Introduction to AIM4S³™ Case Studies

What: Case studies are stories. They present a realistic, in-depth snapshot or picture—in this case, of the framework's implementation in the classroom, including a description of classroom demographics, planning processes (before, during, and after the unit), and an explicit embedding of the key instructional principles in all components of the framework. Case studies provide a lens through which teachers can view implementation in an authentic setting.

These stories allow us as teachers to see and study implementation differences across a range of grade levels, taking into consideration students' varying developmental processes/characteristics across these levels. They also have the potential to represent a variety of settings, student demographics, core instructional programs, and philosophical/ pedagogical stances.

This is the beginning of a collection of case studies which will span grade levels, mathematics content, and program contexts.

Why: The purpose of these case studies is to provide insight into how the framework actually functions in a classroom context. This insight allows a more thorough analysis of effective implementation of the framework and teases out for closer examination the different components of the model, student-teacher interactions, students' responses, teachers' reflections, and so on.

This window into the subtleties of planning, interacting with students, responding to student feedback throughout a unit, and adjusting instruction and pacing accordingly provide a complete and realistic picture of implementation over the weeks of a unit. Case studies can be a powerful support for implementation, allowing teachers to vicariously experience and consider the ins and outs of everyday practice with the framework.

Case studies also create a platform for deeper discussions within professional learning communities on the intention and implementation of the framework in its entirety, as opposed to discrete components. Implementation often takes place naturally—and necessarily—component by component, and yet case studies offer a reminder that the power of AIM4S^{3™} lies in its use as a complete and coherent frame. These discussions, bridging theory and practice, are foundational to reflective professional practice, and offer a starting point, scaffold, and expectation for teachers' thinking and learning relative to the framework.

How: In this document, each case study is framed in the same way. Each begins with a class profile/ demographics; district context for instruction and assessments, including available or mandated standards, materials, assessments, and/or pacing; where the class and teacher currently are in instruction; and what the instructional period for mathematics in the classroom looks like.

The heart of the case study—and effective implementation— is the planning process. How did the unit plan come about? What types of information were taken into consideration? Which planning pieces had to happen prior to instruction and what informed those decisions? This is the time to be very transparent in the thinking and planning that take place throughout the unit.

A description of the teaching through each of the components provides the opportunity to get a clearer picture of how the key instructional principles are embedded across all components and throughout all instruction—and just what that looks like. That clearly leads to a reflection on the data... how did it all turn out? This is the time to look closely and honestly at data regarding where students were before and after the unit of study, and that informs teachers' reflection on their instructional planning and practice. What worked well, and what might have been done differently? What adjustments needed to be made during a lesson? Over the course of the unit?

The two case studies that follow invite the reader to shadow a teacher on the path of implementation, with many pauses to look closely, question, and connect to his or her own classroom and practice.

For a growing collection of case studies and other AIM4S^{3™}, please visit *www.aim4scubed.dlenm.org*.

