

Social and Emotional Learning Supports

We've all heard the old adage "teachers are molders of young minds." But this is only partially true—teachers are ultimately molders of adults, influencing the social, emotional, and intellectual development of the next generation. The STEMscopes curriculum helps teachers address the social-emotional learning (SEL) needs of students while providing an immersive and vibrant learning experience. Here, we've highlighted curriculum elements that empower teachers to uphold each SEL Standard and shape a generation of mathematical thinkers who strive to make the world a better place.

Self Awareness

In each lesson under Evaluate, Decide and Defend provides a powerful opportunity for students to debate, present reasoning and data, and share their thinking. Taking the side of an imaginary student in a sample scenario, students can work alone or in teams to demonstrate why they reached the conclusions they did. Students must demonstrate self awareness by monitoring what they say and how they say it during this exciting activity.

- Students discover **strengths and limitations** by affirming their knowledge and discovering gaps in understanding as they exchange ideas.
- Students develop **confidence** as they defend their positions.
- Students adopt a **growth mindset** by approaching the debate as a learning opportunity—it's not about who's right and who's wrong: it's about becoming mathematical thinkers capable of disagreeing with grace and collegiality.

Self Management

In My Math Thoughts, students have the opportunity to analyze their thinking through three unique lenses: content, process, and affective. By sharing this in small group or with a partner after working independently, students can practice self management in a conversational setting that allows them to experience different points of view.

- Students **manage stress** as they feel pressure to develop and present ideas to their peers.
- Students **control their impulse** to interrupt students with whom they disagree.
- Students **aim to achieve the goal** of understanding different ways of interpreting, solving, and feeling towards real-world math problems.

Social Awareness

A number of STEMscopes lessons promote social awareness. In Compare Fractions, students learn about the waste crisis in Cape Town and how use of fractions could impact recycling. Like all Math Todays, this piece comes with media and questions to spark dialog between students on social topics and become more socially aware all while developing math skills. Teachers can go a step further by integrating SEL best practices from our professional learning.

- Students with behavioral challenges are paired with mature students whose behavior they are encouraged to observe and imitate. By imitating the behavior of another student, they have an opportunity to experience the world from **their perspective**.
- Teachers discourage competition because it inhibits **sympathy/empathy** by pitting students against each other.
- During the one-on-one dialogue, students are instructed to face each other and maintain eye contact, which encourages them to **observe and react to emotional markers and indicators**.

Relationship Skills

The Student Notebook in Explain is the prime tool for recording questions, feeling out new concepts, showing work through productive struggle, and sharing responses. Using concrete models, drawing, writing, and creating abstract expressions are all important as students progress through the CRA learning model. By sharing this with fellow classmates in think-pair-shares, students can hone relationships skills and learn to be openly vulnerable as they grapple with new and challenging content.

- Teachers encourage students to **listen and respect** their peers as they ask questions and wonder aloud.
- Students strive to **communicate their questions clearly and succinctly**.
- The inquiry process helps students feel comfortable **asking for and offering help**.
- Students practice **resisting social pressure** that discourages curiosity and creates a hostile environment where students fear asking "stupid questions."

Responsible Decision Making

The Teacher Toolbox is a wealth of SEL resources: from Student Goal Setting tools to documents covering how to communicate math, students have multiple opportunities to learn responsible decision making while strengthening classroom norms.

- Teachers establish classroom rules that foster **safety and social norms**, such as respecting others' personal space and saying "excuse me" and "thank you."
- Students participate in role playing activities that allow them to practice the use of **appropriate manners and body language**.
- Students uphold high **ethical standards** as they demonstrate respect for peers through behaviors such as active listening and teamwork.