



EMPATHIC MATHEMATICS TEACHING & LEARNING

DEVELOPING OUR CAPACITY TO EMPATHIZE

PD LEARNING OBJECTIVE: The overarching objective for this professional development series involves developing empathy for all students but in particular those who are traditionally marginalized in mathematics classrooms. Participants will learn that most individuals can learn and strengthen their ability to empathize with students by analyzing teacher-student interactions that are strong or weak examples of empathic interactions. Participants will also learn the positive impact that teaching with empathy has on students’ sense of belonging in mathematics classrooms.

Timing of the Professional Development

This PD experience is ideally intended to be a yearlong exploration but can be customized to your local context to accommodate your schedule. These communities can be an entire middle school mathematics department or smaller Professional Learning Communities (PLCs) within that. The PD is best led by someone who has experienced the PD themselves within a different PLC, but that may not be feasible in all situations. Facilitator notes are shown along the way as support for an instructional leader that was unable to work through this with their own community.

Timelines can be altered depending on your context

<p>Summer Common Book Read</p>	<p><i>Sense of Belonging Activity</i> <i>What happened to you? Conversations on Trauma, Resilience, and Healing</i> Oprah Winfrey and Bruce D. Perry (nice to have an electronic copy to take notes on but best on audible because it is read by both authors)</p>
<p>First Nine Weeks</p>	<p>Debrief the Summer Book, if necessary PLC Meeting: Portrait of a Math student: Creation PLC Meeting: Portrait of a Math Student: Analysis</p>
<p>Second Nine Weeks</p>	<p>PLC Meeting: Video Analysis of Empathy Scenarios PLC Meeting: Analysis of Empathy Plays</p>
<p>Third and Fourth Nine</p>	<p>Individually (PLC reflection meetings) Champion a Student (should be started at the beginning of the third 9-weeks) PLC: Quality School Opportunities</p>

WeeksIf time permits, start reading *Equity-Centered Trauma-Informed Education* by Alex Shevrin Venet**Brief description of each learning experience and Links to the appropriate resources**

Empathic Mathematics Teaching and Learning	This includes ALL THE LEARNING EXPERIENCES in one single document in the recommended sequence.
Sense of Belonging Activity	Participants should take notes in an empathy journal (whether a physical or online version). The first discussion should begin with the “Sense of Belonging” activity to set the stage that not all students’ math identities are fostered in math class and to help participants feel that frustration as closely as possible to the real experiences of students.
What Happened to You? Book read	Participants should take notes in an empathy journal (whether a physical or online version). The book provides a beautiful description of trauma in children, how it works neurologically, and strategies for supporting students who have experienced trauma (one of which is showing empathy). This book should provide a foundation, through a discussion guide, for all of the work to follow through the PD experience.
Portrait of a Student: Creation	The intention of this activity is for participants to create two portraits, one for a student who feels a sense of belonging and flourishing in math class and one who does not. Portraits can be compared and modified, but the main point is to gather multiple perspectives on what it feels like to belong in math class. Participants’ perceptions of belonging can be challenged by others who know what it is like not to belong.
Portraits of Students: Analysis	The intention of this activity is for participants to read short portraits of students in math classrooms. Participants are shown several portraits of typical mathematics students and are asked to analyze the portrait to determine if that student has been supported to flourish or not. Which students are not flourishing? What are potential reasons for this? How might you support this student? What else would you like to know about the student? Participants are expected to challenge their own personal biases as well as challenge others’. Depending on participants’ backgrounds, these portraits may shed light on particular characteristics that often go unnoticed due to implicit bias.
Empathy models: Video Case Analysis	The intention of this activity is to give participants the opportunity to watch videos of teacher-student interactions, with the goal of identifying key characteristics of empathy. Since 90% of communication is non-verbal, it is critical that participants “see” and analyze the non-verbal strategies that exhibit empathy before practicing it with students. One of the videos illustrates an empathic interaction and the other, a non-empathic interaction.

	Participants will be introduced to the E.M.P.A.T.H.Y™ Observation Protocol that they will use to analyze particular features of the interaction that do or do not show empathy. There will be reflection time after each video to discuss participants' observations.
Enacting and Analyzing Empathy Plays	The intention of this activity is to give participants an additional opportunity to analyze teacher-student interactions for empathy by either watching an enactment of a script (by the facilitator and two others) or by reading the script themselves. Again, one of the plays illustrates an empathic interaction and the other, a non-empathic interaction. Participants will use the E.M.P.A.T.H.Y™ Observation Protocol to analyze particular features of the interaction that do or do not show empathy. There will be reflection time after each play to discuss participants' observations.
Champion a Student	The intention of this activity is to give participants an opportunity to experience their students in their day-to-day lives inside and outside their mathematics classroom and become empathic champions for students in mathematics education. Participants will select and mentor one student whom they consider as non-flourishing mathematically. The mentoring process will be intentional and involve working with the chosen student, the student's other teachers, and family members to learn and apply the participant's empathic capacity. There will be reflection time at the end to discuss participants' observations and identify practical strategies moving forward.
Quality School Opportunities	The intention of this activity is to give participants tools and resources to enhance their community engagement in their schools. Participants will self-reflect on their school's and the district's existing vision for community engagement using a set of guided questions and identify meaningful ways to empathically connect with the community to foster a sense of partnership.