The next big thing will be a lot of small things.

Open Software for Learning Analytics

Nancy, May 2017

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What is Open Source?
… software for which the original source code is made freely available and may be redistributed and modified …

https://opensource.org/osd-annotated
Why Open Source?
Why Open Source?

- Cost
- Suitability
- Control
Upgrade Paths
Support Options & Portability = Choice
Innovation & Collaboration
The Mathematics of Collaboration

2 + 2 + 2 = 5

Less than 6, but more than 2 …
What is Apereo?

The Apereo Foundation

Reduce the overhead of collaboration

Manage collective intellectual property

Provide shared services that reduce friction
What is Apereo?

- Membership Organization
- Legal: New Jersey 501.c.3
- Elected Board of Directors
- Global Membership
  + Partnership ESUP-Portail in France
The Apereo Foundation is a non-profit [501(c)(3)] registered in New Jersey

Mission

... to assist and facilitate educational organizations which “collaborate to foster, develop, and sustain open technologies and innovation to support learning, teaching, and research.”

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Educational Institutions
Apereo = 80 + ESUP = 72

Commercial Affiliates
Apereo = 13

Apereo Foundation
Shared Services
Software Communities
AKA “Projects”
Open Analytics Platform
Practitioner Perspective

Early Work funded by Gates Foundation

Marist College, North Carolina State
Sinclair Community College

Jisc

Université de Lorraine
Applying techniques associated with **big data** to learning.

Analysing historical aggregate data to identify potential failure/success.

“**Measurement, collection, analysis and reporting** of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs” (1)

Academic Analytics
System or organisation wide data

Learner/ing Analytics
Actionable data about individuals
Learning Analytics Purpose

Present
Prediction for intervention
*retention*

Coming Soon
Evidence of Learning Outcomes
*next gen transcripts*

Future
Prediction for learning pathways
*adaptive content*
"Big 6" lessons From Early Adopters

1 Define purpose
2 Moral and ethical dimensions
3 Legality and Consent
4 Governance
5 Capacity and expertise
6 Your technical approach is strategic
Platform, not Application

Bundling capability with application?

Student Information System

Learning Management System

Limitations?

Other sources of data?

Libraries?

Student personal data?
Learning Analytics Purpose

Present
Prediction for intervention retention

Coming Soon
Evidence of Learning Outcomes next gen transcripts

Future
Prediction for learning pathways adaptive content
Why an Open Platform?

Neutral and unbundled

Flexibility and choice of components

Jisc UK national analytics service

Prepared for future development

Transparency

open source, open standards, open algorithms
A Connected Network of Partners

Established by ADL to steward xAPI

Research Practitioners

Large-scale deployments
Open Software for Learning Analytics

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