



INNOVATION ABSTRACTS

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Innate Ability Versus Acquired Ability: A Student Dilemma

"What good is trying, I'm not good at math!" "It wouldn't matter if I put in more time studying English literature, I just can't understand Shakespeare!" "Why go to the writing lab, I'll never learn how to be a good writer!" Students with these beliefs about their abilities are less likely to make the time and expend the effort necessary to learn the material or skills being presented in their classes. They are less likely to use effective learning strategies and are more likely to give up and abandon learning tasks they find difficult. If you do not think that your efforts will make a difference, why try?

Many college students view their abilities, or lack of abilities, as innate and fixed characteristics. While many of our abilities and talents are innate, many are not. Many, and perhaps most, of our abilities develop over time and are heavily influenced by learning and practice. We are not born knowing how to ride a bicycle, but most of us were able to learn and develop this skill to a greater or lesser degree. To do this we had to believe that we could learn to ride a bicycle, we had to put in the effort necessary for us to learn how to do it, and we had to practice so that we could develop the skill to a level necessary for the type of riding we wanted to do. Notice that the first step was believing we could learn how to ride. What if we did not think we could learn this skill? What if we thought it was innate—you are either born with the skill to ride a bicycle or you are not! In this case, the person would not try to learn how to ride because they already "knew" they could not do it.

Self-Efficacy for Learning

Self-efficacy refers to students' beliefs about whether or not they are capable of succeeding at particular academic tasks and learning. Students with high self-efficacy, or a strong belief in their capability to reach learning and performance goals, evidence greater effort and persistence on academic tasks, particularly when the tasks are difficult. Students with low self-efficacy evidence lower persistence and may even avoid the learning situation or learning task. For example, a nursing student with high self-efficacy toward developing a plan for patient care would regard a "difficult and crotchety" patient as a challenge to be mastered. Since the nursing student believes that he can master this task, he would be likely to strategically assess different care options and try the one he felt was best. If this did not work, he might feel some

disappointment, but he would not give up. The student would rethink his analysis and come up with a different approach. How might this scenario differ for a student with low self-efficacy toward developing a plan for patient care? This student might not even want to try to develop a plan because he is convinced that he cannot do it. A student with low self-efficacy often does not even attempt to complete many academic tasks or assignments. If he did try to complete the task, it is also far less likely that he would persist after one or two failed attempts. Now this student has another experience that tells him what he already "knew"—"I cannot do this type of task; I'm just not good at it!"

Many students with low self-efficacy believe that their abilities are fixed. This belief has powerful negative effects. It can also become a self-fulfilling prophecy: students who believe they cannot perform a task do not try very hard, fail or get low grades and have another reason to believe they are not good at this type of learning or performance. The next time a similar learning situation or performance task occurs, these students will be even less likely to believe that they can do it.

Characteristics of a Strategic Learner

To be successful learners in a college setting, students need to become strategic learners. Strategic learners are able to take significant responsibility for their own learning. Strategic learners can set realistic, yet challenging learning goals. They can use knowledge about themselves as learners, the tasks they must perform, their repertoire of learning strategies and skills, their prior content knowledge, and their knowledge of the context in which they will be expected to use new learning, now and in the future, to help them select effective ways to study and learn new information and skills. Strategic learners can also use executive control processes to create a learning plan, select methods to implement it, use the plan, monitor their progress, and, if necessary, modify their goal or the approach that they are using. However, these different types of knowledge, strategies, and skills are not sufficient. Strategic learners must want to learn. Effective learning requires the integration of skill and will components. Motivation and positive affect for learning derive from and interact with many factors. These factors include goal setting, analysis, and utilization; efficacy expectations; interest; and valuing.



Students' beliefs play an important role in their becoming strategic learners. Strategic learners take more responsibility for their own learning, which requires that students believe they can take more responsibility for their own learning. Again, to improve one's learning-to-learn strategies, students must believe that they can become more strategic learners. If students believe that how one learns is wired in at birth, or a function of fixed intelligence, then they will not be likely to work on learning skills. Only if they believe these are at least partially developed abilities will they make the effort to learn and use them.

Suggestions for Helping Students Develop More Accurate Beliefs About Acquired Abilities

- Discuss with students their assumptions about the skills and abilities needed to succeed in your class. Putting their ideas into words (and awareness) and listening to the thoughts and discussions of class members can be productive experiences.
- Provide opportunities for experiences that will challenge students' beliefs. Nothing succeeds like success and seeing the results of one's own efforts.
- Invite students to share experiences about how they accomplished a task, such as studying for a test or working a difficult homework problem. Highlight the role of effort and the use of strategic learning strategies in the examples provided by the students.
- Provide feedback that stresses effort or developed ability. For example, if a student improves on a test, say something like, "Great! The effort you put into studying really paid off." Avoid general statements that could be interpreted as referring to fixed ability or intelligence, such as, "Great! You are good at this type of problem" (rather than you have been working hard and it shows in your improvement or performance).
- Help students develop effective and efficient study and learning strategies so that they have the tools they need to help build their confidence and create positive learning experiences.

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