

Self-Efficacy Questionnaire (2016 Version)

Overview

What This Questionnaire Measures

In the context of education, self-efficacy refers to a student's confidence in his or her ability to achieve specific academic tasks. A wider definition encompasses a belief that ability is not fixed but can grow with effort. Research conducted by Zimmerman (2000) found that students with higher levels of self-efficacy will engage more, work harder, and persist longer when they encounter difficulties.

The Self-Efficacy Questionnaire is designed to measure a student's proficiency in the two essential components of self-efficacy, which are:

1. Believe that ability can grow with effort.
2. Believe in your ability to meet specific goals and/or expectations.

How This Questionnaire Is Accessed

Teachers can launch questionnaires and view both individual and aggregate student results by visiting <http://ResearchCollaborationSurveys.org>, creating an account, and following the instructions provided on the website. This website is free and available to all educators. Once students have completed the questionnaires, teachers can see graphed results for individual students as well as in aggregate. Teachers can also download a raw data file in MS Excel.

How This Questionnaire Is Completed

Teachers make the questionnaire available to students by providing the URL to the survey site and a survey code. Students then enter the survey code and a student number assigned by the teacher. Students complete the questionnaire by self-rating items on a 5-point, Likert-type scale. This scale ranges from 1 (*Not very like me*) to 5 (*Very like me*). The results are automatically graphed for students and available to them once they complete the questionnaire. This enables them to immediately reflect on results.

The following example items represent each of the two essential components:

- *I believe hard work pays off.* (Ability Can Grow)
- *I can figure out anything if I try hard enough.* (Belief in Own Ability)

The items on the questionnaire are written at an eighth grade reading level, per the Flesch-Kincaid¹ readability score. Accommodations should be provided when appropriate and can include reading the items aloud, explaining the items, and having a scribe fill in the response option.

¹ Kincaid, J.P., Fishburne, R.P., Rogers, R.L., & Chissom, B.S. (1975). Derivation of new readability formulas (automated readability index, fog count, and flesch reading ease formula) for Navy enlisted personnel. Research Branch Report 8–75. Chief of Naval Technical Training: Naval Air Station Memphis.

How to Use the Results

Self-Efficacy Questionnaire results can be used by both teachers and students. To ease interpretation, results are displayed on a 100-point scale. These scores can be interpreted similar to grades (e.g., 70-79 is a C). Results by essential component support reflection on relative strengths and areas for improvement.

Students can use the questionnaire results to build an awareness of how their perceptions and beliefs about ability contribute to their academic success. As students better understand that they can positively impact outcomes with effort, they build confidence in their ability to take on more challenging tasks.

Teachers can enhance their instructional practices by determining which perceptions are impacting their students' motivation to succeed. For example, if the student results indicate that students view ability as fixed, teachers can counter that belief by teaching students about growth mindset and incorporating instructional practices that help students see their progress over time. After combining this targeted instruction with guided practice and independent practice, teachers can re-administer the Self-Efficacy Questionnaire and alter their instruction accordingly. This allows teachers to engage in a process of data-driven decision making to increase their students' fundamental ability to understand the positive impact that effort has on ability and believe in their own personal ability to make progress on challenging tasks. Numerous resources for teaching self-efficacy are available at <http://CCCFramework.org/Resources.html>.

Technical Information

The Self-Efficacy Questionnaire was developed in 2015 by Research Collaboration (<http://ResearchCollaboration.org>). An extensive review of related research resulted in the identification of two components that are essential for developing self-efficacy. Following this literature review, it was determined that positive self-efficacy increases when students believe that ability can grow with effort and also believe in their ability to meet specific goals.

During the 2015-2016 school year, this questionnaire was tested for reliability using Cronbach's coefficient alpha² with results from 1,370 high school and middle school students.

The belief that ability grows with effort subscale consisted of 5 items ($\alpha = .819$) and the belief in personal ability subscale consisted of 8 items ($\alpha = .852$). The overall self-efficacy questionnaire was found to be highly reliable (13 items; $\alpha = .900$). When converted to a 100-point scale, the bottom quartile ranged from 20 to 74 and the top quartile ranged from 93.5 to 100.

² Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.

Cronbach, L. J. (1988). Internal consistency of tests: Analyses old and new. *Psychometrika*, 53, 63–70.

Questionnaire



Self-Efficacy Questionnaire

Please **CHECK ONE** response that best describes you. Be honest, since the information will be used to help you in school and also help you become more prepared for college and careers. There are no right or wrong answers!

Student ID _____

Date _____

	Not very	—————→			Very
	like me				like me
	1	2	3	4	5
1. I can learn what is being taught in class this year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I can figure out anything if I try hard enough.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. If I practiced every day, I could develop just about any skill.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Once I've decided to accomplish something that's important to me, I keep trying to accomplish it, even if it is harder than I thought.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am confident that I will achieve the goals that I set for myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. When I'm struggling to accomplish something difficult, I focus on my progress instead of feeling discouraged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I will succeed in whatever career path I choose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I will succeed in whatever college major I choose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I believe hard work pays off.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. My ability grows with effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I believe that the brain can be developed like a muscle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I think that no matter who you are, you can significantly change your level of talent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I can change my basic level of ability considerably.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>