Self-Efficacy

A Key Component of Social-Emotional Learning

"If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning."
~ Mahatma Gandhi

transforming education

Equipping students with the mindsets, skills and habits they need to succeed

Contents

transforming education

Objectives

In this session you will:

- Build a **deeper understanding of self-efficacy**, one example of a social-emotional competency that can help students feel more motivated to persist and succeed.

- Leave with at least one **specific strategy or technique** that you could try in the classroom to support your students in developing self-efficacy.

- Identify the **role a teacher can play** in helping students develop self-efficacy.

Defining Self-Efficacy

Self-Efficacy is the belief in one's ability to succeed in achieving an outcome or reaching a goal. [1,6] This belief, specific to a task or an area of knowledge or performance, shapes the behaviors and strategies that help one pursue their goal. [1] Self-efficacy is informed by five influences (also known as sources): performance experience, vicarious experience, social persuasion, imaginal experience, and physical and emotional states. [2]
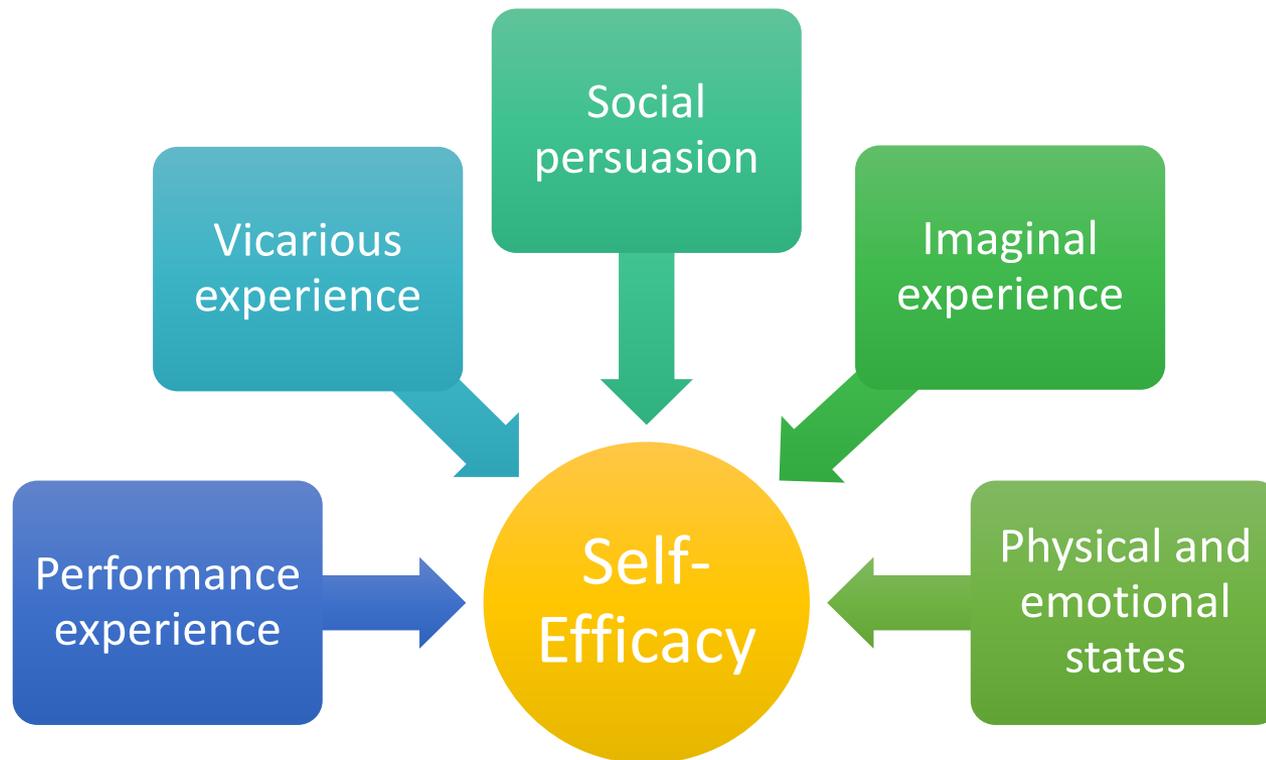
Defining Self-Efficacy – 5 Influences

A person's self-efficacy can be influenced by the following:[1,2]

- **Performance experience** refers to one's previous and related experiences, which can influence their perception of whether or not one has the competence to perform the task at hand. This tends to be what influences self-efficacy <u>the most</u>.
  - For example, Alex feels more confident about preparing a great science fair project this year, after having placed in the top 3 at last year's fair.

- **Vicarious experience** refers to the observed performances and experiences of others like oneself in a similar situation.
  - For example, although public speaking makes her nervous, Angela feels better about her upcoming speech to the student body after having watched her best friend deliver a speech that was well-received by their peers.

- **Social persuasion** refers to verbal encouragement or discouragement about a person's ability to perform. Typically, the more credible the source, the more impact this source is likely to have on a person's self-efficacy.
  - For example, when John's teacher reminds him how much John has improved his writing since the beginning of the year, new writing assignments seem less daunting.

transforming education

Defining Self-Efficacy – 5 Influences

A person's self-efficacy can be influenced by the following[1,2]:

- **Imaginal experience** refers to a person's use of their imagination to envision his or her success at a task.
  - For example, before her match, Karen visualizes herself making the plays her soccer team has successfully used before to feel more confident about her ability to defeat their opponents at this upcoming game.

- **Physical and emotional states** refers to how one experiences physical sensations and emotional states when facing the task or challenge.
  - For example, Nick feels anxious before the band recital, but he takes a moment to breathe and reframe this emotion as excitement to perform before his family and friends. He finds that this helps him to feel better about how he will do in his performance.

It's important for educators to understand the skills students require in order to use these influences to positively shape their own self-efficacy. Therefore, it is essential to support students' abilities to effectively use relevant strategies and to help students, themselves, be able to recognize their own successes as successes.

Defining Self-Efficacy – Different levels in different contexts

A person's level of self-efficacy can vary for different subject areas or tasks. Likewise, even within a subject area, a student can have different levels of self-efficacy for different tasks.

For example, while a student may feel high self-efficacy in understanding a concept in science, he or she may still feel a lack of confidence in math. Moreover, the student can have high self-efficacy about scoring high on a science exam, but not feel as confident about his or her ability to build an outstanding science fair project.

I can understand how the heart receives and sends blood through the body!

Will I be able to show it well in my science project?

I wish I could understand math this well.
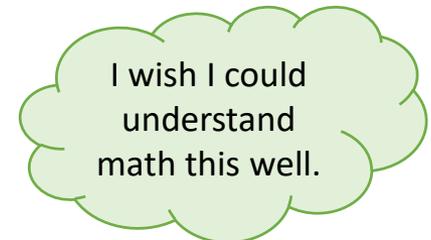
Defining Self-Efficacy: A first-hand perspective

It's important to talk to students about their understanding of self-efficacy. The following animation can help you start the discussion.

(Click on the image below to view the video.)

transforming
education
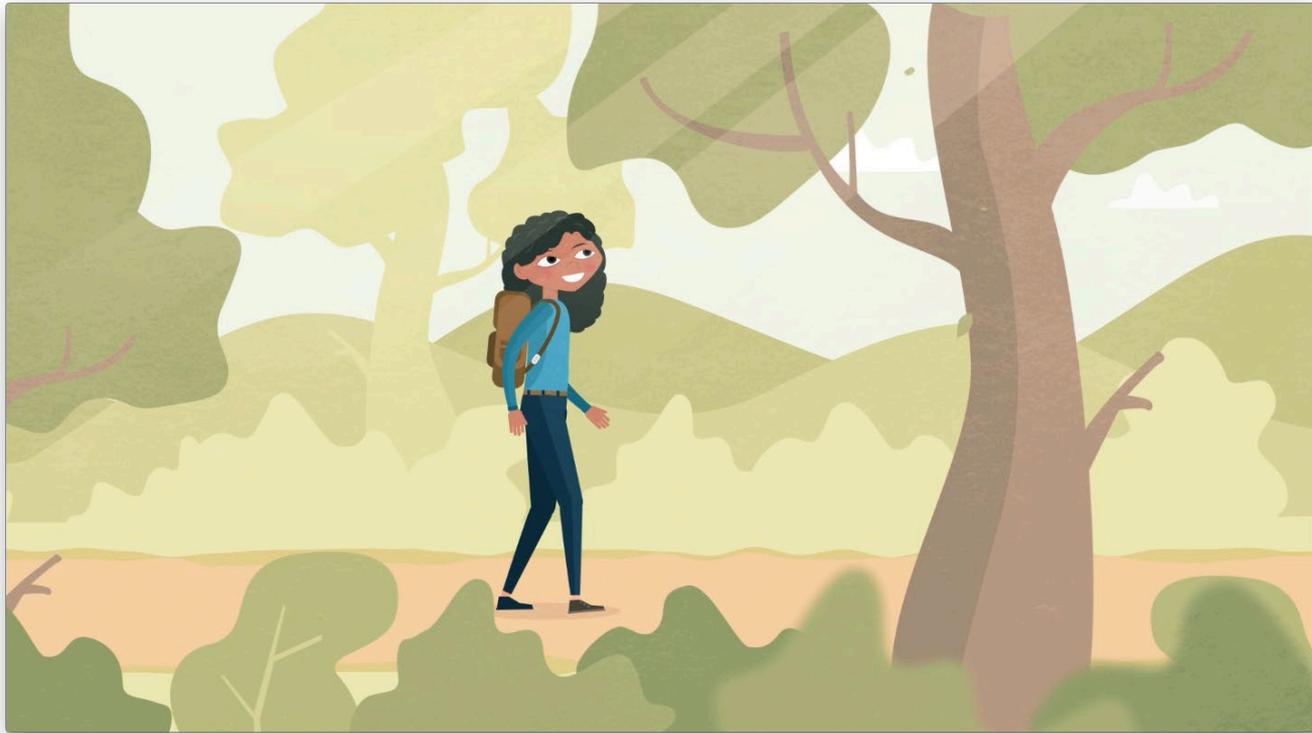
Activity #1: Your journey towards supporting students' self-efficacy

Turn to a partner and reflect on the following together:
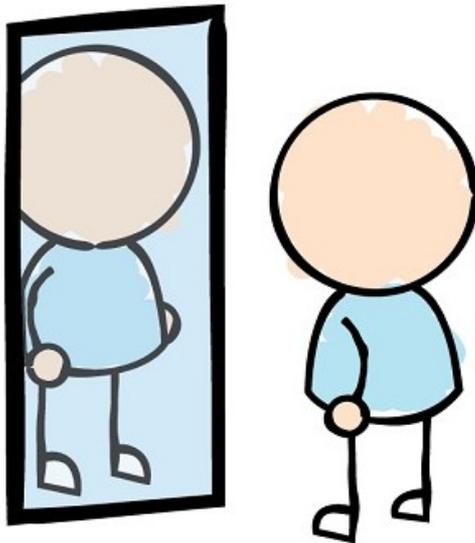
- What does this video make you think about your own self-efficacy for teaching?

- How could you use this video to spark a conversation with students, parents, or other educators?

- With whom else might you share this video?

Development of Self-Efficacy – Think about which aspects of self-efficacy are most relevant to your students based on where they are developmentally.[3]

Period (approx. ages)	Relevant Characteristics of Development *	Examples of Students Exhibiting High Self-efficacy
Early-mid Childhood (ages 2-6)	• Beginning to build the capacity for self-control and looking ahead • Developing an understanding of expectations and adjusting behaviors accordingly	*Continuing to find ways to pursue a curiosity or master a task in spite of setbacks* "I couldn't remember what came after the letter N! I bet if I start over, I can remember."
Mid-Late Childhood (ages 6-11)	• Developing ability to self-evaluate based on competence and perspective of others • Self-awareness of one's limitations, but learning one's ability to control oneself and the environment	*Observing peer models to build a stronger sense of one's own ability to accomplish a goal* "Ms. Smith helped Ana sound out the word and the next time, she could read it on her own! I wonder if I can try that, too."
Early Adolescence (ages 12-14)	• Developing an understanding of the self and one's abilities to influence outcomes • Reworking understanding of autonomy and initiative • Metacognitive abilities become more developed and help one assess their own capabilities more accurately	*Believing that one can adapt their behavior in pursuit of a goal* "I don't think I studied enough for that last geometry quiz. I'm sure if I make more time to review the lesson, I can get a better grade on the next quiz."
Late Adolescence (ages 14-18)	• Developing an understanding of what's important to the self and one's influence in planning for future goals	*High academic achievement and rigorous goal setting* "I really want to go to college with my peers. If I plan out my applications this summer, I should be able to have everything ready to apply in the fall and make sure I get things in on time."

*The characteristics listed under these periods continue to manifest and develop in different ways throughout different periods in childhood and adolescence.

transforming education

Differentiating Self-Efficacy from Self-Esteem and Growth Mindset

Self-efficacy is related to, but distinct from, self-esteem and growth mindset.[4,5,6,7,30]

|	Self-Esteem	Self-Efficacy	Growth Mindset
Definition	Refers to a person's more general sense of self-worth.	Refers to a person's belief that she can do what's necessary to successfully achieve a specific goal or task.	Refers to the belief that one's abilities can change over time as a result of effort, perseverance, and practice.
What does this answer?	Who am I? What is my worth?	Can I do this?	Can I grow in this area?
Example	"I am a competent person and a good learner…"	"…and I have confidence that I can master linear equations;"	"although I haven't mastered it yet, I know that I can get better at it if I study hard, try new strategies, and seek out help."
Relationship to Self-Efficacy	High self-efficacy and a growth mindset across various goals can contribute to overall positive self-worth (i.e., self-esteem).	Having high self-efficacy with a growth mindset can help a student navigate setbacks successfully. Even as a student experiences failure, noticing a gradual improvement in skills over time will give the student confidence that he or she can *ultimately* achieve the goal (self-efficacy) by increasing effort and abilities (growth mindset).	

Self-Efficacy: In students' words

How do students talk about self-efficacy in their lives? Watch the following video to hear more about self-efficacy in students' own words.

(Click on the image below to view the video.)

Hector, an 8th grader, tells us about the importance of self-efficacy in helping him reach his goals.

transforming education
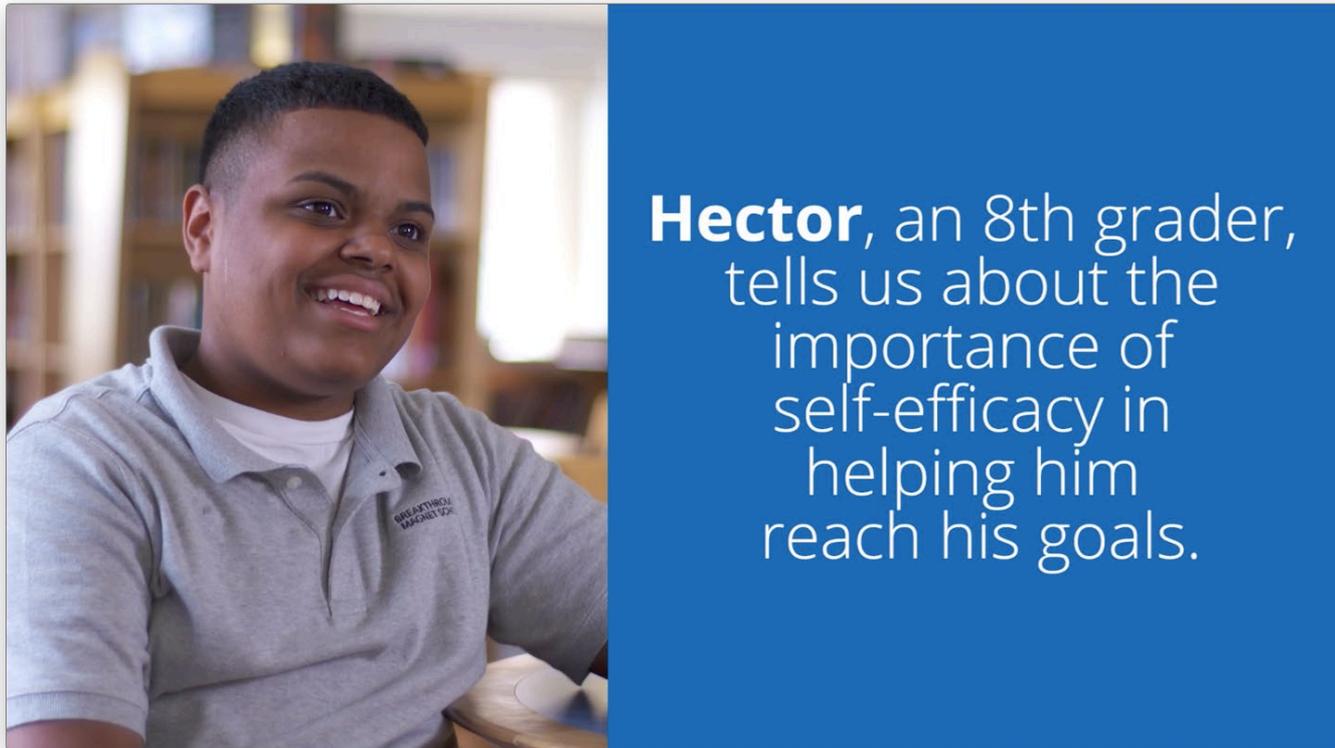
Activity #2: Take a step back
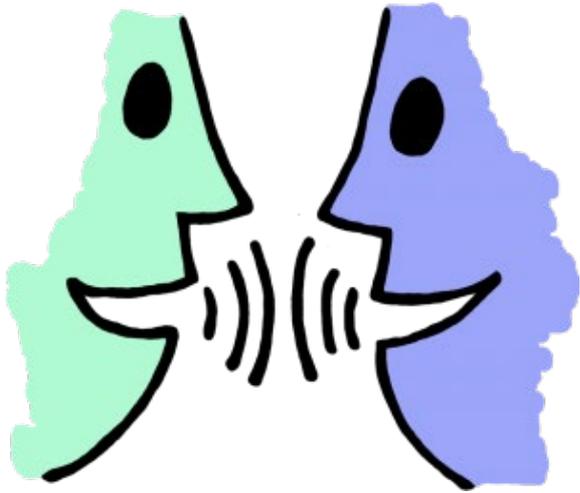
Small Group Discussion:

- What words resonated the most in how students talked about their self-efficacy?

- What role does students' self-efficacy play in your classroom?

- What kinds of messages do you think your students are receiving throughout the day that might influence their self-efficacy?

- How does this make you think about your role in helping to motivate students who are struggling in school by improving their academic self-efficacy?

transforming education

Why Self-Efficacy Matters

Self-efficacy determines how one feels, thinks, motivates themselves, behaves, and performs. Students with high self-efficacy:

- Have better self-regulation[8]

- Are more resilient in the face of obstacles[9]

- Demonstrate stronger academic performance and achievement[10]

- Are more motivated in school[11]

- Set more challenging and higher academic goals[11]

- Are better prepared to adapt to and succeed in their first year of college[12]

- Go on to have more successful careers and are open to a wider range of career choices[13,14]

- Are happier all around[15]
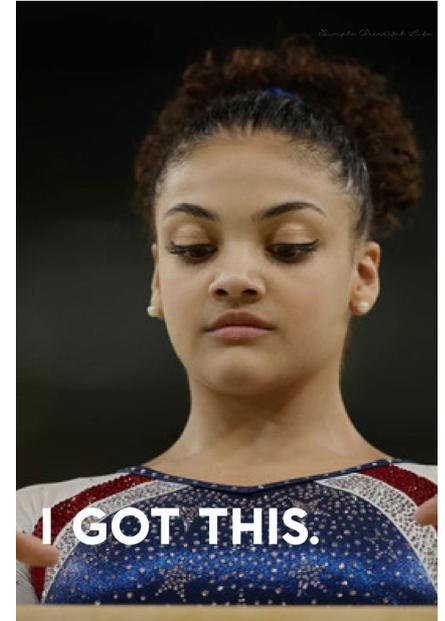
I GOT THIS.

16-year-old Olympic gold medalist, Laurie Hernandez, reminds herself "I got this," before preparing her beam routine at the 2016 games in Rio.

transforming education

Self-Efficacy: A gateway to other mindsets, essential skills, and habits

Having high self-efficacy…

…helps students use more self-regulation practices that make them successful in school.[16]

…encourages students to persist and not give up in the face of difficulties.[17]
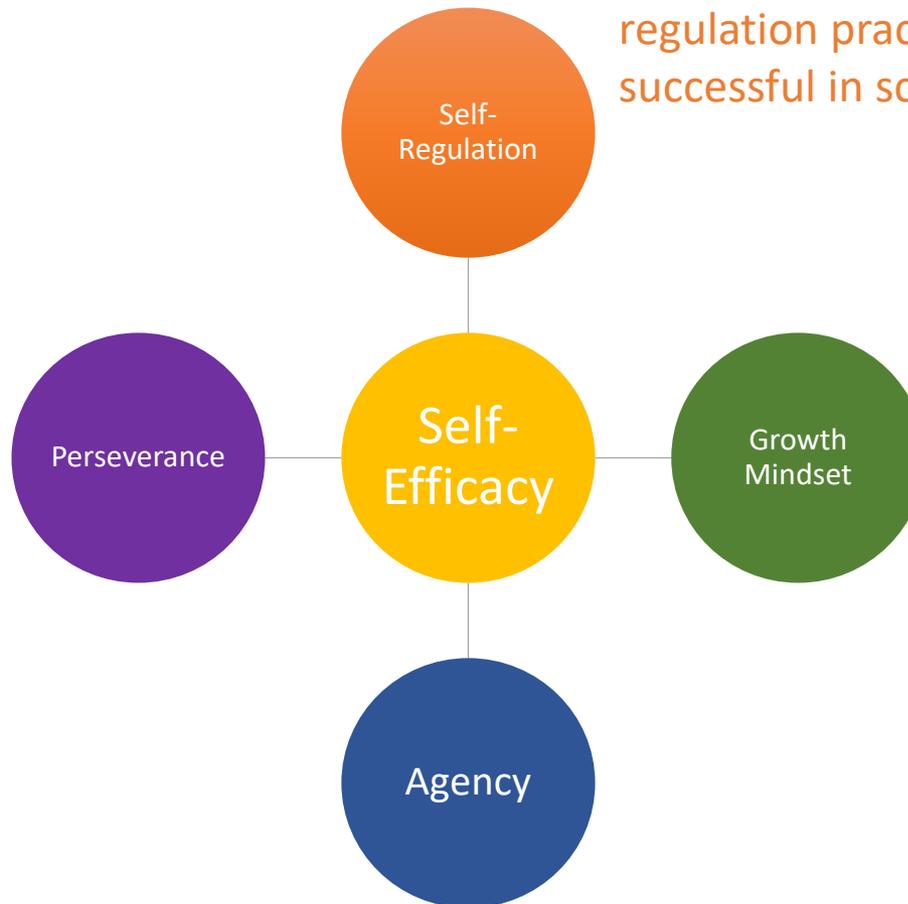
…can help students recover from challenges more successfully by motivating them to increase their efforts and abilities.[17, 18]

Self-Regulation

Perseverance

Self-Efficacy

Growth Mindset

Agency

…compels students to enact their agency in pursuit of a goal because they believe it will be worth it in the end.[19]

transforming education

Self-Efficacy in the Classroom
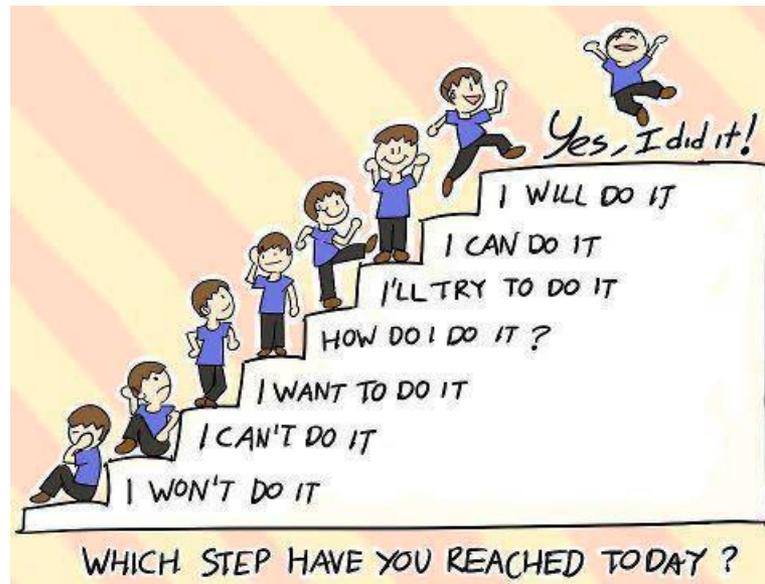
Questions to consider

How do your students…

- Think about setting goals?

- Think about the impact of their own abilities and efforts on their performance?

- Approach challenges?

- Respond to setbacks?

- Define success?

Self-Efficacy in the Classroom

A wide range of strategies can be used to support students' self-efficacy. All of the "five influences" described earlier are valid entry points. The research-based strategies on the following slides are sample approaches to developing the various influences of self-efficacy. **All strategies are adaptable for elementary, middle, and high (secondary) school.**

Consider the following questions:

- How can I adapt these strategies for the whole class? With groups of students? With individual students?
- Are there developmental and language adaptations that I need to consider?
- How can I build these practices into everyday curriculum? Can I work on one strategy across various subjects?

Also consider the tips for success indicated by this icon:

We use the following key to indicate the grades for which each strategy is most relevant:

E	Elementary Grades
M	Middle Grades
H	High School Grades

Choose the strategies that are most age-appropriate and aligned with your teaching style.

Sample Strategy: Building Evidence of Success (Performance Experience)

Plan for moderately challenging tasks (just above the student's current ability level) that gradually increase in difficulty and reflect progress so that students can build a record of mastery performance and generate evidence that they can succeed.[20, 21]

Strategy:
Provide students with an assignment and a corresponding student-friendly learning progression—a roadmap towards the mastery of a skill or task—that clearly represents expectations at different stages of achievement. Modify and adapt the assignment to reflect varying levels for each student—what he or she should be able to do successfully, with your help (instructional) or alone (independently).[20]

For example, develop a learning progression with each of your students that acts as a step-by-step guide to help the student track progress as he or she masters each level of reading comprehension.[20] Use a similar strategy for teaching students how to analyze historical documents or write up a lab report in science class. See an example here.

E

M

H

- ✓ Ensure that each level or skill in the progression is broken down into manageable pieces for the student.
- ✓ The progression (or rubric) should facilitate mastery in one task or skill before proceeding to the next.
- ✓ The student should be able to track her own progress and clearly understand how to move forward and master the next step.

transforming education

Sample Strategy: "If she can do it, I can, too!"
(Vicarious Experience)

Use peer models to enhance self-efficacy in a powerful way. Foster opportunities for students to acquire new skills and strategies by observing peers who are working through or have mastered a similar challenge and are modeling an effective strategy. The most influential peer models are often those the learner relates to or admires.[20, 22, 24]

Strategy:

Have students who are more advanced in math work through problems out loud with their peers who are one or two levels below. Use the following prompts[23]:

- Tell me what you know about _____ .
- How might you break this problem into smaller steps?
- What strategies did you use to get from ____ to _____ ?

E

✓ Make sure peer models are attributing their successes and failures to factors they can control and modify (e.g., time studying, applying new strategies, etc.).
✓ Teachers should noticeably reinforce models for correctly using the targeted skill or strategy.
✓ Peer models are most effective, but parents, teachers, athletes, and celebrities can also inspire students in other areas.

transforming
education

Sample Strategy: "You know how and so you can!"
(Social persuasion)

An important source of self-efficacy is the specific feedback students receive from teachers on what is driving the student's performance. It is most important to focus on feedback that attributes the end result to something specific (e.g, using a specific strategy effectively) so that students can make the connection between success, effort, and correct use of strategies.[20]

Strategy:[20]
When providing feedback to students, follow this sequence:
1) State why the student succeeded (or failed).
2) Explain to what degree the student was successful.
3) Use words related to achievement (e.g., "great job") or encouragement (e.g., "try it again") at the end.

E

M

H

For example, "(1) You used the "Read, Ask, Put" strategy correctly: You read the paragraph, asked yourself what it was about, and put the main idea and two important details in your own words. (2) By using this strategy, you got all the answers right. (3) Nice job."

✓ When students are successful at a task, point out where their competence, invested effort, or effective use of a strategy contributed to their success.
✓ Note that negative comments are more effective in lowering self-efficacy than positive comments are in raising self-efficacy.

Sample Strategy: Imagination is a powerful thing!
(Imaginal Experience)

A student's imagination is a powerful and easily harnessed tool in helping him feel more confident about approaching a goal.[2] Guiding students through imagining themselves as confident and successful in a stressful situation can help them feel the same in real life.

Strategy:
Have students make a concrete plan about how they will approach an upcoming exam. Encourage them to use using the following **If-Then** planning prompt to plan for specific intentions and overcoming challenges:[25,26]

M

H

- If it is Friday at 3pm (situation), I will identify specific days and times next week to to study (action).
- If I get distracted by another activity (obstacle), then I will find a time to do the activity later (action to address the obstacle) and return to studying.

Then, have students take 20 seconds to visualize how they will carry out their plans (for example, picture when and where they will study next week).[27]

✓ Encourage students to think through various sensory details when they are imagining the situation.
✓ Have students practice relaxation techniques, such as deep belly breaths, while engaged in imagining to help them make a positive, relaxed connection with the experience.

Sample Strategy: Mindfully Aware
(Physical and Emotional States)

Students will have a higher sense of self-efficacy about challenges in school when they're feeling calm. Creating a classroom environment that is not perceived as threatening can also help students feel more relaxed in the long run and therefore, more confident about their ability to succeed.[2,24]

Strategy:
Have your students practice mindfulness by learning to do a body scan. Have students sit in a relaxed position. Start with gentle, deep breaths and guide them through paying attention to various parts of their bodies, noticing how they feel, without trying to change it. Find a script for a classroom-friendly body scan here.

E

M

H

✓ Give students the opportunity to reflect on and become familiarized with what their bodies and sensations are telling them.
✓ Push students to think about relaxation strategies they might already be using, but may not be aware of (e.g., taking deep belly breaths, visualizing their favorite, peaceful places).

transforming education

Sample Strategy: Embrace the Stress
(Physical and Emotional States)

Students will also have a higher sense of self-efficacy about challenges in school when they can interpret their body's feedback as excitement, rather than distress, upon facing a challenge.[2] Shifting their mindset from stress to excitement can help students feel good about their ability to tackle what's ahead.[28]

Strategies:

- If you're feeling stressed or anxious about a challenge up ahead, reframe your mindset to think of stress as way of helping you to prepare for the task by saying to yourself: "I'm actually excited about this because (name something good about this situation)."[28]

- Before starting work on a challenging project, make a list of how your skills will make your success possible. Try using **If-Then** statements to help you plan how you will use your skills.[29]

E

M

H

✓ Help students practice viewing stress as a way to enhance their skills:
  - To help them improve at what they're doing
  - To help them learn and grow
  - To help give them the energy to stay motivated

transforming education

Closing Activity: Planning for Implementation
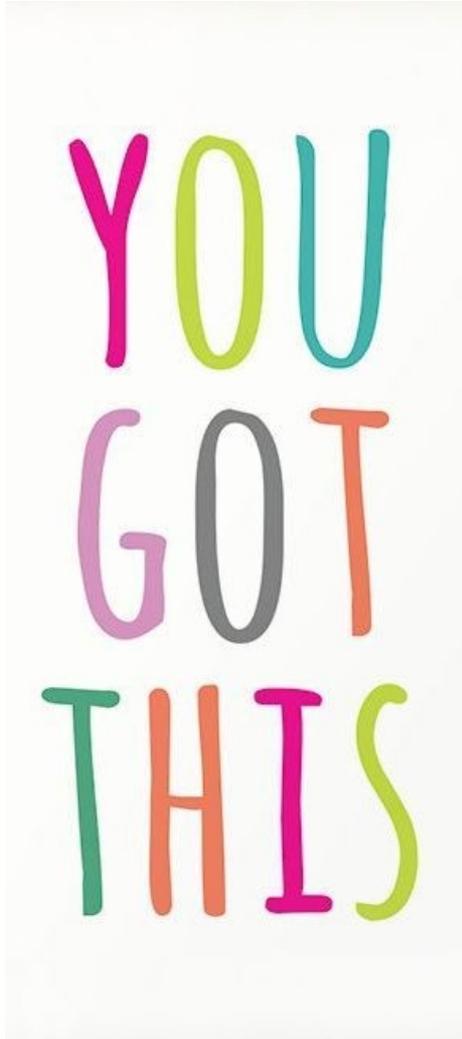
Individual reflections and/or small group discussion:

Of the various strategies we've discussed today, which one(s) do you want to commit to trying?

- How might this strategy be integrated into your existing practices, strategies, or lesson planning?

- What are some challenges you anticipate for implementing this strategy into your daily curriculum? What planning and preparation might help you overcome these challenges?

- What are areas of strength and growth, related to self-efficacy, for the different students in your classroom?

- Think about your own self-efficacy in implementing these strategies.
    - What prior experiences are informing your confidence?
    - What other influences can help support your own confidence in effectively helping your students' self-efficacy?

Want to Know More?

Self-Efficacy

- [The Sway of Self-Efficacy](#)

- [Teaching Self-Efficacy with Personal Projects](#)

- [Self-Efficacy: Helping Children Believe They Can Succeed](#)

- [Classroom strategies to improve student self-efficacy and learning outcomes](#)

- [Attempting the Impossible: Inspirational quotes about self-efficacy from historical figures](#)

- [If at First You Don't Succeed, You're in Excellent Company](#)

- [Multimedia Resources for Introducing Mindfulness to Your School](#)

Social-Emotional Learning

- [Transforming Education toolkit on Growth Mindset](#)

- [Transforming Education toolkit on Self-Management](#)

- [Transforming Education toolkit on Social Awareness](#)

- [A National Teacher Survey on How Social and Emotional Learning Can Empower Children and Transform Schools](#)

- [Smart Hearts: Social and Emotional Learning Overview](#)

- [The Heart-Brain Connection: The Neuroscience of Social and Emotional Learning](#)

transforming education

References

[1] Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191.

[2] Maddux, J. E., & Gosselin, J. T. (2003). Self-efficacy. *The Wiley Handbook of Positive Clinical Psychology*, 89-101.

[3] Adapted from: Cole, M. & Cole, S. (1996). *The development of children.* New York: Scientific American.

[4] Hajloo, N. (2014). Relationships Between Self-Efficacy, Self-Esteem and Procrastination in Undergraduate Psychology Students. *Iranian Journal of Psychiatry and Behavioral Sciences*, *8*(3), 42–49.

[5] Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development*, 78(1), 246-263.

[6] Nagaoka, J., Farrington, C. A., Roderick, M., Allensworth, E., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2013). Readiness for College: The Role of Noncognitive Factors and Context. *Voices in Urban Education*, *38*, 45-52.

[7] Orth, U., Robins, R. W., & Widaman, K. F. (2012). Life-span development of self-esteem and its effects on important life outcomes. *Journal of personality and social psychology*, *102*(6), 1271.

[8] Bouffard-Bouchard, T., Parent, S., & Larivee, S. (1991). Influence of self-efficacy on self-regulation and performance among junior and senior high-school age students. *International Journal of Behavioral Development*, 14, 153-164.

[9] Schwarzer, R., & Warner, L. M. (2013). Perceived self-efficacy and its relationship to resilience. In *Resilience in children, adolescents, and adults* (pp. 139-150). Springer New York.

[10] Collins, J. L. (1984). *Self-efficacy and ability in achievement behavior*. Redwood City, CA: Stanford University.

[11] Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, 29(3), 663-676.

[12] Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology, 93(1)*, 55–64.

[13] Lent, R. W., Brown, S. D., & Larkin, K. C. (1986). Self-efficacy in the prediction of academic performance and perceived career options. *Journal of Counseling Psychology, 33*(3), 265–269.

[14] Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin, 124*(2), 240–261. doi:10.1037/0033-2909.124.2.240

[15] Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: the role of core evaluations. *Journal of applied psychology*, *83*(1), 17.

[16] Pajares, F., & Schunk, D. (2001). The development of academic self-efficacy. *Development of achievement motivation. United States*, 7.

[17] Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational psychologist*, *28*(2), 117-148.

[18] Dweck, C., Walton, G. M., & Cohen, G. L. (2014). Academic tenacity: Mindsets and skills that promote long-term learning. Seattle, WA: Bill & Melinda Gates Foundation.

[19] Cauce, A. M., & Gordon, E. W. (2012). Toward the measurement of human agency and the disposition to express it. *Gordon commission on the future of educational assessment, Princeton, Educational Testing Service*.

[20] Margolis, H., & McCabe, P. P. (2006). Improving self-efficacy and motivation what to do, what to say. *Intervention in school and clinic*, *41*(4), 218-227.

[21] Stipek, D. (1998). Motivation to learn: From theory to practice (3rd ed.).Boston: Allyn & Bacon

[22] Pajares, F., & Schunk, D. (2001). The development of academic self-efficacy. *Development of achievement motivation. United States*, 7.

[23] Haskell, N. (2016). Classroom strategies to improve student self-efficacy and learning outcomes. Retrieved from http://www.pearsoned.com/education-blog/improve-self-efficacy-learning-outcomes/

[24] Schulze, P., & Schulze, J. M. (2003). Believing is achieving: The implications of self-efficacy research for family and consumer sciences education. *AAFCS monograph: research applications in family and consumer sciences*, 105-113. Chicago

[25] Maddux, J. E. (2006, November). *Goals and self-regulation: A pathway to happiness and well-being.* Invited address at Smithsonian Institute, Washington, DC.

[26] Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in experimental social psychology*, *38*, 69-119.

[27] Knauper, B., McCollam, A., Rosen-Brown, A., Lacaille, Kelso, E., & Roseman, M. (2011). Fruitful plans: Adding targeted mental imagery to implementation intentions increases fruit consumption. *Psychology & Health*, 2011

[28] McGonigal, K. (2016). *The upside of stress: Why stress is good for you, and how to get good at it*. Penguin.

[29] Csikszentmihalyi, M. (2016). Finding Flow. *Psychology Today.* Retrieved from https://www.psychologytoday.com/articles/199707/finding-flow.

[30] Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of educational research*, *78*(4), 751-796.

transforming education

27

Please help us improve!

Please share your feedback in this 2-minute survey so that we can improve the free tools we create for teachers! Click **HERE** to access the survey.


transforming
education

Thank You!

A special thank you to the content experts who contributed to this work:
- David Dunbar, CITYterm at The Masters School
- James E. Maddux, Ph.D., University Professor Emeritus, George Mason University
- Ellen L. Usher, Ph.D., Associate Professor, University of Kentucky

transforming education
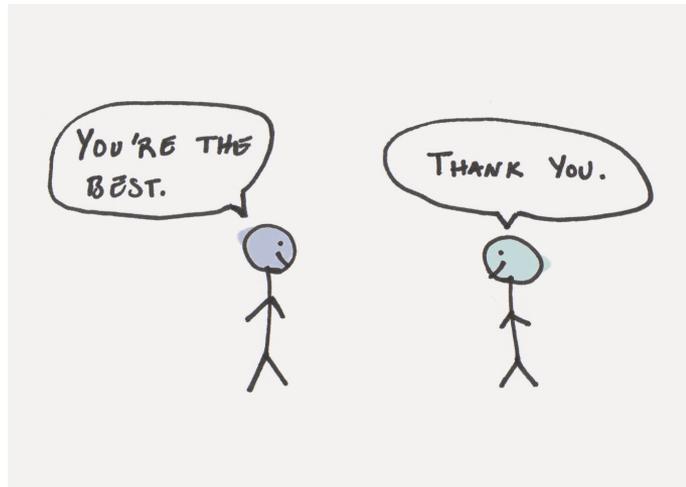
Equipping students with the mindsets, skills and habits they need to succeed

www.transformingeducation.org