

Design tips for online lectures and labs in entomology to be more accessible and engaging.

1. Lecture videos
 - a. Chunks ~ 15 min
 - b. Accountability mechanisms for engagement
 - i. Knowledge checks/polls during lecture videos
 1. [Instructions for mediasite in video quizzes](#)
 - ii. Skeleton lecture notes
 - c. Pulse checks/polls with students on a current topic
 - i. [Wayground](#), [Mentimeter](#), [Microsoft forms](#)
 - d. Utilize Microsoft products over Google Slides; built in accessibility checkers
 - e. SCORM content
 - i. [Softchalk/Adobe Captivate/iSpring](#)
2. Course layout and design
 - a. [QM Standards-- IYOC](#)
 - i. Provide modules based on units or weeks
 - ii. Provide module objectives and how those objectives will be obtained, what tools, mapped to what course objective etc—a roadmap
 - iii. See if your institution offers training at no cost to you
 - b. UDL-Universal Design for Learning
 - i. “The overall goal is not to design for individuals with challenges, but rather to design so that those challenges are no longer relevant”
 - c. Create an introduction video
 - d. Weekly check ins—announcements or videos
 - e. Highlight relevancy to student
 - i. Why are we doing this assignment? Why is this information important?
 - f. Assessments where students have agency might encourage more of a ‘buy in’ from the student
 - i. Choice in assessment (e.g. paper vs presentation)
 - ii. Choice in topic of assignment
 1. Maybe they get to choose the paper they discuss or present?

3. Remember, you're an educator, not an entertainer. "The ultimate decision to engage in any behavior resides with the individual. You can enhance motivation, but you cannot make a student do anything."

Tools that can assist with accessibility and/or engagement in digital classrooms.

1. Harness peer-to-peer learning
 - a. [Perusall](#)
 - i. Good for required readings and synchronous discussions
 - b. [Padlet](#)
 - i. Can embed into the html
 - ii. Better in smaller groups
 - c. Shared Google or Word doc
 - i. Group edits
 - d. Group discussion forums
 - i. Packback/Tophat \$
 - ii. Built in forum in LMS (use of video messages are really nice)
2. Check for institutional accessibility checkers
 - a. [Panorama](#)
 - b. [Ally](#)
 - c. [Handout from Missou with online checkers](#)
3. Online labs?
 - a. [Insect Collection Lab](#)
 - b. [Ento360](#)
4. Recording
 - a. [Camtasia](#)
 - i. Runs Whisper Ai for transcripts which can be exported as .srt file
 - b. [Yuja](#)
 - c. [Zoom](#)
 - d. [Panopto](#)
 - e. [OBS](#)
 - f. [Powerpoint built in recording features](#)
5. Transcripts
 - a. Finetuning autocaptions

- i. Autocaptions from YouTube, will need to be edited, but can download .srt files
- ii. [Whisper ai](#)

6. Scanned articles that are actually images that are difficult to turn into OCR
 - a. Ask gemini or similar AI to screen read and convert image into text for you (will require proof reading)

Tricks for evaluating online student engagement and retention.

1. Build in pre-requisites to access material
 - i. e.g. Unit 2 will not open unless requirements are met
2. Reach out regularly for students who aren't reaching content when they should be
 - i. Use the built in messaging tools of the LMS like intelligent agents
 - ii. Weekly/regular announcements in the course
 1. I check after the first week if students have even completed initial work. Send message by 2nd week that they are already falling behind.
 - iii. Timely feedback for formative assignments
 1. [Textblaze](#)
 2. Rubrics
3. [Start, Stop, Continue](#)
 - i. Can easily be a google form or use the quiz features of the LMS to create this. Great for pulse-checking/course correcting