

Day 1 Agenda

Instruction and Tasks

Every K–12 Student Can Learn Mathematics

“My role as a teacher is to evaluate the effect I have on my students.’ It is to ‘know thy impact,’ it is to understand this impact, and it is to act on this knowing and understanding. This requires that teachers gather defensible and dependable evidence from many sources, and hold collaborative discussions with colleagues and students....”

—Hattie, *Visible Learning for Teachers: Maximizing Impact on Learning* (2012)

- 7:00–8:00 a.m. Registration, continental breakfast
- 8:00–8:30 a.m. **Setting the Stage**
Participants reflect on the PLC culture inherent to the Mathematics in a PLC at Work framework. They are introduced to the six team actions and two coaching actions collaborative teams use to ensure every K–12 student learns mathematics.
Timothy D. Kanold
- 8:30–9:45 a.m. **Keynote**—Every Day for Every Student: Lessons That Matter
Sarah Schuhl or Mona Toncheff
- 9:45–10:00 a.m. Break and transition
- 10:00 a.m.–12:00 p.m. **Breakout**—Essential Elements of Daily Lesson Design Focused on Every Student Learning Mathematics (Part 1)
 - *Sarah Schuhl or Mona Toncheff* (Grades K–5)
 - *Timothy D. Kanold* (Grades 6–12)
- 12:00–1:30 p.m. Lunch (on your own)
- 1:30–3:45 p.m. **Breakout**—Essential Elements of Daily Lesson Design Focused on Every Student Learning Mathematics (Part 2)
 - *Sarah Schuhl or Mona Toncheff* (Grades K–5)
 - *Timothy D. Kanold* (Grades 6–12)
- 3:45–4:00 p.m. **Q&A and Reflection**
Participants engage in Q&A and reflect on the day’s discussions and topics.

Day 2 Agenda

Assessment and Intervention

Every K–12 Student Can Learn Mathematics

“You are most likely in a state of eudaimonia at work if you feel fully immersed in a feeling of energized focus, full involvement, and full engagement while experiencing incredible success in the process of the days’, weeks’, or months’ activities as a result of your deliberate practice.”

—Timothy D. Kanold

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| 7:00–8:00 a.m. | Continental breakfast |
| 8:00–8:15 a.m. | Welcome and Day 1 Reflections
<i>Timothy D. Kanold</i> |
| 8:15–9:30 a.m. | Keynote —Knowing Your Heartprint:
What Will Be Your K–12 Mathematics Teaching Inspiration Story?
<i>Timothy D. Kanold</i> |
| 9:30–9:45 a.m. | Break and transition |
| 9:45 a.m.– 12:00 p.m. | Breakout —High-Quality Mathematics Common Assessments:
Teacher and Student Actions Required for Every Student to Learn
(Part 1) <ul style="list-style-type: none">• <i>Sarah Schuhl</i> or <i>Mona Toncheff</i> (Grades K–5)• <i>Timothy D. Kanold</i> (Grades 6–12) |
| 12:00–1:30 p.m. | Lunch (on your own) |
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Teacher and Student Actions Required for Every Student to Learn
(Part 2) <ul style="list-style-type: none">• <i>Sarah Schuhl</i> or <i>Mona Toncheff</i> (Grades K–5)• <i>Timothy D. Kanold</i> (Grades 6–12) |
| 3:45–4:00 p.m. | Closing Session, Evaluation, and Next Steps
<i>Presenters work with participants to discuss and share priorities
for next steps and plans for action.</i> |

Session Descriptions: Day 1



Every Day for Every Student: Lessons That Matter Sarah Schuhl or Mona Toncheff

In a PLC culture, collaborative teacher teams build shared understanding of mathematics content and process standards for each grade level or course. Teachers determine connections students need to make from one year or unit to the next, and they identify meaningful tasks for student engagement and learning. How does this professional work translate into effective lessons that engage each learner every day?

Resources from *Mathematics Instruction and Tasks in a PLC at Work* introduce six essential elements of lesson design and help participants reflect on current and future instructional practices.

Participants understand the *why* of each lesson and explore the classroom culture to create an environment of learning. Educators examine tools, protocols, and tasks to grow a deeper understanding of how intentional lesson design impacts student learning at all levels.

Essential Elements of Daily Lesson Design Focused on Every Student Learning Mathematics (Parts 1 & 2)

Sarah Schuhl or Mona Toncheff (Grades K–5)
Timothy D. Kanold (Grades 6–12)

In the modern view of professional development for mathematics teachers, it is critical to build pedagogical knowledge capacity, particularly when designing lessons that motivate students to persevere. More importantly, teachers and colleagues must act intentionally to transfer professional development into daily classroom design and practice.

Participants and teams learn to design and deliver highly effective research-affirmed mathematics lessons using a formative assessment and feedback process. They use tools and protocols to *reflect* on current practice; *refine* daily planning decisions for each mathematics lesson (with a focus on student perseverance, balanced student discourse, and tasks); and then *act* on that knowledge to design more effective lessons daily.



= Keynote

Session Descriptions: Day 2



Knowing Your Heartprint: What Will Be Your K–12 Mathematics Teaching Inspiration Story?

Timothy D. Kanold

Timothy D. Kanold uses warmth and insight to help you explore your professional teaching story. With wisdom from his book *HEART!*, Dr. Kanold examines how you can fully engage in your professional work. He explores the relational intelligence needed to be a contributing mathematics team member, as well as the self-awareness necessary to be an inspiring mathematics teacher for each and every student—in every unit, every day.

High-Quality Mathematics Common Assessments: Teacher and Student Actions Required for Every Student to Learn (Parts 1 & 2)

Sarah Schuhl or Mona Toncheff (Grades K–5)

Timothy D. Kanold (Grades 6–12)

When mathematics teachers create and score common assessments *together*, they build shared understanding of each essential standard’s intent, and they define student proficiency. In doing so, teachers build an improved equity in teaching and learning experiences across teachers and K–12 classrooms.

High-quality common mathematics assessments, along with scoring and teacher feedback on assessments, enhance or limit a students’ desire to learn. Effective mathematics assessment and intervention should be part of a formative process for student learning. Yet questions arise: What do teachers and students do with common unit mathematics assessments after students take them? Have assessments been accurately scored? What happens when assessments are passed back to students? How are students required to reflect on essential standards learned versus those not learned yet? How do mathematics teachers use evidence of student learning to impact their instructional decisions for the next unit of study?

Presenters use tools from *Mathematics Assessment and Intervention in a PLC at Work* to help teachers and teams *reflect* on current practice, *refine* assessments, feedback, and intervention routines, and *act* on new knowledge. Teachers also address the design and use of K–12 homework as an integral part of student motivation and engagement in learning mathematics.

