Considerations for STEM Education from PreK through Grade 3

A SELECTION OF DRK-12 RESOURCES

1. The *Ongoing Assessment Project for Additive Reasoning* includes tools and resources for teachers in grades Pre-K–2, specifically on the topics of **number, addition and subtraction**. These tools and resources include professional development, a bank of formative assessment items, and learning progressions for analyzing evidence in student work. For more information, visit the [project website](#).

2. *Project M²: Mentoring Young Mathematicians* project developed K–2 **geometry and measurement** units that engage students as mathematicians. Visit this [site](#) to see how teachers engaged students in mathematical discussions and writing. Project M² publications about engaging students in mathematics:


3. Practitioner-focused publications from projects, *Project M²* and *A Task Force on Conceptualizing Elementary Mathematical Writing: Implications for Mathematics Education Stakeholders* to support students’ oral and written mathematical discourse:


1 *Promising Practices for Engaging Families in STEM Learning* project explores how families, schools, and communities can join together to promote student success in STEM. [Access a related publication.](http://www.promisingpractices.org)

5 Information and examples of all three components of *mathematics learning trajectories*: the goal (understanding the mathematical content), the developmental progression (children’s patterns and levels of thinking) and correlated instructional activities:


6 Publications that explore teaching and learning of *early algebraic concepts* in preK–3:


7 Components of an *integrated early science and literacy* model that can be implemented in all K–3 classrooms:


