

6 strategies for promoting student self-efficacy in your teaching

What is self-efficacy?

Self-efficacy is the judgement that a person makes about their own capability to achieve a future task. High self-efficacy is the confidence or strength of belief that one can learn and experience success in learning. Students tend to avoid tasks that exceed their ability and seek tasks at which they can succeed. Therefore self-efficacy judgements affect which activities students choose or avoid, how much effort they put in, how much resilience they have, and how long they persist with a task.

Students with high self-efficacy enjoy challenges and tolerate failure, whereas those with low self-efficacy are more likely to avoid difficult tasks, and have low commitment to goals. Students with higher self-efficacy set higher goals and expend more effort towards their achievement. They persist longer and use more cognitive and metacognitive strategies (higher-level thinking showing an understanding of learning processes). The most useful efficacy judgement for a student is slightly overestimating what they can actually achieve on a task — this motivates greater effort and results in greater learning.

Students' self-efficacy beliefs are based on:

- prior task accomplishments, and whether success is interpreted through a growth or fixed mindset
- seeing a model perform the task or activity (because students develop an expectation that they too can acquire the skill)
- teacher expectations and verbal persuasion
- the amount of support students can expect from teachers and peers
- physical symptoms such as anxiety. (Students with low self-efficacy are more likely to experience achievement anxiety.)

Seven strategies that can increase self-efficacy

1. Task accomplishment and success

A student's experience of succeeding in tasks is the most important source of self-efficacy beliefs. To help students experience success, teach techniques such as self-verbalisation. For example, encourage students to verbalise a procedure for subtraction aloud, and provide feedback on their effort. Research shows this leads to problem-solving successes, and higher self-efficacy, alongside the development of the desired learning strategies and understanding of content.

Once students experience an improvement in performance or an achievement, feelings of efficacy are enhanced, which enable students to tackle further learning challenges. Students learn that their efforts improve their performance. Students' feeling that important learning has been achieved further enhances efficacy beliefs, therefore teachers should convey to students that what they are learning is important.

Value what you are teaching and express confidence that your students can learn it. Provide activities that students can accomplish with a reasonable amount of effort. To ensure an optimal level of challenge, teacher support can include scaffolding, giving plenty of time, and deconstructing larger tasks into smaller steps. Build concepts gradually and ensure success at each step. Explain the concept or strategy thoroughly before asking students to use it for problem solving. This creates a perception of moderate challenge but also balances the difficulty of tasks.

Foster a co-operative social environment, rather than a competitive atmosphere. Allow students to work together, and encourage students to build on one another's responses and help each other. Use instructional practices based on class discussion and small group work.

Ask students to develop and explain (or justify) their own solutions. Use every answer as an opportunity to ask students to explain their thinking. Allow multiple solutions to problems, and offer elaboration on each so that every student understands the range of correct answers. This supports students' sense of autonomy and allows them many opportunities to demonstrate competence, but also communicates to the class that they are learning, and that what they are learning is important.

With multiple possible correct answers to solutions, it is particularly important to always be clear whether an answer is right, and to elaborate or explain whether and how strategies are effective, otherwise students are left unsure whether they are learning or what it is they have learned. Without feedback, clarification and explanation, approaches which invite multiple strategies and solutions risk student confusion instead of efficacy.

2. Peer modelling

This is the second most important influence on self-efficacy beliefs. Peer modelling is more effective than teacher modelling, especially as some students may doubt they can ever attain the teacher's level of competence. However, choose your models carefully. The best peer models are those that make errors at first and express doubt about their self-efficacy ("I'm not sure I can do this"). The teacher supports these peer models by giving prompts, and the model then successfully completes the task. He or she can be questioned about how they overcame failure and developed mastery. This kind of model (called a 'coping' model) is more effective than a 'mastery' model who performs the task correctly and verbalises high self-efficacy and ability ("I'm good at this" or "That was easy"). Most students tend to see themselves as being more like the coping model than the mastery model. Try to identify suitable coping models from within your class, and be wary of influential students who offer themselves as mastery models. If your model does not make mistakes or experience difficulties, ensure that you ask questions about how they worked out challenges in order to elicit coping strategies. Alternatively, you might act as a coping model yourself, or make empathetic statements such as "At this point, you might be getting confused", or "You might believe you've gone wrong".

3. Goals and feedback

Although involving students in setting their own goals can lead to greater satisfaction for the student, giving a student a goal you as a teacher wish them to achieve can have a larger impact on self-efficacy because it indicates your belief in the student's capabilities. Encourage students to compare present performance against a goal and also against previous performance. Convey tasks and activities as goals to be accomplished, then frame completion as success. Help students identify any obstacles they foresee to accomplishing the goal. Help them brainstorm potential strategies to use.

Give specific instruction in goal setting. Give students a general goal and discuss how to revise it so it is specific and realistic, as well as how to break it into a subset of smaller goals. For example, "I want to have great study habits" might be transformed into "I will learn a reading comprehension strategy", "I will practise each part at a time", and "I will monitor my performance after each comprehension test". Have students write goals, then in pairs try to revise and improve them.

Make feedback frequent, elaborative and positive. Offer feedback emphasising goal progress and highlighting personal capacities in order to increase students' self-efficacy. Feedback should indicate what students are learning rather than simply evaluate their answers as correct or incorrect. When students give an incorrect response, instead of evaluating or moving on to another student, examine their thinking processes to ascertain why they misunderstood. Use this opportunity to reteach or clarify, so as to further support students' efficacy.

Focus on effort and strategies in attributing the reason for success. For example, "The effort you showed by restudying the words you missed paid off; look at the improvement you've made." Teach students to expect to make mistakes, and treat mistakes as opportunities to learn and gain useful feedback from others. This can retrain students' interpretations of setbacks and build resiliency.

4. Use self-assessment

Have students write comments or questions in the last few minutes of class. Address these the next day. This encourages students to think about what they do/do not understand and helps them see how they are getting smarter. Tell students every day how they are progressing and what they learned the day before. Some students need to be convinced that they can learn, and are learning.

5. Give daily problem-solving opportunities

To foster competence, make the problems very easy, but non-routine. After a month, students will become comfortable and more confident and able to move to more challenging problems. The impact of challenge on students' sense of self-efficacy depends on students' perceived autonomy and choice, their knowledge and skills, as well as the support they receive from their teacher and peers. Help students learn how to explain why they are doing something; then ask them to explain to class, each other, and have pairs question each other. "I see you did _____. How did you come up with that?" Use questions that foster thinking and that ask students to justify their thinking.

6. Support students' affirmation

Rather than expect students to reinterpret difficulty or failure in an optimistic way, students might be better able to accept difficulties if they have affirmed other aspects of self which strengthen their sense of self-efficacy. This might be by engaging in interactions with friends and peers, or participating in extra-curricular activities or sports. Affirm students' personal adequacy in the school environment by having them write self-affirming statements consisting of brief reflections on their most important values, characteristics and relationships. Affirmations of values remind students of their higher goals, deeper values, and, most importantly for self-efficacy, highlight credible evidence of students' personal adequacy and efficacy. These affirmations of values and goals boost students' sense of their resources to cope with challenges, and to view threatening events — such as negative feedback or making errors — as less powerful and less significant for their self-concept.

7. Develop teacher self-efficacy

Teachers need to believe in their ability to make a difference to student learning. Teachers' sense of self-efficacy influences students' self-efficacy beliefs. Tell stories about how your self-efficacy beliefs helped you overcome a setback or failure, and have students tell, or write and share, self-efficacy stories.