

## Individualized Education: Using Online Tools and Videos to Reach All Students

*Susan M. Gilles*, John E. Sullivan Professor of Law, Capital University Law School,  
[sgilles@law.capital.edu](mailto:sgilles@law.capital.edu)

*Cynthia M. Ho*, Clifford E. Vickrey Research Professor, Loyola University of Chicago School of Law,  
[cho@luc.edu](mailto:cho@luc.edu)

*Angela Upchurch*, Professor of Law, Capital University Law School, [aupchurch@law.capital.edu](mailto:aupchurch@law.capital.edu)

	Online quizzes	“Clickers”	Online videos	Screen-sharing	Video Conferencing or Instant Chat	Lino or Mindmapping
<u>Assessment (A) &amp; Feedback (F)</u>	A, F	A, F	F	A, F	A, F	F
<u>Assists professor in modifying content in class</u> to meet needs of students with varied ability and learning style	X	X				
<u>Assists professor in modifying content outside of class</u> to meet needs of students with varied ability and learning style	X		X	X	X	
Integrating Legal Skills Training into Traditional courses			X	X	X	
Integrating Academic Support into Traditional courses			X	X	X	X
Assisting students with organization and spatial concepts			X			X
Learning Styles: (V) Visual; (A) Auditory; (K) Kinesthetic	V	V	V, A	V, A, K	Possibly V, A	V, K

**Online Quizzes and Clickers: Professor creates questions for students to answer either before, during or after class.**

*Examples of Technology:*

- TWEN quizzes and instant-poll
- Clickers (various hand-held and app based models available) (e.g., CPS, iclicker, Turning Technologies) (fee required)
- [www.polleverywhere.com](http://www.polleverywhere.com) (free and paid versions available)

**Meeting Educational Goals:**

*Using online quizzes and clickers to provide assessment and feedback:*

- By providing quizzes throughout the semester, the student is given formative assessment on his or her performance. End of unit quizzes, give students summative assessment.
- Professors can provide quiz questions or clicker questions during class to engage students in active learning and to assess their performance.
- TWEN and many clicker platforms provide professors with reports of student performance which can be easily graded based on performance or completion. TWEN quizzes and some clicker platforms can be adjusted to allow for anonymous grading with the use of an exam number.

*Using online quizzes and clickers to modify content in and out of class*

- Professors can provide questions before class and direct the students to complete them by a designated time. Based on student performance, the professor can adjust class coverage.
- The professor can easily identify individual students or groups of students for more targeted intervention through detailed reports of student performance. For example, the professor could meet with these students or could provide a modified quiz to reinforce the material.
- Questions provided in class can provide for “real time” adjustment of class coverage.

*Questions to consider when choosing technology*

- Are reports important? What information is reported on quiz performance? In what format?
- Is there an option to grade anonymously?
- Are the clickers, poll or quizzes easy to use (especially if intended for use during class)?
- Will students need to bring a clicker to class?
- What smart devices do students typically use and would using polling on smart devices be helpful or distracting?

*Issues to consider in creating questions*

- Assessment strategy: Is the clicker/quiz part of a student’s grade and if so, is it based on performance or completion? If graded, does the quiz format assist in this process?
- Question design: What is the difficulty level for the question? What is the purpose for the question (to check understanding; stimulate class discussion; preview or review)? Consider wording of questions. Clarity is critical.
- Logistics: How frequently will the students be asked to complete quizzes? How many questions in a bank? Will in-class questions be delivered on screen and/or handout?

## **Online Videos**

**Professor captures video and audio and uploads finished product to the web to be accessed by students on their own time.**

### *Examples of Technology:*

- Screencast-o-matic [www.screencast-o-matic.com](http://www.screencast-o-matic.com); Camtasia <http://www.techsmith.com/camtasia>; Educreations [www.educreations.com](http://www.educreations.com); Knowmia [www.knowmia.com](http://www.knowmia.com)

### **Meeting Educational Goals:**

#### *Using online videos to modify content*

- The professor can provide videos on traditionally lectured material for the students to review prior to class. The students will benefit from the professor's guidance while preparing and will be better able to engage with the material in class.
- In place of videoed material, the professor can use class time to cover more advanced problems or teach any variety of skills or concepts.
- Enables students to stop and repeat video to reinforce or reexamine the material.
- Videos can be used after class to clarify concepts.

#### *Using online videos to integrate legal skills training*

- "Flipped" lecture content into out of class video, permits in-class time to be used for legal skills.
- Professors may create videos demonstrating legal skills to provide training necessary to permit the students to engage in a simulation during class.
- In addition to using videos to "flip" coverage of material outside of class, professors could use videos of practitioners in class to enhance skills training and to differentiate the type of instruction (i.e., engaging students by including different perspectives).

#### *Using online videos to integrate academic support*

- Professors can provide training on skills such as case briefing, note taking, outlining, time management and test taking.
- Professors can use videos to provide review sessions for students before exams.

#### *Using online videos to provide feedback*

- Professors can provide comments on student papers or projects by taping an online video with comments that syncs with revisions marked on the student work.

#### *Questions to consider when choosing technology*

- What hardware is needed to create the videos? Camera? Mic?
- What options are available for publishing videos and is privacy important?
- How much editing features are desired?
- Does the professor intend to tape over a screen (such as a PPT presentation)?
- Would the professor benefit from being able to write on the screen via a tablet?
- What information is available about usage of videos? (Can you track audience retention in addition to number of views?)
- Does the professor have a plan to assist students in using the videos? (Will the student be given directions on when to stop the video? On how to take notes? Be asked to complete an accompanying assignment or quiz?)

## **Screen sharing**

**Professor hosts a live web-conference and shares his or her screen with participants. All participants can view screen and can participate in dialogue via synchronized audio.**

### *Examples of Technology*

- [www.join.me](http://www.join.me)
- [www.gotomeeting.com](http://www.gotomeeting.com)
- [www.fuzebox.com](http://www.fuzebox.com)

### **Meeting Educational Goals:**

#### *Using screen sharing to provide assessment and feedback*

- Using screen sharing to ask students quiz questions during online meeting. The professor can keep track of student responses.
- The professor can screen share the student's paper, exam or work-product to meet in an online setting.

#### *Using screen sharing to modify content outside of class*

- Professor can meet with students in smaller groups (or individually) to cover substantive material.
- The focus can be clearly placed on the professor's screen which can display notes or PPT slides.

#### *Using screen sharing to integrate skills training and academic support*

- Screen share training on academic skills to smaller groups of students.
- Have review sessions targeted at poor performing students. Have an enrichment session targeted at high performing students.
- Invite practitioners or others to participate in or lead screen share on skills training.

#### *Questions to consider when choosing technology*

- How many students can participate during meeting at one time?
- How easy is the platform to use?
- Can students phone in to participate in audio? Is that an option likely to be used by the students?
- Are sessions recorded?
- Can the professor share control of the screen with participants?
- Can the screen be annotated live?
- Is there a way to verify identity of the participants?

## **Video Conferencing and Instant Chat**

**Professor meets with a group of students in a video conference online or a chat session.**

### *Examples of Technology*

- Google hangouts
- TWEN live discussion (essentially an instant chat)

### **Meeting Educational Goals:**

#### *Using video conferencing or instant chat to assess students or provide feedback*

- Using video conferencing to ask students quiz questions during online meeting. The professor can keep track of student responses.
- The professor can provide individual conferencing to a student in either format (though video is a richer format)
- Instant chat sessions allow the professor to hold office hours online at non-traditional hours; this is ideal for PTE students. In addition, TWEN permits discussion to be saved and printed, unlike a “live” office hour session.

#### *Using video conferencing to modify content outside of class*

- Professor can meet with students in smaller groups (or individually) to cover substantive material.
- Here, while documents can be displayed or shared, this format focuses on the participants. Video conferencing is especially helpful if the content to be demonstrated includes modeling of skills.

#### *Using video conferencing to integrate skills training and academic support*

- Host a training session with a small group of students. This technology is especially helpful if observing the students’ body language would guide instruction. Additionally, meeting in a small group is less intimidating to students.
- Have review sessions targeted at poor performing students. Have an enrichment session targeted at high performing students.
- Invite practitioners or others to participate in video conference on skills training.

#### *Questions to consider when choosing technology*

- What hardware is required of participants?
- Can session be recorded?
- How many students can participate during meeting at one time?
- How easy is the platform to use?

## **Lino or Mind Mapping**

**Lino is an online post-it board. Groups can have access to board and can select post-its of various sizes and colors and arrange them on a board. Word documents, videos and other files can be attached to the post-it and due date reminders can be incorporated into the post it.**

**Mind mapping apps allow groups to think through project management and tasks and to organize topics in clusters.**

### *Examples of Technology*

- <http://en.linoit.com/>
- <http://www.mindmeister.com/>
- <http://www.xmind.net/>

### **Meeting Educational Goals:**

#### *Using Lino and mind mapping to assist students with organizational and spatial concepts*

- Technology provides easy grouping of information.
- Mind mapping allows for construction of decisional trees to show development of ideas.
- Because flow chart or organizational diagram is easily adjusted students are less resistant to reorganizing concepts as they move along.

#### *Using Lino for kinesthetic learning*

- Students can be assigned a lino group before or during class.
- Students can move post-its around on board to form groups of topics. The post-its can be rearranged to show a hierarchy of ideas or to reflect the interrelation of concepts.
- The platform allows students to consider relation of concepts. They can “chunk” information as an expert.

#### *Using Lino to provide feedback to students and to integrate academic support*

- Students can make their own Lino boards in lieu of or in addition to traditional course outlines. They can easily share these with the professor who can provide feedback on the board (including in the form of different colored post-it notes).
- Students working on improving time-management can use Lino to create to-do clusters. They can rearrange or color code post-it notes based on the priority of the task and can set due date reminders in the post-it.

#### *Questions to consider in choosing technology*

- Is the platform an app? Can it be accessed from a PC, Mac or both?
- How complicated are the decisional trees to create?
- How much information will be put into the decisional tree or board? Will the end product be easy to follow? Too visually distracting?