

AGENDA FOR TODAY

- **Topic:** Active Learning Strategies
- **Active Learning:** ET's perspective (Dr. Ava Wolf)
 - Research behind the concept
 - Application and Backward Design
 - Digital tools and activities
- **Active Learning: Instructor's perspective**
 - Dr. Jose Vazquez
- **SGD:** Lesson planning with active learning
- **Learning take-away:** Collaborative Grading Platforms
 - ****NOTE: This will be carried over to next IGET meeting**

Active Learning: ET's perspective (Dr. Ava Wolf)

"People learn when they do" - switch from lecture to doing, what we do in class, not what we tell students in lecture

Lectures have poor retention rates (5%). Teaching others and practicing doing something has the most retention (75-90%)

Carl Wieman "decrease in failure rates"

"increases in exam performance that would raise average grade half a letter or more"

"benefits greater for women and minorities...."

- how often are women and minorities likely to ask in large lecture vs small groups?

Active Learning Builds Skills -> Jobs

- Didn't know how to work in teams. College not really teaching team learning skills
- Leadership
- Ability to work in a team

How do we motivate? Not many students liked working in groups. How do we motivate them?

- value - do i think that this is important
- achievement - can i achieve this?

Can I see the top of the mountain?

How does this make me feel when I do it?

Can I imagine what the outcome will be? More likely to feel I can achieve these outcomes.

Tap into what they value and what they can think they can do

Backwards design

Wiggins and McTighe, 2000: "One starts with the end - the desired results - and then derives curriculum from the evidence of learning"

Outcomes - what to know what to do, learn, understand

How will you know that they can do it? (assessments)

How to connect (learning activities, from point a to point b)

Build consensus: Teams, Icebreakers

Helps build team skills

Stuck on a desert island only take 3 things, come to consensus?

Then reach consensus as a class? Small groups then whole groups

"team based skills"

Fact vs Feelings: Role Plays, Case Studies

Gets students out of their own skins, perspectives,

Connect to real life cases or roles and ask the students to think about it, feelings, empathy

Curate content: Scoop-It, Flipchart, Diigo, Delicious

Ava likes Scoop-It

Giving students power to select information and what's meaningful to them. They take ownership

Students love to play games:

- competition
- engagement
- struggling, fighting, fun
- students love this. problem solving.

Whiteboards:

- Create Rotate Critique Revise

QR codes for phones

Polling: Padlet, Google Slides

(Something here I missed while playing with QR codes on my phone, whoops)

Storymapping:

- Google
- ArcGIS
- Lit Google Lit

Gigapan.com (views around the world)

Fun with data: infographics, tableau, timelineses

pictograph of data that's meaningful means they know the data better

Documenting learning: Digital portfolios, digication

- Digication is being used at UIUC by Grand Challenge and LAS courses
- Available in Compass
- Contact Robert Baird at CITL for more info

"We learn from reflecting on experience" - John Dewey

Billboards, Bumperstickers, One-Minute papers, More

- Twitter like post about take away from the day, personalized idea?

Active Learning: Instructor's perspective w/ Dr. Jose Vazquez

Lecture (multimedia, seeing, hearing) more effective than just reading a text book.

Multimedia lecture replaces text book. What do we do with empty space where lecture was?

College is a place where a professor's lecture notes go straight to the student's lecture notes without passing through the brains of either.

Why did we care?

- why people want to learn?
- you're curious
- Gap Theory of Curiosity, when there's a gap: make you aware of what you know and what you don't know

guessing MC and potentially getting it wrong is how I reveal to you that you know or don't know
revealing gap makes you aware
then it's an itch, a hunger

Will pay attention until I give you the answer
Activities that get you into the zone
Now I can inspire you to learn

Motivation comes from inside you

Prisoner's Dilemma, "Wow"

Ask question, ask why?
Focus on wrong reasons, bring them up as discussion points

Sample answer that sounds right but it's wrong and ask the students

Clicker for motivation only
4 right answers
4 wrong answers
Brings discussion, engagement
Use clickers not for assessment, just to motivate

Some work before class

Bike riding
encouragement
motivation
safety
learn by falling and correcting mistakes
cheering and safety

classroom where instructor is everywhere

- for cheering and safety
- put them in situations where they fail so they can learn from mistakes

- but do in classroom so we can provide safety to them

Convince them of what they're giving up in classroom
and new role in classroom

With right tools and approach, instructors will follow

18-25 minutes engagement
then start reversing
pre-lecture videos: 15 minutes total, chunks of 2 minute clips
a couple multiple choice questions, 5 minutes

more involved homework at the end of the week (adaptive technologies)
mastery, differentiated after the classroom

allure of online testing is that we tend to do too much of it

Take pre-work into the classroom, review, etc.
Using content from students increases engagement

Encourage motivation

Show how to record their videos
Asking instructors how to do a lot.
Cover vs Discover

Student equity concerns (museum visitors watching videos ahead of time)
Grouping mattersNDon't let group themselves
Continue to meet in the same group
Moodle random group first, then loop over demographics to move them to different groups

Learning Activities not Instruction

Notetaking supports
Or example model
Can we improve the active learning of a student during a lecture?
Think about what students are doing rather than what the teacher is doing

Look at definition of learning - still not person delivering not learning