34 – Course Capture and Video Repository

Action Item Template Response

General Action Item Information

Lead Division/Office: Learning Technologies
Action Item Number: 34
Action Item Short Name: Teaching and Learning Resources Data Utility
Dependencies with other EP Action Items: 33, 35, 37
Implementation leader (name & email): Beverly Teach (teach@indiana.edu), Martin Wagner (mjwagner@indiana.edu)

I. DESCRIBE YOUR PLANS FOR IMPLEMENTING THIS ACTION.

Note: See Accomplishments, below, for an update of the direction of this Action Item.

IU should participate in and adapt a system, preferably open source in nature (rather than build from scratch), a "data utility service for teaching and learning materials" that provides storage, ease of use, and controlled and open access. Such a system would support course casting of lectures and also a wide range of media materials intended, in some cases, for use in courses, and in other cases for much wider distribution. Such a system will be integrated with IU’s Sakai-based course management system (Oncourse).

Opencast is an initiative driven by higher education institutions to empower:

- Institutions to make informed choices about capture, processing, and distribution infrastructure for audio/video.
- Faculty to teach courses and share knowledge with their students and learners worldwide without technology getting in the way
- Students to access and shape media into a more meaningful tool for learning
- Everyone to easily find and engage with educational video, audio, and other rich media from instructors and institutions around the world.

Source: http://www.opencastproject.org/

Opencast/Matterhorn is an open source project for a lecture capture system. This system will allow faculty to schedule class sessions to be recorded using Oncourse. Students will be able to access the recordings using Oncourse. Opencast/Matterhorn will automatically package the recording, adding an introductory and closing branding, compressing the file, and publishing to multiple formats and desired locations. To introduce lecture capture to IU while Opencast/Matterhorn is in development, the Podcast Producer proof of concept project is underway. Podcast Producer is an Apple solution that provides some of the features expected in Opencast/Matterhorn.

An Opencast integration with Oncourse should be developed. Creating an interface between
Opencast and Oncourse will allow students and faculty in Oncourse to use Opencast materials.

II. WHAT ARE THE POLICY AND PRACTICE IMPLICATIONS OF YOUR PLANS?

Instructors participating in course capture should be assured that their online instructional materials are considered Traditional Works of Scholarship as defined in the Intellectual Property Policy adopted by the IU Board of Trustees on May 2, 2008, and that they retain ownership and copyright. If the materials are to be distributed more widely, the University will likely need to develop a consent and release mechanism.

The Technology, Education, and Copyright Harmonization (TEACH) Act and fair use provisions of US copyright law allow faculty to use copyrighted materials in their teaching. To comply with the TEACH Act, several requirements must be met, which may include such things as reasonable "downstream controls" and a warning notice to students on the work. IU should strive to ensure that the technology supporting course capture and distribution also aids in meeting the requirements of copyright law.

III. IDENTIFY STAKEHOLDERS.

Faculty, students, departments, schools, libraries, and academic administrators are key stakeholders.

IV. ACCOMPLISHMENTS

The original plan for Action Item 34 outlined an implementation of Podcast Producer as an interim solution proof of concept for course capture while Opencast/Matterhorn, an open source initiative driven by higher education institutions, was in development. Feedback from the Podcast Producer pilot indicated that faculty wanted the ability to control the capture in the classroom, as well as being able to approve captures and/or edit the capture before uploading into Oncourse.

1. A pilot of Echo360, a commercial course capture system with the controls and features being requested by users was run in parallel with the Podcast Producer pilot. After evaluating both capture systems, Echo360 was chosen. So far, 19 classrooms on four campuses have Echo360 capture devices installed. Opencast/Matterhorn is no longer being considered as it uses a version of Linux that has limited support in our Intelligent Infrastructure environment. While Echo360 satisfies IU's needs for lecture capture, it does not fulfill the other requirements this Action Item.

2. IU has identified Kaltura, Inc. as a possible solution vendor that provides this data utility service. Kaltura offers instructors abundant near- and long-term storage, ease of use across a variety of courses, rigorous control of access to their materials or open sharing, and simple import/export/reuse in Oncourse.

3. A pilot project has been commissioned to determine if the Kaltura solution meets these needs. Kaltura's solution is based on an open source model, but offers enterprise levels of development and support. The pilot has been commissioned to determine if Kaltura's solution fulfills the needs listed below.

- Replace existing streaming infrastructure.
- Enhance Oncourse's multimedia capabilities.
- Create user generated video repository, included support for student content.
- Integrate Microsoft SharePoint with UGV repository.
- Determine if there is any overlap or synergy with multimedia preservation solutions outlined in EP Action Items 35 & 36.
The Echo360 timeline is:

**Summer 2010**
- Evaluation of Echo360 lecture capture solution begins.
- Capture appliances initially installed in 5 classrooms with another added later

**January 2011**
- Echo360 installation upgraded to version 3.0.

**June 2011**
- Echo360 installation upgraded to version 4.0.
- Pilot expands with new SafeCapture HD appliances installed in an additional 13 rooms, bringing total number of installed capture appliances to 19.

**January 2012**
- Echo360 lecture capture solution becomes a production-level service.

**May 2012**
- Tentative upgrade to version 5.0.

The Kaltura Pilot timeline is:

**November 2011**
- 180 day pilot officially begins
- Provision and configure virtual servers and storage
- Initial software installation and configuration
- Test basic media delivery capabilities
- Integrate authentication/authorization with existing IU systems
- Identify and communicate with stakeholders for inclusion in pilot

**December 2011**
- Test integration with Sakai/Oncourse.
- Test integration with Microsoft SharePoint.

**January 2012 through April 2012**
- Involve stakeholders and other interested parties in formal evaluations.

**May 2012**
- Conclude Pilot.
- Evaluate findings.
- Collect and distill feedback from stakeholders.
- Recommend or oppose promoting the solution to production status for Fall 2012.