

## **Modernizing the Mathematics Classroom**

This document is intended to help guide teachers on the big ideas of how to create a modern mathematical classroom.

## **Top 10 Practices for your mathematics Classroom**

- 1. Ensure that ALL students have access to grade-level standards.
- 2. Create daily opportunities for students to engage with the <u>Standards of Mathematical Practice</u> (SMPs).
- 3. Utilize the 8 Mathematical Teaching Practices from NCTM's Principles to Actions.
- 4. Create a student-centered classroom.
- 5. Continually foster your and your students' Mathematical Identity and Agency.
- 6. You and your students should use the 10 Dimensions of Formative Assessment daily.
- 7. Create opportunities for students to make connections across <u>multiple</u> representations.
- 8. Allow students to engage in productive struggle.
- 9. Facilitate productive student discourse.
- 10. Incorporate rigorous, grade-level, and group-worthy math tasks.

## **Additional Learning**

- <u>Catalyzing Change Key</u> Recommendations
- Building Growth Mindset
- Playing and taking risks
- Classroom is a safe space to make mistakes
- Confidence Building
- Habits of Mind
- The Opportunity Myth
- ADE Math Document SMP's and SEL
- Fluency Without Fear
- The Evolution of the SMPs in the Math Classroom

- Progression Documents
- Feedback
- Never Say Anything a Student Can Say
- <u>Culturally Relevant Instructional</u> Practices
- Complex Instruction
- Problem-Based
- Features of Quality Tasks
- Formative Assessment: Common Core Standards in the Math ClassroomAn Enabler of Learning