Classroom-Tested Strategies for Overcoming Student Resistance to Active Learning

Connect your approach to what learners value

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Answer this question, thinking of what you value in education

What is the most important goal of a college education and, therefore, individual college courses?

A. Acquiring information (facts, principles, concepts)
B. Learning how to use information and knowledge in new situations
C. Developing lifelong learning skills
How do you think undergraduate students answer this question?

What is the most important goal of your college education and, therefore, of this course?

A. Acquiring information (facts, principles, concepts)
B. Learning how to use information and knowledge in new situations
C. Developing lifelong learning skills
How students actually answer this question

What is the most important goal of your college education and, therefore, of this course?

A. Acquiring information (facts, principles, concepts)  7%
B. Learning how to use information and knowledge in new situations  38%
C. Developing skills to continue learning after college  55%

(quantitative n = 1377)
If you have perfect attendance for one semester in this 3-credit course, how many classtime-learning hours will you experience in one semester?

37.5 hours, in class

85.5 hours, commuting

(UNM survey data)
Learning “venues”:

Learning on your own

Learning in class with others

Of the three goals, which do you think you can make headway on outside of class by your own reading and studying, and which do you think would be best achieved in class working with your classmates and me?”
How do learners want to learn?

A. Acquiring information (facts, principles, concepts)
B. Learning how to use information and knowledge in new situations
C. Developing lifelong learning skills

Attempt learning on their own, outside of class

Prefer learning in class, working with peers and instructor
Why might it be potentially useful to conduct this exercise with your students on the first day of class in an active learning classroom?

Prepare effectively before class

Participate actively in class
Transitioning from teacher-centered to learner-centered instruction ...  
*Who is taking the risk?*
Where we’re going

Higher education faculty are increasingly using small-group work in classes

Students are not increasingly recognizing the value of small-group work in classes

What should we do?
National surveys of faculty show increasing use of cooperative learning and group work, ...

Methods used in all or most of the courses you teach

- Extensive lecturing
- Cooperative learning (small groups)
- Group projects
... and students report significant, and increasing, experience with in-class group work

Worked with other students on projects/assignments during class

Year

National Survey of Student Engagement
So, although students admit that they learn best in ways that might not be preferred (easier?), small-group work is not highly regarded.
Students like interactivity of active-learning classes, but dislike added responsibility, including to groups

Changing Biology instruction at Georgetown University

**Lecture course:**

*Liked:*
- Traditional course materials: PowerPoint, videos, handouts, outlines
- Quality of instruction: enthusiasm, clarity, and organization

*Disliked:*
- Lecture not stimulating
- Exams: too hard, too specific, grading
- Subject matter not interesting

**Active-learning course:**

*Liked:*
- Quality of instruction: organization, clarity, and interesting
- Additional course materials: learning goals, groups, quizzes
- Interaction in lecture: via group activities, clickers, multiple approaches to learning

*Disliked:*
- Group work
- Quizzes: points, stressful, too hard

Armbruster et al., 2009, *CBE—Life Sciences Education*, 8:203–213
Leading to a rich literature on overcoming student resistance working/learning in groups.

Overcoming Resistance to Cooperative Learning

Top 10 reasons students dislike working in small groups... and why I do it anyway.

Overcoming student resistance to group work

Dealing with Student Resistance to Learner-Centered Teaching

Productive contradictions: dissonance, resistance and change in an experiment with cooperative learning.
Can we really successfully facilitate learning in these spaces if students resist learning in groups?
What to do?

“To counter students' resistance, try to persuade them that you are neither playing a game nor performing an experiment, but teaching in a way known to help students learn more and understand better.”

Navigating the Bumpy Road to Student-Centered Instruction.
Richard M. Felder and Rebecca Brent, 1996, College Teaching
Achievement motivation relies on value and expectancy.

A goal that I value ...

... and a belief that I can make it!
What is the most important goal of your college education and, therefore, of this course?

A. Acquiring information (facts, principles, concepts) 7%
B. Learning how to use information and knowledge in new situations 38%
C. Developing skills to continue learning after college 55%
First-day questions ... connect to expectancy

A. Acquiring information (facts, principles, concepts)

B. Learning how to use information and knowledge in new situations
C. Developing lifelong learning skills

Attempt learning on their own, outside of class

Prefer learning in class, working with peers and instructor
Achievement motivation relies on *value* and *expectancy*.
How important is it, to you, to develop skills in your coursework that will help you land a job when you graduate?

Can you pick which four in the following list are among the top 5 most desired characteristics among recent college graduates as reported by hiring companies?

1. Creativity
2. Computer skills
3. GPA, cutoff above 3.0
4. Leadership skills
5. Problem-solving skills
6. Teamwork skills
7. Verbal communication skills
8. Written communication skills

Write the numbers for your four choices on the board
1. Creativity
2. Computer skills
3. GPA, cutoff above 3.0
4. Leadership skills
5. Problem-solving skills
6. Teamwork skills
7. Verbal communication skills
8. Written communication skills
Employers rate the importance of candidate skills/qualities

<table>
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<tr>
<th>Skill/Quality</th>
<th>Weighted Average Rating*</th>
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<tr>
<td>Ability to verbally communicate with persons inside and outside the organization</td>
<td>4.63</td>
</tr>
<tr>
<td>Ability to work in a team structure</td>
<td>4.60</td>
</tr>
<tr>
<td>Ability to make decisions and solve problems</td>
<td>4.51</td>
</tr>
<tr>
<td>Ability to plan, organize and prioritize work</td>
<td>4.46</td>
</tr>
<tr>
<td>Ability to obtain and process information</td>
<td>4.43</td>
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<tr>
<td>Ability to analyze quantitative data</td>
<td>4.30</td>
</tr>
<tr>
<td>Technical knowledge related to the job</td>
<td>3.99</td>
</tr>
<tr>
<td>Proficiency with computer software programs</td>
<td>3.95</td>
</tr>
<tr>
<td>Ability to create and/or edit written reports</td>
<td>3.56</td>
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<tr>
<td>Ability to sell or influence others</td>
<td>3.55</td>
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</table>

*5-point scale, where 1=Not at all important; 2=Not very important; 3=Somewhat important; 4=Very important; and 5=Extremely important

☑ = employer-desired skill that matches a learning outcome for this course
Describe one or more aspects of this course that you feel might cause anxiety or stress during the semester.

![Data from a recent class](chart.png)
Pick one aspect of working in small groups that is a concern for you. Explain why you have this concern.

No concerns about group work? <15%

Most common concern: “Slackers” (60-80%)
Then, skim through the three links that are listed at the top of the "Team information page" in Learn and seek information that is relevant to your concern.

Write a few sentences that explains how you can help alleviate your concern during the semester.
Resources provided to students:

“Top 10 reasons students dislike working in small groups ... and why I do it anyway”

Ann Taylor

“Coping with Hitchhikers and Couch Potatoes on Teams”


Fact and Fiction: Common Fears about Group Work

Writing@CSU
Think of something that you’re “good at” other than being a student.

Jot down some thoughts in response to these questions:

How did you become “good at it?”
What role did other people play for you to develop expertise?
Briefly share your answers with your tablemates.

Pay attention to processes and people that are mentioned most often.

List these “common denominators” on a whiteboard

• How did you become “good at it?”
• What role did other people play for you to develop expertise?

All learning works the same

Repetition (practice with a goal), and
Elaboration (expanding understanding through sense-making)
Coaches, mentors, parents, teachers, provide opportunity and give feedback – but the performance is up to you.
Where is the teacher likely “coaching” a learning process that includes practice and elaboration?
**Positive interdependence**

**Leader:** Summarizes the problem and goal, proposes a strategy, coordinates the conversations, keeps everyone on task, and keeps track of available time.

**Recorder:** Writes down the answers on behalf of the group, frequently checks with teammates to assure accuracy.

**Monitor:** Assures that all are participating and comfortable with the group consensus with responses; brings up alternative possibilities; encouraging goals/processes/strategies.

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<tr>
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<td>Monitor</td>
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Team Work Checkup:

What is the **strongest** aspect of our work as a team?

What is the **weakest** aspect of our work as a team?

What can we **do** to make our team work better for helping all of us learn better?
Connect Your Approach to What Learners Value

• Link active, collaborative learning to students’ educational goals
• Make development of teamwork skills a learning outcome for the course
• Guide student reflection on good teamwork
• Be sure that group exercises foster positive interdependency and individual accountability
What questions do you have?

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