



Universal Design for Learning: Video, VoiceThread, Web-conferencing

Presented by

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Technologies (COHLIT)

Who We R

- Public, multi-campus University
- Multiple learning management systems



Who We R: COHLIT

- Help Desk for LMSs
 - Video Hosting Support
 - Support for LTIs (external tools)
- Game Research & Immersive Design (GRID)
- Application Development
 - Integration, Student Information System
- Project Management
 - RU Online Conference planning!
- Office of Instructional Design

Who We R: OI

- Face-to-face and online training & workshops
- Certificate program in Online Learning (4 courses)
- Individual support for course design (one semester)
- Course revisions
- Customized to suit faculty, department, program level needs

Universal Design

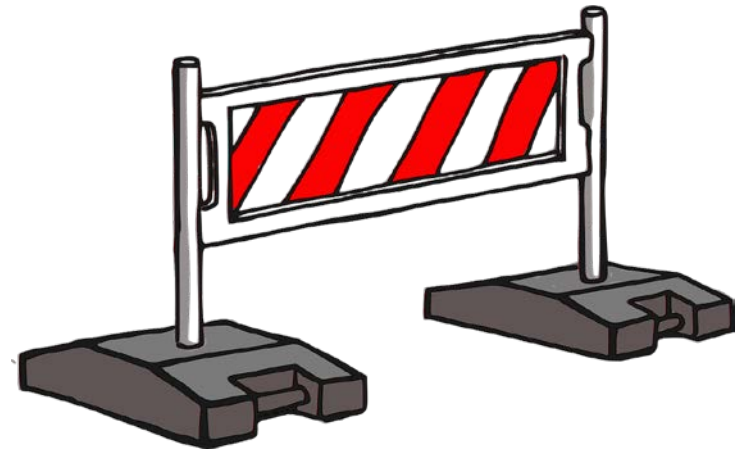
- Multiple modes of representation
- Multiple avenues of action/expression
- Multiple methods of engagement

Multimedia

Both a solution



And a new challenge



Today's Presentation

- Streaming Video
 - Captioning and description, use of *all* materials
- VoiceThread
 - Transcripts, community solutions, Universal
- Web-conferencing
- Your experience/solutions

Streaming Video

- Multiple channels of perception
- Effective tool for teaching hands-on tasks²⁻³
- Easy to create and share
- Caption/Description options available to make videos accessible

2. Alqahtani, N. D., Al-Jewair, T., AL-Moammar, K., Albarakati, S. F., & ALkofide, E. A. (2015). Live demonstration versus procedural video: a comparison of two methods for teaching an orthodontic laboratory procedure. *BMC Medical Education*, 15, 199.

3. Nadelson, L.S., Scaggs, J., Sheffield, C. et al. *J Sci Educ Technol* (2015) 24: 476.

Professional Caption/Description

- Best quality but expensive

Rev.com website showing 'How it Works' page. The page includes a navigation menu with 'SERVICES', 'ABOUT', and 'CONTACT'. Below the navigation, there are links for 'Captions', 'How It Works', 'FAQ', and 'Subtitles (non-English)'. The main heading is 'How it Works'. A table lists service details:

Price	\$1.00 per minute of video. A 30 minute video costs \$30.00.
Accuracy	99% or better for text and timing
Turnaround	24 hours or less for videos under 30 minutes. For longer files see our FAQ.
Video length	No minimum or maximum length
What you get	A caption file includes the text of what was said in the video and time codes for when captions should display. We email you the caption file in your requested format. Examples of what you can expect:

3PlayMedia website showing 'EXPRESS ACCOUNT' pricing table. The page includes a navigation menu with 'SOLUTIONS', 'SERVICES + FEATURES', 'HOW IT WORKS', 'RESOURCES', and 'CUSTOMERS'. There are also links for 'BLOG', 'CONTACT US', 'SUPPORT', 'COMPANY', and 'SEARCH'. A search bar is present. On the right, there are links for 'PLANS & PRICING', 'SCHEDULE A CALL', and 'GET STARTED'. The main heading is 'EXPRESS ACCOUNT'. A video player shows 'Watch an Introduction to 3Play Medi...'. A pricing table is shown:

Express Account	Pricing
English Captioning & Transcription	\$3.00/min
Spanish Captioning & Transcription	\$4.50/min

CaptionMax audio description:
\$1000 / hour of video

Professional Caption Sample

RUTGERS Fundamentals of Designing & Teaching Online Courses Fall 18

Welcome to Fundamentals of Designing & Teaching Online Courses

How to Begin This Class

Please click on the " syllabus" link under the Course Home area in the course navigation menu located on left-hand and read each section. The last section will direct you to the next step. Then review all unlinked course announcements located on the right hand side. (Participants should do this every time they log into the course.)

Instructor: Priscilla Harkin Blower
Course Delivery: Online
Duration: 8 weeks
Email: prh1@blackboard.rutgers.edu
Office Hours: 3-4 PM Monday via Go-to-Meeting
Course Pre-requisites: None

Announcements

Please Read all items in Course Home area. Welcome to Fundamentals of Designing & Teaching Online Courses Fall 18. (View)

Upcoming

Next 7 Days

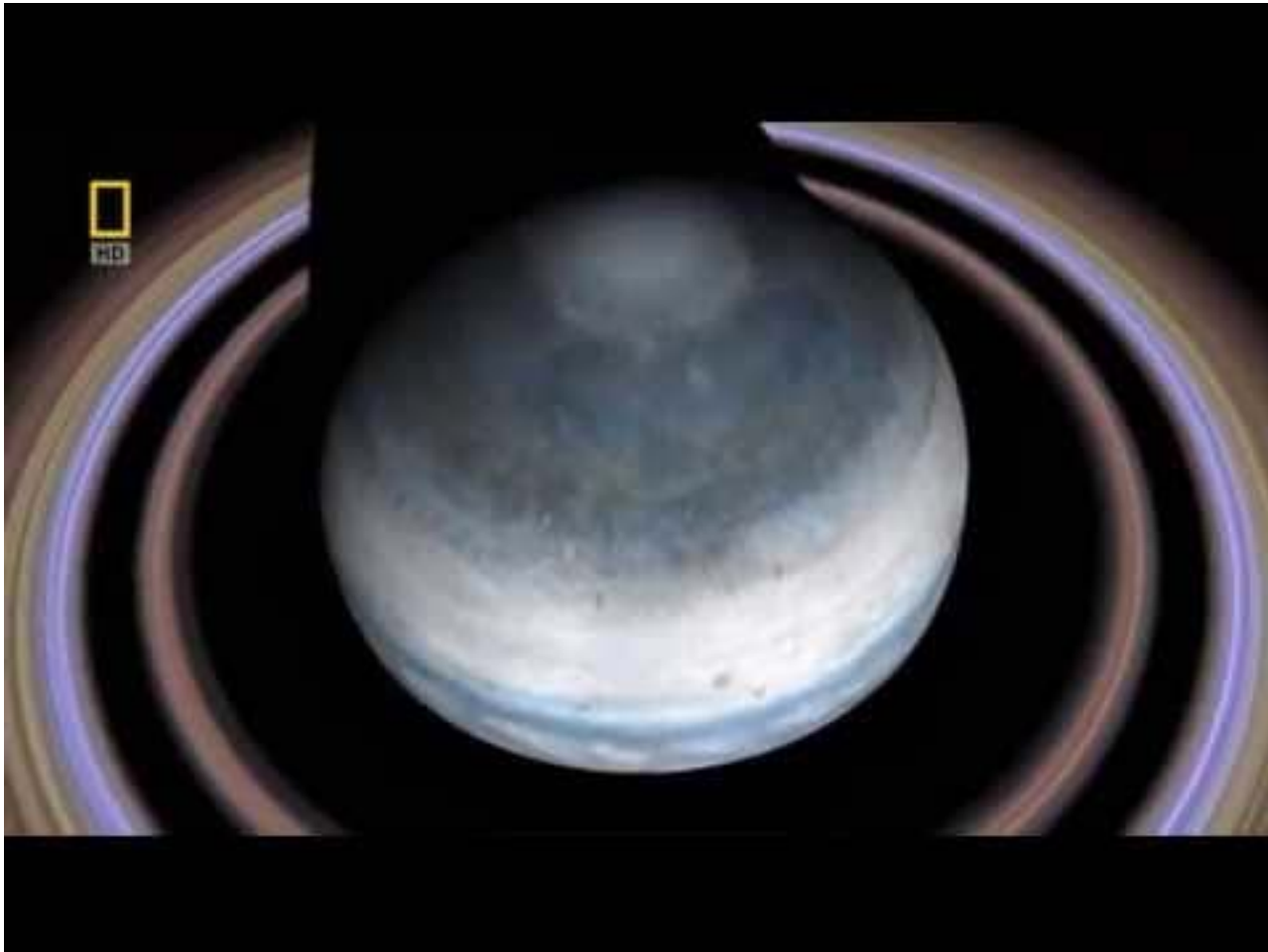
For Review

141 characters remaining

Self-service Caption/Description

- Free
- Speech recognition has frequent inaccuracies
- YouTube: both auto-caption and auto-time options

Auto-caption Sample



Auto-timed Sample

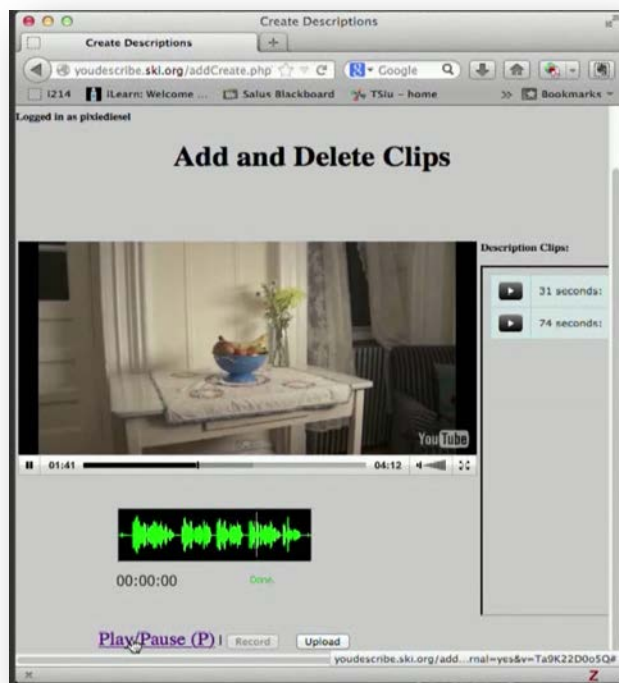


Best Self-Service Results

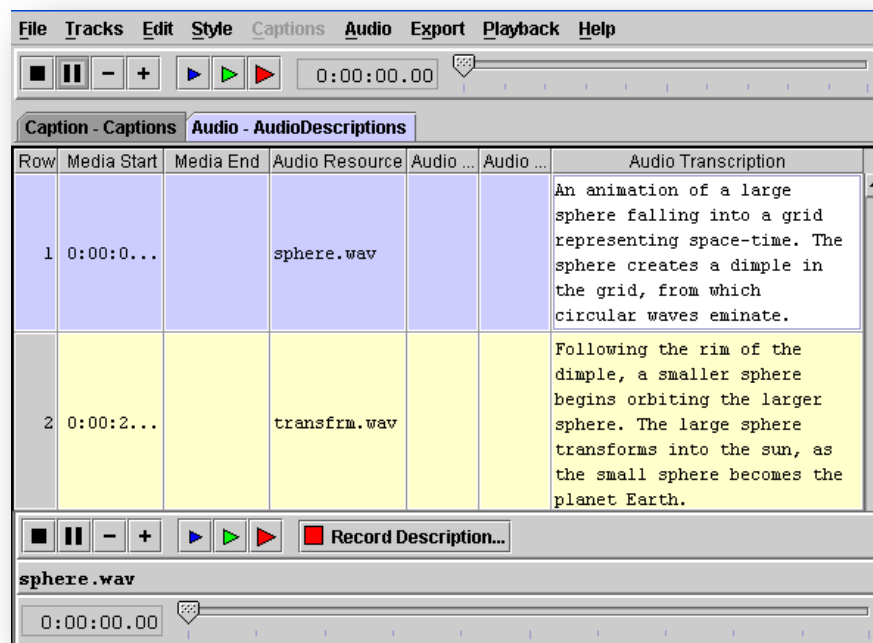
- Use a script
 - May help keep an even pace, gives you a transcript
- Record in quiet, well-lit location
 - A better microphone than a built-in laptop mic helps

Self-Service Audio Description

MAGpie 2
ncam.wgbh.org



Youdescribe.org



Universal Design Approaches

- Post *all* materials
 - video, slides, script/notes
- Add access in while composing
 - Headers
 - Alt tags
 - Table captions
 - Detailed narration of your actions in a video

Multimedia Discussion Tools

- Adding video components to text discussions:
 - On-the-spot recording for discussion boards
 - Video-chat
 - VoiceThread



Multimedia Discussion Challenges

- Captions may take too long
 - Reduced participation opportunities
- Very few studies or dedicated tool solutions available

Multimedia Discussion Possibilities

- Possible options during discussions⁴
 - Teacher-supplied text repetition: sum up or guide
 - Student-supplied transcripts/descriptions
- Addition benefits⁵⁻⁶
 - Stronger learning community
 - Increased online student retention/persistence

4. Kernion, C., Williams, S., Arakaki, J. (2016). Communication Studies and Journalism Accessibility Study: General Best Practices Report. Retrieved from <https://www.pcc.edu/resources/instructional-support/access/documents/BestPracticesforCommunicationFinalReport.pdf>.

5. Wade, C. E., Cameron, B. A., Morgan, K., & Williams, K. C. (2011). Are Interpersonal Relationships Necessary for Developing Trust in Online Group Projects?. *Distance Education*, 32(3), 383-396.

6. Cronjé, J., Adendorff, D. E., Meyer, S. M., & van Ryneveld, L. (2006). Surviving the shipwreck: what makes online students stay online and learn? *Educational Technology & Society*, 9 (4), 185-193.

Tool-makers' Solutions

- VoiceThread Universal
 - Linear, text-based navigation
 - Also helpful for anyone overwhelmed by graphic interface
 - Does not make video component itself any more accessible

Universal Design Approaches

- Instructors
 - Link to scripts/notes in a text comment
 - Describe central media as part of comments
- Students
 - Reply directly to video comment with text version
 - Keep video comments concise and on-point

Synchronous Online Sessions

Benefits

- Build community
- Add broader context to discussions
- Increase student motivation

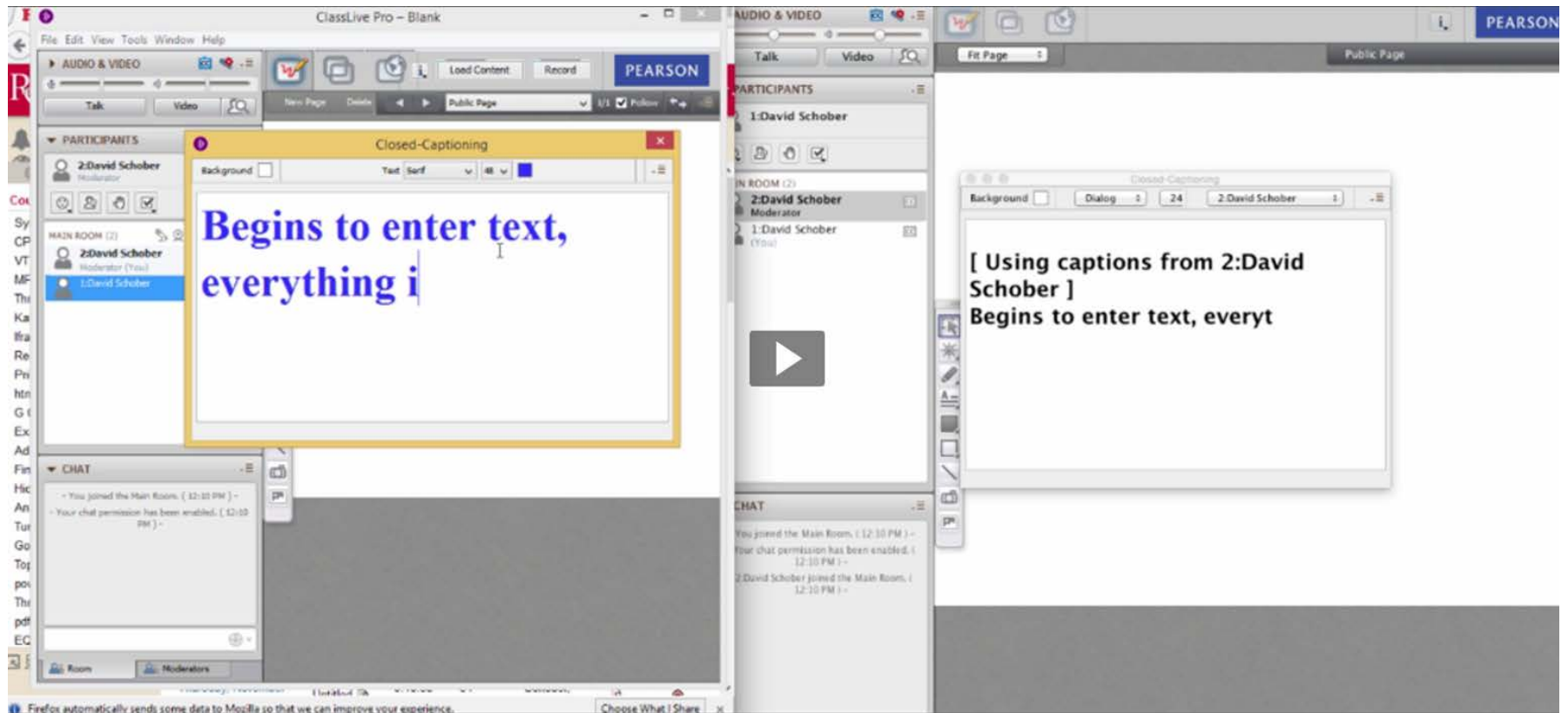
Challenges

- Technical
- Multiple means of representation
- Student interaction

Coy, K., Marina, M.T., & Serianni, B. (2014). Using Universal Design for Learning in Synchronous Online Instruction. *J. Spec. Ed. Tech.* 29(1): 63-74. DOI: 10.1177/016264341402900105

Rao, K. (2013). Universal instructional design of online courses: Strategies to support non-traditional learners in postsecondary environments. In S. Burgstahler (Ed.), [Universal design in higher education: Promising practices](#). Seattle: DO-IT, University of Washington. Retrieved from www.uw.edu/doi/UDHE-promising-practices/uid_online.html

Synchronous Solutions



everything is transcribed
to the participant.

Audience Solutions

- Challenges
- Solutions

Works Cited

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<http://doi.org/10.1186/s12909-015-0479-y>
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<http://www.udlcenter.org/aboutudl/udlguidelines>.
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- Rao, K. (2013). Universal instructional design of online courses: Strategies to support non-traditional learners in postsecondary environments. In S. Burgstahler (Ed.), [Universal design in higher education: Promising practices](#). Seattle: DO-IT, University of Washington. Retrieved from www.uw.edu/doit/UDHE-promising-practices/uid_online.html
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