

WHAT STRATEGIES DOES THE RESEARCH SUGGEST?

In this section we present a number of strategies that may help you increase the value that students place on the goals and activities that you have identified and created for them, as well as strategies to help you strengthen students' expectancies and create an environment that supports motivation.

Strategies to Establish Value

Connect the Material to Students' Interests Students are typically more motivated to engage with material that interests them or has relevance for important aspects of their lives. For example, courses on the history of rock 'n' roll, philosophy and the *Matrix* films, the statistics of sexual orientation, how technology can combat global poverty, and how to build virtual reality worlds may strongly connect with students' interests. All of these courses can be rigorous and yet demonstrate high demand because they tap into issues that are important to students.

Provide Authentic, Real-World Tasks Assign problems and tasks that allow students to vividly and concretely see the relevance and value of otherwise abstract concepts and theories. For example, an economics professor might use a case study of economic instability to illustrate market forces. Analyzing a real-world event provides students with a context for understanding economic theories and their applicability to current situations. Similarly, in an information systems course, the instructor might assign a service-learning project in which students must build a database for an actual client in the community. This kind of authentic task allows students to work within real constraints,

interact with real clients, and explore the profession. It might also create possibilities for future internships or jobs.

Show Relevance to Students' Current Academic Lives

Students sometimes do not appreciate a current learning experience because they do not see its value relative to their course of study. For instance, psychology students may see little value in taking a math course because they do not realize that the knowledge they acquire will serve them well when they take a required statistics or research methods course. If you make explicit connections between the content of your course and other courses to come, students can better understand the value of each course as a building block for future courses.

Demonstrate the Relevance of Higher-Level Skills to Students' Future Professional Lives

Students often focus on specific course content without recognizing how the skills and abilities they develop across courses (for example, quantitative reasoning, public speaking, persuasive writing, teamwork skills) will benefit them in their professional lives. For example, students often complain about being graded on the quality of their writing in lab reports, failing to recognize the importance of written communication skills in a wide range of professions. We can help motivate students by explaining how various skills will serve them more broadly in their professional lives.

Identify and Reward What You Value

It is important to explicitly identify for students what you value. This can be done in the syllabus, through feedback, and through modeling. Having identified what you value, be sure to reward it through assessments that are aligned with course objectives. For instance, if you value the quality of group interactions in a project course, you should identify and describe the aspects of such interactions that

are important (for example, clear communication, effective resolution of disagreements, consideration of multiple perspectives) and include an evaluation of the group as part of the final grade. Similarly, if you want students to take intellectual or creative risks, identify these features as important and assess students' work based on the extent to which they pushed the limits, whether or not they were ultimately successful.

Show Your Own Passion and Enthusiasm for the Discipline

Your own enthusiasm and passion can be powerful and contagious. Even if students are not initially attracted to or interested in your course, don't be afraid to let your excitement for your discipline show. Your enthusiasm might raise students' curiosity and motivate them to find out what excites you about the subject, leading them to engage more deeply than they had initially planned or discover the value they had overlooked.

Strategies That Help Students Build Positive Expectancies

Ensure Alignment of Objectives, Assessments, and Instructional Strategies When these three components of a course are aligned—when students know the goals, are given opportunities to practice and get feedback, and are able to show their level of understanding—learning is supported. Students also have a more coherent picture of what will be expected of them and thus are more motivated because they feel more confident and in control of their learning, as well as their grade.

Identify an Appropriate Level of Challenge Setting challenging but attainable goals is critical for optimally motivating students. However, identifying the appropriate level at which to frame your expectations may be difficult. To do so, you need to

know who your students are—in terms of their prior knowledge and experience as well as their future plans and goals. A pre-assessment may be useful in evaluating both prior knowledge and future goals. Examining the syllabi of courses that immediately precede your course in the curricular sequence (when relevant) may also provide insight into your students' prior academic experiences. Syllabi from instructors who have taught the course in the past may also offer clues about the appropriate level at which to frame your expectations. Finally, talk to colleagues about their process for identifying appropriate expectations or ask to observe their classes.

Create Assignments That Provide the Appropriate Level of Challenge

One the one hand, if your course or an assignment is pitched at a level that students do not expect will allow them to be successful with reasonable effort, they will not be motivated to engage with the assignment. On the other hand, if the course or the assignment is too easy, students will not think that it has value or is worth their time to engage with it, deeming it busy work. Consequently, we need to set standards that are challenging but attainable with student effort. Determining these standards is not always easy given that student cohorts differ, so administering diagnostic or early assessments can help you determine the right level for each cohort.

Provide Early Success Opportunities Expectations for future performance are influenced by past experiences. Hence, early success can build a sense of efficacy. This strategy is incredibly important in courses that are known as “gateway” or “high-risk” courses or for students who come into your course with anxiety for whatever reason. For example, you might incorporate early, shorter assignments that account for a small percentage of the

final grade but provide a sense of competence and confidence before you assign a larger project.

Articulate Your Expectations Articulate your course goals clearly to students so that they know what the desired outcomes are. Then make it clear to students what you expect them to do in order to reach those goals. This will help make the connection between a course of action and a desired outcome more concrete and tangible, thus creating a more positive outcome expectancy. Help students set realistic expectations by identifying areas in which they might encounter difficulty and support their sense of agency by communicating your confidence and expectation that they will overcome those challenges and succeed. At the same time, let students know what support they can expect from you in pursuit of those goals (for example, office hours or review sessions).

Provide Rubrics Rubrics are a way of explicitly representing performance expectations and thus can direct students' behaviors toward your intended goals. For example, a rubric for a research paper can identify the components of the task (for example, hypothesis, evidence, conclusion, writing) and the expectations for performance for each component at several levels of sophistication (for example, developing, competent, exemplary). See Appendix C for examples.

Provide Targeted Feedback Because feedback provides information about progress toward a goal, it can have a powerful motivating effect. Feedback is most effective when it is timely and constructive. Timely feedback is close enough in proximity to the performance to have impact and to allow for incorporation of the feedback into the next iteration. Constructive feedback identifies

strengths, weaknesses, and suggestions for future action. For more discussion on feedback, see Chapter Five.

Be Fair Be sure that the standards and criteria used to assess students' work are administered fairly. This is particularly relevant when multiple graders are involved (for example, teaching assistants). If students perceive that their work is being assessed differently from their peers or differently from one time to the next, their expectations for success may be compromised.

Educate Students About the Ways We Explain Success and Failure To give students a better sense of control over the outcomes that they experience and in turn influence their expectations for success, educate them about the attributions that people make for success and failure. For example, we frequently attribute success to things about us (that is, internalize) and attribute failures to things about the external world (that is, externalize). Help them shape their attribution for success to include appropriate study strategies, good time management, and hard work. Similarly, help them avoid attributing failure to factors such as “not being good with numbers,” “not being good with details,” or “not being very smart.” Rather, help them focus on controllable features, such as the way they studied (for example, how much, when, the nature of their study habits).

Describe Effective Study Strategies Students may not be able to identify ways in which they should appropriately change their study behaviors following failure. In this case, it is important to discuss effective study strategies to give them alternatives to the behaviors that resulted in poor performance. In doing so, we may help adjust their expectations about being able to successfully obtain their goals.

Strategies That Address Value and Expectancies

Provide Flexibility and Control Where possible, allow students to choose among options and make choices that are consistent with their goals and the activities that they value. One way to give students greater flexibility is to allow them choices in portions of the course content, topics for papers, and questions for class discussion. Flexibility lends a sense of control, which can contribute to a student's expectation of success.

Give Students an Opportunity to Reflect It is important to give students an opportunity to reflect on assignments. Facilitating their reflection with specific questions can help structure the process to support motivation. For example, asking students "What did you learn from this assignment?" or "What was the most valuable feature of this project?" helps them identify the value of their work. Asking students "What did you do to prepare for this assignment/exam? What skills do you need to work on? How would you prepare differently or approach the assignment differently if you were doing it in the future?" can help them to identify specific strategies that leverage their strengths and overcome their weaknesses, thus bolstering their expectations for future success.

SUMMARY

In this chapter, we have discussed some of the variables that underlie student motivation. We have used the concept of goals as an organizing feature and have argued that students frequently have multiple and diverse goals, many of which may not align with ours. We described a model in which the subjective value that students place on goals and their expectancies of success play a key role in influencing their motivation.

We have described how subjective value, efficacy expectancies, and beliefs about the supportive nature of the environment interact to affect the specific ways in which students behave. Our hope is that by understanding how some of these variables influence motivation and by arming yourself with some practical strategies, you can increase the motivation of your students and improve the quality of learning in your courses.