DRAFT FOR DISCUSSION AND REVISION

A Guiding Vision For Ensuring That Inquiry-based, Conceptually-driven, Sense-making Mathematics is the Enacted Norm in Every Mathematics Class Every Day

Our shared commitment is that every YOUR SCHOOL HERE student receives well-planned, well-executed mathematics instruction that consistently reflects our vision of active engagement in thought-provoking tasks, productive discussion about mathematical ideas and common misconceptions, and the individual and collective construction of understanding via problem-solving and inquiry.

This commitment requires that teachers plan their lessons around **rich tasks** that are supported by **targeted questions** and powerful **lesson debrief discussions.** Such lessons are diametrically opposite of the "I show, we practice, you do" model of direct instruction that essentially tells students what to remember and how to get right answers. For example, the "trick" to "invert and multiply" (as opposed to understanding that dividing by a number is the same as multiplying by the inverse of that number) works in the short-term, but does not support mathematics as a sense-making enterprise and does not foster an inherent love of mathematics and its power and beauty.

The problem we face as a community of teachers, administrators and parents is that our vision is **not** widely shared, **not** fully understood or even believed, **not** consistently supported, and therefore **not** consistently implemented for all students every day. To begin to address this problem, the chart on Page 2 summarizes what students, teachers and leaders are and are not doing to make inquiry-based, conceptually-driven, sense-making mathematics the enacted norm in every YOUR SCHOOL HERE mathematics class.

What students ARE doing:	What teachers ARE doing:	What leaders ARE doing:
• Actively engaging in solving rich problems that are aligned with the curriculum standards • Regularly engaging in productive discourse about their thinking and reasoning • Grappling with mathematical ideas and making and exploring conjectures about those mathematical ideas	• Thoroughly studying the curriculum standards, the textbook and other resources to develop an understanding of the key mathematical understandings across a grade, unit, or lesson • Carefully selecting rich tasks that support reasoning and problem solving • Anticipating students' solutions and strategies to each task • Carefully crafting and asking targeted questions that focus on the key mathematical understandings • Making frequent use of the "discourse clouds": Why? Can you explain? Who did it differently? Convince us? How did you picture that? • Regularly collecting and using formal and informal evidence to assess scholar understanding of the big mathematical ideas and adjusting their instruction accordingly	• Regularly meeting with teachers to help them think through their lesson plans, including clarifying the learning goal, the selection of rich, aligned tasks and the questions to be asked during the lesson • Co-teaching the lesson in ways that support the teacher and maintain a focus on the learning goals • Taking notes to support a productive debriefing and action planning session
What students are NOT doing:	What teachers are NOT doing:	What leaders are NOT doing:
• Solving more than three naked problems from a worksheet without the chance to explain their thinking • Listening to explanations by the teacher without interruption • Regurgitating procedures to get answers	• Showing students how to solve problems and expecting them to replicate the process solely on the basis of remembering • Using the phrases "this is the rule" or this is "how you solve this" or "this is what you have to remember" without including reasons, explanations or a focus on WHY • Allowing students to solve problems without providing any opportunities for feedback	• Sitting on the sidelines, not interrupting or participating in the lesson • Using the co-teaching/coaching process only for evaluation • Only using co-teaching and coaching, with no opportunities for pre-planning or debriefing