INNOVATIVE TOOLS
FOR LEARNING

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At NC State University, creative teams of faculty, instructional designers, multimedia specialists and students work together to explore and create innovative tools that solve learning challenges.

- Mobile Video Framework
- LifeCycle Tool
- MicroExplorer
- Virtual Viewer
- Flashcard Study Tool
DEMONSTRATE EQUIPMENT

THE CHALLENGE

OUT OF ORDER
MOBILE VIDEO FRAMEWORK

Just-in-time instruction available anywhere, anytime

- Responsive website design adapts to any device
- Demonstration videos always available for reference
- Every student gets a front-row seat
- Additional tips and FAQs as well as glossary terms provided
- Email access to instructor from any point in the instruction

Mobile Video Framework
Available on mobile devices and on the web at
http://go.distance.ncsu.edu/ftp219/
MANAGE A HONEY BEE HIVE
LIFECYCLE TOOL

Linking together the modular pieces within a single environment created cohesion

- Students can get the same content reinforced with text, media, video, and questions
- Progress is saved across multiple computers
- Great flexibility in ways to display content
- Ability to link directly to a slide

LifeCycle Tool

See an example deployment online at:
http://delta.ncsu.edu/projects/lifecycle/demo/honeybees/
LEARN TO USE A COMPOUND MICROSCOPE
Now available on iOS devices through iTunes, soon to be on Android as well. Check out the web version at http://go.distance.ncsu.edu/microexplorer/.

**MICROEXPLORER 3D**

Training, exploration, and reference all rolled into one

- Web version for home, mobile version for use on-site
- Generalized microscope model so that students can recognize parts and their function without being limited by brand
- Provides a common vocabulary and reference for all students
- Encourages self-guided learning through exploration
MICROEXPLORER 3D
THE CHALLENGE

VIEW SLIDES
VIRTUAL VIEWER

Focusing on what was most important solved several challenges

- No need to ship potentially harmful substances or fragile equipment
- Free for students to use
- Instructor has tight control over what content and structures are available for students to study
- Facilitates group work as all students have access to same samples
- Able to compare samples side-by-side, or even compare different views of the same sample

Virtual Viewer
See an example deployment online at:
http://projects.delta.ncsu.edu/virtualviewer/
STUDY VOCABULARY
Finding ways to make cards out of generic templates helped craft a reusable solution

- Free to use around the world
- Create cards once, reuse any number of times
- Use text, images, sound, and video on cards
- Chain cards together
- Link directly to a set of cards
- Students can view cards anywhere

Flashcard Study Tool
The Flashcard Study Tool is available online at:
http://delta.ncsu.edu/projects/flashcards/
QUESTIONS?
ANSWERS
(FOR LEARNING!)

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