Caliper Briefing
Caliper Proof of Concepts (PoC) Demos

Gradecraft and LectureCapture Caliper Enabled LTI Tools with Moodle LMS Data

**Summary:**
Both UM developed Gradecraft and Lecture Capture LTI tools were Caliper enabled to collect assessment and lecture player related learning data. These tools were provisioned within a Moodle LMS instance that was also Caliper enabled. All data was marshaled to an Intellify provided event store to be aggregated. The aggregated Moodle LMS and external Gradecraft and Lecture capture LTI tools data was visualized via an Intellify dashboard.

**Components Enabled:** Moodle via an LMS sensor, Gradecraft and LectureCapture LTI tools

**Sensors Used:** Ruby, Java, PHP

**Event Model Used:** Session, Media, Assessment, various Moodle supported Caliper event profiles
**Summary:**
An initial Caliper sensor was developed for the Canvas LMS to collect learning data which could then be leveraged within Canvas but also made available to be sent to and stored in the external Intellify event store. In addition, a sample LTI tool(s) was provisioned within Canvas that was also Caliper enabled so that any reading activity related data could then also be sent to the Intellify event store. The aggregated Canvas LMS and external LTI tool(s) data was visualized via an Intellify dashboard.

**Components Enabled:** Canvas via an LMS sensor, Caliper enabled LTI tools

**Sensors Used:** Ruby

**Event Model Used:** Session, Reading, Assessment, Discussion (in progress)
Caliper Briefing
Caliper Proof of Concepts (PoC) Demos

Personalized Performance Analytics for Students, Instructors

Summary:
McGraw-Hill has developed Caliper enabled sensors for two existing platforms – one for higher education (MHE Connect) and the other for schools (MHE Engrade). These Caliper enabled sensors were setup to send learning data to a central internal Learning Analytics Platform. Data received by the Analytics Platform is used to power two applications built on top of it to provide Performance Analytics to Students and Instructors.

Components Enabled: Connect and Engrade via Caliper, Analytics Platform for Learning Data, Insight Apps for Students and Instructors

Sensors Used: Java

Event Model Used: Assessment, Outcome
Caliper Briefing
Caliper Proof of Concepts (PoC) Demos

Summary:
Elsevier provides a wide range of digital learning products to institutions and their students in the nursing and health professions. However, student performance data is siloed in each of these products, making consolidated, roll-up reporting for individuals and cohorts technologically problematic, if not impossible. Elsevier and Difference Engine (Learning Objects) are partnering on a proof-of-concept (POC) Caliper implementation that will ultimately yield a single, unified learning performance dashboard for students, instructors, curriculum managers, and institutions.

Components Enabled: The POC consists of DE instrumenting the Elsevier Adaptive Quizzing (EAQ) product with Caliper Sensors. These sensors point to Elsevier endpoints for data storage and presentation via analytics dashboards.

Sensors Used: Java

Event Model Used: Session, Base, Assessment, Assessment Item, Assignable, Outcome
Summary:
The UCLA developed CASA edu App Store service framework was Caliper enabled so as to capture a new collection of edu app and store related actions and attributes. With that, a new Caliper event model derived edu App profile was developed. As edu Apps are provisioned, shared, used etc via the CASA edu App Store, data is collected via Caliper and marshaled to an Intellify provided event store. In addition, a CASA edu App store instance was provisioned via LTI in a Moodle LMS instance. This Moodle instance was also Caliper enabled to collect additional learning activity data that was also marshaled to the same Intellify provided event store. The aggregated CASA edu App and Store and Moodle LMS data was visualized via an Intellify dashboard.

Components Enabled: CASA, Moodle via an LMS sensor and IMS LTI Content-Item Message support

Sensors Used: Ruby, PHP

Event Model Used: New Caliper derived CASA App profile, various Moodle supported Caliper event profiles