

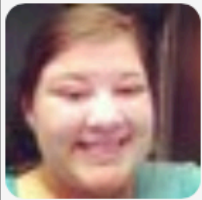
Flipping 101: An introduction to flipped classrooms



Julie Schell
Sr. Educational Research Associate
Mazur Group, Harvard University

Rowan University
New Jersey
April 12, 2013



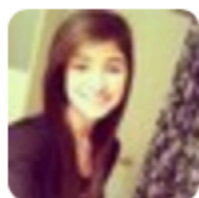


brianna girlie @bripaigegirlie

33 mins

I hate school. Ihateschool. I HATE school. I h8 school. I hate skool.
lh8skool. I. hate. school. Eye h8 skool. I HATE SCHOOL. **#ihateschool**

Expand ↩ Reply ↻ Retweet ★ Favorite ⋮ More



LundenStallings @livestrong_1

Feb 25

I was having a pretty good night, until I realized i gotta get up for prison in the morning 😊🔫 **#ihateschool**

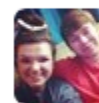
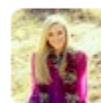
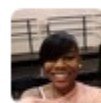
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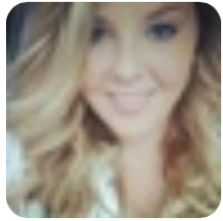
11

RETWEETS

3

FAVORITES



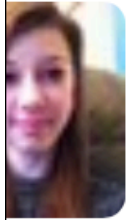


Allison Newby ♥ @allisonnewby13

Tomorrow is new fresh start to a long week of torture.

#ihateschool

Expand



Kaylee Krepps @kay_lay13

Fel

Dear pre-calc, **I hate** your stinking guts You make me vomit You're the scum between my toes Love me P.S. send that message to **physics** too



JasmineJandu @JasmineJandu

13 mins

I hate the fact that there's school tomorrow. Dead serious right now, I'd rather throw up and sit on it. **#ihateschool**

Expand



Kelly Chen @pianokchen

4h

School is so boring [#ihateschool](#)

Expand



brookedlane @brookedlane14

Completely. Bored. Out. Of. My. Mind. 🙄🔫 #ihateschool

Expand



KAILS @kaillleybird

7 Apr

Never learned how to get a loan, buy a house, car, or anything else useful in life, but I DO know the effing **pythagorean** theorem

Expand

Would be funny...if it wasn't so
heartbreaking.

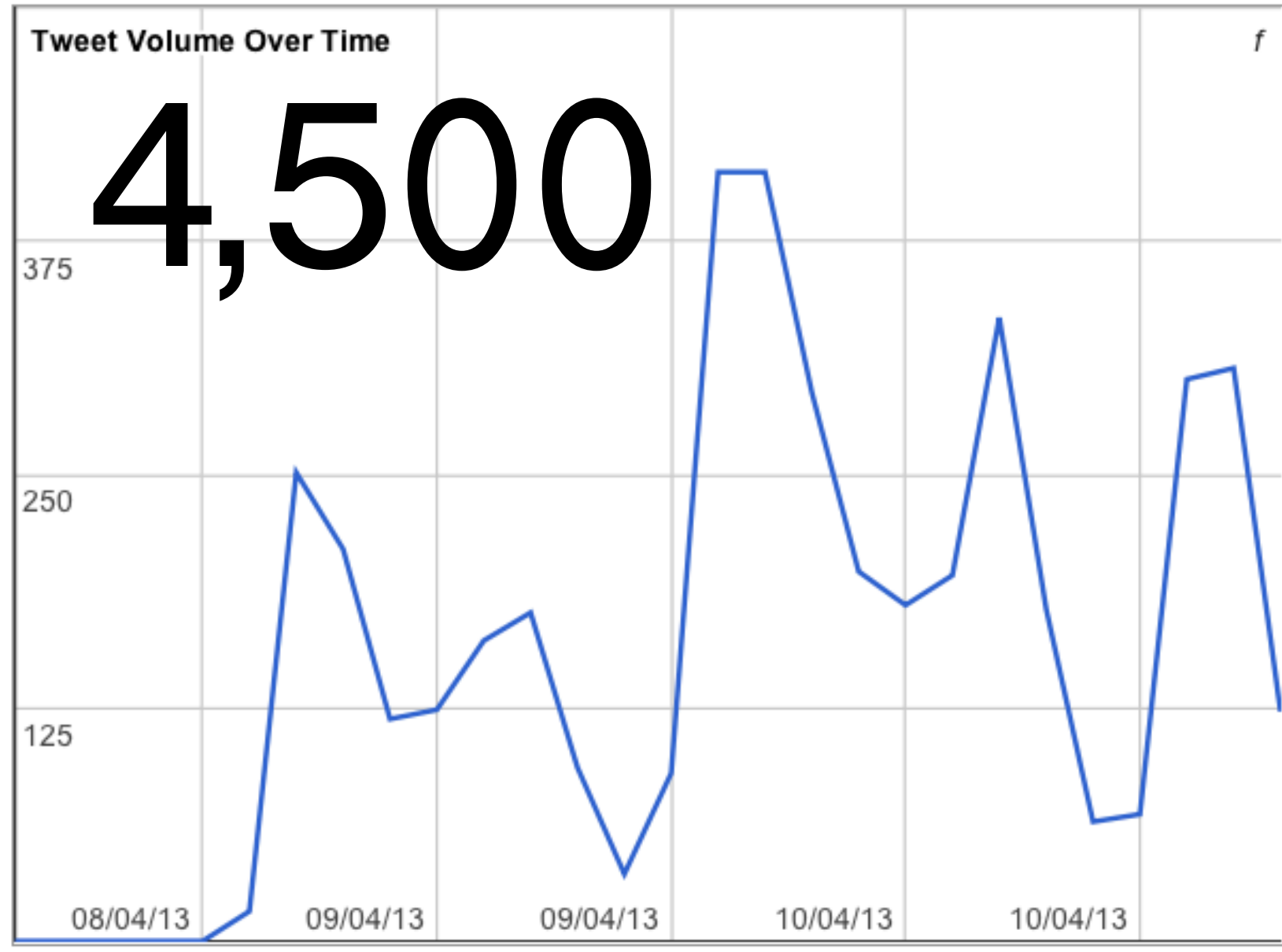


- no ON / OFF button
- only last “click counts”
- displays recorded answer
- ID on back

How many #ihateschool tweets in past 3 days? About...

- a. 500
- b. 1500
- c. 4500
- d. 9000

#ihateschool



Q. What keeps you
up at night?

A.

Q. What keeps you
up at night?

A.

I sleep well at night.

Rowan

Q. What keeps you
up at night?

A.

Having greater student
involvement.

Rowan

Q. What
up at n.

How can I motivate the class
better? It is my real struggle.

A.

Having greater student
involvement.

Rowan

A.

How
be
Q. What keeps you
up at night?

A.
How can I engage and invest
the students in their own
education, beyond just getting a
good grade in my class?

Rowan

Rowan

Q. What
up at night?

keeps you
night?

How
be
Q. What keeps you
at night?

Q. What
up at night?

Q. What keeps you
up at night?

A.

How can I motivate and get
the through to these kids?

good grades

Rowan

A.

How can I motivate

Q. What
up at night?

Q. What keeps you
up at night?

Q. What keeps you
up at night?

How to engage my students.

Rowan

Chile

How can I motivate

A.

F

A.

Desinteresse!!

Brazil

Q. What keeps you

Q. What keeps you
up at night?

Q. What
up at night?

How
be
Q. What keeps you
up at night?

Q. What
up at night?

you

A.

A.

How boring I am & how little
will be retained by the student.

Yale

Rowan

Students and teachers want the same thing.

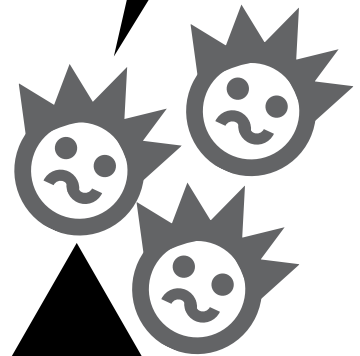
I want you
engaged!

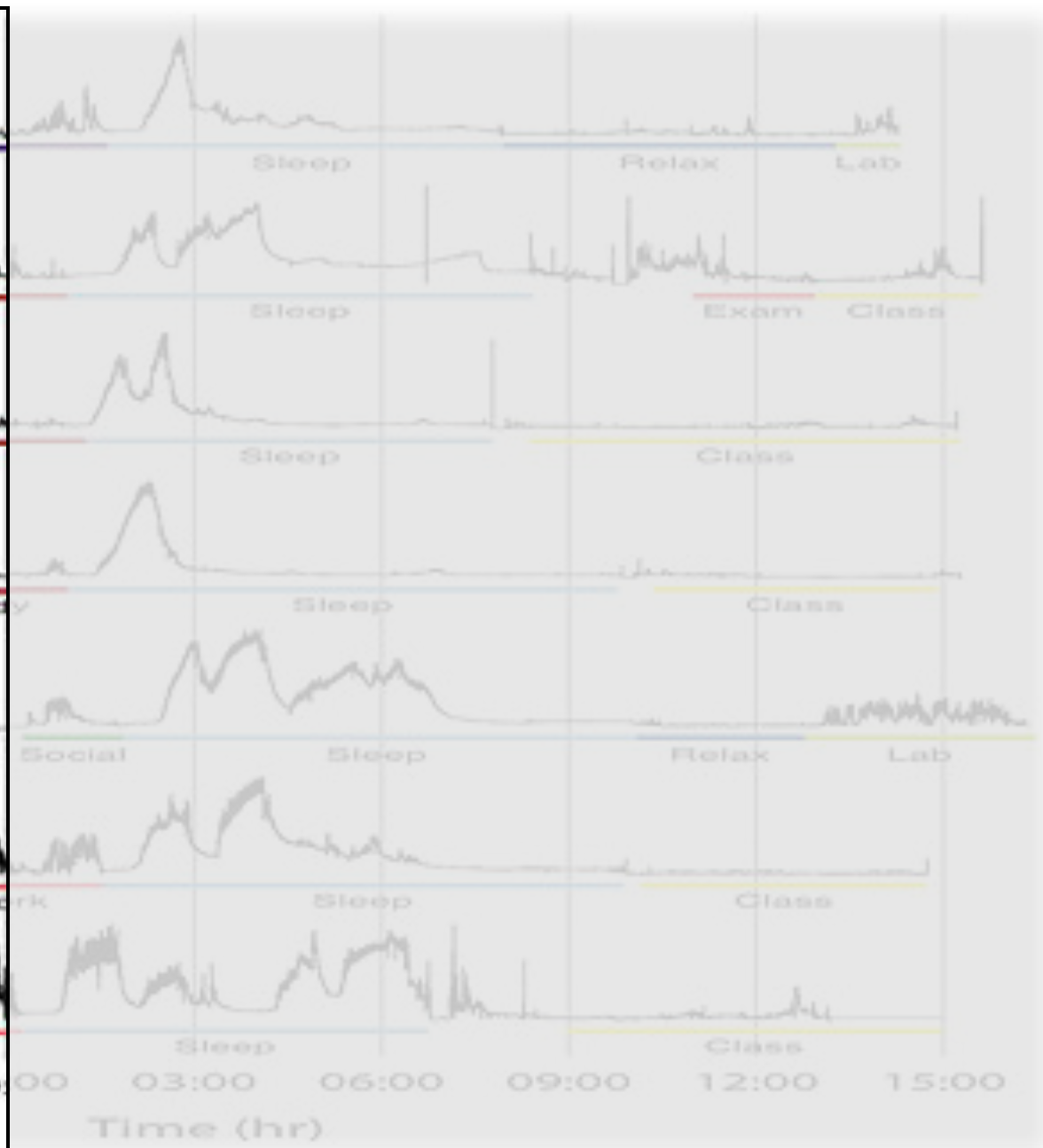
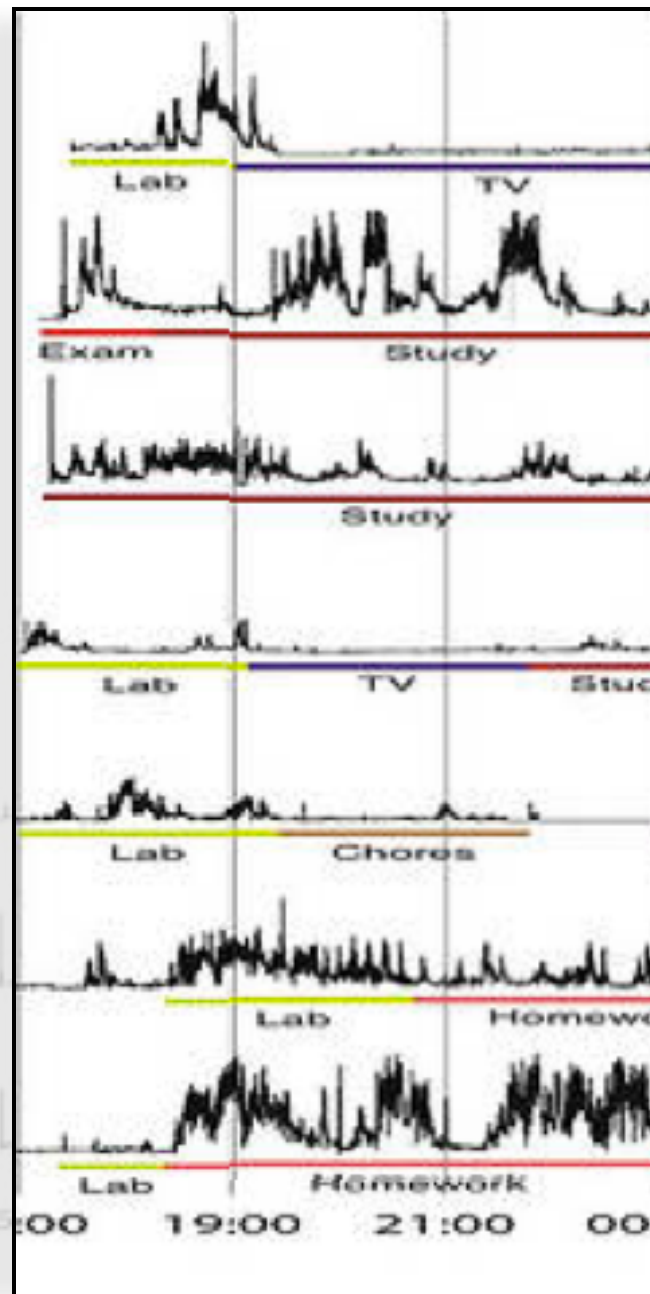


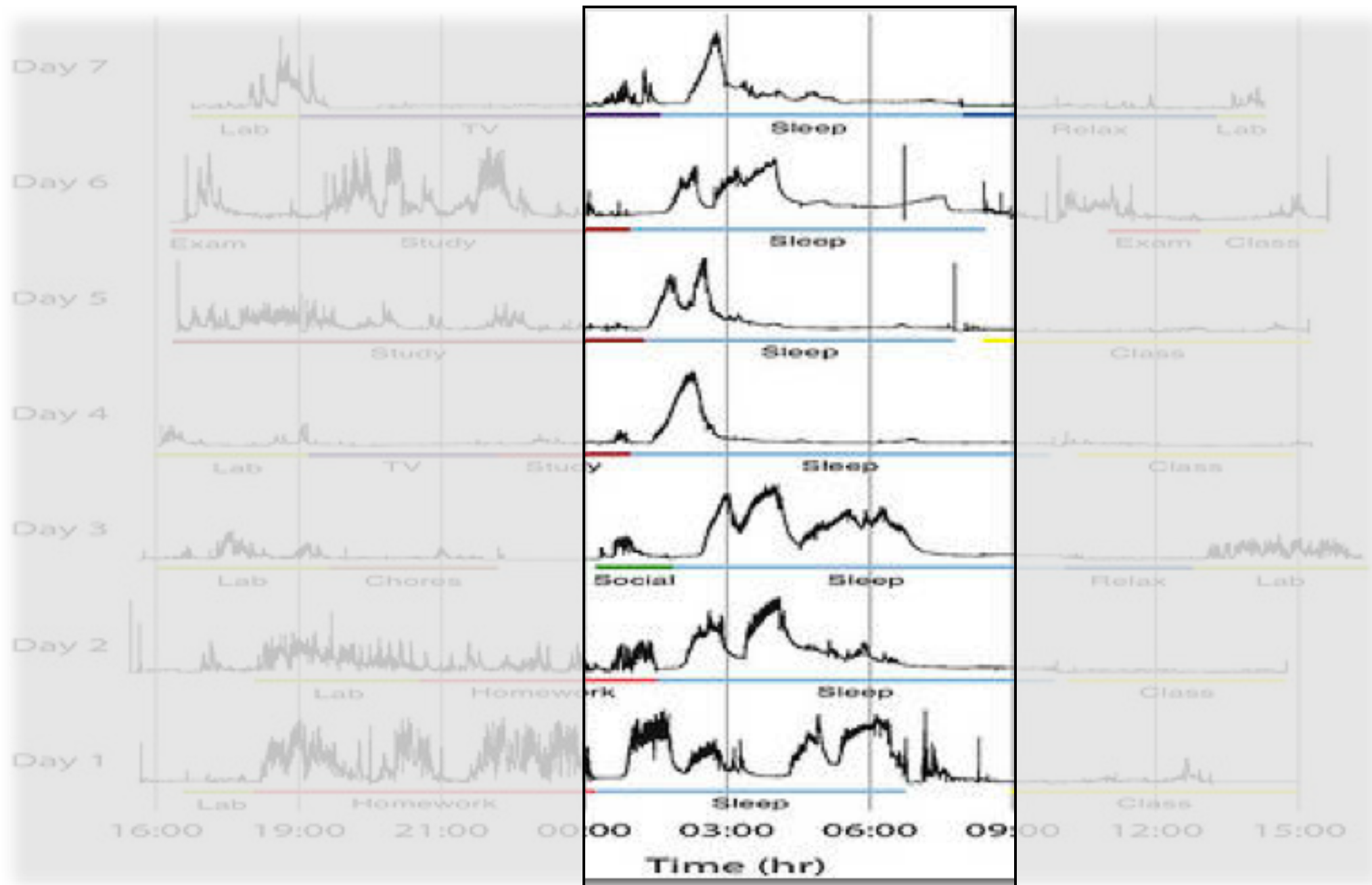
I want you
engaged!

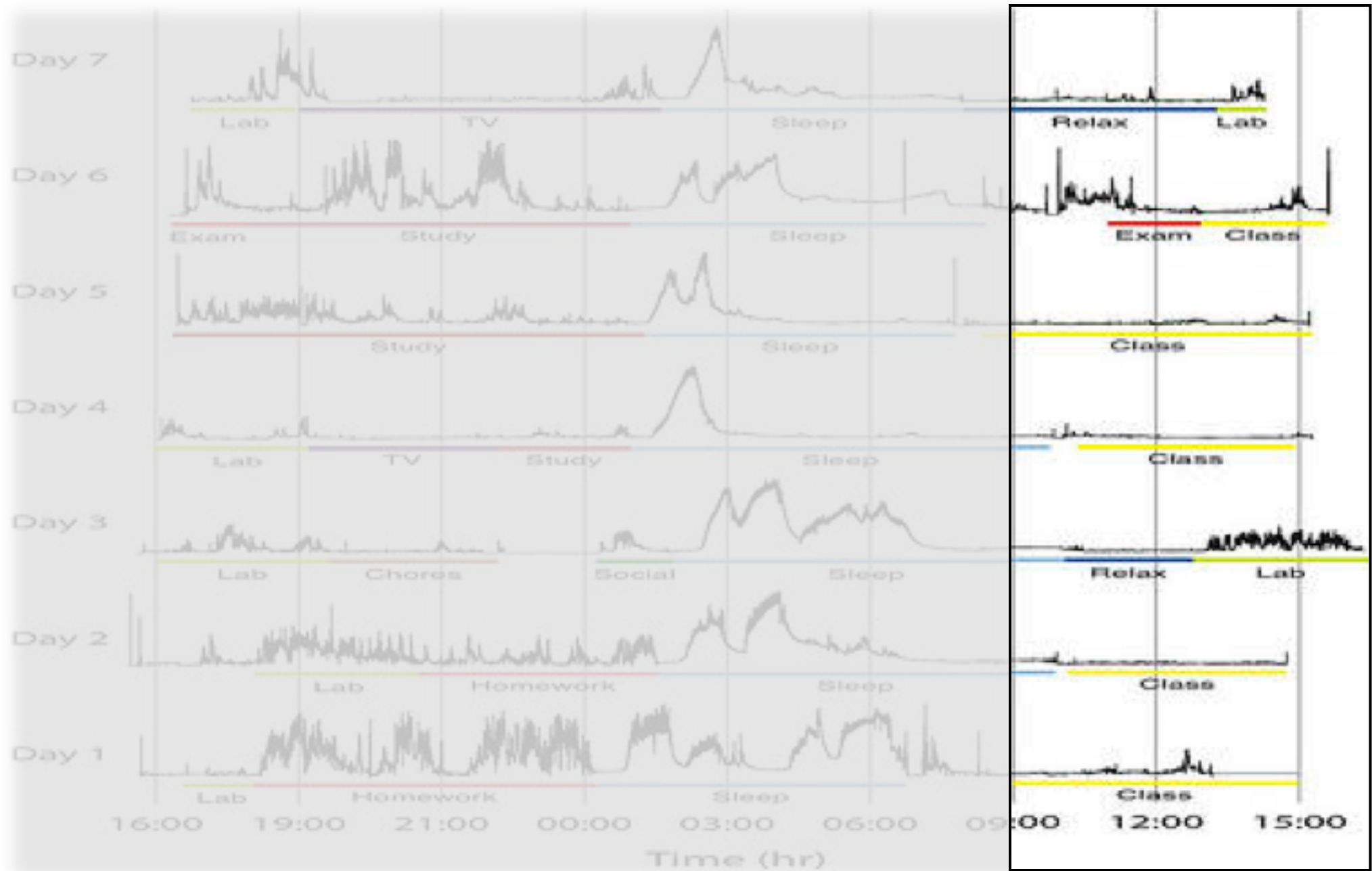


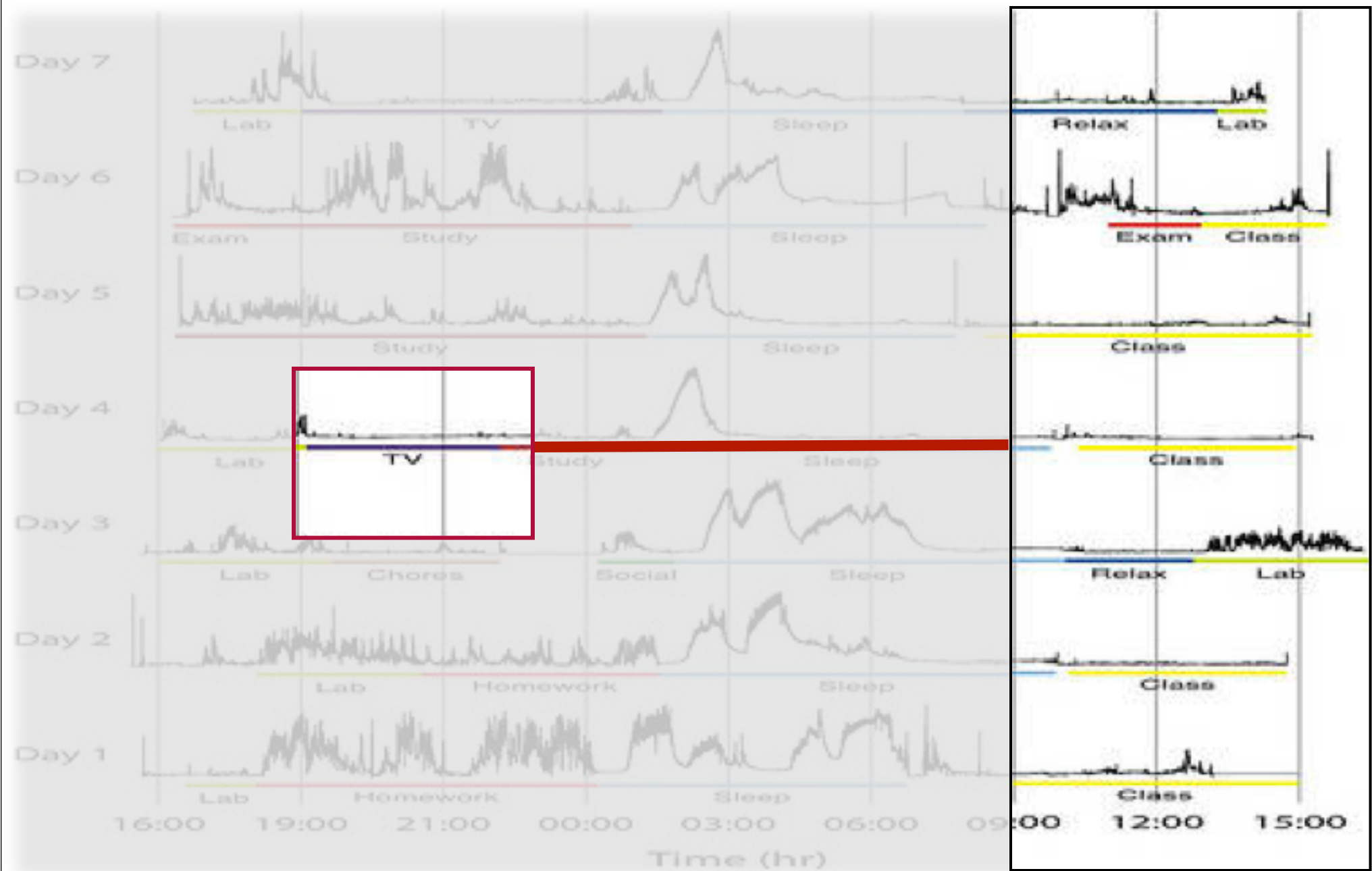
We
want to be
engaged!



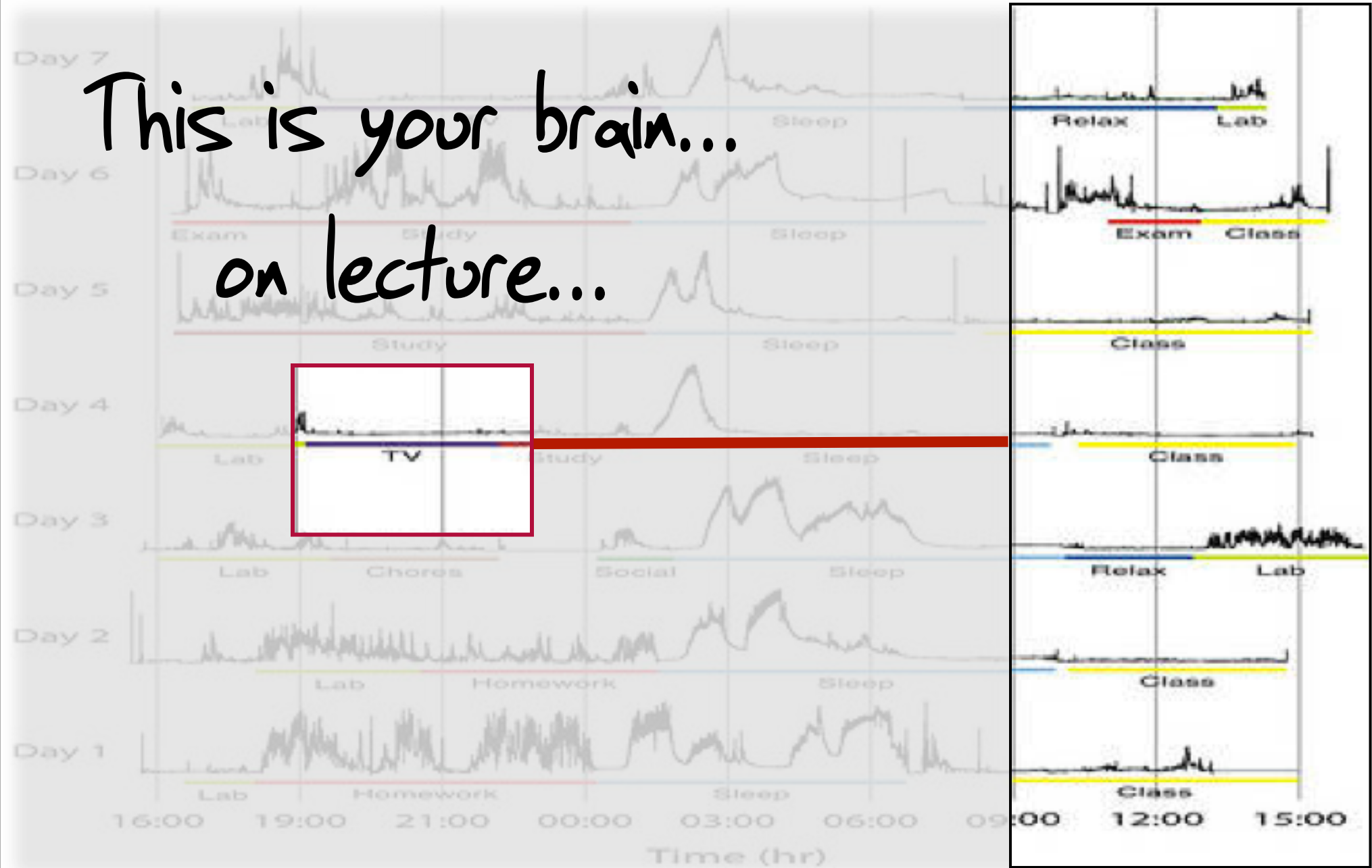








This is your brain...
on lecture...





Message



Education doesn't
have to be this
way.

What's going on in this classroom?



What's going on in this classroom?

- a. teacher left the room
- b. talking about dating
- c. working on a physics problem
- d. this isn't a classroom it's a party

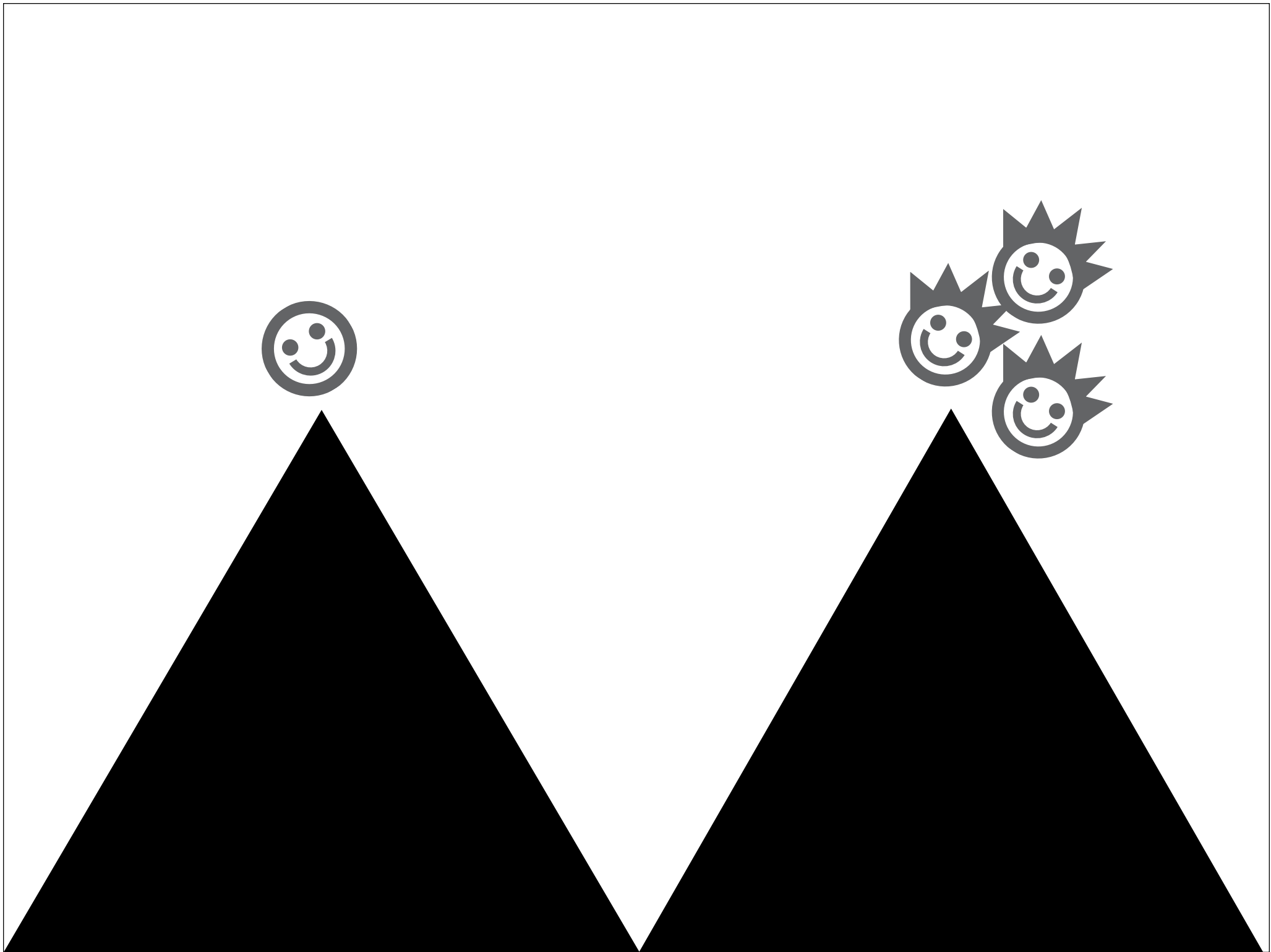
What's going on in this classroom?

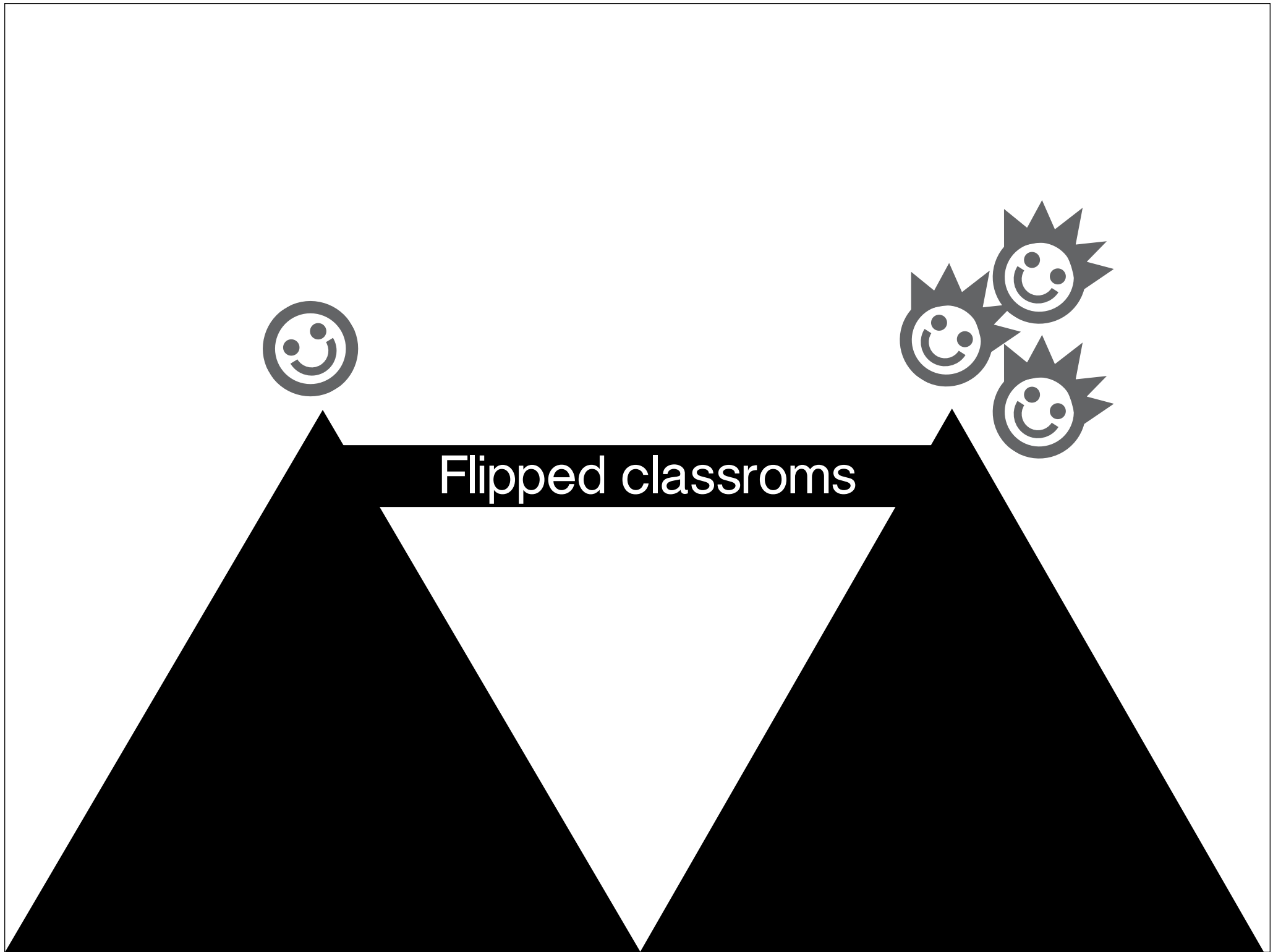
- a. teacher left the room
- b. talking about dating
- c. working on a physics problem**
- d. this isn't a classroom it's a party

Call to Action



Bridge the gap.





Goals for today...

3 Essential Questions[?]

8 Big Ideas

+ 2 Key Characteristics

1 Call to action

14 takeaways

3 essential questions

What is a flipped classroom



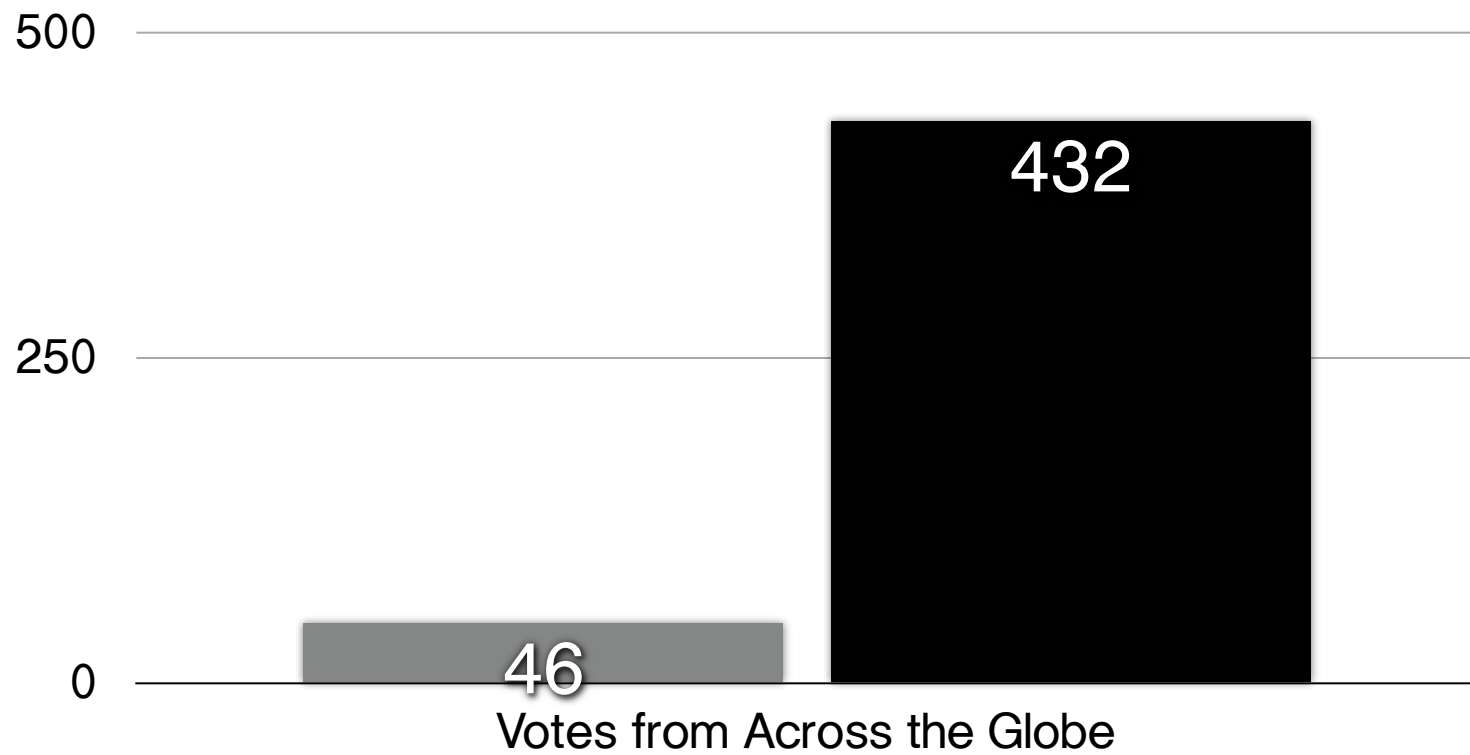
You have to flip all content to have a real flipped classroom.

I

- A. True
- B. False

A ■ True

B ■ False



You can flip one concept or 10.

I

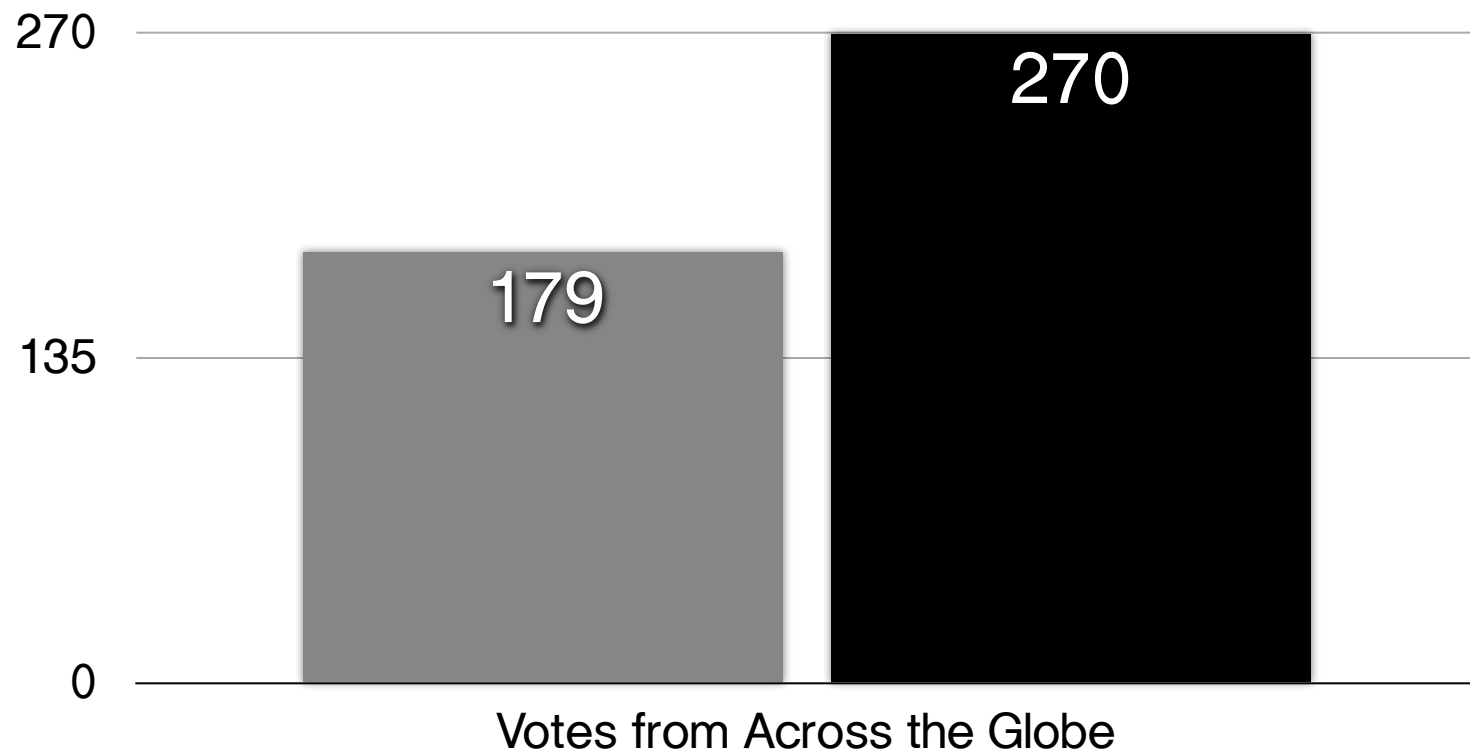
Flipped classrooms are the latest edutrend.

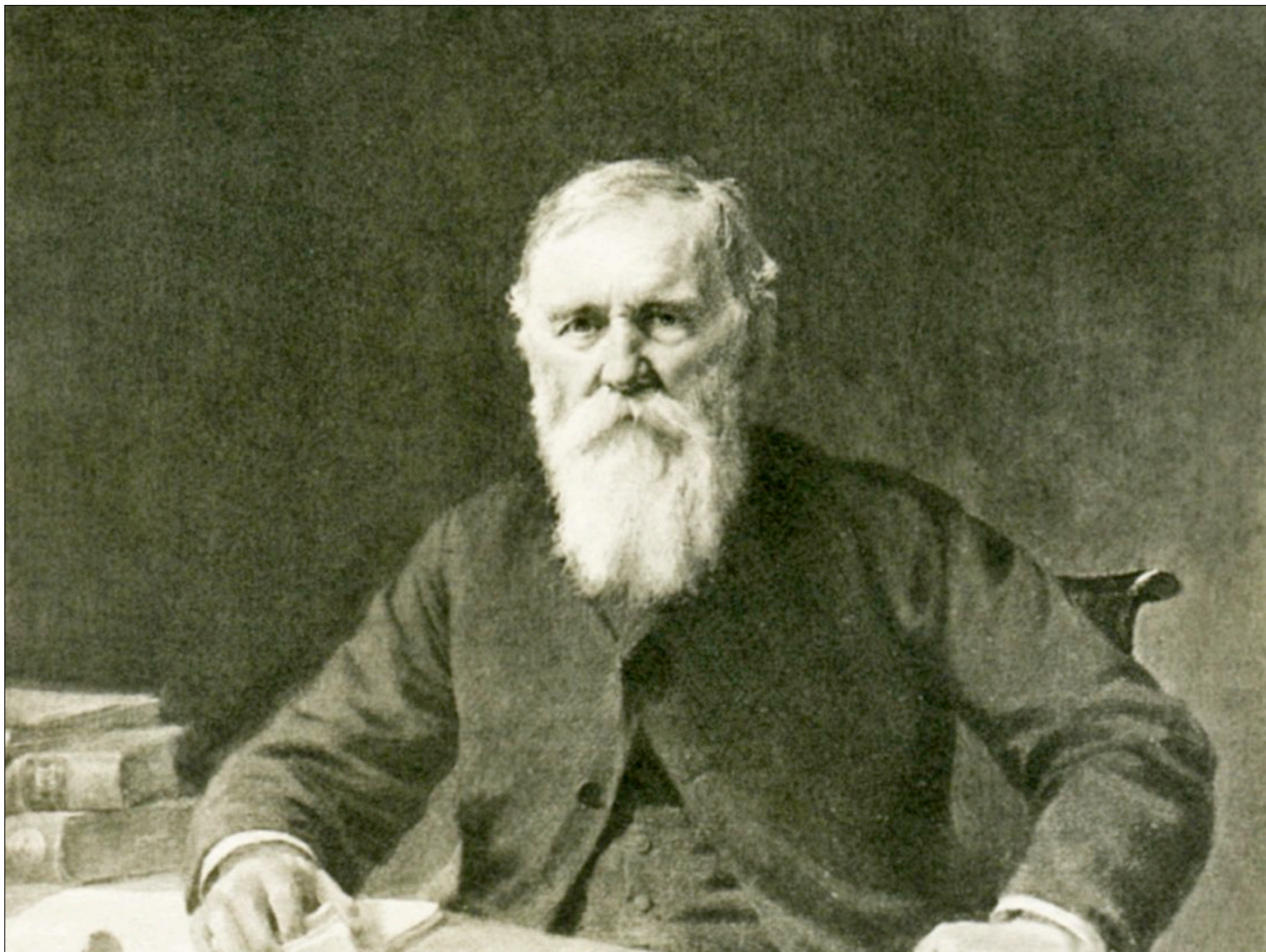
2

- A. True
- B. False

A ■ True

B ■ False









They are not new.

Flipped classrooms replace faculty with computers.

3

- A. True
- B. False

A ■ True

B ■ False

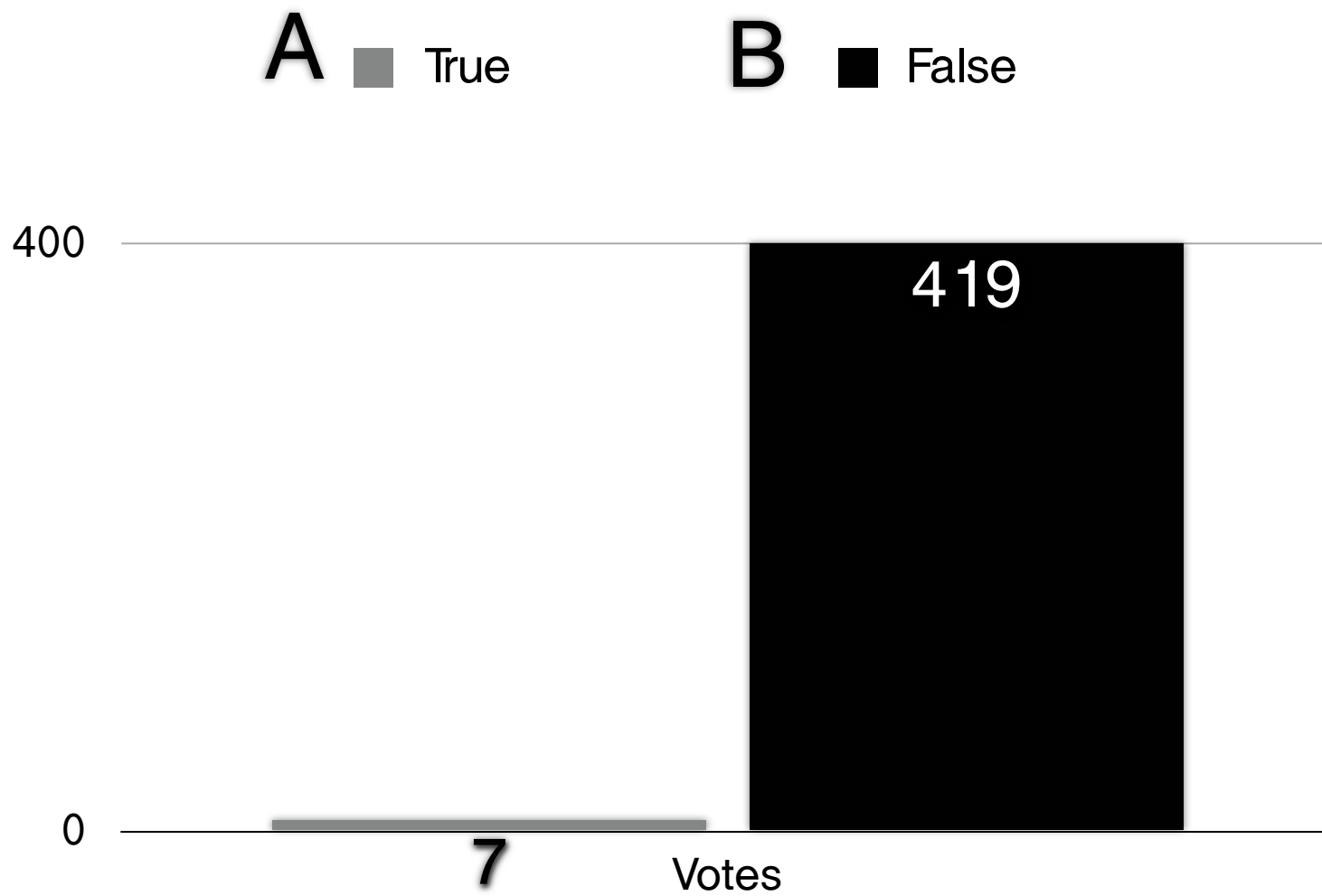
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419

0

7

Votes







Replaced sage on the stage with a guide on side.

Flipped classrooms are primarily about putting lectures online.

4

- A. True
- B. False

A ■ True

B ■ False

400

479

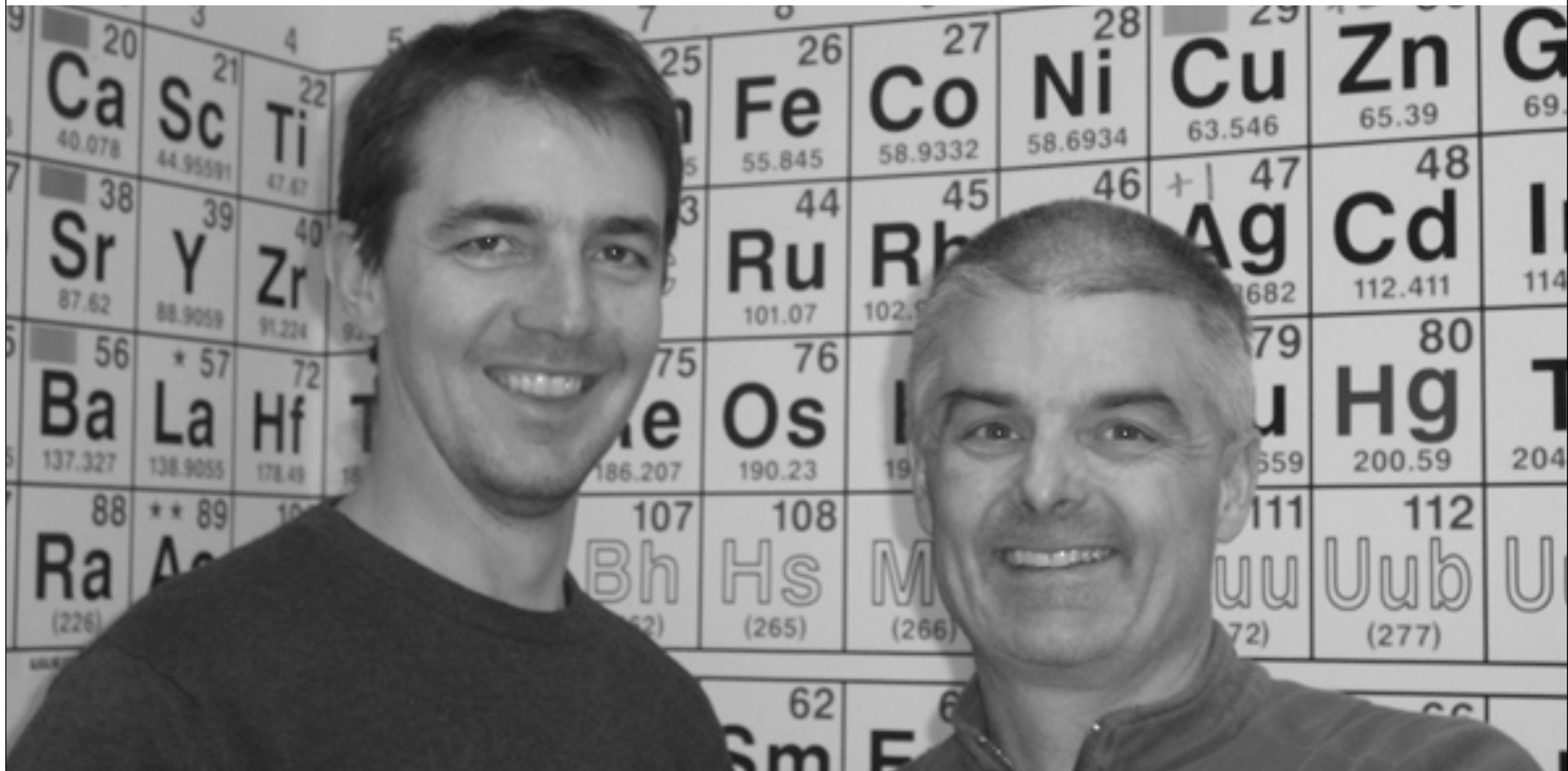
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33

Votes



“Flipping the classroom is...[a] **mindset** redirecting attention away from the teacher and putting attention on the learner and the learning.”

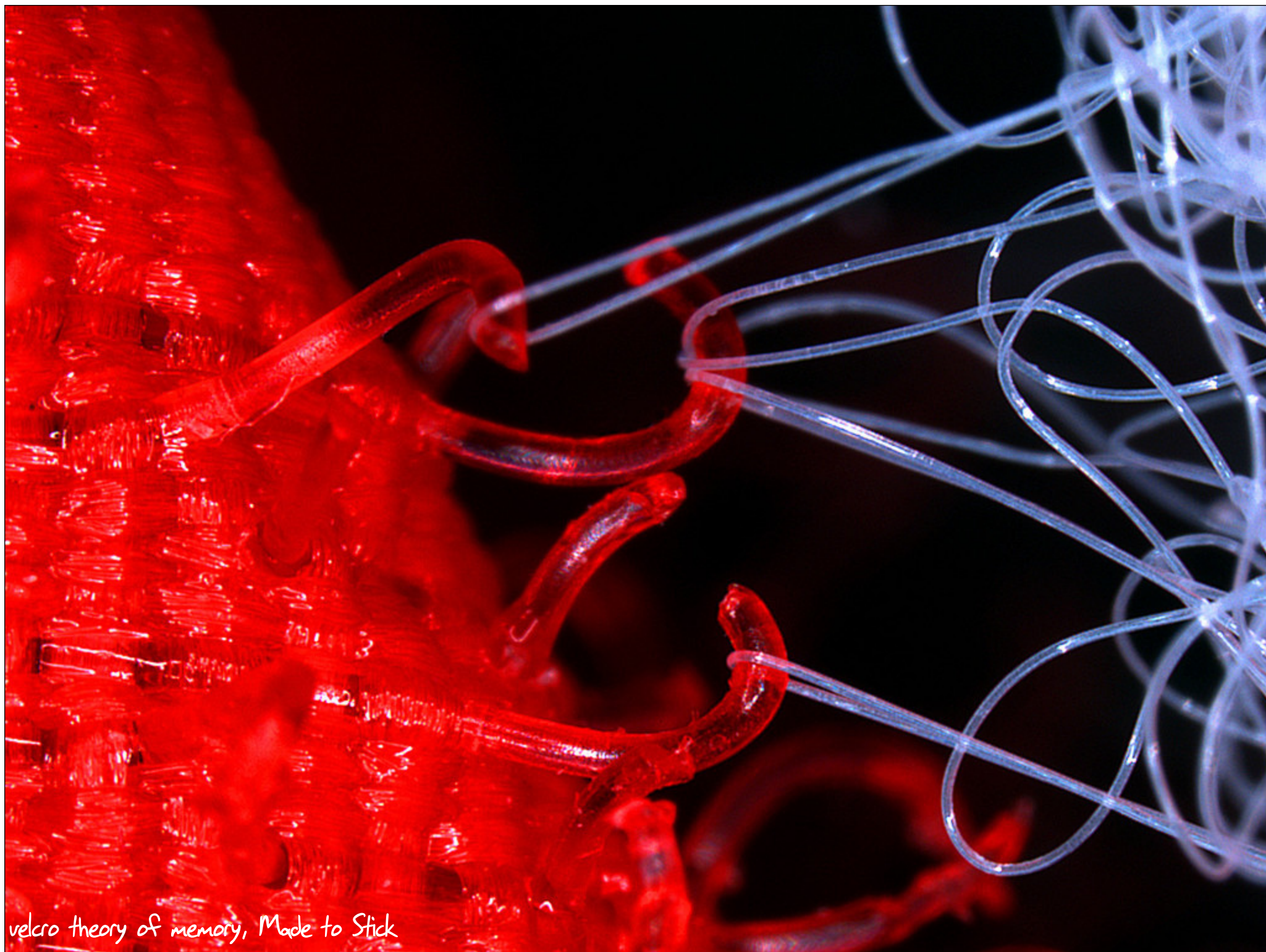


In a traditional class, first exposure to material happens in class, primarily through lecture.

**Application happens out of class,
primarily through homework.**

Flipped classrooms are about pedagogy not technology.

In a flipped class, students get **first exposure** before class.



velcro theory of memory, Made to Stick

And spend time **applying** material in class.

Flipped 101 Model

Out-of class activity is lecture video
or “screencast”

"How does using lectures pre-recorded by
other instructors work instead of my own
pre-recorded lectures?"

Rowan

Ted-Ed

Flip your class with proven methods

LESSON CREATED BY **JULIE SCHELL** USING **TED**Ed Beta
VIDEO FROM **BokCenter** YOUTUBE CHANNEL

Let's Begin...

What is a **flipped classroom**, anyway? In a traditional flipped class, teachers capture lectures on video students view those videos as "homework." In class, instructors help students apply concepts learned at home and guide more complex work, rather than lecturing. Peer instruction, developed by Eric Mazur at Harvard University is one way to do something innovative with your flip.



Watch

Think

Dig Deeper

Discuss

...And Finally



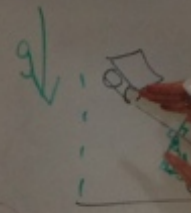
Flip This Lesson



[Create Your Own Lesson](#) | [Send Us Feedback](#) | [Flag As Inappropriate](#)

TEDEd Beta

In-class activity is doing homework problems.



$$\Delta x = x_0 + v_0 t + \frac{1}{2} a t^2$$
$$\Delta y = y_0 + v_0 \sin(\theta) t + \frac{1}{2} (g \sin(\theta)) t^2$$
$$b) \theta = \sin^{-1}\left(\frac{v_0 \sin(\theta)}{g}\right)$$
$$\theta = \sin^{-1}\left(\frac{v_0 \sin(\theta)}{9.8 \text{ m/s}^2}\right)$$



Why should I flip my classroom●

Students will love not having lecture in class.

5

- A. True
- B. False

A  True

B  False

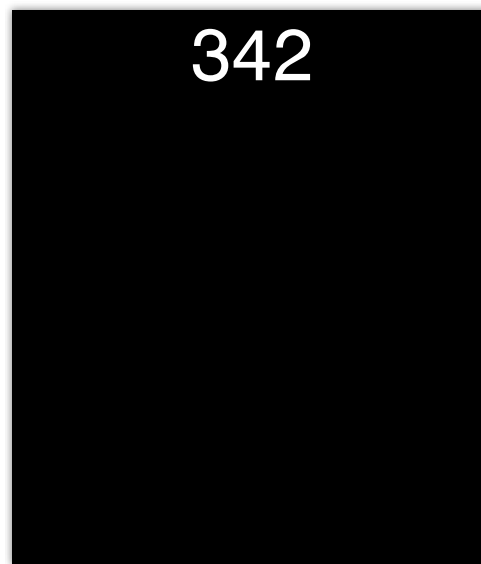
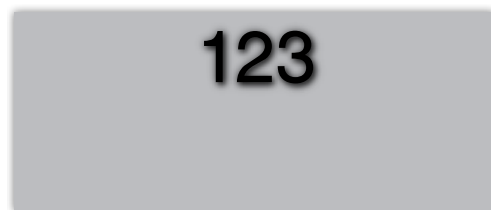
400

0

123

342

Votes



Students will resist flipped learning.

Tip: Do a “stealth flip” - don’t say “flipped classroom” or “experiment.”

Flipped classrooms means no more lecture.

6

- A. True
- B. False

A  True

B  False

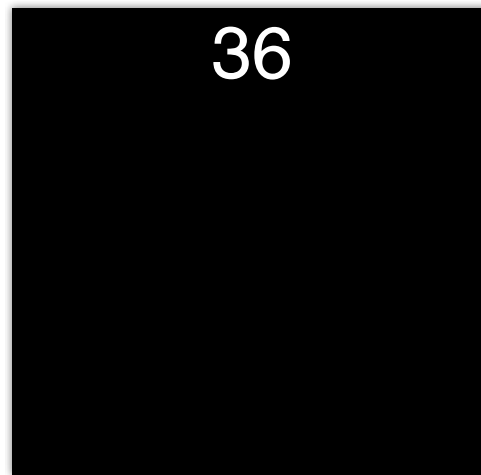
50

0

5

36

Votes





You can lecture a little.

Tip: Flipping builds prior knowledge loops, so more engaged in lecture.

How do I flip my class



My students will not do out-of-class work, even with credit for doing so.

7

A. True

B. False

A  True

B  False

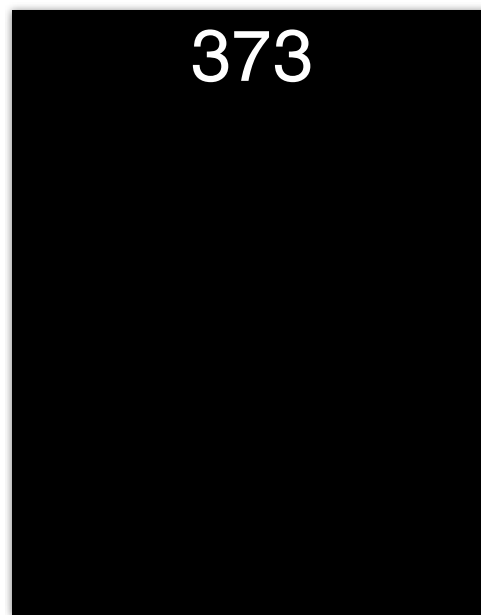
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54

373

Votes



"There is a lot of content to cover and I have to introduce it all in class, we will NOT get through it. I really only want to focus on things they didn't get through the reading. But they aren't reading."

Rowan

How can I ensure that students complete out-of-class assignments (like viewing videos) without the time-consuming effort of giving a quiz and grading them? Is there a technological solution that works?

Rowan



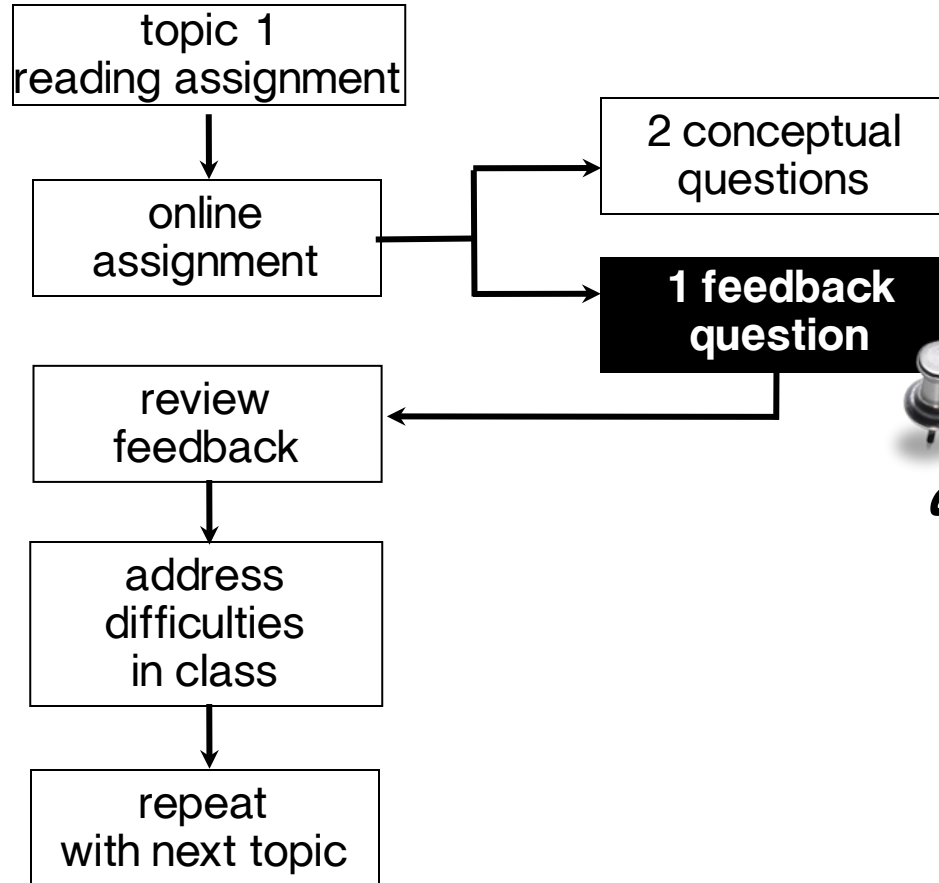
If you assess it...
they will come




Tip: Assess pre-class content via low-stakes and high-stakes evaluations.

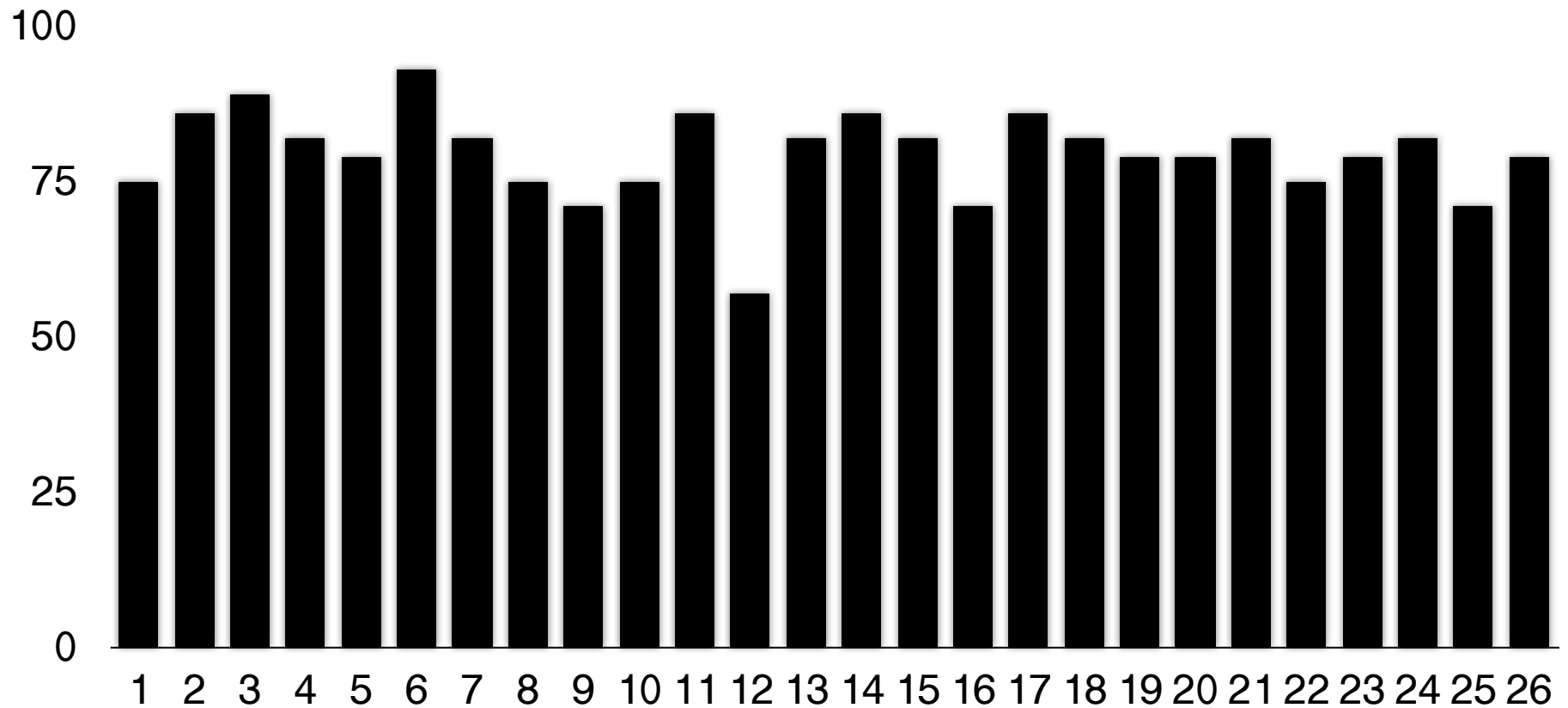
Tip: Favorite out-of-class tool =
Just-in-Time Teaching

Just-in-Time Teaching



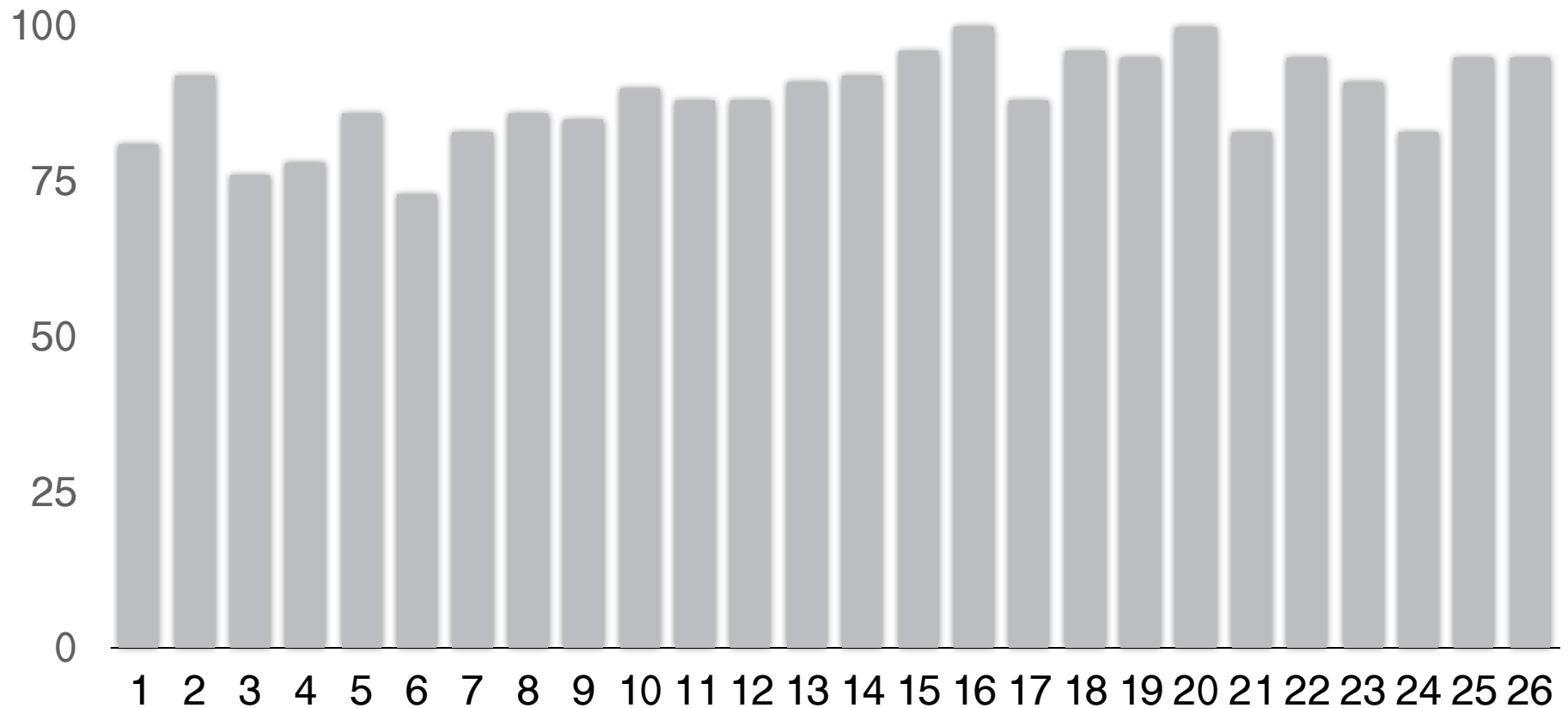
 What do you find most difficult or confusing about this concept?

Just-in-Time Teaching



% of students (n=28) completing reading assignment (n=26)

Just-in-Time Teaching



% of students (n=28) reading assignment
engagement (n=26)

If you assess it, they will come.

There is one right way to flip a class.

8

A. True

B. False

A  True

B  False

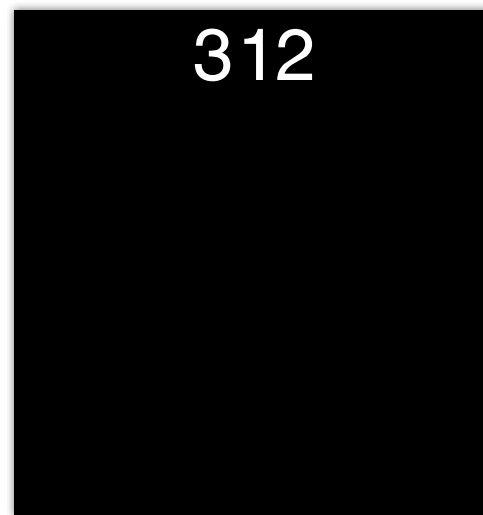
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110

312

Votes



**There are many ways to flip a class
and no one right way.**

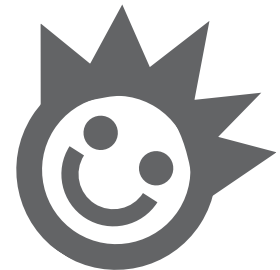
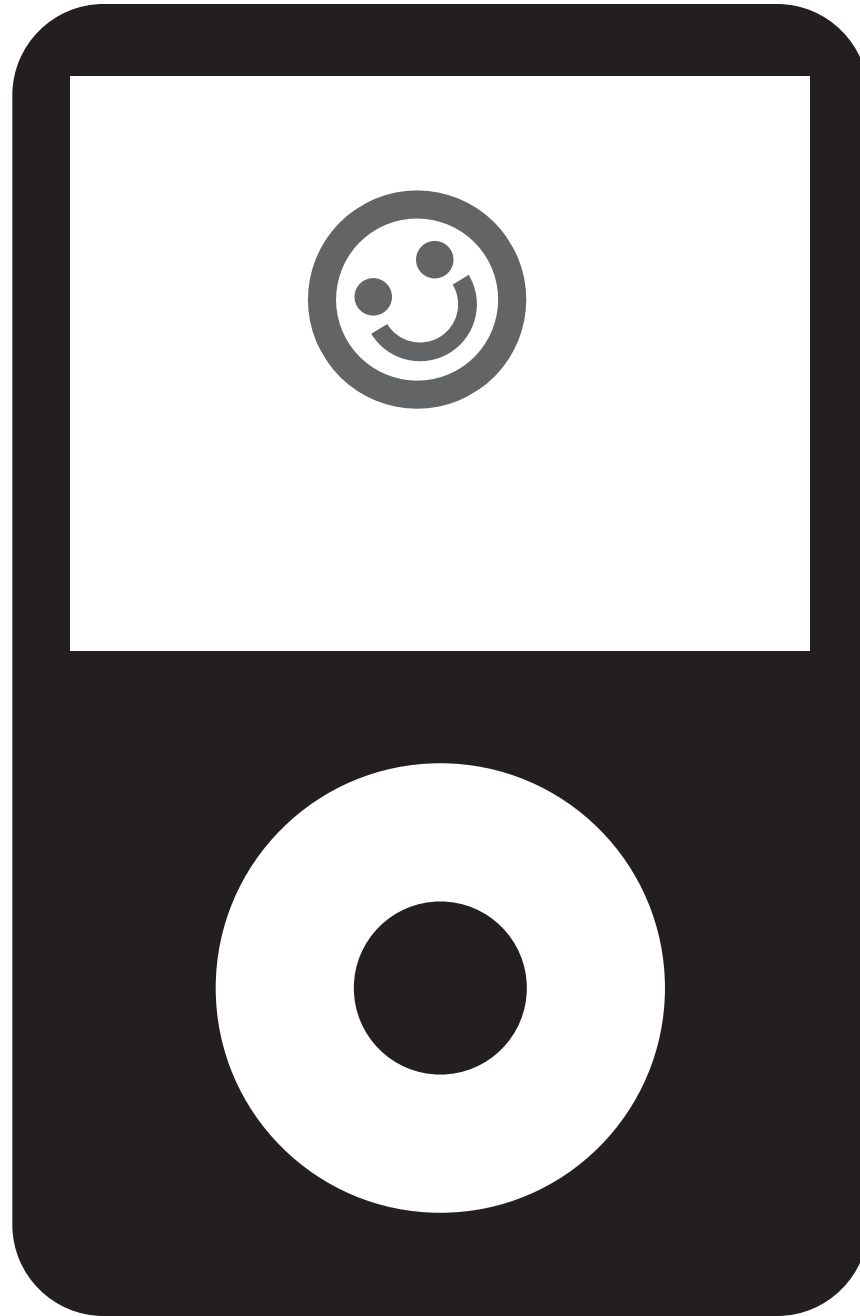
2 Key Characteristics

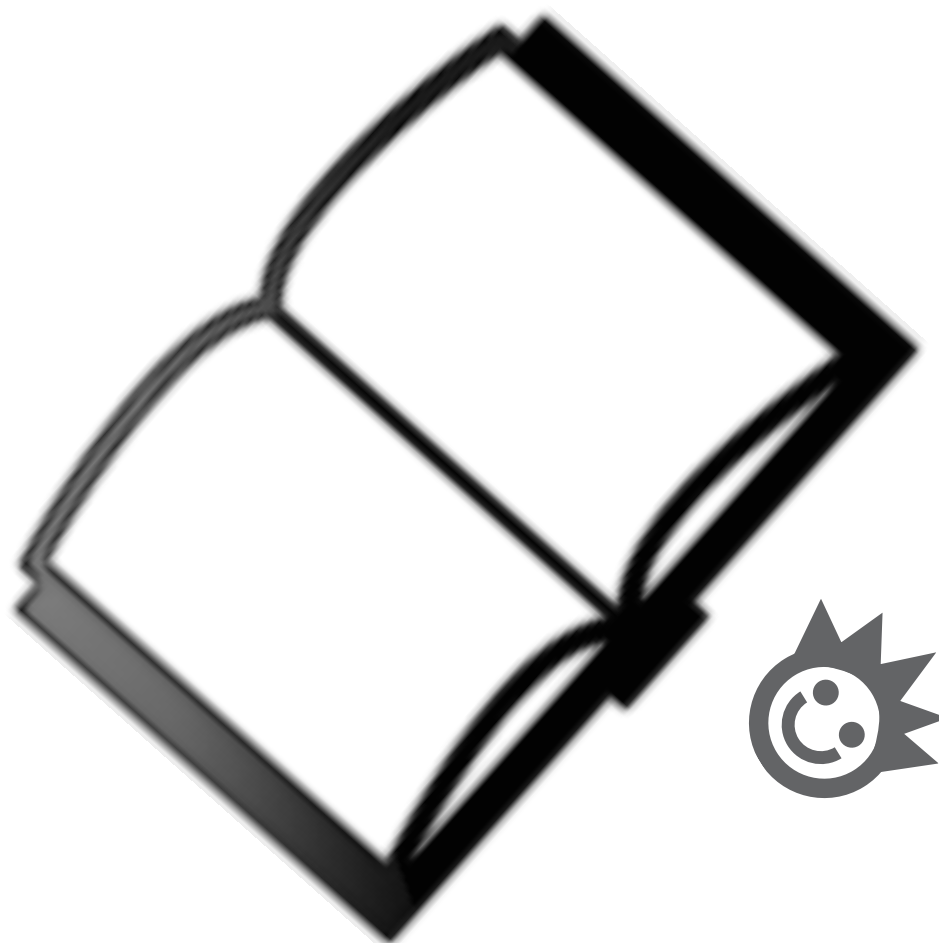
How does one handle/balance
getting through a substantial
amount of content vs. the
slower pace of a flipped
classroom?

Rowan

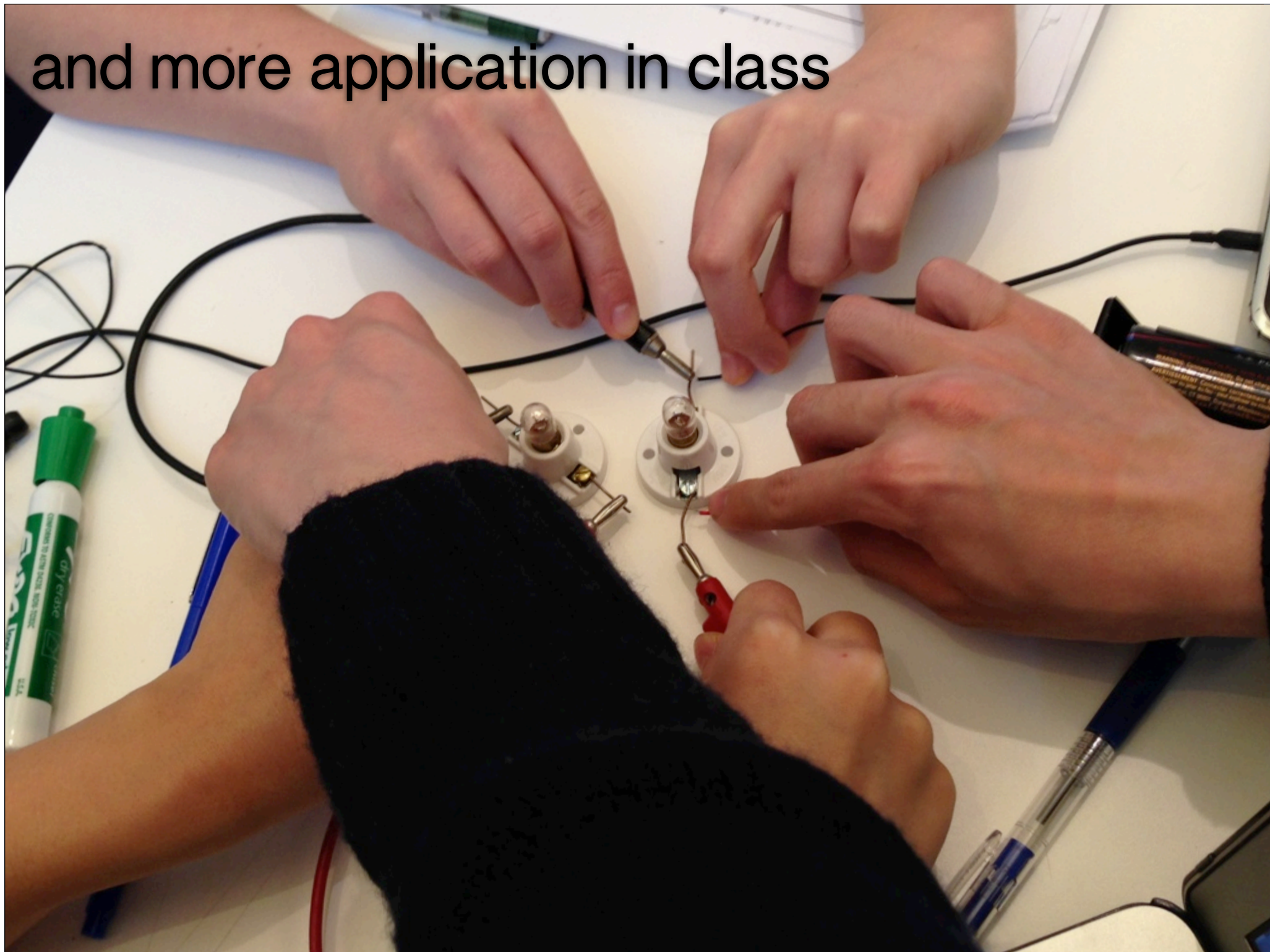


Has more first exposure before class





and more application in class



"I use pre-lecture questions that get students reading and thinking before the lecture."

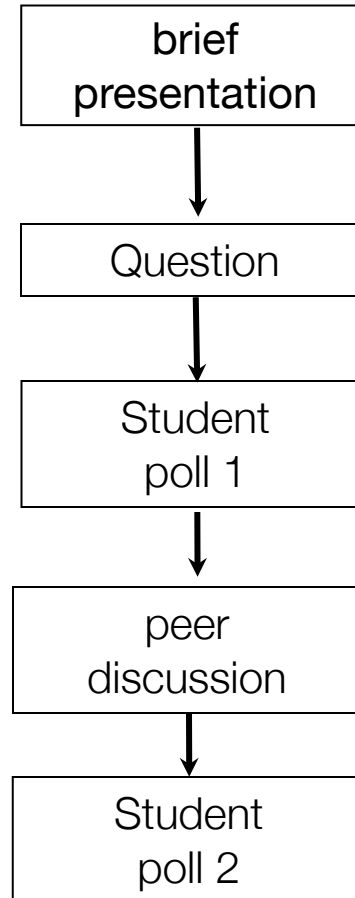
Rowan

I have provided my students with a formal podcast lecture, which includes a video demonstration and clicker questions. The next lecture was used to enforce what they should have learned in the podcast.

Rowan

Tip: Favorite in-class tool =
Peer Instruction

Peer Instruction



Goals for today...

3 Essential Questions?

8 Big Ideas

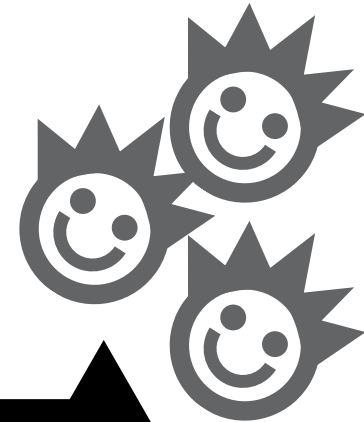
+ 2 Key Characteristics

1 Call to action

14 takeaways



What do you want me to do, Julie?



Flip your classroom

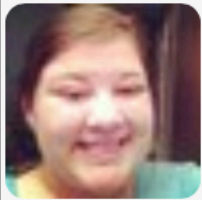
hero

mentor



Call to action- FLIP

F	Find a concept to flip
L	Lift coverage / first exposure out of class
I	Incentivize out of class work
P	Privilege application activities in class



brianna girlie @bripaigegirlie

33 mins

I hate school. Ihateschool. I HATE school. I h8 school. I hate skool.
lh8skool. I. hate. school. Eye h8 skool. I HATE SCHOOL. **#ihateschool**

Expand ↩ Reply ↻ Retweet ★ Favorite ⋮ More



Tyson_Awesome @tegrinse614

6 hrs

today I developed my own proof for **pythagorean's** theorem. woooo
yeah baby **#genius**

Expand



Follow now!

blog.peerinstruction.net



Hundreds of tips, resources, guides.



Acknowledgements

PEOPLE

Eric Mazur

Ives Araujo

Cassandre Alvarado

Brian Lukoff

Dan Meyer

Nancy Duarte

BOOKS

Flip Your Classroom

Peer Instruction a User's Manual

Just-in-Time Teaching

Slide!Dology



www.julieschell.com

@julieschell

