

Creating a Pearson Sample App Yields Valuable Lessons

Using a strategy focused on analyzing feasibility, the Personalized Learning & Analytics (PLA) and Sample Apps teams recently engaged in an exercise with emerging Higher Ed markets in Vietnam, particularly a program run there by Arizona State University, the HEAPP program.

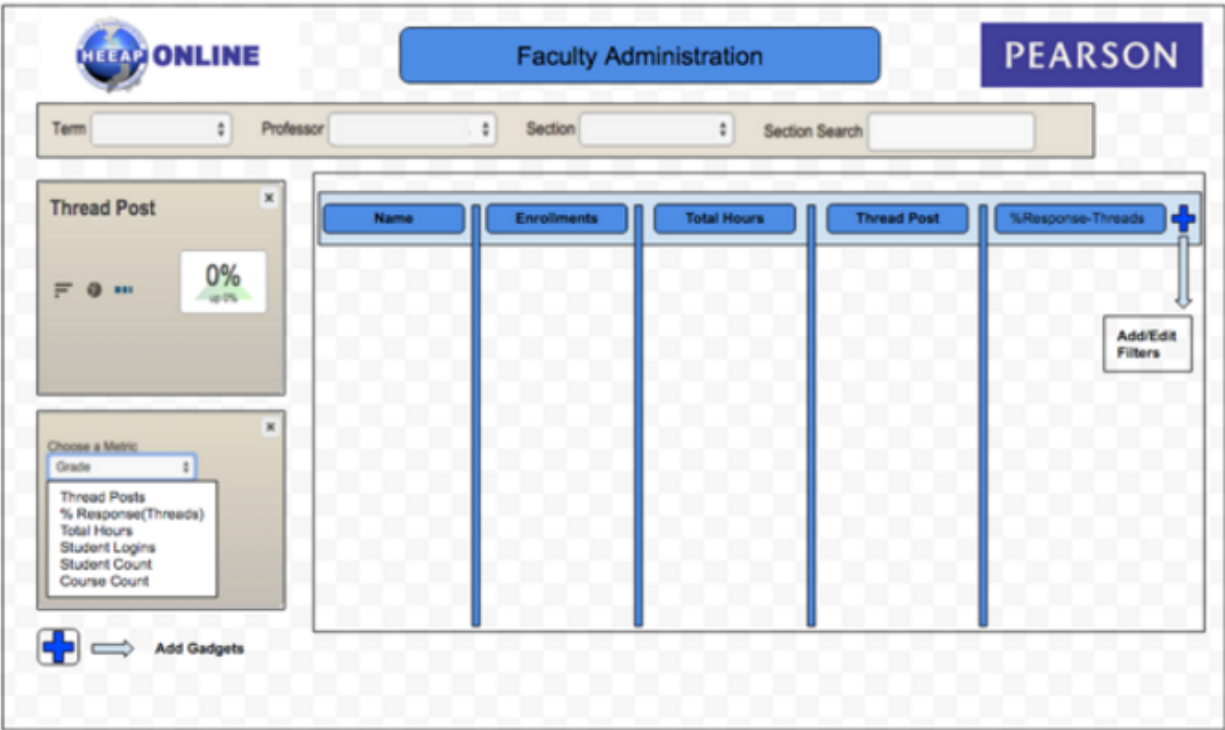
The initial project set out to design a sample application, using PLA Application Programming Interfaces (APIs), to extract and export user activity and course data from the school's already in-use Moodle platform; and illustrate the extracted data through interactive, easy-to-use and easy-to-access analytics dashboards.

The primary objective of the study focused on Moodle capabilities and plugins to:

- Demonstrate that PEARSON APIs are open and agnostic with respect to a Learning Management System (LMS)
- Demonstrate global market implementation and use of data analytics
- Use data in a flexible platform to aid in accreditation, student retention, enterprise administration and instructor/student engagement.

The PLA dashboards allow admins to:	The PLA dashboards allow instructors to:
View how many instructors are using Moodle	View student activity minutes in a course
View how many discussion threads are in a course	View a student's time on task - plug-in or content item
View how many posts an instructor has made to Discussion Threads	View student's time on task at the assignment level
View how many posts a student has made to Discussion Threads	Provide student's trend (up-down/down or flat) at assignment level
View how many students are enrolled in a class	View student last login date
View how many "active" courses are running	View a student's submission count
	View student forum (discussion) activity
	View student grades to date

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The PLA Dashboard

Pearson leveraged HEAPP as a pilot for this project, with a follow-on plan to showcase the use-case for larger institutional operations in global markets. As a secondary outcome, the teams also hoped to use the HEAPP project as a model to inspire other Pearson teams and 3rd party developers to use the PLA suite of services for next gen product development. While this project was considered an outlier, if successful, it would have provided a model and tutorial for future HED teams to implement PLA services in new applications. A successful project could have been developed as an Amazon Web Services (AWS) template, complete with code samples. The project encountered early challenges, including:

1. No PLA documentation available in the PDN, requiring substantial ramp-up time from the PLA resource teams to understand APIs, PLA architecture and the mapping of available Moodle data points.
2. PLA requirements that depended heavily in Pearson Identity (PI) services, requiring the creation of a “ghost account” in PI when no Pearson product was at play in the integration, a strategy not easily supported in the current PI models. This concern led to a follow-on question about token authentication in PLA and data privacy using the “ghost accounts.”
3. Concerns about latency issues if PLA was accessed across continents in the U.S.

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After several months of analysis, the conclusion for this study was that the challenges presented too high a hurdle for this particular sample app to become a reality, primarily because of the concerns around user authentication and PI, concerns that grew mostly out an implementation overseas with unknown data security protections.

Will this impact future sample apps using PLA tools? Not if the PI concerns can be addressed in the initial requirements.

Conclusion: This analysis and proposed sample app was a unique learning experience for Pearson and one that provided useful insight. The teams involved garnered a greater understanding of the types of questions to ask when mapping out use case and technical requirements. Going forward, this case will help guide future PLA engagements internationally and domestically.

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