TEAM-Math and AMSTI Math Science Partnership Professional Mathematics Learning Communities

Presenter's Guide for Mathematics Identities

Overview

Title of Activity/Lesson	Mathematics Identities
Time Allotment	60 minutes
Audience	All participants
Content Objectives	NA
Pedagogical Objectives	Principles to Actions – Mathematics Teaching Practices
Overview of Big Ideas	• Mathematics Identities • Differentiating Instruction
Materials	• Caroline and Craig Vignettes • Mathematics Identities Handout • Power Point

Outline/Plans	What Might Happen/Dialogue
Examining Participants' Mathematics Identities Ask participants to write down three adjectives, which they believe describe themselves as mathematics learners. Next ask participants to share what they wrote. Note how their beliefs about themselves as mathematics learners were impacted by their opportunities to learn mathematics and the environments in which learning did or did not take place.	State the following: • Please write down at least three adjectives, which describe you as a mathematics learner. – Also think about the factors, which helped to shape these beliefs about you as a learner. • Please be prepared to share what you wrote and why.
Focus on Students' Mathematics Identities	

Vignette 2: Caroline and Craig (Adapted from Chval & Davis, 2009)
 	
Ask participants to read Caroline's and Craig's Vignettes. Next Ask them to use the vignettes to explore the roles of the different players for the statements related to students' mathematics identities.
 	
Next, ask participants to share their thoughts about how Caroline's and Craig's mathematics identities were being formed.
	• Read the Caroline's and Craig's Vignettes.
	• Use the vignettes to explore the roles of the different players for the 5 points below.
	• Mathematics identity includes:
	  1. beliefs about one's self as a mathematics learner;
	  2. one's perceptions of how others perceive him as a mathematics learner,
	  3. beliefs about the nature of mathematics,
	  4. engagement in mathematics, and
	  5. perception of self as a potential participant in mathematics (Solomon, 2009).
	• Ask participants to share their thoughts about how Caroline's and Craig's mathematics identities were being formed.

Next, ask participants to read the mathematics identities overview.	Ask them to discuss the points that resonated with them the most and why. Next, ask them how the discussion will impact their teaching practices.