



Stephanie Chasteen, University of Colorado

Andrew Boudreaux (Western Washington University), Jon Gaffney (Hamilton College)



The Framing Project:

Expert recommendations, research-based strategies, and classroom-tested activities to promote student buy-in.



What are the challenges?

While open resistance to active learning is rare, students may sit back and wait for the answer, get tired of engaging during the course of the semester, or sometimes complain or give negative evaluations.

About this project

We identified strategies used by diverse STEM instructors, observed active learning classrooms, and combed the literature to bring clear, concrete guidance to those facing challenges in student engagement. We call these strategies “framing” the active classroom.

We want students to engage (1) **behaviorally** (do they participate in the activity?), (2) **emotionally** (is it fulfilling?), and (3) **cognitively** (do they think it’s useful?) This is what we term “*productive engagement*”.

Set clear expectations

Students fear being evaluated unfairly. Discuss the course approach and establish a routine, share success strategies from past students, and give early low-stakes assessment. Set the stage with a *syllabus quiz* and a first-day activity.

Avoid preaching

Telling students to engage because it’s good for them (“eat your spinach”) can be demotivating. Use *first day activities*, metacognitive discussion, and students’ own interests to draw students in.

Motivate students

Grades only go so far as a motivational tool. Students must feel a sense of ownership and competence. Engage students in decision-making, hold them accountable for participation (on individual and group level), and set high expectations.

Create community

Create a climate conducive to participation. Decide on your classroom norms and use them, validate student ideas, correct errors in a way that is not embarrassing, learn student names using *table tents*, listen to student feedback, and be vulnerable.

Also check our our new directory of **physics education consultants**, <http://physport.org/consultant>



Full set of articles and resources online at <http://physport.org/expert/framing>



Acknowledgments

This material is based upon work supported by the Science Education Initiative and Center for STEM Learning at CU Boulder.

More Information

<http://physport.org/expert/framing> or chasteen@colorado.edu