

University of Alberta Relies on TAO for Its Massive Open Online Course



BACKGROUND

In 2013, the University of Alberta began partnering with Coursera, an education technology company that offers Massive Open Online Courses (MOOCs), utilizing the services of major educational institutions. MOOCs are full courses that incorporate complete syllabi, video instruction from instructors, and personal interaction between instructors and classmates via the internet.

Subsequently, with more than 1,000 students enrolled in MOOC programs, the University of Alberta needed to develop a secure online exam that would provide these students with an optimal exam writing experience.

CHALLENGE

To address this challenge, the University of Alberta's first priority was finding an open source system. They compiled a list of 33 function requirements for an assessment platform. They wanted a system that could be modified for different types of assessments (e.g., low

stakes vs. high stakes), so ease of custom development was essential. They also considered the time and resources required for implementation, as program administrators must learn and operate the new software in a short amount of time.

SOLUTION

Why TAO?

- TAO is open source, which was the first selection criterion.
- TAO offers all the features on their wish list, and is very secure.
- TAO offers a series of features not found in off-the-shelf solutions, which would have required software modifications.
- TAO is able to provide tremendous amounts of necessary technical and conceptual support from experts, making it possible for the entire process to go forward in a timely and efficient manner.
- TAO is cost-effective.

RESULTS

Implementing the TAO Open Source Solution

Using a rapid development framework and a dedicated hosting server, the team completed three component tasks:

- First, they built an authentication gateway to verify student identity based on university logins, and an SAML-SSO based authentication was developed to pass login information between the university authentication server, the client, and the TAO server.
- Second, they built an automated upload function to read Word documents and convert them directly into QTI item formats for upload.
- Third, they modified the administration interface to fit the item types and administrations used in the program.

The University of Alberta has been very satisfied with the results. The platform became fully operational after only eight weeks. Over the last six months, more than 80 assessments have been uploaded and administered to over 6,000 students. These assessments include exams from the Faculties of Science, Education, and the Arts. New assessments can be set up, loaded, and administered within an hour, and conditional assessments requiring custom answer paths can be set up within a day.



TAO didn't just satisfy our need for Open Source," says Janet Welch, Assistant Dean and Director of Technologies at University of Alberta, "it's also proven to be reliable and easy to use. We're delighted to have found an assessment solution that our entire team finds easy to embrace.

