

Show examples of various technologies (particularly videos) that enhance **active learning**



(aka Just Joe, Bio Joe from Fresno...)

- Assistant Professor, Biology, CSU Fresno
- Ed tech & digital pedagogy *connoisseur*
- Faculty Professional Developer

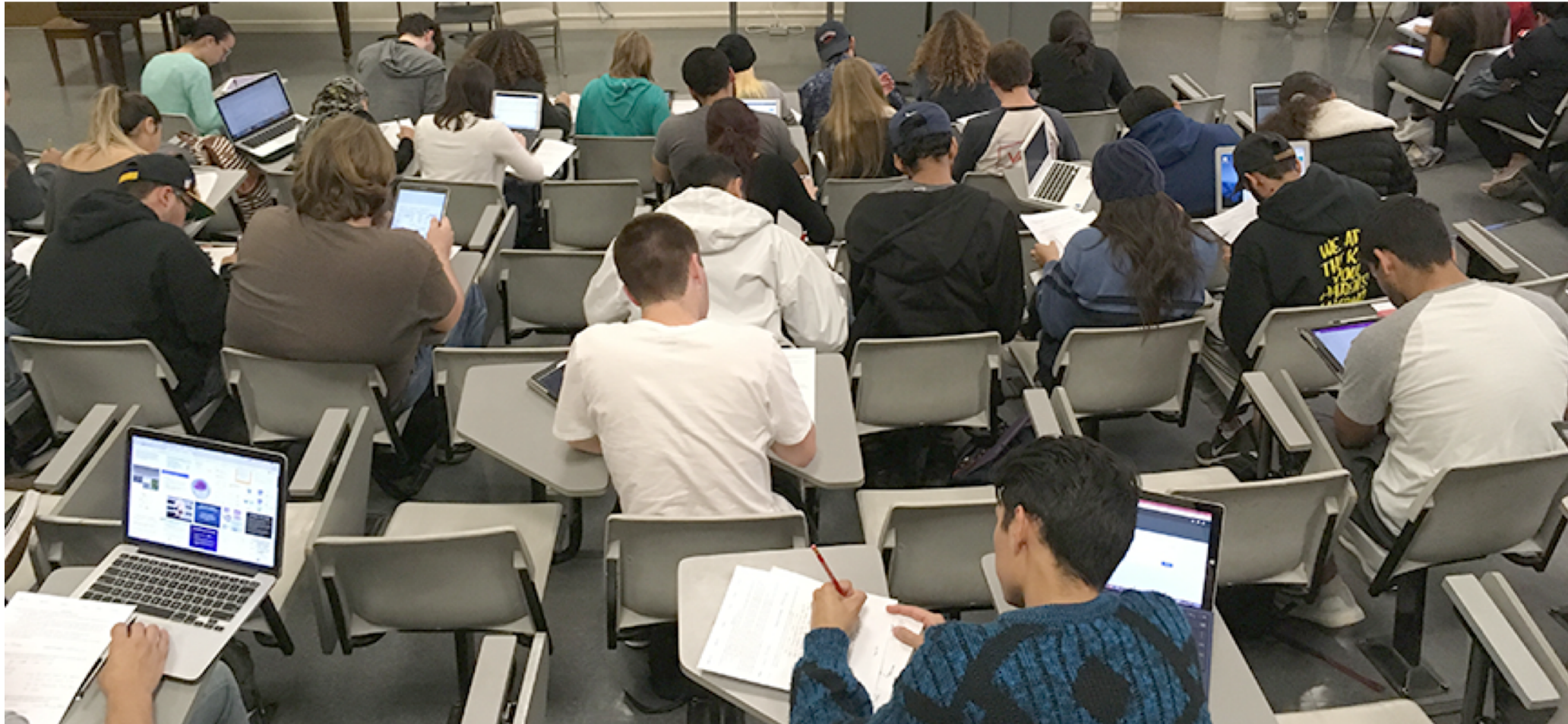


`jross@csufresno.edu`
`@rossbiology`

`tabletpedagogy.blogspot.com`
`youtube.com/c/JosephRoss`

`rossbiology.com`

I teach tech-infused $\text{d}^{\text{e}}\text{p}^{\text{p}}\text{l}^{\text{i}}\text{t}$ classes



BIOL 102 students during an exam

Pre-Workshop Video



<http://vizia.co/videos/c837dd5ab09d49a09d5a47/share>

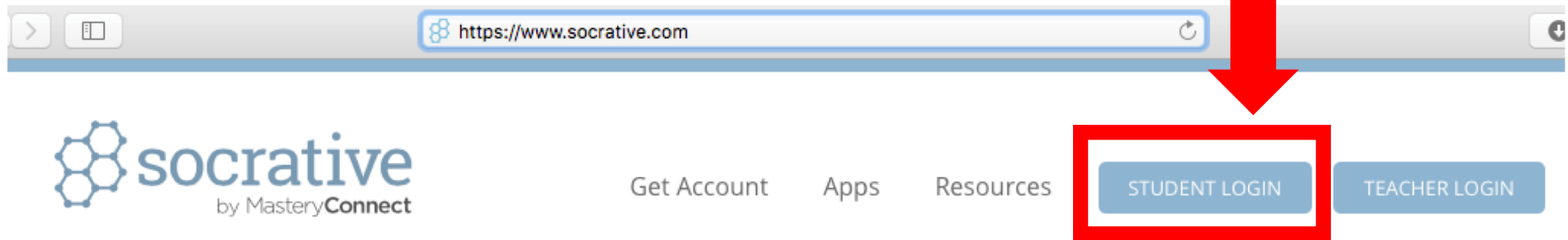
Class trailer



<https://youtu.be/P3bcdAw0mPw>

engagement
importance

Please visit: [socrative.com](https://www.socrative.com)




Room Name: STEP



Student Login

Room Name

JOIN

 English ▾

Discipline-authentic analyses

Row	Observed	Expected	Chi Square
1	17	42.4	$=(C4-D4)^2/D4$
2	27	42.4	42.4
3	36	42.4	42.4
4	45	42.4	42.4
5	37	42.4	42.4
6	58	42.4	42.4
7	47	42.4	42.4
8	36	42.4	42.4
9	44	42.4	42.4
10	77	42.4	42.4
	42.4	42.4	
	424	424	

paste that equation
down to calculate the

<https://youtu.be/tr9c5jDjgyk>

engagement
importance

Video jigsaw activities



<https://youtu.be/EW-C6IAU8lw?t=1m30s>

engagement
interaction

Lecture/office hour/key capture

following sequence using microsatellite
locate a restriction enzyme site within the
giving the name of the enzyme that recognizes that

(AT)₆ (TT)₅ BamH

ACTATATATATTACCGGATTTTTTTTTTCACCACCACCACGAATTC

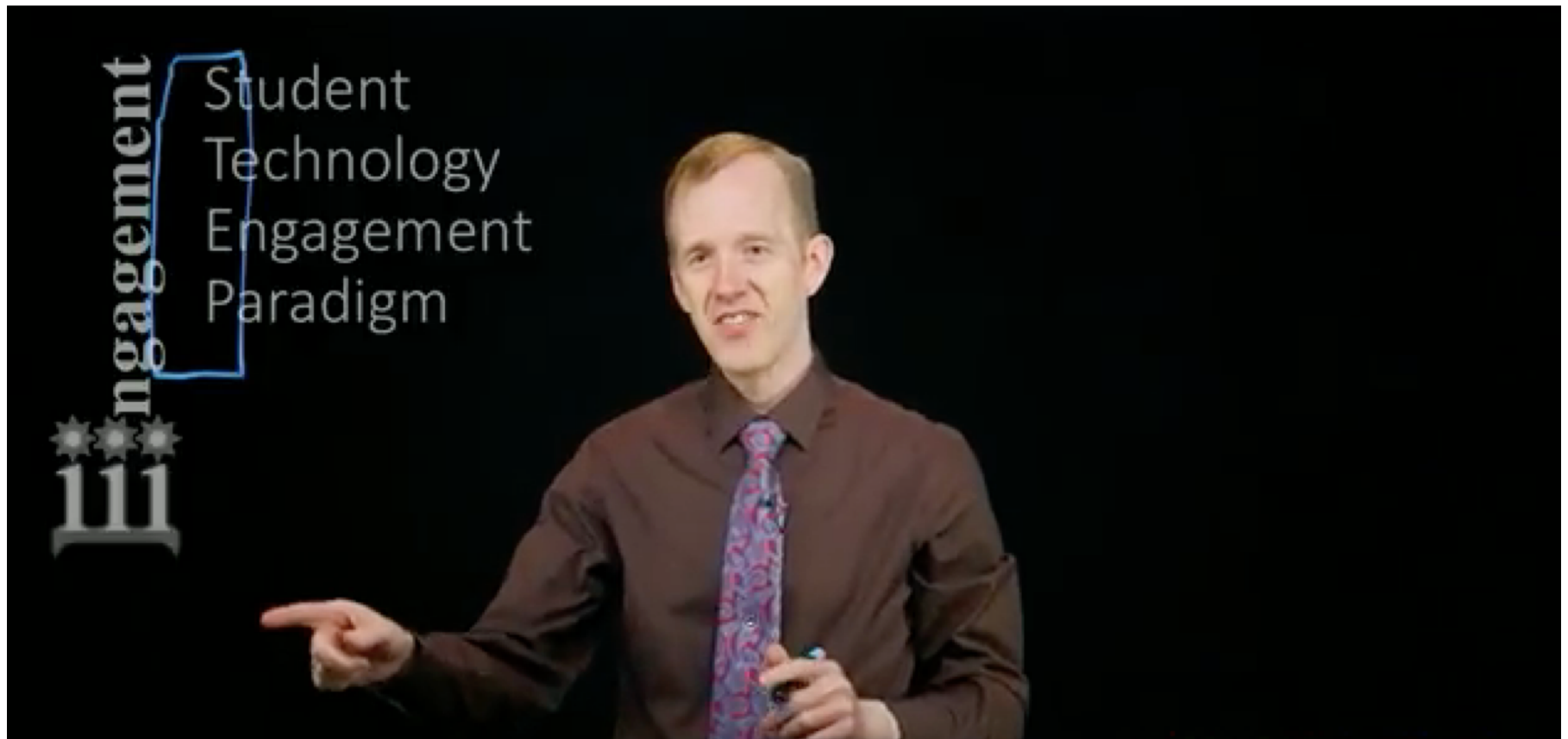
ACTAC MspI (CAC)₄

es. (examples)

<https://youtu.be/ePO7FlsrtaA>

engagement


Inquiry



<https://youtu.be/rJpuNUncSys>

Engaging Students with Video

Video Type	Faculty Tech	Faculty Cost	Deploy	Student Tech
Pre-lecture	Lightboard	Large	YouTube	Web browser
Key / office hour/ lecture capture	ExplainEverything	Free/low	YouTube	Web browser
Trailer	Clips (iOS), or...	Free	YouTube	Web browser
Jigsaw	Clips (iOS), or...	Free	YouTube	Web browser
Screencast	QuickTime Player	Free	YouTube	Web browser

You can also use free web-based tools to add quizzes, collect free response text, and link to other resources to customize any video you can find on YouTube!

Student Feedback

How much did each of the following contribute to your success in the course?

In-class exercises



- none
- a little
- somewhat
- a lot
- essential

In-class Q&A



Open-note and open-internet tests



Watching recorded lectures



Using the course manual



Student Self-Assessment

Compared to your efforts in a typical course, you:

interacted with other students during class periods



interacted outside class



asked questions during class



engagement
interaction

Student Self-Assessment

To what extent did access to a tablet computer allow you to grow in the following areas?

Achieving a better understanding of the relevance of genetics to you personally or to humanity



■ none ■ little ■ some ■ a lot

Having authentic experiences in genetics



Improving your information literacy skills



Improving your quantitative reasoning skills



Working collaboratively in groups

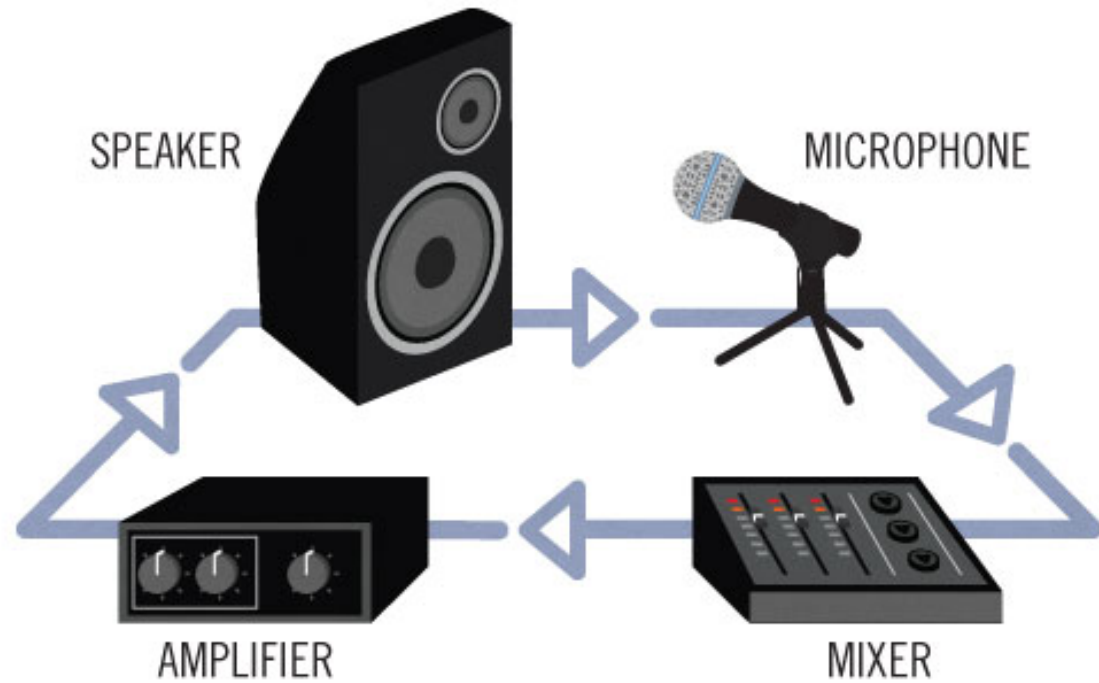


engagement
importance

What to do next?

Stay in this room!

“Facilitating Engaging Online Discussions using
Google Classroom”



Feedback

<https://goo.gl/3fFsFc>

