



# Aperero Open Analytics

An open platform for optimising learning

**Learning Analytics** is a hot topic in education. Everywhere you look, vendors of proprietary software are bundling analytics capability into products - and trying to persuade institutions to bet the farm on their solution.

The Aperero Foundation, working closely with members of the *Society for Learning Analytics Research (SoLAR)* is developing an **open analytics platform**. We don't have all the answers - but we do have some proven software, and an open approach that will let you test the water without getting in over your head. Not tying your institutional analytics work to a singly application or application module retains flexibility and control, and helps prepare for a future where analytics efforts will reach beyond retention and advising.

Components of the Aperero open learning analytics platform have been used by a number of institutions. These include Marist College, North Carolina State University, Savannah State University and several community colleges. An initial field pilot involved over 2200 students across four institutions, two community colleges and two Historically Black College and Universities (HBCUs), over two semesters. Through controlled randomized studies, the pilot found statistically significant evidence that our early alert and intervention system had a positive impact on student success factors such as final course grades.



**100% Open**

## Learning Activities

**Collection** – Standards-based data capture from any potential source using open standards: xAPI and/or IMS Caliper/Sensor API

**Storage** – Single repository for all learning-related data using Learning Record Store (LRS) standard. Over the past year OpenLRS has made significant progress toward maturity. In addition to its support of the Experience API (xAPI), OpenLRS has added support for the IMS Caliper learning event specification. OpenLRS has also seen its first production deployment at the University of Notre Dame. Several additional production deployments are planned for 2016 at both higher education institutions and global publishers.

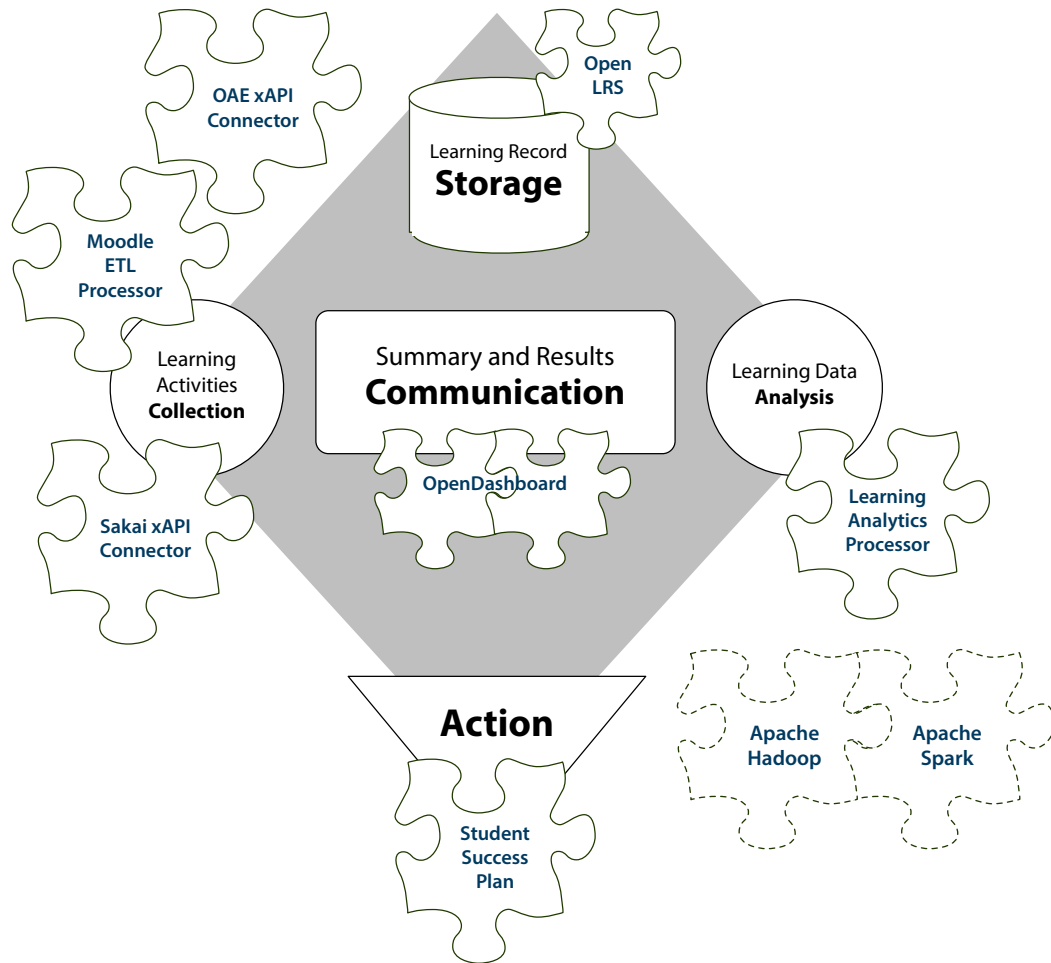
**Analysis** – Flexible Learning Analytics Processor (LAP) that can prototype data mining, data processing (ETL), predictive model scoring and reporting. Work on larger datasets is handled by Apache Hadoop and Apache Spark.

**Communication** – Dashboard technology for displaying LAP output.

**Action** – LAP output can be fed into other systems to trigger alerts, etc.

Apereo members are building software around this platform. OpenLRS, Learning Analytics Processor, OpenDashboard and Student Success Plan are early examples of the benefits of a platform-based approach.

# An Emerging Platform



## What's Next?

Marist College, Uniformed Services University (USU), North Carolina State, Notre Dame and the UK's Jisc, and others are contributing to the further development of the Apereo Open Analytics Platform. Currently, much work is being undertaken to further test the portability of algorithms and approach, and to ensure that the platform operates at the scale of a state system, or, in the UK, as a national service.

## Interested in more information?

Hear and discuss news from the Apereo LAI community, including platform developments, and how the Apereo LAI components are being used in practice by the Jisc and others.

**Thursday, May 5th, 1100 US EDT, 1600 BST, 1700 CEST**  
Details - <http://tinyurl.com/zbqhz4v>

Email: [analytics-coordinator@apereo.org](mailto:analytics-coordinator@apereo.org)