

SOURCES OF SELF-EFFICACY BELIEFS

Psychologists who study self-efficacy have identified four major sources of self-efficacy beliefs (Pajares & Schunk, 2001, 2002). In order of importance, they are

- (1) prior experiences of mastering tasks,
- (2) watching others' mastering tasks,
- (3) messages or "persuasion" from others, and
- (4) emotions related to stress and discomfort.

Fortunately the first three can be influenced by teachers directly, and even the fourth can sometimes be influenced indirectly by appropriate interpretive comments from the teacher or others.

Prior Experiences of Mastery

Not surprisingly, past successes at a task increase students' beliefs that they will succeed again in the future. The implication of this basic fact means that teachers need to help students build a history of successes. Whether they are math problems, reading assignments, or athletic activities, tasks have to end with success more often than with failure. Note, though, that the successes have to represent mastery that is genuine or competence that is truly authentic. Success at tasks that are trivial or irrelevant do not improve self-efficacy beliefs, nor does praise for successes that a student has not really had (Erikson, 1968/1994).

As a practical matter, creating a genuine history of success is most convincing if teachers also work to broaden a student's vision of "the past." Younger students (elementary-age) in particular have relatively short or limited ideas of what counts as "past experience"; they may go back only a few occasions when forming impressions of whether they can succeed again in the future (Eccles, et al., 1998). Older students (secondary school) gradually develop longer views of their personal "pasts," both because of improvements in memory and because of accumulating a personal history that is truly longer. The challenge for working with any age, however, is to ensure that students base self-efficacy beliefs on all relevant experiences from their pasts, not just on selected or recent experiences.

Watching Others' Experiences of Mastery

A second source of efficacy beliefs comes from vicarious experience of mastery, or observing others' successes (Schunk & Zimmerman, 1997). Simply seeing someone else succeed at a task, in other words, can contribute to believing that you, too, can succeed. The effect is stronger when the observer lacks experience with the task and therefore may be unsure of his or her own ability. It is also stronger when the model is someone respected by the observer, such as a student's teacher, or a peer with generally comparable ability. Even under these conditions, though, vicarious experience is not as influential as direct experience. The reasons

are not hard to imagine. Suppose, for example, you witness both your teacher and a respected friend succeed at singing a favourite tune, but you are unsure whether you personally can sing. In that case, you may feel encouraged about your own potential, but are likely still to feel somewhat uncertain of your own efficacy. If on the other hand you do not witness others' singing, but you have a history of singing well yourself, it is a different story. In that case, you are likely to believe in your efficacy, regardless of how others perform.

All of which suggests that to a modest extent, teachers may be able to enhance students' self-efficacy by modelling success at a task or by pointing out classmates who are successful. These strategies can work because they not only show how to do a task but also communicate a more fundamental message, the fact that the task can in fact be done. If students are learning a difficult arithmetic procedure, for example, you can help by demonstrating the procedure, or by pointing out classmates who are doing it. Note, though, that vicarious mastery is helpful only if backed up with real successes performed by the students themselves. It is also helpful only if the "model classmates" are perceived as truly comparable in ability. Overuse of vicarious models, especially in the absence of real success by learners, can cause learners to disqualify a model's success; students may simply decide that the model is "out of their league" in skills and is therefore irrelevant to judging their own potential.

Social Messages and Persuasion

A third source of efficacy beliefs are encouragements, both implied and stated, that persuade a person of his or her capacity to do a task. Persuasion does not create high efficacy by itself, but it often increases or supports it when coupled with either direct or vicarious experience, especially when the persuasion comes from more than one person (Goddard, Hoy, & Hoy, 2004).

For teachers, this suggests two things. The first, of course, is that encouragement can motivate students, especially when it is focused on achievable, specific tasks. It can be motivating to say things like: "I think you can do it" or "I've seen you do this before, so I know that you can do it again." But the second implication is that teachers should arrange wherever possible to support their encouragement by designing tasks at hand that are in fact achievable by the student. Striking a balance of encouragement and task difficulty may seem straightforward, but sometimes it can be challenging because students can sometimes perceive teachers' comments and tasks quite differently from how teachers intend. Giving excessive amounts of detailed help, for example, may be intended as support for a student, but be taken as a lack of confidence in the student's ability to do the task independently.

Emotions Related to Success, Stress or Discomfort

The previous three sources of efficacy beliefs are all rather cognitive or “thinking oriented,” but emotions also influence expectations of success or failure. Feeling nervous or anxious just before speaking to a large group (sometimes even just a class full of students!) can function like a message that says “I’m not going to succeed at doing this,” even if there is in fact good reason to expect success. But positive feelings can also raise beliefs about efficacy. When recalling the excitement of succeeding at a previous, unrelated task, people may overestimate their chances of success at a new task with which they have no previous experience, and are therefore in no position to predict their efficacy.

For teachers, the most important implication is that students’ motivation can be affected when they generalize from past experience which they believe, rightly or wrongly, to be relevant. By simply announcing a test, for example, a teacher can make some students anxious even before the students find out anything about the test— whether it is easy or difficult, or even comparable in any way to other experiences called “tests” in their pasts. Conversely, it can be misleading to encourage students on the basis of their success at past academic tasks if the earlier tasks were not really relevant to the requirements of the new tasks at hand. Suppose, for example, that a middle-years student has previously written only brief opinion-based papers, and never written a research-based paper. In that case, boosting the student’s confidence by telling him that “it is just like the papers you wrote before” may not be helpful or even honest.