



Social-Emotional Learning Skills in Mathematics

| Specific SEL Skills | Demonstrations of SEL | Possible Prompts and Questions to Support Student Thinking | Teacher-Moves to Support Student Learning |
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| <i>To the best of their ability, students will learn to:</i> | <i>so they can:</i> | | |
| 1. identify and manage emotions <ul style="list-style-type: none"> • How do students respond to problems and prompts? • What feelings are demonstrated when math problems are posed to the class? • Do students show understanding of the feelings of others during math talks and collaborative learning tasks? | <ul style="list-style-type: none"> • express and manage their feelings, and show understanding of the feelings of others, as they engage positively in mathematics activities | <ul style="list-style-type: none"> • How do you feel about learning mathematics? • Write to tell a friend or family member describing how you feel about what we are learning in mathematics. <ul style="list-style-type: none"> – The thing I like best about mathematics is ... – Today, I felt ... | <p>Notice and Name - be intentional about noticing and naming SEL Skills across mathematics lessons.</p> <p>Celebrate - recognize and authentically praise students' efforts and actions.</p> <p>Model - demonstrate the language and actions described in the SEL Skills.</p> <p>Anchor New Learning - when appropriate, create anchor charts to support students (e.g. the language of self-talk, prompts for student-led conversations).</p> <p>Dedicate Time - provide time for students to reflect on and share their learning of the SEL Skills (e.g. a journal, through a personal portfolio, as part of a lesson's consolidation).</p> <p>Feedback - provide specific feedback to support students as they develop these skills (e.g. "Let's brainstorm some actions we can take when we feel frustrated by a challenging math problem.", "When I get frustrated with a problem, I stop and ...")</p> <p>Journals and Conferences - create opportunities for students to reflect on SEL skills and share their learning.</p> |
| 2. recognize sources of stress and cope with challenges <ul style="list-style-type: none"> • How do students respond to challenges? (e.g. jump right in, wait for assistance, use a strategy like model the problem...etc.) • Can students describe the self-talk they use to refocus? ("I tell myself to slow down." "I stop and take a breath.") • Do students persevere? | <ul style="list-style-type: none"> • work through challenging math problems, understanding that their resourcefulness in using various strategies to respond to stress is helping them build personal resilience | <ul style="list-style-type: none"> – When I get stuck on a math problem, I tell myself... – If I'm stuck on a problem, I can get help from... – I need help with ... because ... | |

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| <p>3. maintain positive motivation and perseverance</p> <ul style="list-style-type: none"> • Do students have strategies when they are stuck? (e.g. attempt or test out different approaches, use resources in the room, ask for help from a friend) • Are students open to learning from mistakes? • Do students recognize what is working well for them, and what might need to be changed? | <ul style="list-style-type: none"> • recognize that testing out different approaches to problems and learning from mistakes is an important part of the learning process, and is aided by a sense of optimism and hope. | <ul style="list-style-type: none"> • What is working well? Where are you having difficulties? What do you know / understand? • When I'm stuck on a problem, I encourage myself by ... (e.g. seeking help from a friend, looking for more information, representing the problem, thinking about what I do know) | |
| <p>4. build relationships and communicate effectively</p> <ul style="list-style-type: none"> • How do students respond to feedback, questions or prompts from the teacher and their peers? • Do students build on each others' thinking? • Do students use supportive 'math talk' language? | <ul style="list-style-type: none"> • work collaboratively on math problems - expressing their thinking, listening to the thinking of others, and practicing inclusivity - and in that way fostering healthy relationships | <ul style="list-style-type: none"> • What do helpful math learning partners do to support each other? – Math Prompts to Support Communication – I ask questions. – I explain / justify my thinking to a friend and ask for their feedback. | |
| <p>5. develop self-awareness and sense of identity</p> <ul style="list-style-type: none"> • Do students perceive themselves as capable math learners? • Can students describe some of their mathematical strengths? • Do students demonstrate ownership of their learning? (e.g. using the resources and tools in the classroom, asking questions, using feedback to set a personal learning goal, taking risks in their learning) | <ul style="list-style-type: none"> • see themselves as capable math learners, and strengthen their sense of ownership of their learning, as part of their emerging sense of identity and belonging | <ul style="list-style-type: none"> • What part of today's math problem did you feel most successful with? Why? • What did you do when you felt stuck with this problem? • What more do you want to learn about ...? – My favourite part of math is ... – I do best in math when ... | |
| <p>6. think critically and creatively</p> <ul style="list-style-type: none"> • Do students connect the mathematics they are learning to familiar contexts? | <ul style="list-style-type: none"> • make connections between math and everyday contexts to help make informed judgements | <ul style="list-style-type: none"> • What does this math remind you of? – I look back and check my thinking to see if my answer / solution makes sense by... | |

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| <ul style="list-style-type: none"> • Do students use their mathematical thinking to make and justify decisions? • Do students use mathematics to help them identify and/or address important social issues? | and decisions | – I change my approach if my strategy isn't working. | |
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