

Scope – Deep insight at the intersection of technology and learning

Teaching and Learning Technologies, Information Technology at Purdue

Challenge: As the head of teaching and learning technologies for Purdue’s central information technology organization, Jason Fish has grown used to the sound of the “squeaky wheels” – the people on campus who advocate loudest, or longest, for their particular need.

But until the creation of Caliper-based Scope, Fish had a hard time determining where to best invest his staff’s time and effort – was it better to focus on vocal members of the community, or were there more pressing needs, sometimes undetected, to be addressed?

The best available data, however, was primarily restricted to information provided by Google Analytics, says Purdue web application programmer Jason Dufair, which lacks the deep insight that Fish and others at Purdue wanted.

“We couldn’t get the depth of information that we needed, and were basically looking at information like logins or page views,” Dufair says.

Solution: Scope, created in-house at Purdue, will provide Fish and his team with the in-depth analytics they need to make both macro- and micro-level decisions about learning technologies on Purdue’s campus. Using the Caliper framework, Scope will help measure learning activity, provide in-depth analysis of learning tool usage, and allow educators make data-driven decisions that are pedagogically sound.

“Scope will allow us to make better decisions,” says Fish. “If we can show that more instructors use tool X – even though a handful of vocal faculty say they prefer tool Y – it at least gives us the data to have a real discussion.”

Following the Caliper standards set out by IMS, Scope provides a radical departure from basic analytic software because it gives access to new information and presents it in a display that is easy to understand and share.

“And it’s designed to work across platforms, so whether it’s something we make here at Purdue or at another university, or if it’s a commercial product off the shelf, Scope provides the aggregated data necessary to manage a university’s technology needs,” says Dufair.

Learning Impact Outcomes: Scope will help organizations determine who is using a particular technology and how they’re using it – creating a better pathway for establishing best practices. If a technology is being underutilized, Scope can help administrators determine if the tool is unnecessary or simply unknown to faculty.

“If a person has a need, how do we make sure they have that need addressed?” Fish says. “Without good analytics, we’re really just guessing.”

Return on Investment: With Scope, Purdue’s ability to accurately analyze the usage of various learning technologies will play a major role in deciding where to best spend resources, ultimately creating a more affordable education for students.

For instance, Fish notes that knowing which features of the university’s learning management tool are utilized the most could inform future discussions about upgrades or replacements, helping the university save money by not investing in unused features. Scope can also help educators compare different learning tools, regardless of platform, providing the depth of data needed to make decisions based both on cost and pedagogical benefit.

“We have two different tools that are designed for classroom engagement,” says Fish. “One costs students money, the other is free. We can use Scope to give us the data to show how those two tools are being used, and help faculty make decisions about which one to use – or even if we need to support both or just one.”