that two teachers are better than one. When you find the right teaching partner, hold onto them, because it is a beautiful thing.

—continued from page 5—



Aaron Rodgers revisiting with students their Compendium on decimals.

*Everyday Math* Units, and their students' needs as they are planning the Focus and Motivation, Compendia, and assessment pieces. Aaron Rodgers talked about considering the skills that students often have difficulty with and emphasizing them (i.e., highlighting the importance of lining up decimals). It's also important not to simplify concepts, thereby teaching incorrect mathematical concepts that need to be corrected in future years (i.e., the larger number always goes on top with subtraction, or you can't subtract negative numbers).

Everyone thought the upfront time spent planning the unit and the Compendium content was invaluable. One teacher said the big picture planning is helping her to more effectively use the *Everyday Math* materials, going deeper with content concepts this year and better supporting her students.

*In Closing*

This follow-up session focused primarily on the Compendium, which is an important component of the AIM4S<sup>3</sup> model—but it is only one piece. Focus and Motivation activities, sheltered and scaffolded lessons, student goal setting and closure activities are all necessary components of the model. All of these components, coupled with the Key Instructional Principles, make up the AIM4S<sup>3</sup> framework. We have seen the largest gains in student achievement when all of these pieces are consistently implemented.

*Thank you to the Deming teachers for sharing their experience, expertise, and reflection!*

# COMMON CORE READY

WITH McGRAW-HILL K-12 EDUCATION

For more information contact:  
**Katie Gentry-Funk** | Grades K-5  
 505-301-7382  
 katie\_gentry-funk@mcgraw-hill.com  
**Eddie Marshall** | Grades 6-12  
 505-660-2172  
 eddie\_marshall@mcgraw-hill.com

McGraw Hill Education  
 8W12-0171 5/12

