

AT Grants: Interim Report

Project Title: Development of a Web Services Interface to Populate a Campus Learning Object Repository from WebCT Vista.

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1. Original Project Summary

The University of Massachusetts uses WebCT Vista as its enterprise course management system. This environment is heavily utilized for both on-campus and continuing education courses. For students, access to the learning objects developed in WebCT is lost when a course closes. Students in graduate studies, health profession studies and others often need to refer back to the course content to prepare for thesis qualifying exams, board certifications or other academic requirements. The purpose of this grant is to create an object repository application which will utilize the content from WebCT to populate a campus learning object repository. The project includes a technical and administrative component. The technical component is to develop an object repository application. The administrative component is to create a multi-campus team to develop policies and procedures to address issues such as intellectual property, usage guidelines and a strategy for subject headings, name authority and metadata

The object repository application will be developed using the Blackboard/WebCT PowerLinks SDK. Specifically, we will use PowerLinks web services to access and manipulate content in the WebCT Vista File Manager tool. This will enable automated download of content to a local file system (repository). This approach automates the process for faculty. The repository will allow authorized users to “Google” or search across all courses—across an entire curriculum—while preserving the integrity of the classroom roster and grade book of WebCT. The application will be available for all campuses to use to create local repositories with campus specific guidelines for use.

2. Changes in goals / objectives / deliverables

At this point, we have modified our goals and methodology. We investigated two different approaches to leverage the Blackboard API with two different consultants. Both were unsatisfactory. Rather than develop the repository in-house, our goal now is to pilot a commercial off the shelf product (Equella™) to build the repository. The pilot will test the ability of the system to meet our functional requirements. Additionally, it will

inform us about the costs and resources required to scale this to a system or potentially state-wide solution. The pilot will be completed in December 2008.

3. Accomplishments:

We have used the AT funding to secure a contract with THE LEARNING EDGE NORTH AMERICA, INC (TLENA) to pilot Equella™ software for the repository. Equella™ is a java application comprising of a Learning Content Management System with an XML repository and a content authoring or assembling system. Equella™ has the potential to provide a robust, scalable, and configurable repository to support and enable content sharing across departments, disciplines and institutions. The engagement is for the provision of ASP services for the implementation of Equella™ as a content repository for UMASS Online, specifically the Medical School. The engagement will focus on the initial planning, implementation, integration into Blackboard Vista, and training.

TLENA will provide hosting for a UMass pilot of Equella™. The pilot will be within shared instances of the Equella™ platform. This approach assumes access to the Equella Institution Manager with the capacity to support multiple time zones within an instance. TLENA will ensure that the hosting service results in an application availability of 99.5% for this pilot.

The following table details a summary of the pilot service criteria:

Max Equella Users	100
Max Disk space	20 GB
Bandwidth	shared 1,000MBit/sec connection
Domain name	Custom domains supported from Equella 3.2

4. Anticipated challenges, issues, or problems

At this point, the biggest challenge using this methodology may be cost. Operationally, the timing of the pilot coincides with the changeover in academic year.

5. Any other comments you would like to share

The cost issue may be offset by the added functionality that this approach offers to UMass. This system has content management capabilities in addition to the repository and digital rights management functionality. Thus it could be used to create or modify learning objects that could be used to populate any LMS. Additionally, the scope could be expanded to create a state-wide learning object repository. Similar efforts are underway in Florida and Georgia.