**Challenges**

As a long time innovator in online education, the University of Phoenix has always strived to provide a consistent and seamless experience for our students that allows them to focus on learning. A challenge for the institution has always been how to create that seamless experience when leveraging technology and courseware from our partners in our curriculum without having to invest significant time and resources into creating wasteful one-off integrations to each partner. Once the University discovered LTI, another challenge became evident; the institution needed a much more comprehensive set of capabilities to support our specific needs around support our learning model and customizing a student’s experience in a third party product than we saw in reference LTI tool consumer implementations.

**Solution**

To solve these challenges, the University of Phoenix created the **Dynamic LTI Handler**. This tool provides extensive management and configuration capabilities for use of LTI tools within the institutions ecosystem both within and outside of the Learning Management System (LMS).

The Dynamic LTI Handler allows the institution to centrally configure and manage all LTI enabled tools available to the institution and ultimately makes them available to the institutions resource or course development staff for use wherever with just a few clicks. The handler has the unique capability of being able to map any value from our SIS or course information to any parameter of a tool dynamically with customizable formatting to adjust for the context in which it’s accessed through a simple interface, even outside of the LMS. The tool also provides an in-line test harness and additional configuration options that allows course developers to easily test content when adding it to a course. The level of customization offered also allows the institution to work with its partners to create a much deeper integration than what would normally be possible with reference Tool Consumer implementations given the breadth of available data points and customization that can be leveraged for a launch.

**Learning Impact Outcomes**

The Dynamic LTI handler facilitates much deeper integrations that allow the institution to create in depth tool launches that leverage expanded data points to pre-populate course templates including pre-assigned due dates and assignments. This allows our students to be easily and seamlessly linked to learning and reduces the workload on our faculty for setting up courses. This in turn allows them to focus less time on administrative tasks and more time on instructional activities.

**Return on Investment**

University of Phoenix has realized **10-100x savings** on time and resources when integrating content from our partners within the institutions curriculum while still supporting extensive customization of seamless student experiences with content and technology from the classroom that would normally require a more custom integration. The reduced cost of integration has also allowed the institution to implement seamless access to content in courses and instances where it previously may not have been cost effective.