

# AIM4S<sup>3™</sup>: Making a Difference for Fifth Grade English Learners

by Laura Krol-Williams—Ysleta Independent School District, El Paso, Texas

Promising practices...

I taught first and second grades in Deming, New Mexico, for four years before moving in the summer of 2012 to El Paso, Texas. Though it is just a hop, skip, and jump across the state line, teaching in Texas is very different. I had 10 happy days of teaching first grade before my classroom was closed due to low enrollment. I was pleased to be able to stay at my school, but I was placed in a fifth grade classroom... I was delighted to learn I would be working with English learners (ELs), which has become my passion, but nervous to be teaching fifth graders! The past year was eye-opening, and I was able to clearly see how solid instructional practices benefit students no matter the grade level.

I use the *Achievement Inspired Mathematics for Scaffolding Student Success™* (AIM4S<sup>3™</sup>) model in my classroom. While in Deming, I was trained in the model and implemented it for the last half of the 2011-2012 school year. As a result, I saw a 10% gain in my second graders' average scores (see *Impacting Second Grade Achievement in Mathematics with AIM4S<sup>3™</sup> Implementation*, Soleado Fall 2012—[www.soleado.org](http://www.soleado.org)). This past year, I was the only teacher using the model at my school and my students' average scores were higher than the grade-level average on all but one of the common assessments developed by the grade-level teachers at my school.

My fifth grade class was composed of 21 students, 12 of whom were male. All students were English learners, and two of them received special education services. Thirteen students were considered “first year monitoring,” as they were recently exited from the bilingual program. For these students, it was their first time learning in English for the entire day. While effective with all my students, the AIM4S<sup>3™</sup> model was perfect for these English learners, in particular, and my training in AIM4S<sup>3™</sup> was probably their biggest advantage. I used all the components of the model, which includes focus and motivation, the compendium, scaffolded and sheltered unit lessons, and closure, evaluation, and goal setting. Within the

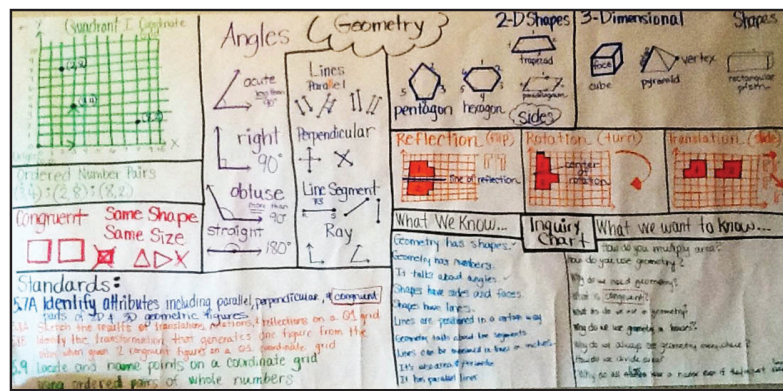
model, I scaffolded mathematics content, provided support for the language students needed, and made sure there were many opportunities for peer interaction.

Since the move, I am following the Texas Essential Knowledge and Skills (TEKS), which are state standards, rather than the Common Core State Standards (CCSS); but as with the CCSS, the TEKS are the core of my unit planning. Additionally, we have a district curriculum

calendar for pacing to ensure that all of the standards are taught during the school year. Since I was new to fifth grade and the school, it took me longer than I would have liked to figure out how all of the curriculum pieces fit together; planning was my biggest challenge last year. We did not follow

a mathematics textbook page by page, as the text was not directly aligned to the standards, so we often pulled from various resources or created our own. At the same time, we were developing common end-of-unit assessments that weren't always ready in time to inform our unit planning. Being new to the grade-level content, I had to rely on my grade-level team to show me how to teach certain concepts. Because of these challenges, I turned to what was comfortable for me and had been successful in the past. The AIM4S<sup>3™</sup> model gave me an anchor, especially the chants and charts.

For focus and motivation, I used chants; small videos from BrainPOP®, BrainPop Jr., and Discovery Education™; and other technological supports to engage my students and build common experiences to draw from throughout the unit. One of the class favorites was the “Fraction Rap” (Cathy Wiseman & Daniel Gustafson, <https://sites.google.com/a/ewcsd.org/project-glad/Home/math-chants>). I learned to incorporate topics that my students were interested in and used the chants to teach new and sometimes complicated concepts. This seemed much easier in the lower grades; I can connect anything to pets and Disneyland! Rapping was a bit foreign to this country girl, but I quickly saw the benefits. I could do something as simple as allude to the rap with my fifth



A compendium from a fifth grade geometry unit

—continued on page 3—

Soleado—Fall 2013





—continued from page 2—

graders and they would sing it from beginning to end. The girls were even more into the chants, enhancing my plain hand gestures with dance moves. My students' enthusiasm for chants made those frequent experiences a powerful vehicle for practicing and retaining language and content learning.

I consistently used the compendium—a resource chart built in front of students that includes a concept frame with key mathematical concepts, kid-friendly standards, and student inquiry questions—to provide an overview of the unit content while also serving as a reference for the entire unit. When the students took their common grade-level assessments, I often saw them recreating pieces of the compendium as a resource. For me, this was evidence of this component's power for my students. Changing grade levels made me appreciate the DLeNM compendium bank ([aim4scubed.dlenm.org](http://aim4scubed.dlenm.org)) more than ever, as it helped me see the content and organization of other teachers' fifth grade unit compendia. As at second grade, I continued to rely heavily on visual representations to support my students, who were still building a solid foundation in mathematics concepts.

Sheltering and scaffolding the unit lessons is a key component of the AIM4S<sup>3™</sup> model. We used interactive notebooks as a centerpiece for notetaking and formative assessment. In their notebooks, students recorded important information and examples from class on one side of the paper (input). On the other side, they did their practice work (output). This supported students in learning to use their resources during independent practice. “Foldables” were used to shelter and frontload concepts and related mathematical language, and then the students referred to them as needed. This was an excellent resource for students who did not yet have the words to express themselves. Foldables are three-dimensional graphic organizers that break down more complex information and are good for visual and kinesthetic learners.

To scaffold the conversion of mixed numbers to improper fractions, I used a cowboy and horse to model the steps, because this was difficult content for the students. The numerator was a cowboy, and the denominator was the boots. When converting an improper fraction to a mixed number, the cowboy (numerator) stays inside the house when it is raining and becomes the dividend, and the boots (denominator) stay outside and become the divisor. My students, as silly as it may have been, turned the fraction into a good ol' Texas cowboy! While we emphasized the concepts

essential to understanding how to convert fractions, the story was a memorable way to help my students successfully retain the process.

Overall, when reflecting on student data, all of my students made progress. In Texas, fifth grade students are required by law to pass the reading and math tests in order to move to sixth grade, and they're given three opportunities to do so. The state average passing rate for fifth grade that year was 90%; for my school it was 84%. The official pass rate for my class was 95% (see Fig. 1). Given that the one student who didn't pass entered the month prior to testing, 100% of the students who were in my classroom for the entire year passed by the end of the testing windows. This reinforced for me that the strategies and approach I'm using are meeting the needs of my students—all of whom were ELs last year—and making a difference in their achievement.

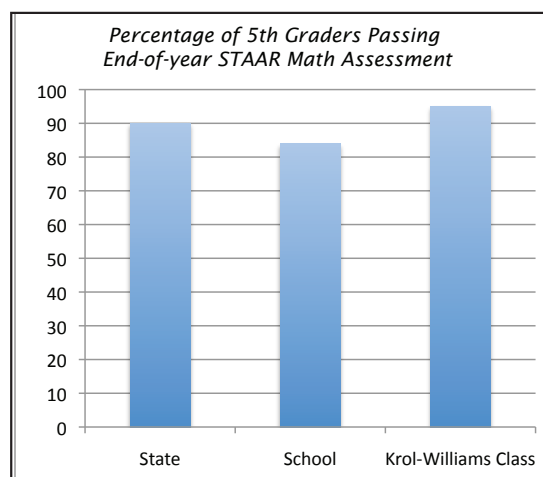


Fig. 1. Source: Texas Education Agency <http://www.tea.state.tx.us/student.assessment/results/>

I was often asked what my secret was and I always replied, “I have had a lot of good training and a lot of strategies in my teacher toolbox.” I was referring to the AIM4S<sup>3™</sup> model. Students are successful when they have a positive classroom culture and a teacher who learns what works for her or his students and then uses the best strategies to benefit those students. I have implemented the components of the model and the key instructional principles, and it is reflected in my teaching. I learned right alongside the students as I scaffolded my own learning through teaching. In spite of the unexpected challenges, these results show me how effective the AIM4S<sup>3™</sup> model was for my students this past year.

For more information on Achievement Inspired Mathematics for Scaffolding Student Success™ (AIM4S<sup>3™</sup>), please visit [aim4scubed.dlenm.org](http://aim4scubed.dlenm.org).