

Motivating Your Students and Yourself

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Outcomes: By the end of this session, participants will be able to...

- Identify the value of motivating students in a classroom setting.
- Select activities to assist with student learning and create an engaging classroom environment.
- Motivate yourself if you start to experience burnout during the quarter.

What is the value in motivating our students?

Entering the classroom, it's easy to assume that your students have the same passions and curiosities that you had at that stage of your development.

However, students may be entering the classroom with a variety of educational experiences and motivations that vary from our own:

- Pursuing professional degree in the same or different discipline.
- Working after receiving their bachelor's degree.
- Wanting to start a business of their own.
- Exploring their passions.

Students enter the classroom with variety of desired outcomes. Our goal as an educator is to equitably teach and motivate students for their next step.

Students look towards their teachers for reinforcement, and are more likely to feel enthusiastic about learning if they feel their work is recognized and valued.

Think-Pair-Share: What was your favorite class in undergrad or graduate school? What did your teacher do to make that class successful and interesting?

In this activity, reflect on the question individually before sharing your response with a neighbor. At the end of the brainstorming session, report your answers out, and reflect on any relevant themes and observations about these courses.

Common Approach to Teaching in STEM

In formative STEM courses, we frequently encounter language expressing that certain courses are intended as "weeder" classes or "sink-or-swim". The purpose of these classes is to challenge students enough to make some students fail and leave the major, discipline, or program.

Through this language, we implicitly convey that science should be difficult, and students have to earn their place.

This approach is not effective. In fact, it leaves students with the impression that science has to be hard, demanding, and demoralizing. It gives them little reason to invest time in a course and demotivates them from learning.

How do we motivate our students?

In general, students are motivated when they are supported by their professors and TAs, are confident they can succeed, and know that what they are learning is useful for something beyond passing a course.

Therefore, we want to:

- build community in the classroom
- inspire confidence in our students
- teach our courses in context of our field

Community

Clarify or review prior knowledge necessary for course

Clarify from the start what your expectations are and keep these expectations reasonable

Review critical material (equations, theories, etc.) at the start of the course rather than expecting students to remember them from a previous course

Make connections to prior knowledge when learning something new

Reinforce concepts by using the language of the subject

Develop a personal connection with your students

Provide constructive feedback rather than simply criticizing mistakes

Understand other aspects of their lives that may inhibit their ability to succeed

Actively ask the students about their goals so you can put the material in a context that best suits their ambitions

Think-Pair-Share: What classes have you been in that have reinforced a feeling of community among students?

Confidence

Scaffolding: building up to new concepts or ideas from ones that students already know

Introduce each individual concept needed to understand a more complex idea, then synthesize these concepts together

Clarify your thought process when working through a difficult problem to teach them how to draw their own conclusions

Actively participate in their learning process by modeling (demonstrating good behavior, working out example problems, then allowing them space to work themselves)

Provide opportunities for feedback

Include active learning opportunities as you teach:

More engaging than standard lecture format

Forces students to use knowledge as they learn

Chance to give students feedback when they report on progress

Give students the opportunity to teach each other and to reach conclusions as a group before walking them through a problem

Context

Be clear about the purpose of each assignment

A good teacher tries to make in-class activities, problem sets, and projects something that students can accomplish. To make sure assignments live up to these expectations, make sure to clarify the purpose of an assignment, the actual task students need to do, and the criteria to successfully complete the assignment.

Relate concepts from the course to examples within your own research.

How do I motivate myself?

If this is your first time teaching, feeling pressured to do everything the "right" way can be overwhelming.

Give yourself room to make mistakes, and correct transparently to both students and professors.

Try making incremental steps in a classroom environment rather than overhauling the entire course.

Rely on the community around you – your students, other TAs, and your professor

Talk to your research advisor or graduate studies administrator