Workshop: Active Learning

CTL Teaching+Learning Lunch
Spring 2023

Marty Samuels, msamuels@brandeis.edu
he/him/his

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Center for Teaching and Learning

What is active learning, and why should we use it?

Passive vs Active Learning

Passive learning: Students listen to a traditional lecture, watch a video, or read a book.

Active learning: Students perform activities during class that inspire student learning by asking them to reflect upon, discuss, and apply the course material.

Active learning increases student performance in science, engineering, and mathematics

Scott Freeman[a,1], Sarah L. Eddy[a], Miles McDonough[a], Michelle K. Smith[b], Nnadozie Okoroafor[a], Hannah Jordt[a], and Mary Pat Wenderoth[a]

[a]Department of Biology, University of Washington, Seattle, WA 98195; and [b]School of Biology and Ecology, University of Maine, Orono, ME 04469

Edited* by Bruce Alberts, University of California, San Francisco, CA, and approved April 15, 2014 (received for review October 8, 2013)

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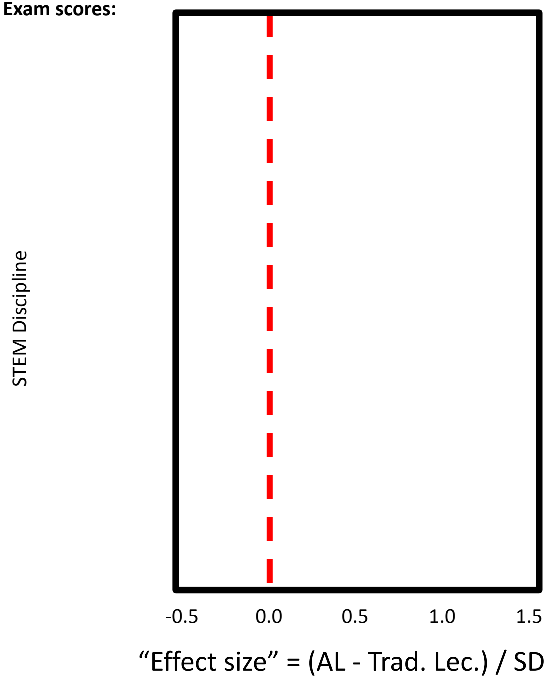

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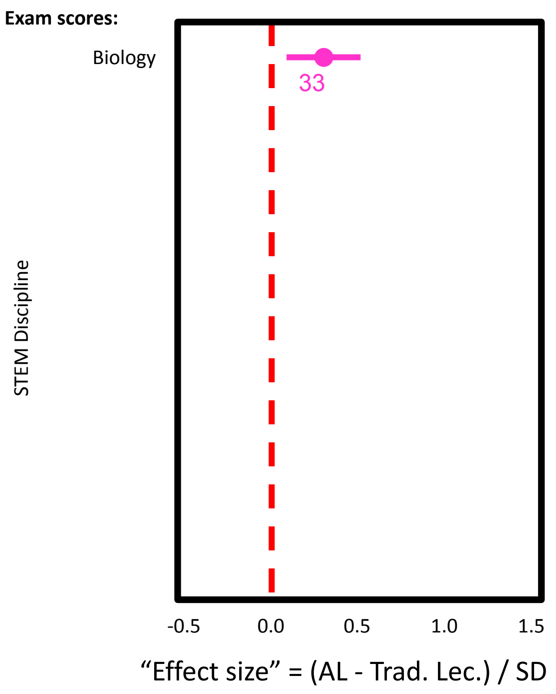

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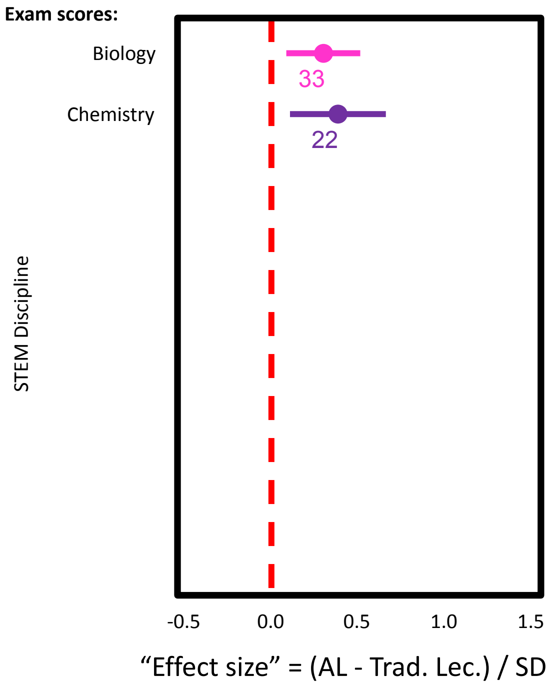

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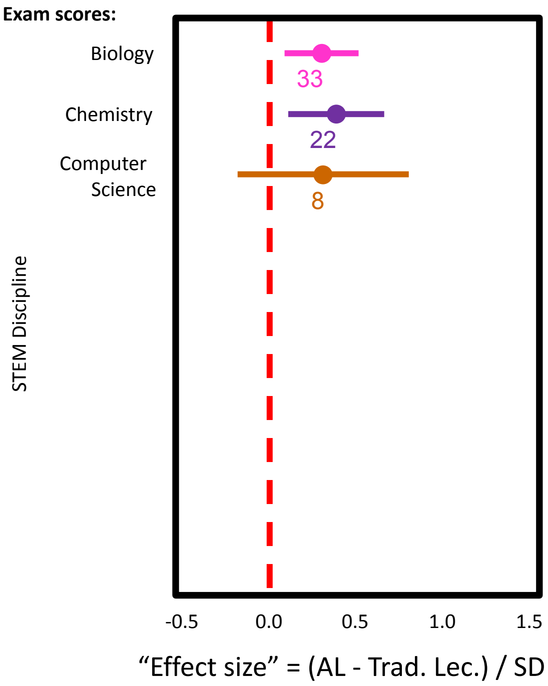

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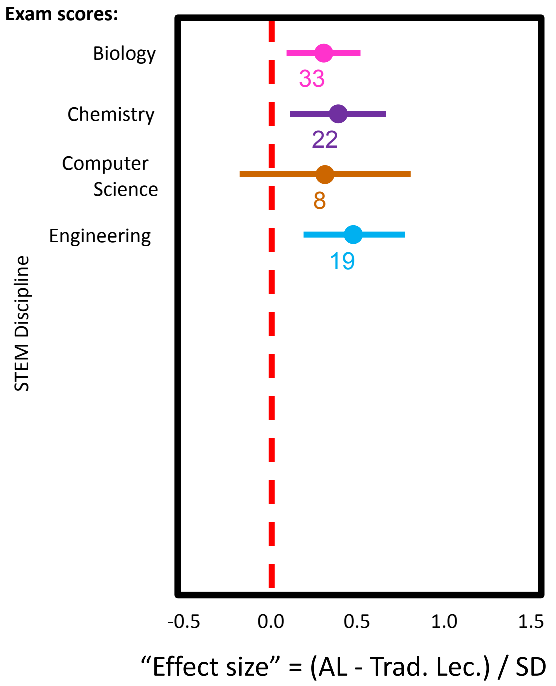

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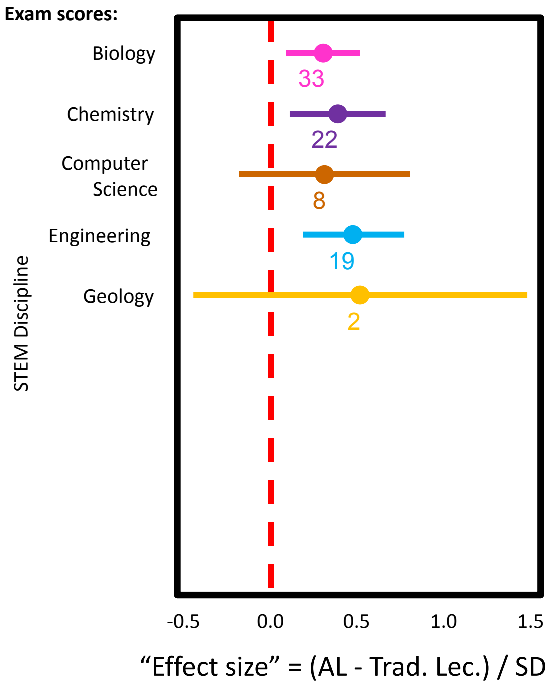

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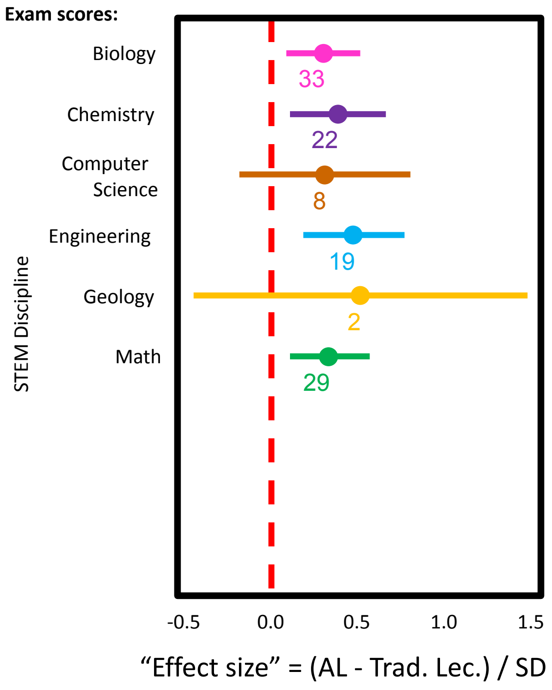

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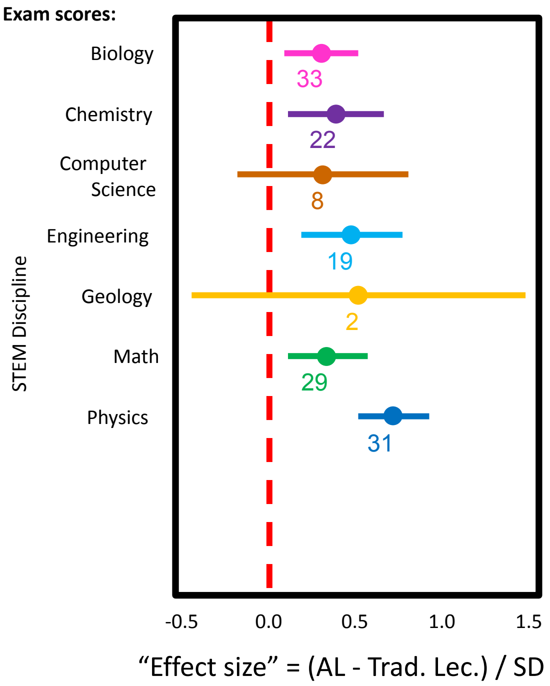

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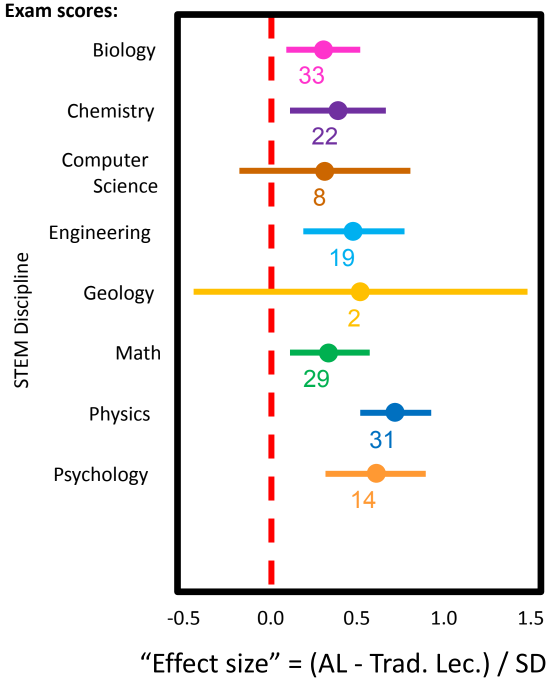

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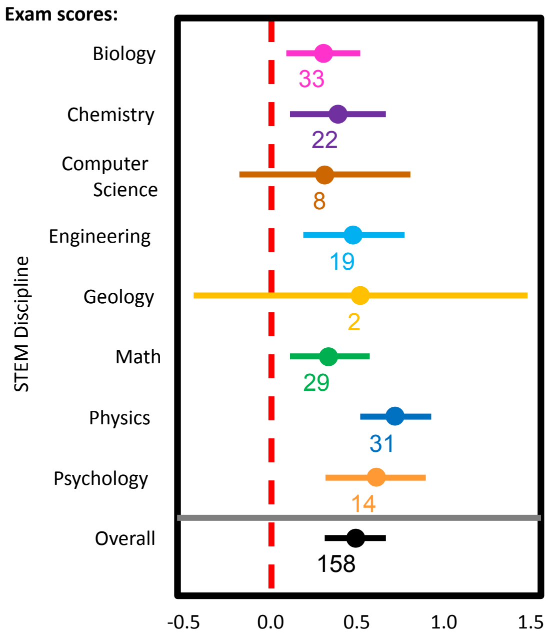

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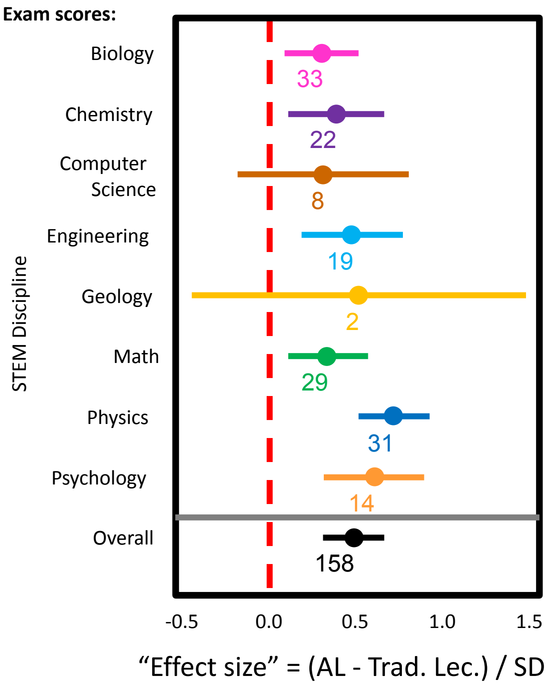

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<u>Found</u>:

AL improves student performance more than traditional lecture

- AL improves average exam scores improved by about 6%.
- These results hold across the STEM disciplines.
- AL is effective across all class sizes

Data from Freeman S *et al*. <u>Proc Natl Acad Sci U S A</u>. 2014 Jun 10; 111(23): 8410-5.

Higher Education
https://doi.org/10.1007/s10734-022-00977-8

Check for updates

Effect of active learning versus traditional lecturing on the learning achievement of college students in humanities and social sciences: a meta-analysis

Anastassis Kozanitis[1] · **Lucian Nenciovici**[1]

Accepted: 25 November 2022

Abstract
A previous meta-analysis found that active learning has a positive impact on learning achievements for college students in STEM fields of study. However, no similar meta-analyses have been conducted in the humanities and social sciences. Because major dissimilarities may exist between different fields or domain of knowledge, there can be issues with transferring research findings or knowledge across fields. We therefore meta-analyzed 104 studies that used assessment scores to compare the learning achieved by college students in humanities and social science programs under active instruction versus traditional lecturing. Student performance on assessment scores was found to be higher by 0.489 standard deviations under active instruction ($Z=6.521$, $p<0.001$, $k=111$, $N=15{,}896$). The relative beneficial effect of active instruction was found to be higher for some course subject matters (i.e., Sociology, Psychology, Language, Education, and Economics), for smaller (≤ 20 students) rather than larger class or group sizes, and for upper level rather than introductory courses. Analyses further suggest that these findings are not affected by publication bias.

Kozanitis, A., Nenciovici, L. "Effect of active learning versus traditional lecturing on the learning achievement of college students in humanities and social sciences: a meta-analysis." High Educ (2022). https://doi.org/10.1007/s10734-022-00977-8

Active learning increases student performance in science, engineering, and mathematics

policy interest (14).

There are also at least two ways to view an odds ratio of 1.95 for the risk of failing a STEM course:

i) If the experiments analyzed here had been conducted as randomized controlled trials of medical interventions, they may have been stopped for benefit—meaning that enrolling patients in the control condition might be discontinued because the treatment being tested was clearly more beneficial. For example, a recent analysis of 143 randomized controlled medical trials that were stopped for benefit found that they had a median relative risk of 0.52, with a range of 0.22 to 0.66 (15). In addition, best-practice directives suggest that data management committees may allow such studies to stop for benefit if interim analyses have large sample sizes and *P* values under 0.001 (16). Both criteria were met for failure rates

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Data from Freeman S *et al*. Proc Natl Acad Sci U S A. 2014 Jun 10; 111(23): 8410-5.

So let's get familiar with some active learning techniques!

In a small group:

1. You will receive a set of 3-5 active learning techniques (and some examples).

2. Discuss each technique.
   - Generally speaking, **what kinds of skills or topics** could you teach with each technique?
   - **When** or **why** during class would each technique be most useful?
   - What are the **strengths and weaknesses** of each activity? When would these activities be most useful?
   - What do you think students will **learn** by doing each technique?
   - **How** would you deploy each technique in class?

3. Identify one strategy that is **your favorite** and be ready to share it.

Examples of active learning techniques

1. Activities to Learn Concepts and Practice Skills Taught in Class
    a. Doing Practice Problems or Discussing Guiding Questions to Analyze a Text in Small Groups
    b. Statement Correction, or Intentional Mistakes
    c. Strip Sequence, or Sequence Reconstruction of a process, argument, or dialogue
2. Activities to Increase Student Involvement, Engagement, and Inclusion
    a. Minute Paper, or Quick Write
    b. Think-Pair-Share
    c. Anonymous Cards
    d. Brainstorm
    e. Polling
3. Activities to Help Students Synthesize and Review a Week’s Worth of Content
    a. Concept Map
    b. Venn Diagram
    c. Compare and Contrast

Active Learning

Almost any activity, **preferably one that is cooperative and with timely feedback,** that requires students to recall, think about, apply, and verbalize concepts.

As students participate in these activities, they construct new knowledge and build new skills.

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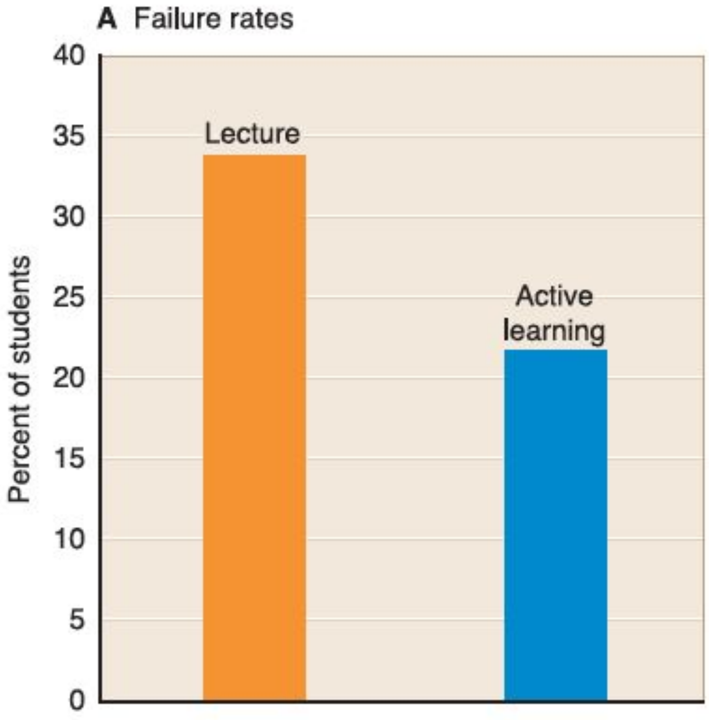
As students participate in these activities, they construct new knowledge and build new skills.

“Anything that involves students in **doing things** and **thinking about the things they are doing.**”

-Bonwell & Eison, (1991)

Students ***Fail Less*** and ***Learn More*** through Active Learning



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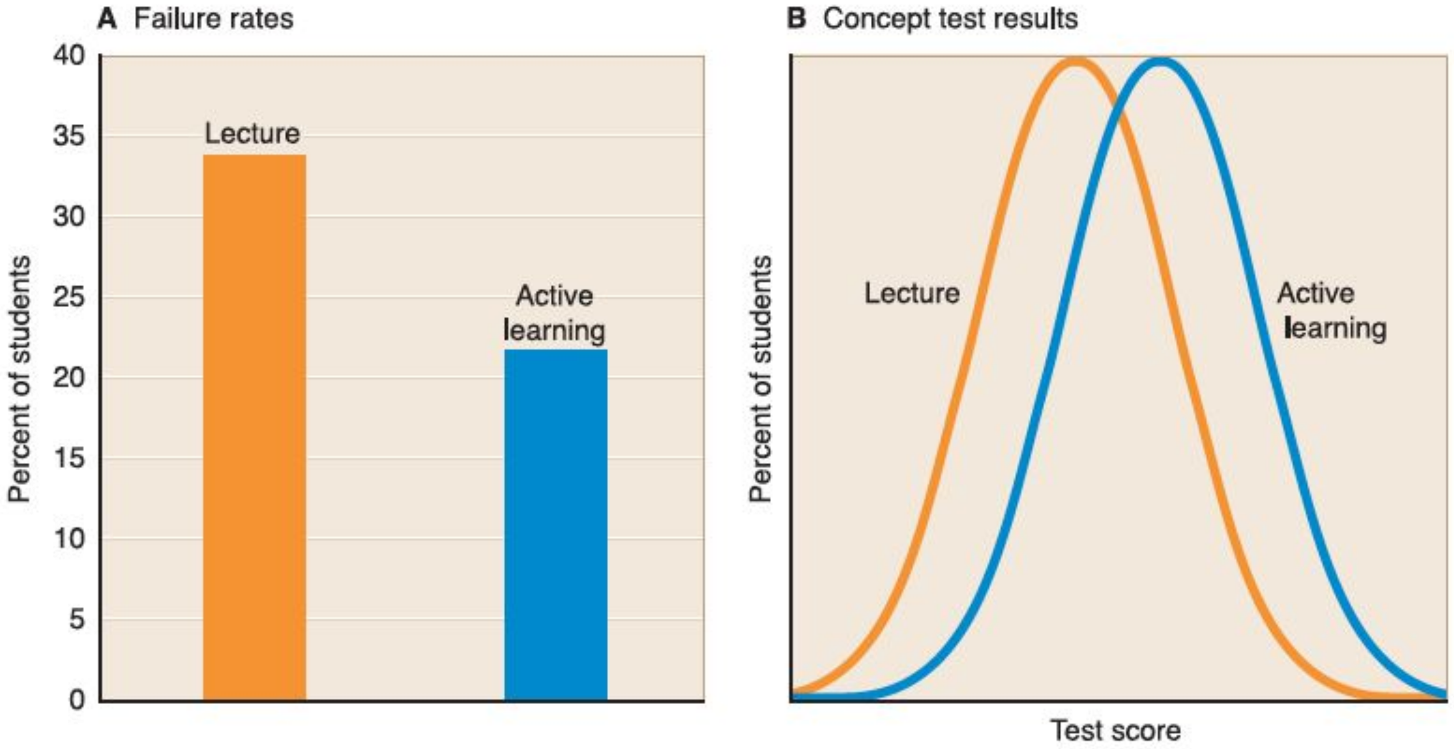

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Example Study of "Traditional Lecture" vs "Active Learning"

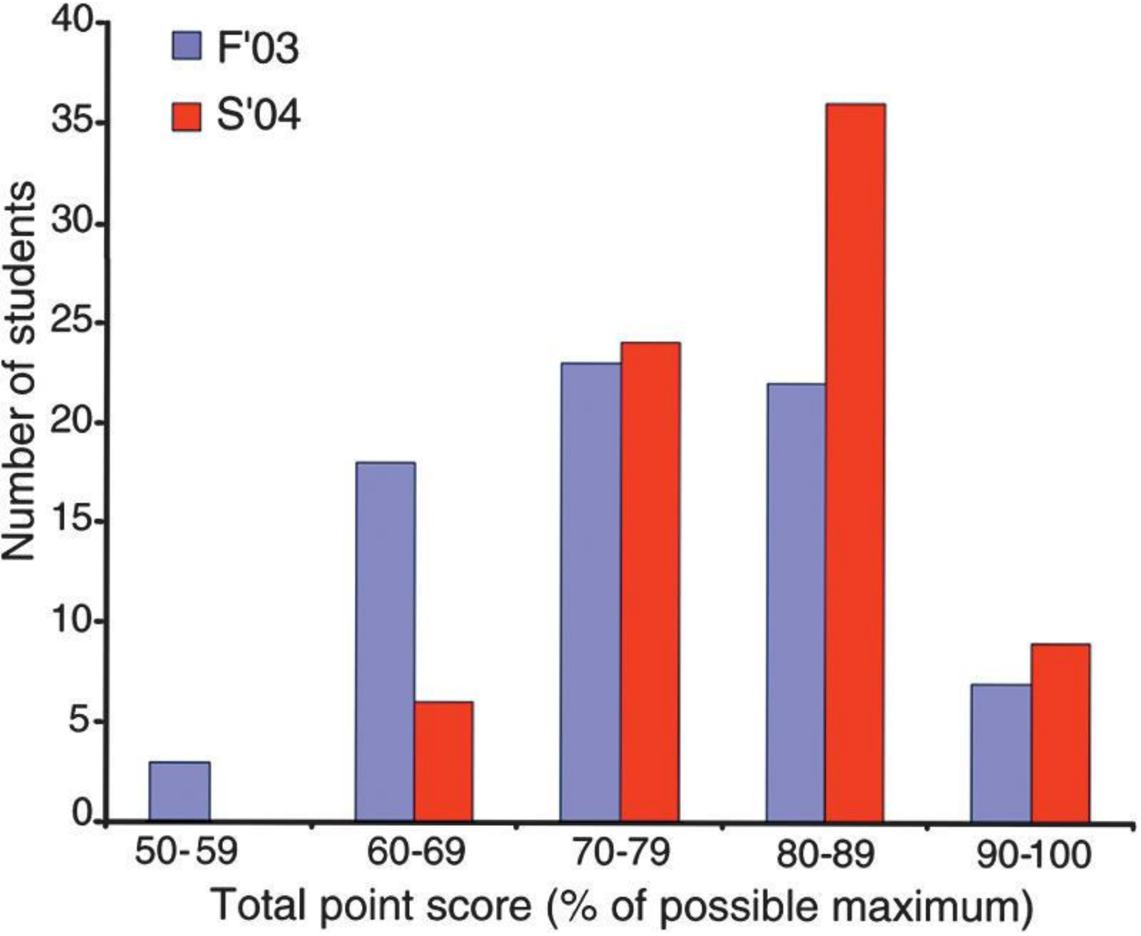

Figure 1. Final course point distributions (% of possible maximum) in **traditional (F' 03, blue)** and **interactive (S'04, red)** classes. The number of students achieving a final score is shown for five ranges of scores.

Knight JK and Wood WB. "Teaching more by lecturing less." Cell Biol Educ. 2005 Winter; 4(4) :298-310.

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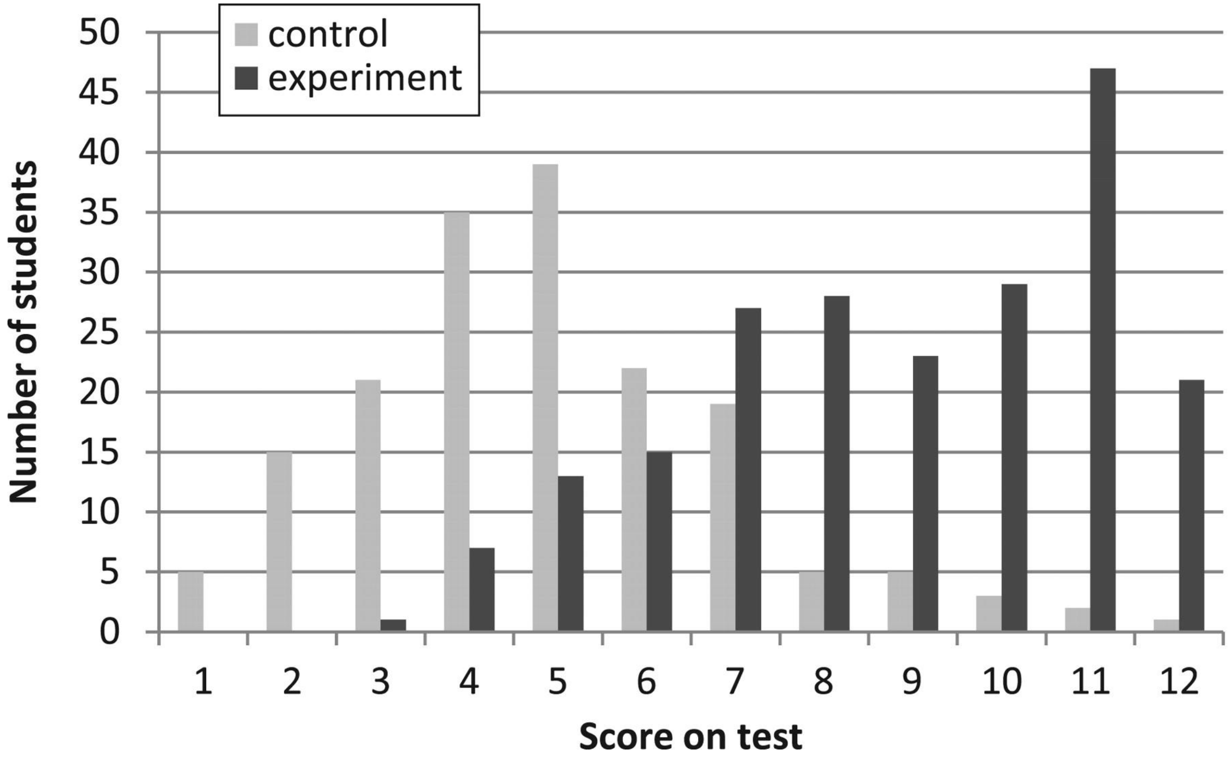

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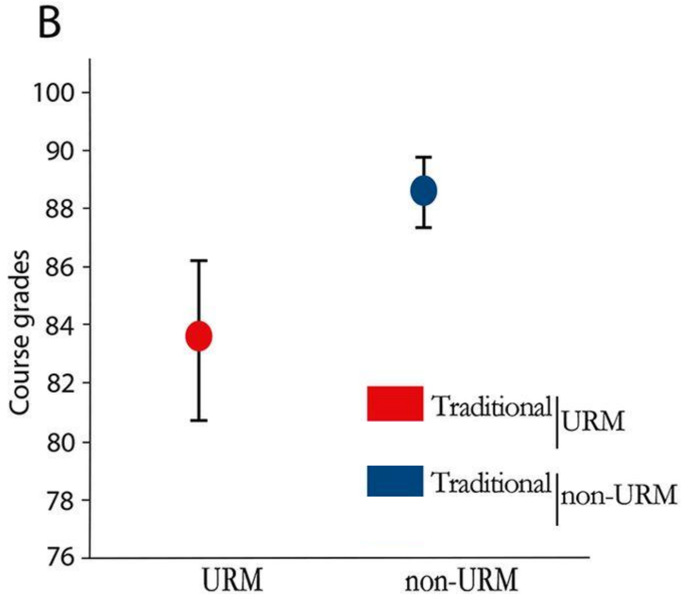
Active learning decreases performance gaps



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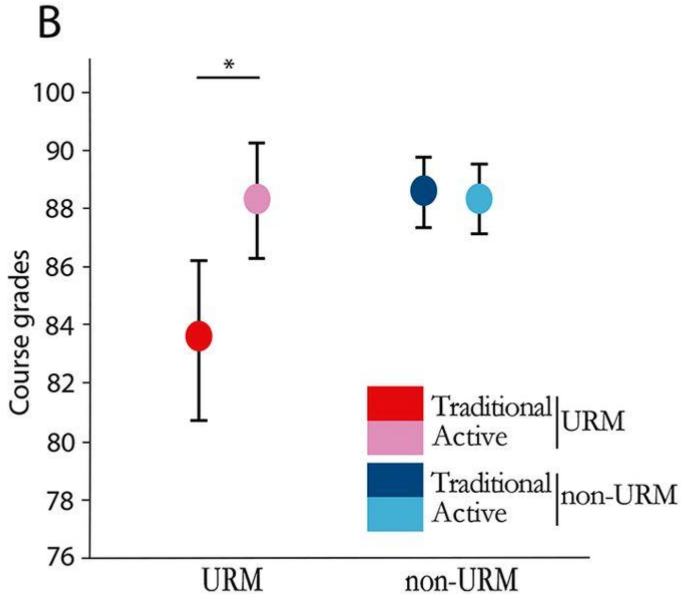

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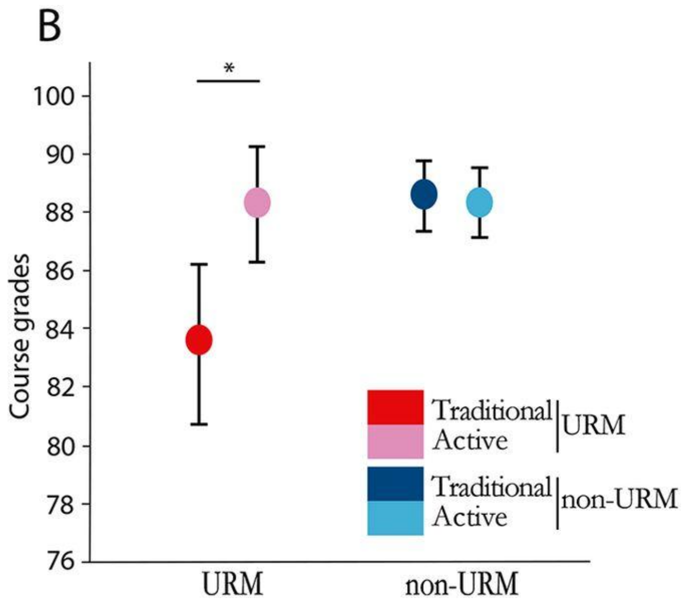

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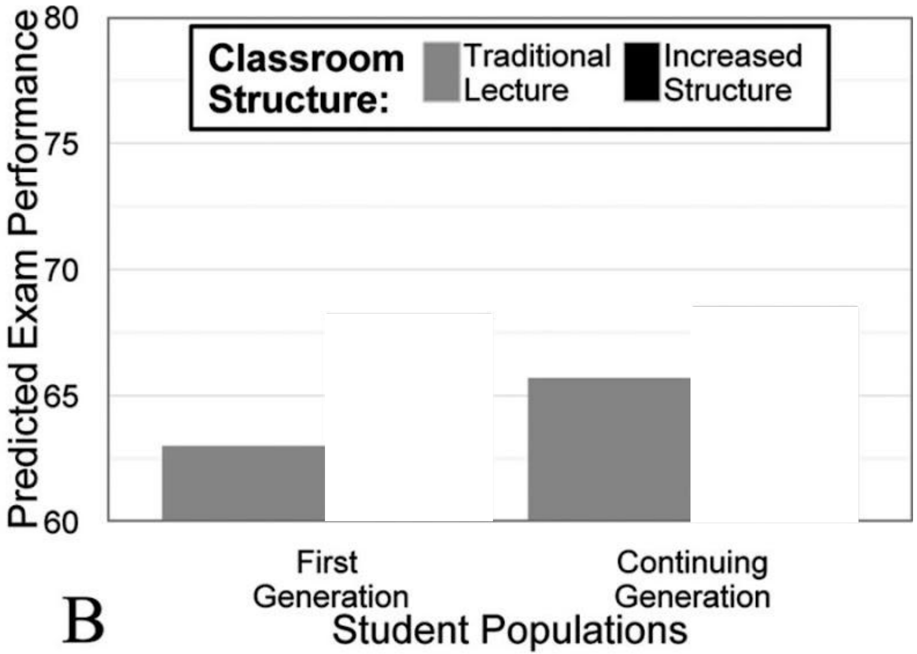

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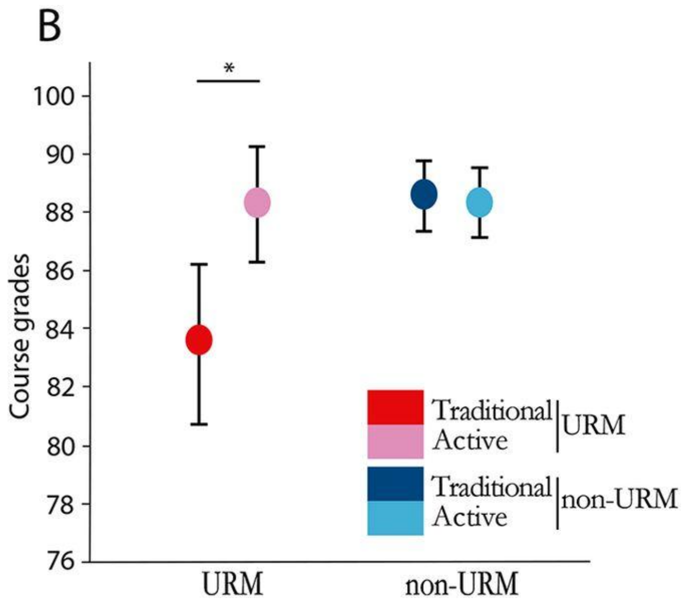

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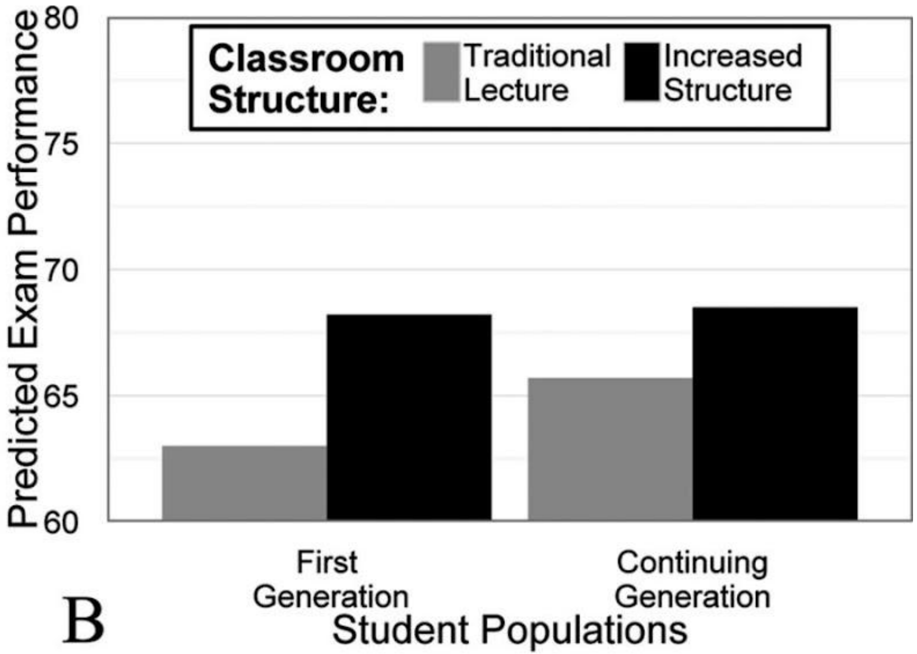

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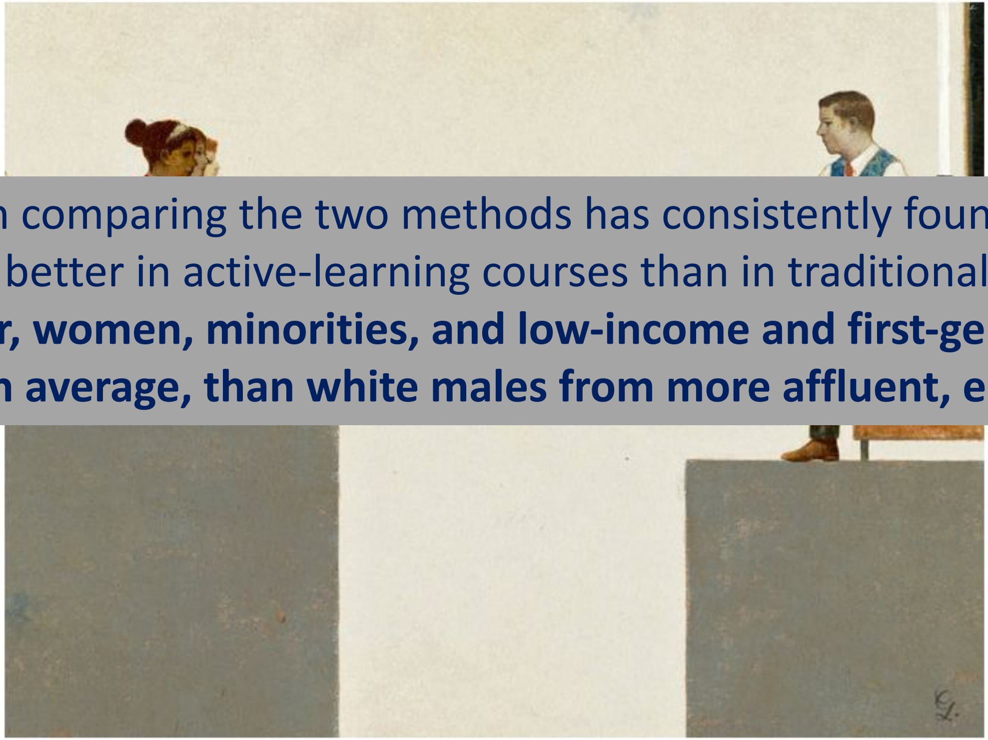
Are College Lectures Unfair?

SEPT. 12, 2015



Research comparing the two methods has consistently found that students overall perform better in active-learning courses than in traditional lecture courses. **However, women, minorities, and low-income and first-generation students benefit <u>more</u>, on average, than white males from more affluent, educated families**.

Gérard DuBois

Gray Matter

By ANNIE MURPHY PAUL

DOES the college lecture discriminate? Is it biased against undergraduates who are not white, male and affluent?

Benefits of using active learning

- Improves exam scores (+6%) (Freeman *et al*., 2014; Kozanitis and Nenciovici, 2022.)

- Students are less likely to fail vs. traditional lecturing (Freeman *et al*., 2014)

- Decreases achievement gap for first generation and underrepresented students (Eddy and Hogan, 2014; Ballen *et al*., 2017)

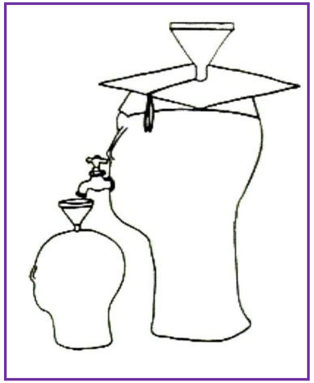
No Sleeping Students

It's fun!

Active Learning Applies the “Constructivist” View of Learning

Transmissionist view of learning (**Passive**)

Lecturer: I know a lot about this topic, so I will transmit my knowledge to you by telling you about it.



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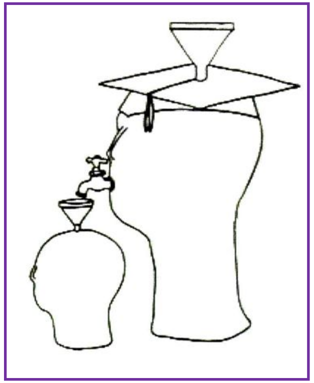

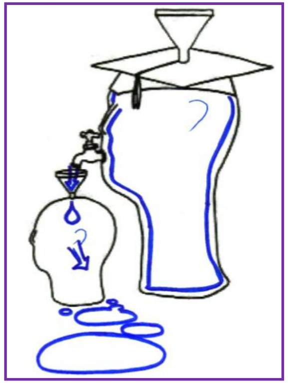

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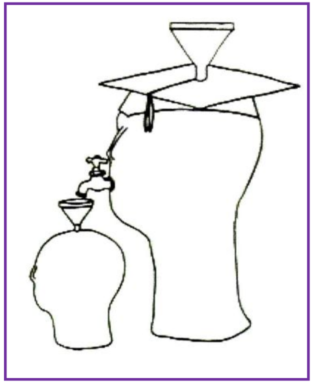

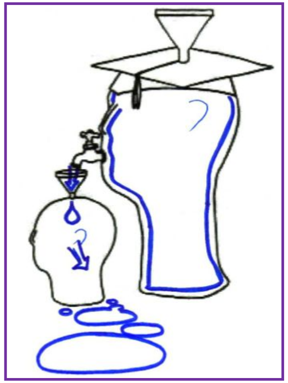

Constructivist view of learning (**Active**)

Facilitator: I know a lot about this topic, so I will create situations and present challenges for you so that you construct your own knowledge and understanding.

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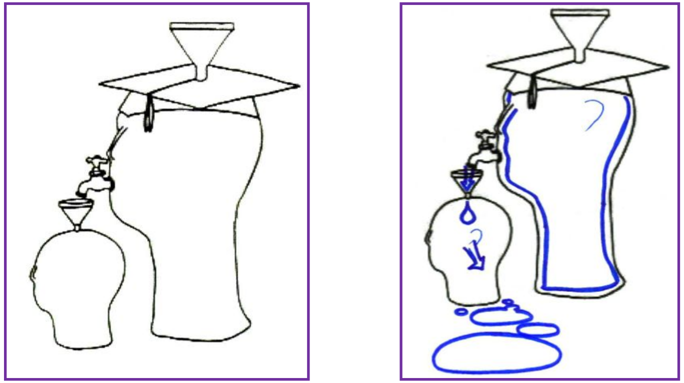
Transmissionist view of learning (**Passive**)

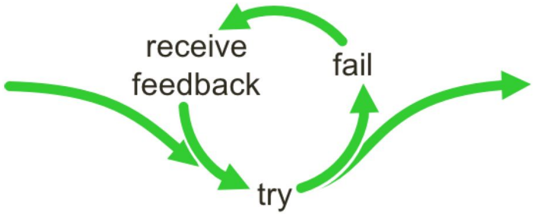
Lecturer: I know a lot about this topic, so I will transmit my knowledge to you by telling you about it.



Constructivist view of learning (**Active**)

Facilitator: I know a lot about this topic, so I will create situations and present challenges for you so that you construct your own knowledge and understanding.

"students encounter safe yet challenging conditions in which they can try, fail, receive feedback, and try again without facing a summative evaluation."
-Ken Bain, *What the Best College Teachers Do*



Let's Practice Making Some Active Learning Exercises!

1. Choose a topic you have taught or expect to teach.

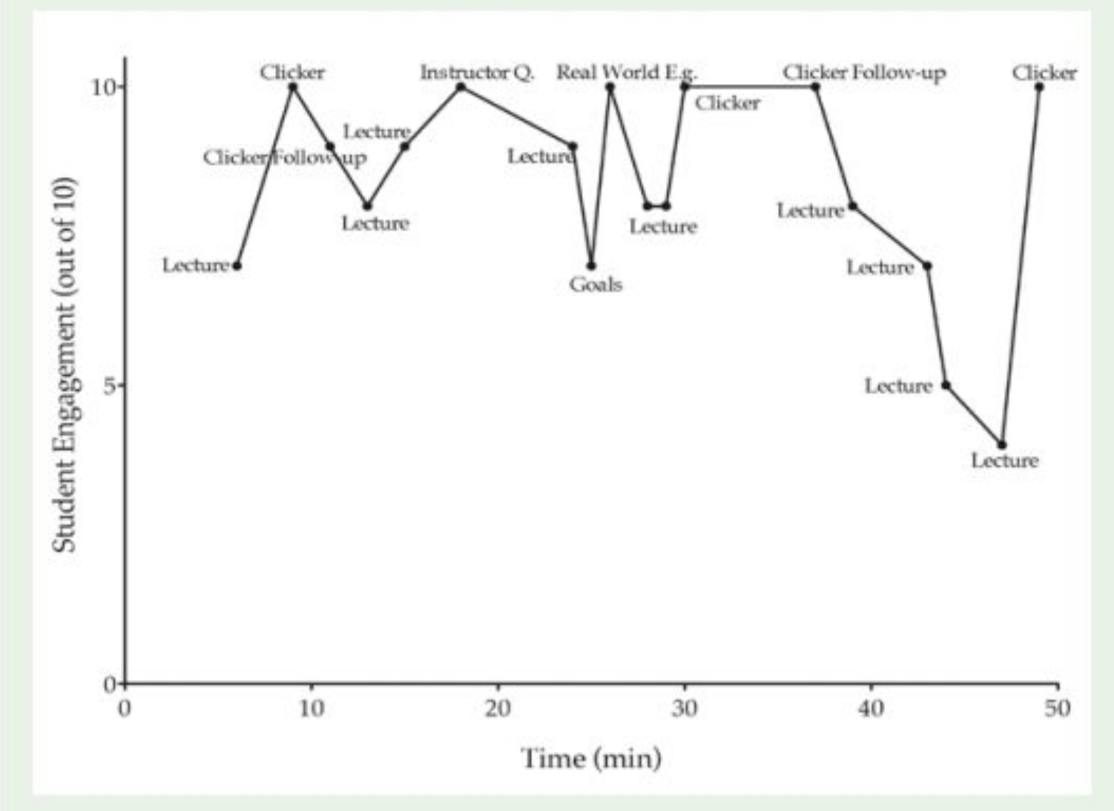
2. From the list of activities, **choose one** of the active learning techniques that is *new* to you.

3. Spend a few minutes planning an activity that you could use to help your students learn your chosen topic.

How often should I do active learning?

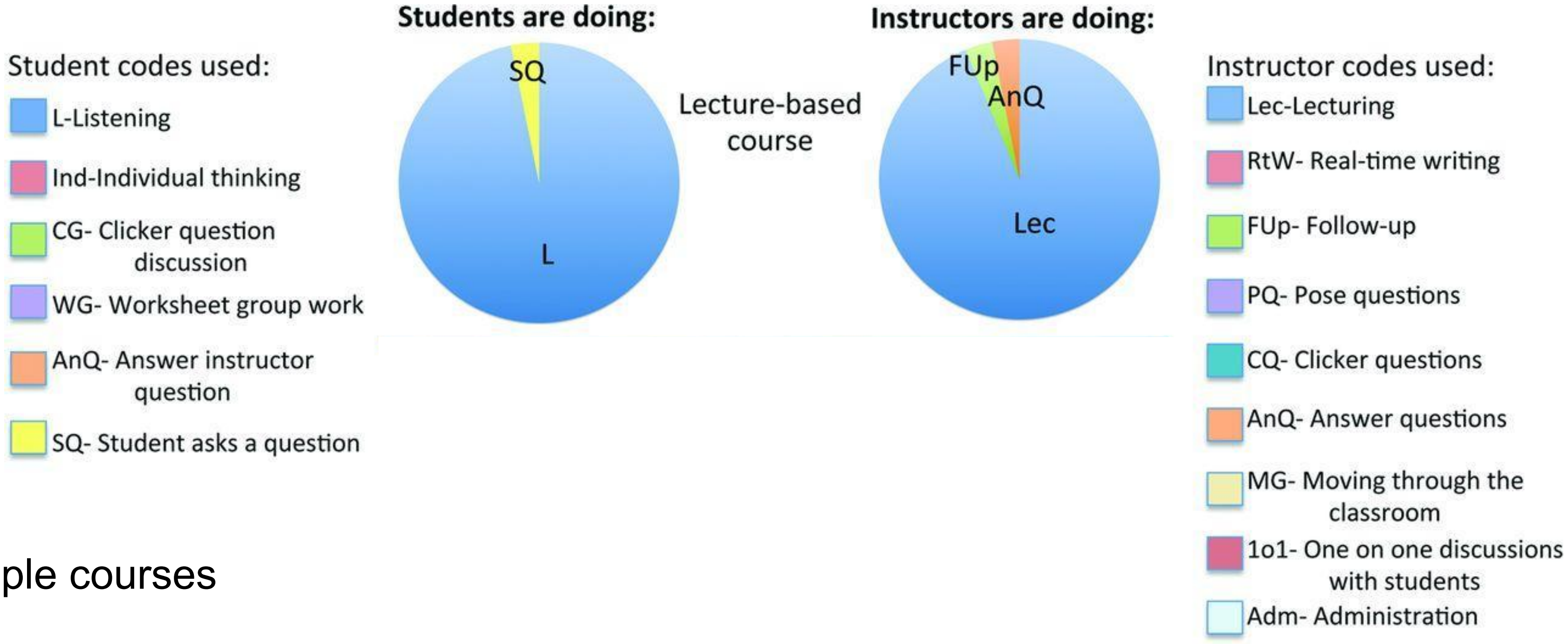
Student engagement during class time

BERI:
*B*ehavioral
*E*ngagement
*R*elated to
*I*nstruction



Lane ES and Harris SE. "A New Tool for Measuring Student Behavioral Engagement in Large University Classes." <u>JCST</u>. 2015. 44(6): 83-91.

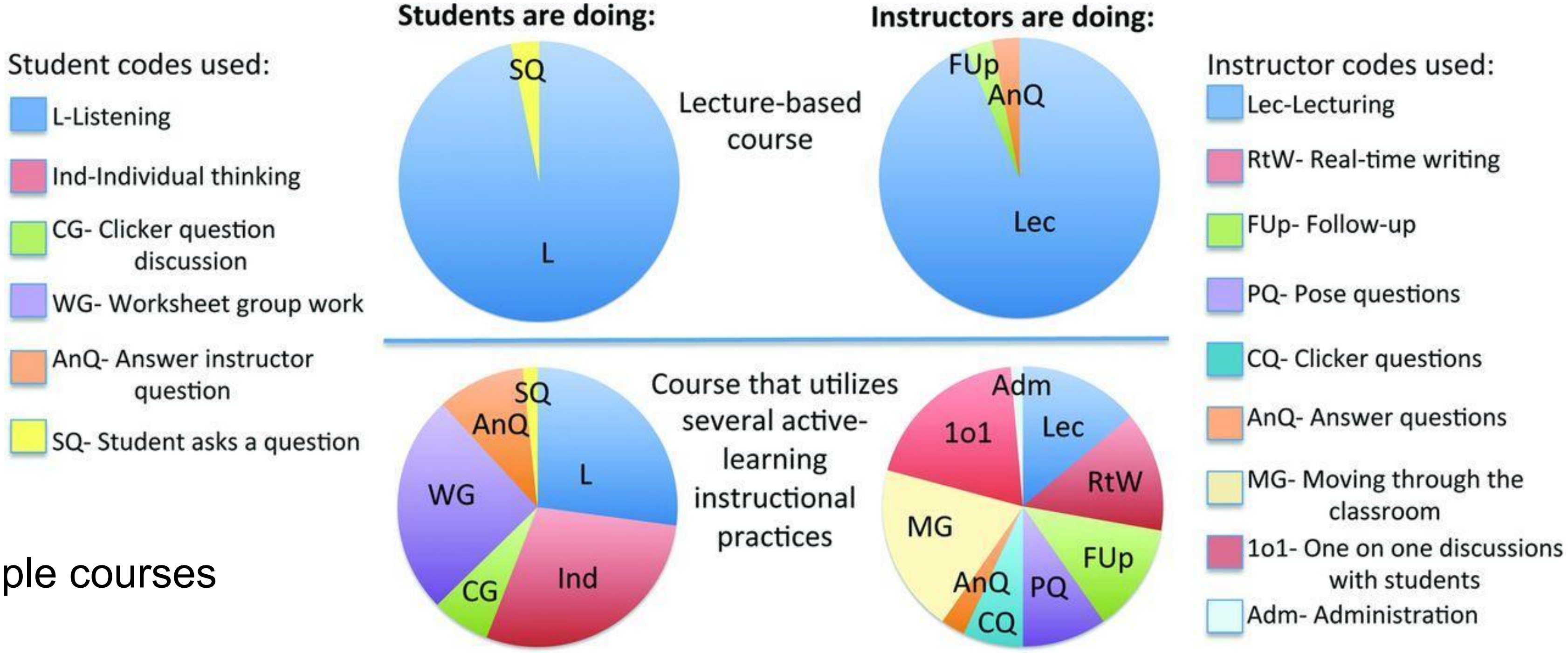
COPUS: Characterizes student and instructor behaviors during class



2 example courses

Smith MK, Jones FH, Gilbert SL, Wieman CE. "The Classroom Observation Protocol for Undergraduate STEM (COPUS): a new instrument to characterize university STEM classroom practices." CBE Life Sci Educ. 2013 Winter; 12 (4): 618-27.

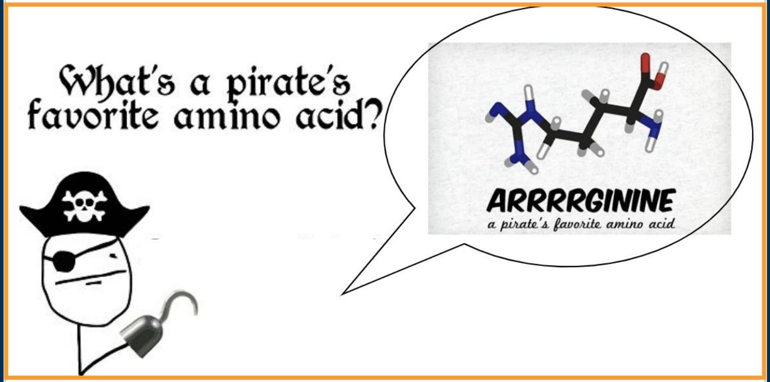
COPUS: Characterizes student and instructor behaviors during class



2 example courses

Smith MK, Jones FH, Gilbert SL, Wieman CE. "The Classroom Observation Protocol for Undergraduate STEM (COPUS): a new instrument to characterize university STEM classroom practices." <u>CBE Life Sci Educ</u>. 2013 Winter; 12 (4): 618-27.

Energy II



LPS A

Biology 2e, Chapter 6

An example

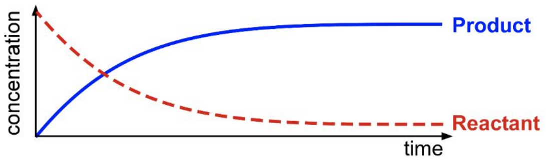
Learning Goal: To understand the relationship between the free energy change of a chemical reaction and its equilibrium constant, and to understand how enzymes affect reactions.

Learning Objectives:

- Define "chemical equilibrium."
- Interpret a free energy diagram to determine whether products or reactants will be favored at equilibrium.
- Relate the concepts of K_{eq} and $\Delta G°$ to the spontaneity of a reaction.
- Calculate a K_{eq} value from a $\Delta G°$ value, and vice versa.
- Write a rate expression of a one-step chemical reaction and determine when a reaction is fastest.
- Identify $\Delta G°$ and E_A on a free energy diagram.
- Use a free energy diagram to describe how an enzyme catalyzes a chemical reaction.
- Describe the molecular mechanism by which an enzyme works.

An example

At equilibrium, the rate of the forward reaction equals the rate of the reverse reaction



- At equilibrium, the concentrations of reactants and products stop changing

- Rate of a reaction = **k** x [reactant]
- We call **k** the **rate constant**.

- Different reactions have different rate constants.
- The larger the rate constant, the faster the reaction.

- For reaction $A + B \xrightarrow{k} C$

, the **rate of the reaction = k[A][B]**

An example

An example

Since the forward and reverse rates are equal at equilibrium, we can also solve for the K_{eq} in terms of the rate constants

- For the reaction $$A + B \underset{k_{rev}}{\overset{k_{for}}{\rightleftharpoons}} C + D$$

there are two rate constants.

- k_{for} is the rate constant for the “forward” reaction (the conversion of reactants A and B into products C and D)
- k_{rev} is the rate constant for the “reverse” reaction

Working with a neighbor, write an expression of K_{eq} for this reaction.

Next, write the rate equations for both the forward and reverse rates.

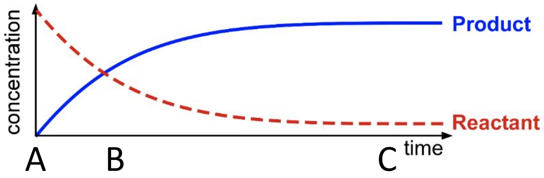
Finally, substitute your rate equations into your K_{eq} expression, and solve for K_{eq} in terms of the rate constants.

An example

When is the forward rate the fastest? When is the reverse rate the fastest?

Consider the favorable reaction diagrammed below. The reaction began with pure reactant (i.e., no product was initially present).

Working with a neighbor, answer questions 1 - 3 below.



1. At which time (A, B, or C) is the forward rate the fastest?

2. At which time (A, B, or C) is the reverse rate the fastest?

3. At which time (A, B, or C) are the forward and reverse rates equivalent?

Learning Goal: To understand the relationship between the free energy change of a chemical reaction and its equilibrium constant, and to understand how enzymes affect reactions.

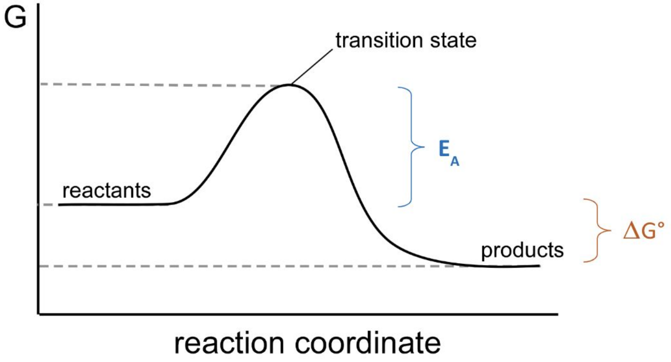
Learning Objectives:

- Define "chemical equilibrium."
- Interpret a free energy diagram to determine whether products or reactants will be favored at equilibrium.
- Relate the concepts of K_{eq} and $\Delta G°$ to the spontaneity of a reaction.
- Calculate a K_{eq} value from a $\Delta G°$ value, and vice versa.
- Write a rate expression of a one-step chemical reaction and determine when a reaction is fastest.
- Identify $\Delta G°$ and E_A on a free energy diagram.
- Use a free energy diagram to describe how an enzyme catalyzes a chemical reaction.
- Describe the molecular mechanism by which an enzyme works.

An example

An example

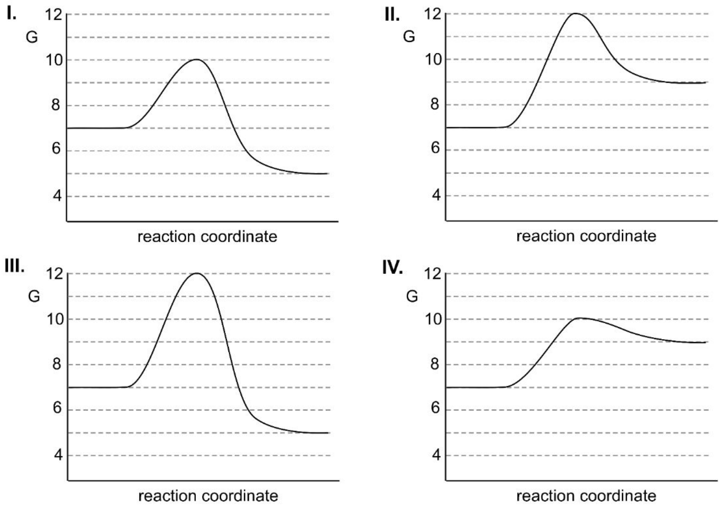
The rate constant **k** is inversely proportional to the energy of activation for a chemical reaction



- Recall that chemical reactions involve making and breaking bonds
- The "**transition state**" is a very high energy ("unstable") species of a chemical reaction in which some bonds are partially formed, and some bonds are partially broken.
- The energy of activation (E_A) tells us how fast a reaction is. The higher the energy of activation, the slower the reaction.
- The rate constant **k** is inversely proportional to the energy of activation for a chemical reaction

An example

Interpreting free energy diagrams



Which free energy diagram(s) depict the exergonic reaction(s)?

Challenge Q: Which free energy diagram(s) depict the fastest reaction(s)?

a. I
b. II
c. III
d. IV
e. I + II
f. I + III
g. I + IV
h. III + IV

Learning Goal: To understand the relationship between the free energy change of a chemical reaction and its equilibrium constant, and to understand how enzymes affect reactions.

Learning Objectives:

- Define "chemical equilibrium."
- Interpret a free energy diagram to determine whether products or reactants will be favored at equilibrium.
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- Use a free energy diagram to describe how an enzyme catalyzes a chemical reaction.
- Describe the molecular mechanism by which an enzyme works.

An example

Are you concerned that your students may be resistant if you start using active learning?

Do you feel that your ratings on end-of-semester student evaluations have ever been impacted by your use of interactive instructional techniques, such as those presented at the NFW?

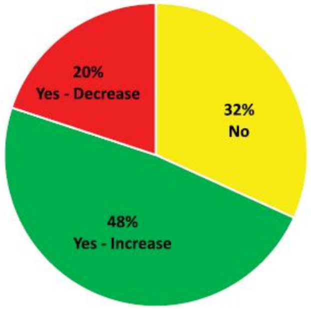


Fig. 5. Instructors' perception of the how using active learning affected their student evaluations.

Table II. Descriptive statistics for class-time spent in lectures by instructors who reported three different changes in their student evaluation: decrease, increase, and no changes.

		Percentage of class time spent in lecture		
		Average %	N	Std. Error
Change in student evaluations	Decrease	46.92	86	2.78
	Increase	54.92	208	1.60
	No change	64.69	137	2.02
All instructors		56.43	431	1.18

Instructors who reported a decrease in student evaluations reported a lower percentage of lecture (47%) than instructors who reported an increase in student evaluations (55%) or no change in student evaluations (65%).

→ **Don't lecture less than 55% of the time.**

Henderson C, Khan R, and Dancy M. "Will my student evaluations decrease if I adopt an active learning instructional strategy?" Am. J. Phys. 2018; 86(12), 934-942.

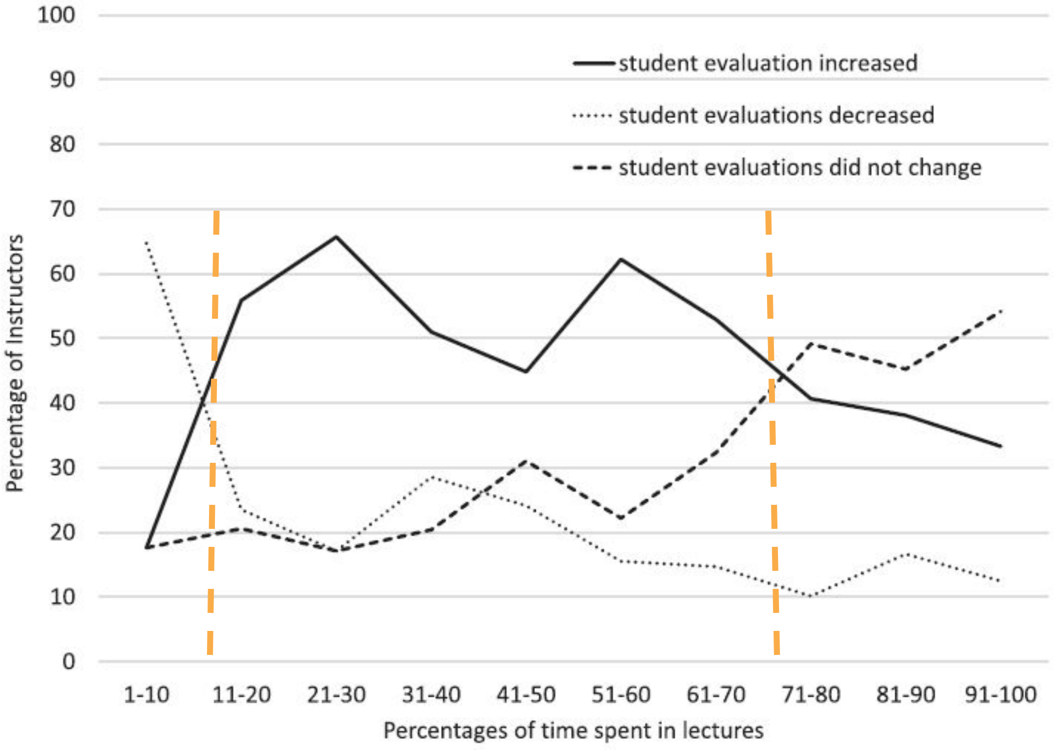
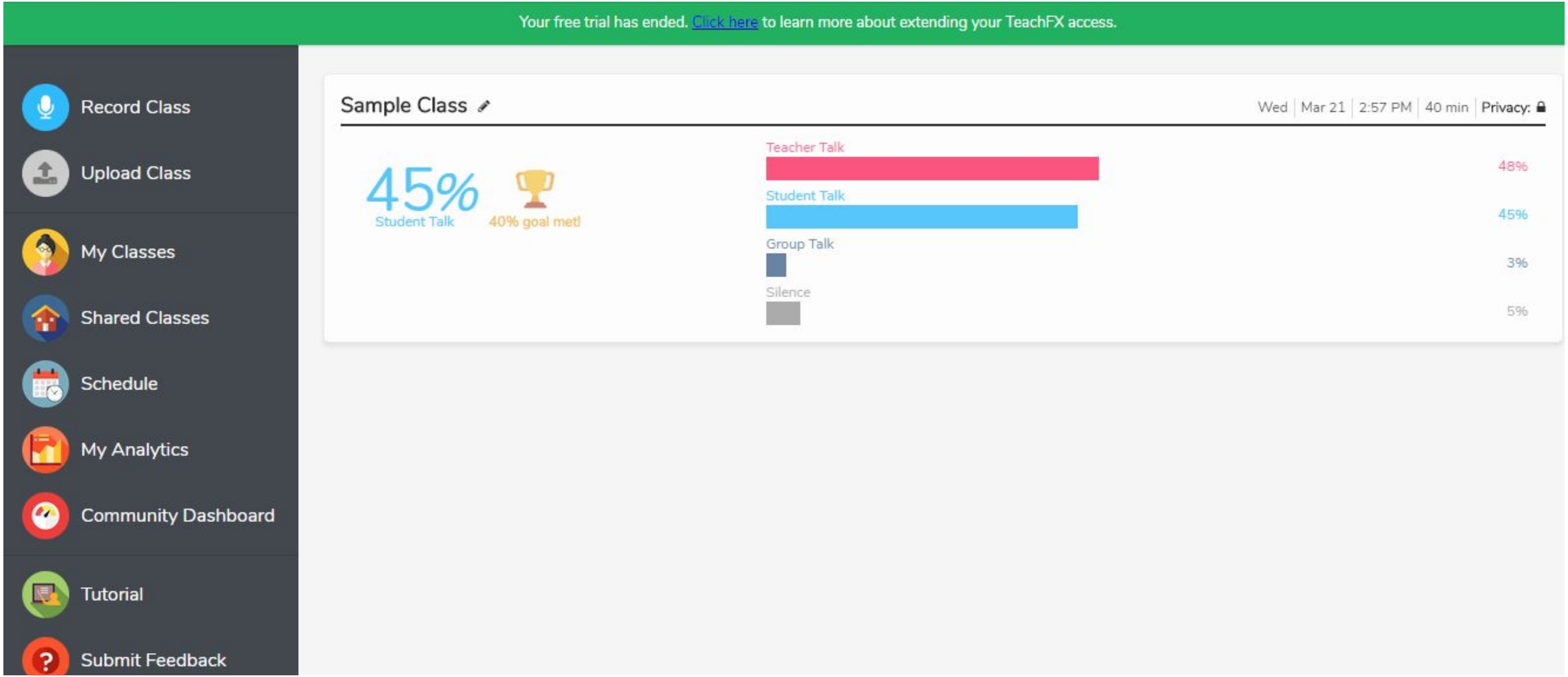


Fig. 6. Changes in student evaluations compared to the amount of class time spent in lecture. Decreasing student evaluations become more likely when the percentage of class time spent in lecture drops below 20%.

Henderson C, Khan R, and Dancy M. "Will my student evaluations decrease if I adopt an active learning instructional strategy?" Am. J. Phys. 2018; 86(12), 934-942.

Side Note: TeachFX (https://portal.teachfx.com/)



Relationship between teacher strategies and student evaluations

TABLE 6

Average evaluation score within each explanation and facilitation quartile.

Explanation	*Facilitation*			
	First quartile ($n = 343$)	**Second quartile ($n = 231$)**	**Third quartile ($n = 209$)**	**Fourth quartile ($n = 269$)**
Fourth quartile ($n = 254$)	3.76 ($n = 17$)	3.98 ($n = 31$)	4.02 ($n = 60$)	4.25 ($n = 146$)
Third quartile ($n = 196$)	3.63 ($n = 29$)	3.70 ($n = 63$)	3.72 ($n = 45$)	3.72 ($n = 50$)
Second quartile ($n = 336$)	3.21 ($n = 128$)	2.99 ($n = 89$)	3.15 ($n = 74$)	3.90 ($n = 45$)
First quartile ($n = 266$)	2.70 ($n = 169$)	2.99 ($n = 48$)	3.15 ($n = 30$)	3.77 ($n = 19$)

[“Quartile” corresponds to student perception of instructor use of strategies.]

Finelli CJ, Nguyen K; DeMonbrun M, Borrego M, Prince M, Husman J; Henderson C; Shekhar P, and Waters CK. “Reducing Student Resistance to Active Learning: Strategies for Instructors.” Journal of College Science Teaching. May 2018; 47(5): 80-91.

POLICY FORUM

SCIENCE EDUCATION

Anatomy of STEM teaching in North American universities

Lecture is prominent, but practices vary

By M. Stains, J. Harshman, M. K. Barker, S. V. Chasteen, R. Cole, S. E. DeChenne-Peters, M. K. Eagan Jr., J. M. Esson, J. K. Knight, F. A. Laski, M. Levis-Fitzgerald, C. J. Lee, S. M. Lo, L. M. McDonnell, T. A. McKay, N. Michelotti, A. Musgrove, M. S. Palmer, K. M. Plank, T. M. Rodela, E. R. Sanders, N. G. Schimpf, P. M. Schulte, M. K. Smith, M. Stetzer, B. Van Valkenburgh, E. Vinson, L. K. Weir, P. J. Wendel, L. B. Wheeler, A. M. Young

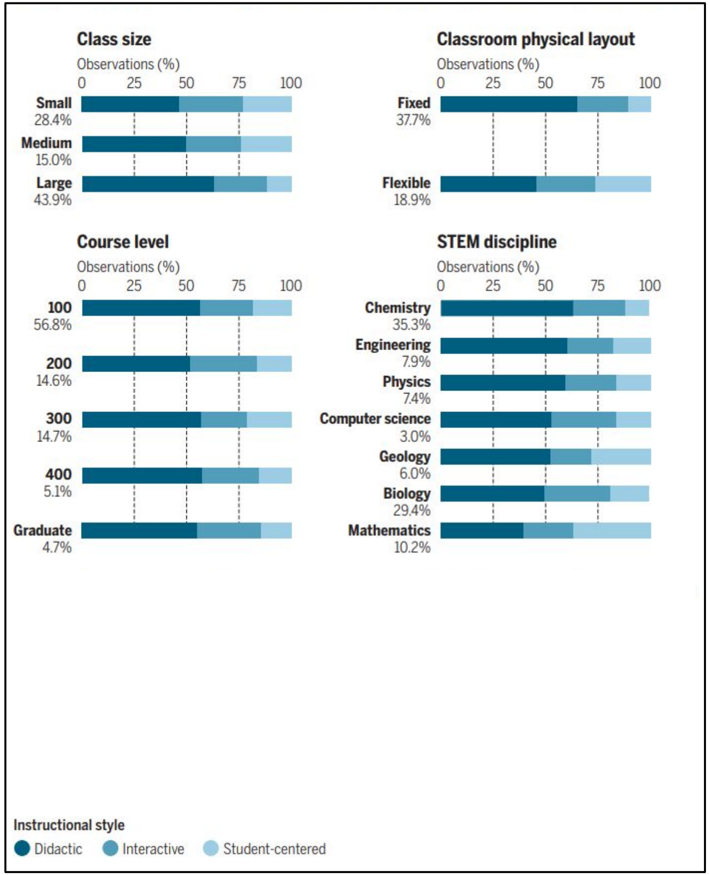
A large body of evidence demonstrates that strategies that promote student

and governmental bodies have called for and supported adoption of these student-centered strategies throughout the undergraduate STEM curriculum. But to the extent that we have pictures of the STEM undergraduate instructional landscape, it has mostly been provided through self-report surveys of faculty members, within a particular STEM discipline [e.g., (3–6)]. Such surveys are prone to reliability threats and can underestimate the complexity of classroom environments, and few are implemented nationally to provide valid and reliable data (7). Reflecting the limited state

Despite numerous calls to improve student engagement, supported by a large body of evidence, STEM classes are often still dominated by lectures.

tion of STEM teaching practices in North American universities based on classroom observations from over 2000 classes taught by more than 500 STEM faculty members across 25 institutions.

Our study used the Classroom Observation Protocol for Undergraduate STEM (COPUS) (9), which can provide consistent assessment of instructional practices and document impacts of educational initiatives. COPUS requires documenting the co-occurrence of 13 student behaviors (e.g., listening, answering questions) and 12 instructor behaviors (e.g., lecturing, posing questions) during each 2-min interval of a class. Our large-scale COPUS data allow generalizations beyond institution-level descriptions and suggest an opportunity to resolve inconsistent findings from recent discipline-based education research (DBER) studies. For example, STEM



Stains M, “Anatomy of STEM teaching in North American universities.” <u>Science</u>. 2018 Mar 30; 359(6383): 1468-1470.

What are the best ways to design active learning exercises?

ICAP Hypothesis

(Menekse *et al.*, 2013; Chi *et al.*, 2014; Wiggins *et al.*, 2017; Smith G, 2020.)

Active		Passive
Students activate their own knowledge *within the boundaries of what has been taught in class*	>	Students receive information without overtly engaging

ICAP Hypothesis

(Menekse *et al*., 2013; Chi *et al*., 2014; Wiggins *et al*., 2017; Smith G, 2020.)

Interactive	>	Constructive	>	Active	>	Passive
Students exchange ideas and perspectives *Build off each other's understanding*	>	Students work **alone** to provide explanations *beyond what is presented in class*	>	Students activate their own knowledge *within the boundaries of what has been taught in class*	>	Students receive information without overtly engaging

ICAP Hypothesis

(Menekse *et al.*, 2013; Chi *et al.*, 2014; Wiggins *et al.*, 2017; Smith G, 2020.)

Interactive		Constructive		Active		Passive
Student pairs shared one activity sheet and completed it collaboratively	>	Students interpreted graphs and figures as they answered questions on a worksheet	>	Students read an 8pg text and highlighted most critical sentences	>	Students read an 8pg text

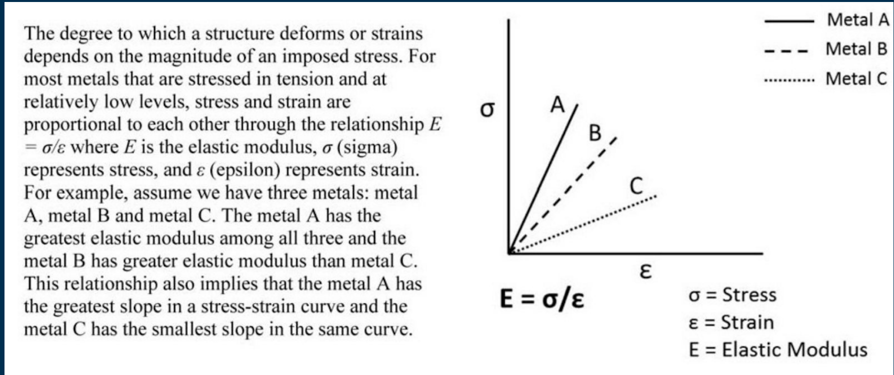
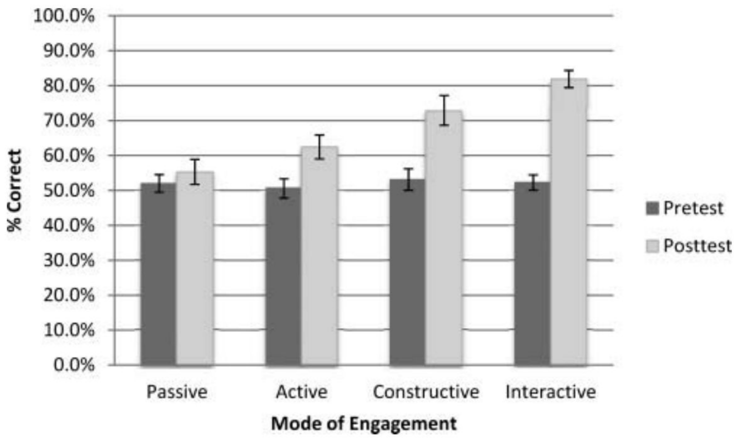


Figure 1 Exemplary text scrap (left) and graph for the elastic modulus concept (right).

(Menekse *et al.*, 2013)



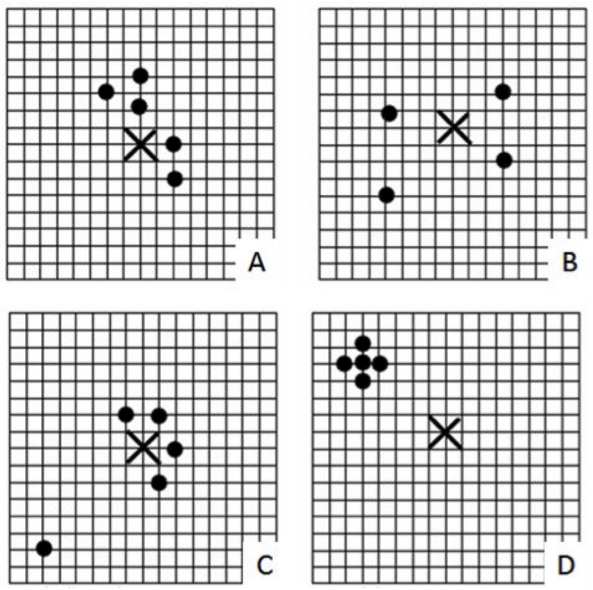
(Chi *et al.*, 2014)

How can I incorporate active learning into my class tomorrow?

- Incorporate a homework problem or practice problem or part of a homework assignment into class time as group work.
- Whenever you ask your students a question in class, give them 1 min to write an answer before asking for volunteers to share, or let them chat with their neighbors for 1-2 min before asking for volunteers.
- Begin class by asking students to answer a question that they won't be able to answer until the end of your lesson, and give them a few minutes to try to answer it- it will inspire their curiosity and prime their learning.

Ask students to answer a question at the beginning of class that they won't be able to answer until after you teach them that day's lesson

- Flip the common "lecture then ask comprehension question" paradigm
- I.e., introduce content with a question



Students who are asked to "invent" a solution to a problem + hear a lecture outperform students who hear a lecture and then do a practice problem

$$\sigma = \sqrt{\frac{\sum(x - \bar{x})^2}{n}}$$

Schwartz, D. L. & Bransford, J. D. (1998). "A Time for Telling." Cognition & Instruction, 16, 475-522.

Thank you!

Stay in touch and let us know how we can help!

- Farber 2
- ctl@brandeis.edu
- msamuels@brandeis.edu
- CTL Events page
- Keep an eye out for our CTL Newsletter

Some very cool resources:

https://teaching.tools/activities

https://ablconnect.harvard.edu/

Weekly CTL Teaching+Learning Lunches

Spring 2023

All Brandeis faculty, graduate students, and post docs are invited to attend our weekly T+L Lunches:

- ***Workshops*** explore specific topics of teaching and learning with practical applications (hybrid format);
- ***Journal Clubs*** discuss recent pedagogical research and its applications for your classroom practice (hybrid format); and
- ***Salons*** foster collegial conversations about teaching and learning (in-person).

T+LL Workshop: Active Learning

January 27, 2023

Friday, 12:30 - 1:50 pm, Goldfarb Gardner Jackson
Research has shown that active learning significantly improves student learning, but how can we best incorporate it into our classes? In this workshop, we will discuss a variety of easy-to-implement active learning techniques from a variety of disciplines, and discuss how to apply some recent research about what makes active learning work best and how to get student buy-in.
Facilitator: Dr. Marty Samuels

PLEASE RSVP HERE IF YOU PLAN TO ATTEND IN-PERSON TO RESERVE YOUR LUNCH SPOT.

PLEASE REGISTER TO RECEIVE A ZOOM LINK IF YOU PLAN TO ATTEND ON-LINE.

...and please feel free to attend even if you don't RSVP!

T+LL Salon

February 3, 2023

Friday, 12:30 - 1:50 pm, Goldfarb Gardner Jackson
Join colleagues for discussions about learning and teaching. These informal conversations are about issues that interest you – or with which you are wrestling. We'll follow your lead, but we always have good topics on tap if there's nothing on your mind at the moment. Bring a friend (or two)!
Facilitator: Dr. Dan Perlman

PLEASE RSVP HERE TO RESERVE YOUR LUNCH SPOT.

...and please feel free to attend even if you don't RSVP!

T+LL Journal Club: Helping your Students to Think Like Experts

February 10, 2023

Friday, 12:30 - 1:50 pm, Goldfarb Gardner Jackson
What is expertise, and what does it look like in your discipline? In this journal club, we'll discuss recent literature about what distinguishes experts and novices in various disciplines, and how we can approach teaching as a way to help students become more like an expert, one semester at a time.
Facilitator: Dr. Marty Samuels

PLEASE RSVP HERE IF YOU PLAN TO ATTEND IN-PERSON TO RESERVE YOUR LUNCH SPOT.

PLEASE REGISTER TO RECEIVE A ZOOM LINK IF YOU PLAN TO ATTEND ON-LINE.

...and please feel free to attend even if you don't RSVP!

T+LL Workshop: Using Growth Mindset to Improve Teaching and Learning

February 17, 2023

Friday, 12:30 - 1:50 pm, Goldfarb Gardner Jackson
Growth mindset—the belief that your skills and intelligence are malleable and can be improved with hard work and practice—has been shown to be a vital aspect of learning. In this session, we will focus on developing a growth mindset for ourselves and for our students, and why both are important. It is often all too easy to think of ourselves as finished products with set skills, but this can hinder our attempts to be willing to learn new knowledge and skills. Fostering a "growth mindset" can motivate us- and our students- to focus on the process of learning, to embrace challenges as learning opportunities, and to improve our abilities through practice. Teaching students to have a growth mindset has been shown to improve student performance and reduce achievement gaps between student groups, and in this workshop we'll discuss how to put some of these principles into practice in our classrooms.
Facilitator: Dr. Marty Samuels

PLEASE RSVP HERE IF YOU PLAN TO ATTEND IN-PERSON TO RESERVE YOUR LUNCH SPOT.