

## **Screencasting: Three Simple Applications for Improving Student Learning**

*Screencasts are video recordings of one's actions on one's computer screen, including any associated audio. Screencasts, synonymous with video podcasts, provide a simple means to increase access to course content and learning resources. Students may access them repeatedly, at any time, from anywhere, using computers or a variety of handheld mobile devices (e.g., smart phones, iPods, iPads, etc).*

### Three Applications of Screencasting to Enhance Student Learning:

#### 1. *Providing feedback on student work:*

Through screencasts, instructors may deliver frequent, high quality feedback on student work via video and audio. This technology can increase an instructor's efficiency because it can be faster than hand writing feedback. Posting screencasts to course management systems, such as CTools, may also facilitate earlier receipt of feedback by students. Video and audio feedback also has the potential to be richer and more detailed than traditional written summaries of feedback or margin notes. For example, an instructor can easily provide multiple examples and concrete suggestions that would be cumbersome to write out. Furthermore, screencasts of feedback on student writing can feel more personal and engaging to students while helping to convey the experience of the reader. By highlighting and annotating specific strengths and areas for improvement on the screen, instructors can also explicitly model their thought processes and expectations for student performance and development.

#### 2. *Responding to classroom assessments of student learning:*

Classroom Assessment Techniques (CATs) are typically brief, anonymous, and ungraded assessments of student learning in which the unit of analysis is the entire class. The Minute Paper/Muddiest Point, is a common CAT in which students briefly write about the most important thing they learned during a class period and/or what concepts remain unclear. Instructors analyze the data during or after class to identify the concepts students experience as important or confusing. Screencasting provides an easy mechanism for instructors to respond to CATs and provide supplemental instruction without impinging on subsequent class time, especially if a CAT does not reveal consensus among students on which concepts are most challenging. Additionally, instructors may take advantage of the internet and digital multimedia resources to enhance explanations in screencasts. Although creating these screencasts represents an initial start-up cost, one quickly forms a library of teaching and learning resources that can be used repeatedly by instructor and students.

### 3. *Creating opportunities for active learning:*

Copious research suggests that active learning enhances student learning. However, instructors often perceive the implementation of active learning strategies as requiring one to sacrifice content coverage during lectures. Screencasting can allow instructors to shift students' first exposure of students to fundamental concepts to before class. Thus, more class time may be used for active learning and teaching critical thinking (e.g., the application and synthesis of fundamental concepts), rather than solely lecturing on basic concepts. This approach may deepen student learning without necessarily sacrificing breadth. Such screencasts can be accompanied by short assignments and/or readings that prepare students for the activities during class sessions.

#### Additional Resources:

- For more basic information about screencasting technology and its use in education, please see “7 Things You Should Know About Screencasting” (<http://www.educause.edu/ELI/7ThingsYouShouldKnowAboutScree/156815>)
- Lecture capture, screencasting, and podcasting (<http://www.crlt.umich.edu/inst/additionalresources>)
- Classroom Assessment Techniques (<http://www.crlt.umich.edu/tstrategies/tssf>)
- Active learning (<http://www.crlt.umich.edu/tstrategies/tsal>)

#### Screencasting Software/Applications:

- Jing (<http://www.techsmith.com/jing.html>)
- Camtasia (<http://www.techsmith.com/camtasia.html>)
- A comparison of screencasting software ([http://en.wikipedia.org/wiki/Comparison\\_of\\_screencasting\\_software](http://en.wikipedia.org/wiki/Comparison_of_screencasting_software))