CHANCELLOR'S COUNCIL ON *Faculty Life*

Faculty Development Day

UCSF

Using IT in Teaching

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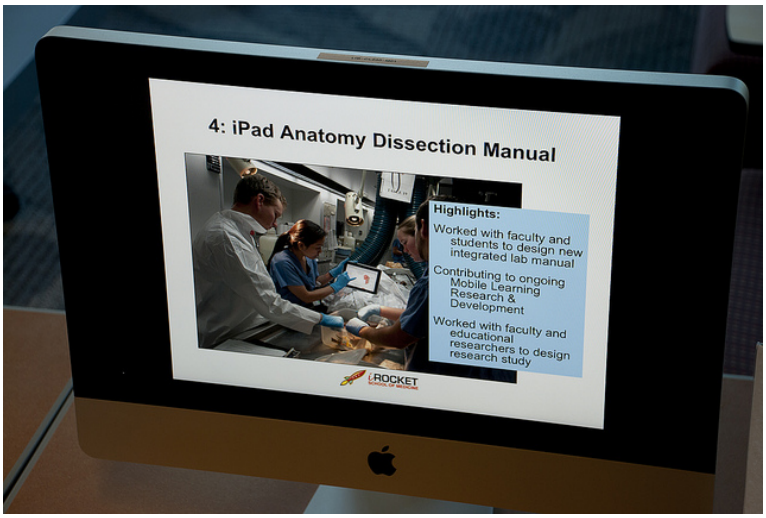
Technology	**Collaborative Learning Environment (CLE)**
When to Use	The CLE consolidates multiple tools into a framework for course content delivery and web-based learning activities. CLE toolset includes Discussion forums and chat for communication, Quiz/assessment/survey tools, Gradebooks, Customizable course formats, templates and themes and many more. Ilios, ePortfolios, and Lecture Capture are all integrated into the CLE. Use the CLE to: • Facilitate discussion outside of the classroom • Free up in-class time by using the CLE to for course admin activities • Provide computer-graded assessments • Deliver self-directed learning activities that empower and engage students
How/Where to Learn More?	Overview of CLE services and links to workshops and tutorials: www.library.ucsf.edu/services/learningtech/cle Contact the Library's Learning Technologies group for help: www.library.ucsf.edu/services/learningtech/contact

Technology	**Video**
When to Use	To enhance learning by demonstrating something that is difficult to show with static images or text. To demonstrate a skill that has multiple steps, e.g. setting up and starting an IV.
How/Where to Learn More?	Video skills: Library classes for different levels of shooting and editing www.library.ucsf.edu/help/classes Digital Video: https://moodle.ucsf.edu/course/view.php?id=1170 Tutorials on videos, editing, and converting files: https://moodle.ucsf.edu/course/view.php?id=250 Learning theory: Mayer RE. Applying the Science of Learning to Medical Education. Medical Education 2010: 44: 543–549 Copyright laws: copyright.universityofcalifornia.edu/, meded.ucsf.edu/tel/navigating-copyright guides.library.ucsf.edu/copyright
Campus Resources	Equipment Rental: Video cameras, accessories, and tripods are available for rental from the Teaching and Learning Center at the UCSF Library. www.library.ucsf.edu/services//learningtech/equipment Editing Software: Workstations with a variety of editing software packages are available at the Teaching and Learning Center (CL240) at the UCSF Library. You can reserve a workstation online calendars.library.ucsf.edu/booking/multimedia

Technology	Online Modules/Independent Learning Modules (ILMs)
When to Use	When the learner is expected to receive or respond to information as an assignment prior to further discussion, or as a stand-alone assignment. When the learner is expected to refer back to material that can be reviewed. Some platforms are better for content that is more static (e.g. anatomy) while other platforms are easier to update for topics with frequent changes (e.g. policy). Can be made interactive and include formative and summative assessments. Examples from SOM: meded.ucsf.edu/tel/learning-modules
How to Learn More?	This toolbox, in the form of an ILM, missinglink.ucsf.edu/lm/lm_toolbox provides important information on how to build a module. Platforms to consider: - Articulate (static content) - CLE (quizzing, but not too much interactive content) and iRocket - Myudutu.com (easy to update; formative and summative assessment possible; branching possible; not great for long videos; assistance in instructional design available for fee) Learning theory: Mayer RE. Applying the Science of Learning to Medical Education. Medical Education 2010: 44: 543–549
Campus Resources	For SOM faculty: www.medschool.ucsf.edu/oet/services/instructionaldesign/



UCSF Library
530 Parnassus Ave.
Tech Commons
Rm CL 240
library.ucsf.edu/services/learningtech

ENHANCING LEARNER INTERACTION WITH AUDIENCE RESPONSE SYSTEMS: iCLICKERS AND BEYOND

What are audience response systems (ARS)?

- Interactive tool which can provide real-time support of interactivity and data gathering among participants;
    - Some require specialized external devices (base receiver, user input device) that are typically distributed from university stock or pre-purchased by students while others rely upon common user-owned devices (e.g., cell phones, laptops, tablets) and are accessed via cellular networks or the internet.
    - AKA audience polling systems; class performance systems; group response systems
    - Some example of ARS include:

Product	Information
iClicker	One of the most commonly used ARS at UCSF. Requires proprietary external devices and a software download. Devices can be checked out from Educational technology Services (ETS). Contact them at edtech@ucsf.edu or 476-4310 for information.
Turning Point	Available through some departments as UCSF. Requires proprietary external devices and software download. Generally more bells & whistles than iClickers but also are a bit more cumbersome to use.
Poll Everywhere	Requires no proprietary device. Works through texting, the web, or Twitter. Free for ≤40 responses/poll; other pricing plans available http://www.polleverywhere.com/
Qualtrics polls	Requires no proprietary device. Qualtrics is survey software that is available for free to all UCSF faculty. It is accessed via SSO/My Access. Within the Qualtrics program, click on the "polls" tab at the top to create a web-based poll that can be exported/inserted as needed.
Socrative	Requires no proprietary device; limited to 50 users at a time; http://www.socrative.com/
Top Hat Monocle	Requires no proprietary device. Free for teachers, fee-based for users. http://www.tophatmonocle.com/

- *Visual Leaner?* Check out the 10-minute YouTube video entitled, "Using Clickers in the Classroom" by Dr Russell James at the University of Georgia: http://www.youtube.com/watch?v=CnnP0uCqD4k&feature=related

What are some advantages to using ARS for teaching?

- Increased interaction participants (faculty-student; student-student)
- Formative or summative assessments of student knowledge
- Maintain learner attention
- Focus learners' attention on key points of presentation

- Poll anonymously (i.e., clickers are not linked to individuals)
- Track responses (i.e., clickers are linked to individuals)
- Display responses immediately
- Poll remotely (if using mobile based systems)

What are some drawbacks/cautions to using ARS for teaching?

- Potentially distracting/gimmicky
- Cost, set up and maintenance of some devices
- User learning curve (learner and faculty)
- Overuse
- iClickers cannot be utilized remotely from external receiver

What are some top tips for using ARS for teaching?

- ✓ Focus first on pedagogy
  - ARS are a means to promote active engagement in learning
- ✓ Plan ahead
  - Identify purpose - ideal for discussion topics for which there is variability in opinion
  - Test in advance - bandwidth and cellular access vary at UCSF
  - Have alternatives, when possible – multiple ways of accessing the poll
  - Have a contingency plan – e.g., colored cards, backup technology, alternate line of discussion
- ✓ "Less is more" (i.e., limit questions to 3-4 per hour)
- ✓ Build in adequate time to use (i.e., requires 30 seconds-two minutes/question depending on question type)
- ✓ If data is to be collected, plan ahead to link responses
- ✓ Be creative (e.g., game-style)

How might faculty use ARS for teaching?

- On the spot evaluation of student mastery of lecture content
- Periodic evaluation of a course (topic, methodology critique; trend over semester)
- Game-based learning (e.g. jeopardy game, small group discussions)
- To highlight areas where there may be (unanticipated) variation in opinion

How are faculty at UCSF using ARS? (representative examples)

- iClickers used for core courses (e.g. for >200 student SON research class to reinforce content, evaluate understanding intermittently throughout session)
- Poll everyone used during seminar and small group time for insta-polls
- i.socrative being explored as jeopardy game for pathophysiology content review
- Qualtrics polls being used to compare individual responses to team responses

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