

## Supporting Social, Emotional, and Academic Development (SEAD) In Mathematics

### How can we support students' Social, Emotional, and Academic Development (SEAD) while engaging in the content of math?

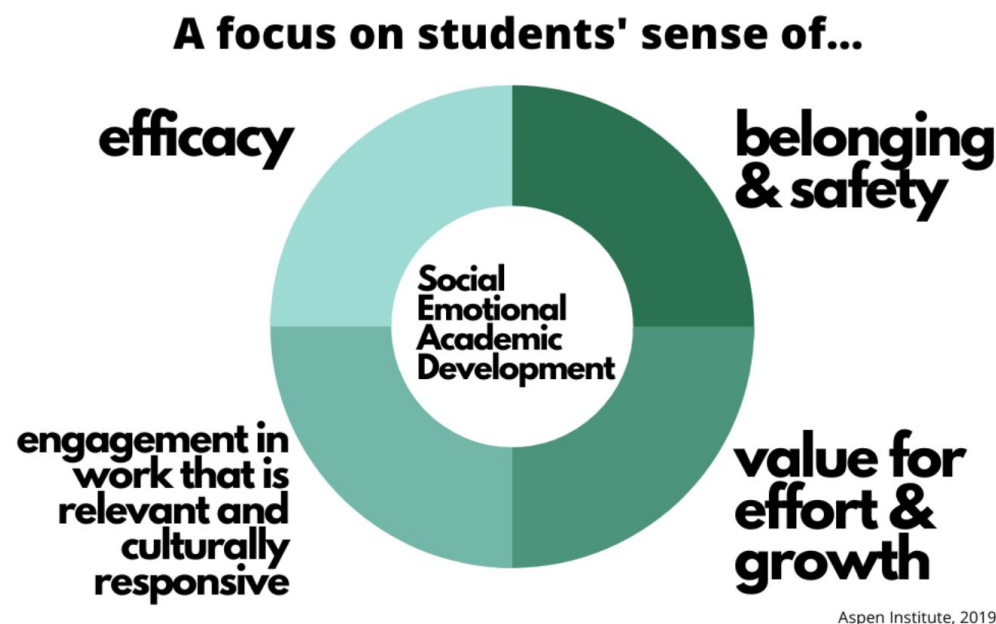
Throughout the 2020–21 school year, attention must be centered on fostering relationships and a sense of community so students feel safe and supported in their learning environment. Students need to know that the adults around them believe they can succeed and that their ability and competence will grow with their effort. And more than ever, students need to see value in what they are learning and relevance to their lives and their very beings. Investing in students' social-emotional development is done by the entire system of adults in schools. This investment is key to promoting engagement in—not a substitute for—teaching rich academic content.

As we narrow the focus and recommit to what matters most academically, research also tells us that four learning mindsets are particularly important in supporting students' academic development.

They focus on students' sense of

- 1) belonging and safety,
- 2) efficacy,
- 3) value for effort and growth, and
- 4) engagement in work that is relevant and culturally responsive<sup>1</sup>.

Review the chart on the following page for a variety of sample actions for facilitating students' social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency, and identity and can either be applied across grades or they can be modified to fit different grades and different learning environments. Note that in mathematics, there is a close connection between social,



emotional, and academic development and the Standards of Mathematical Practice; the recommendations reflect this connection. When these practices are done well, they not only improve the teaching and learning of mathematics, they can address social-emotional learning as well.

<sup>1</sup> Aspen Institute. (2019). *Integrating social, emotional, and academic development (SEAD): An action guide for school leadership teams*. The Aspen Institute Education & Society Program.

To learn more about prioritizing instruction around what matters most see: [2020–21 Priority Instructional Content in English Language Arts/Literacy and Mathematics](#)

## Sample Actions for Effectively Integrating Social, Emotional, and Academic Development (SEAD) into Mathematics

### Facilitate Social, Emotional, and Academic Development (SEAD)<sup>2</sup> Through Grade-Level Content

The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.

Sample Actions	Connection to Standards for Mathematical Practice (SMP)
Bring in students' funds of knowledge and past mathematical experiences by providing access to a wide variety of math tools when working on grade-level math (for example, providing number lines when studying equivalent fractions).	MP5: Use appropriate tools strategically.
Position students as mathematically competent by creating a safe space for students to share their developing reasoning (for example, when they make conjectures and arguments about whole numbers to determine whether they apply to fractions and decimals).	MP3: Construct viable arguments and critique the reasoning of others.
Establish discussion protocols to facilitate students' engagement in peer-to-peer mathematical discourse (for example, about the meaning of multiplication and division, reasoning about fractions) that supports active listening, values diverse perspectives and insights, sets team roles, and ensures there is equity of voice and responsibility.	MP6: Attend to precision.
Bring in students' funds of knowledge by ensuring materials and problems have a connection with learners while also providing opportunities to learn about the broader world, such as when solving rich tasks involving geometric measurement that have a significant modeling component.	MP4: Model with mathematics.
Communicate that students' thinking is valued to build trust and rapport by asking questions that elicit students' thinking, such as when students are analyzing proportional relationships.	MP1: Make sense of problems and persevere in solving them.

<sup>2</sup> Social, Emotional, and Academic Development (SEAD) Sources:

- Allensworth, E. M., Farrington, C. A., Gordon, M. F., Johnson, D. W., Klein, K., McDaniel, B., & Nagaoka, J. (2018). *Supporting social, emotional, & academic development: Research implications for educators*. Chicago, IL: University of Chicago Consortium on School Research.
- Aspen Institute. (2019). *Integrating social, emotional, and academic development (SEAD): An action guide for school leadership teams*. The Aspen Institute Education & Society Program.
- Collaborative for Academic, Social, and Emotional Learning. (2013). *CASEL guide: Effective social and emotional learning programs—preschool and elementary school edition*.
- The University of Chicago Urban Education Institute. (2018). Cultivating social, emotional, and academic development. In *New knowledge and developments in public education* (pp. 11–16).
- Wiener, R. (2020). *Recovery and renewal: Principles for advancing public education post-crisis*. The Aspen Institute Education & Society Program.