Optimising for the Future: Cooperative Open Source Software for Higher Education

Ian Dolphin
Apereo Foundation
ian.dolphin@apereo.org

More about why this sign was created at http://www.intrastructures.net/intrastructures/Actions:_The_next_bigThing_2.html
Apereo is Global

But registered as a non-profit in the US

Talking about the “Why” of open source

Context: international higher education
Changing Fashions. The Cloud - Silver Lining?

In the US, “Cloud First” becomes “Cloud Only”
Typically proprietary
Impacts capacity
Flexibility?
A new lock-in - with better locks
### Who Owns Higher Ed Data ...

#### EdTech Companies with the Most Student Data

<table>
<thead>
<tr>
<th></th>
<th>HigherEd</th>
<th>School District</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>8M</td>
<td>24M</td>
<td>32M</td>
</tr>
<tr>
<td>Microsoft</td>
<td>13M</td>
<td>17M</td>
<td>30M</td>
</tr>
<tr>
<td>Instructure</td>
<td>9M</td>
<td>3M</td>
<td>7M</td>
</tr>
<tr>
<td>Desire2Learn</td>
<td>4M</td>
<td>1M</td>
<td>2M</td>
</tr>
<tr>
<td>Blackboard Learn &amp; Open</td>
<td>6M</td>
<td>6M</td>
<td>6M</td>
</tr>
<tr>
<td>Schoology</td>
<td>1M</td>
<td>6M</td>
<td>6M</td>
</tr>
<tr>
<td>PowerSchool</td>
<td>0M</td>
<td>2M</td>
<td>2M</td>
</tr>
<tr>
<td>EDMODO</td>
<td>0M</td>
<td>2M</td>
<td>2M</td>
</tr>
<tr>
<td>Aeries Software</td>
<td>2M</td>
<td>2M</td>
<td>2M</td>
</tr>
<tr>
<td>Augusoft</td>
<td>0M</td>
<td>0M</td>
<td>0M</td>
</tr>
<tr>
<td>Khan Academy</td>
<td>0M</td>
<td>1M</td>
<td>1M</td>
</tr>
<tr>
<td>Itslearning</td>
<td>0M</td>
<td>1M</td>
<td>1M</td>
</tr>
<tr>
<td>Infinite Campus</td>
<td>1M</td>
<td>1M</td>
<td>1M</td>
</tr>
<tr>
<td>Focus School Software</td>
<td>1M</td>
<td>1M</td>
<td>1M</td>
</tr>
<tr>
<td>Illuminate Education</td>
<td>1M</td>
<td>1M</td>
<td>1M</td>
</tr>
</tbody>
</table>

#### Number of Students

- **HigherEd**: 0M, 10M, 20M, 30M, 40M
- **School District**: 0M, 10M, 20M, 30M, 40M
- **Grand Total**: 0M, 10M, 20M, 30M, 40M

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https://www.listedtech.com/blog/edtech-companies-with-the-most-student-data
“Surveillance Capitalism”? 

Creating

“prediction products"
“behavioural futures markets”

Massively scaled data-gathering

Threat to individual self-determination?

Capable of regulation?
Facebook to pay $5bn to resolve probe into privacy violations

Zuckerberg will have to certify compliance with new data rules every quarter

Facebook has agreed to pay more than $5bn to settle its cases with US regulators over misusing user data, in two settlements that it hopes will help alleviate some of the political hostility it has faced since the Cambridge
What happened next?
The Wheel Turns: “Hybrid Optimization”
(Gartner, NYCIO Conference July 2019)

Rebalancing:
Edge / Private Cloud / Public Cloud

“Core and Chore”

As enterprises grow increasingly reliant on external service providers, CIOs have to keep asking a fundamental question: “What’s core and what’s chore?” If something is core, then it makes sense to keep doing it internally. If it’s just chore, then it’s probably best offloaded to an external provider.

Open Source Software in Higher Education

“In education, government, and anywhere primarily supported by public funding, it makes sense to use software that doesn't lock you in or quietly convert public funds into private equity.”

Ben Werdmüller  https://werd.io/view/5ca3c283d3c9b259255f0bd2
An .edu IPO ...

- Sales: 52%
- Admin: 25%
- R&D: 24%
Which pays for...

Meanwhile...
Student Debt - Individual

Comparability difficulties

**UK** £36,000  (€42,508)
**US** $37,000  (€33,430)

**Germany**: Average debt €5,600.00

**France**: Less than 2% of students take out loans.

https://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN01079

https://time.com/5662626/student-loans-repayment/


https://www.linternaute.fr/argent/guide-de-vos-finances/1407390-bourse-d-etudiant-les-montants-de-la-vente-de-la-rentree-prochaine-enfin-devoiles/
Open Source: Cost, Suitability, Control

Licensing cost saved
...can be invested in capacity
Upgrade according to your plan, not vendors
Needs can be realised directly, and shared
Innovation

eLearning is not a product or product category
We should still be learning about learning
... and innovating around that learning

Collaborate and cooperate to reduce costs
Ugly Acronyms: NGDLE’s
Next Generation Digital Learning Environments

Please note the **plural**
Different institutions, different needs
But conceptually similar - flexibility
And re-using open source code
NGDLE **not a product category**
<table>
<thead>
<tr>
<th>Tool Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Write</td>
<td>A simple tool to prompt users to respond to short answer questions.</td>
</tr>
<tr>
<td>Interactive Video</td>
<td>This tool allows a user to add questions to a Warpwire video.</td>
</tr>
<tr>
<td>Flashcards</td>
<td>Create flashcard sets that include text, images, MP3s, or videos that your students can use to study important material in your course sites. They are fun and work great.</td>
</tr>
<tr>
<td>Learning Journal</td>
<td>This app allows students to enter multiple journal entries on a defined topic.</td>
</tr>
<tr>
<td>Knowledge Check</td>
<td>Create small quizzes that include multiple choice or true/false questions for students to use to assess their knowledge after completing a reading, watching a video, or</td>
</tr>
<tr>
<td>Pre/Post</td>
<td>This is a simple tool to allow an instructor to create a question for a student to answer before and after an activity.</td>
</tr>
</tbody>
</table>
SPRING 2018

HLTHMGMTC 540CI-401
Secondary Use of Healthcare Data
- Slack
- GitHub
- Character Lim
- Sakai Gradebook
- Custom Link

ACCOUNTG 245F-00A
Intro To Financial Accounting
- Slack
- GitHub
- Character Lim
- Sakai Gradebook
- Custom Link

HISTORY 790S-10-01
Rdngs Empr/Colonial Encounters
- Slack
- GitHub
- Custom Link
- Sakai Gradebook
Cooperative Innovation
The Role of Apereo

Membership organisation
Strong partnerships - LAMP, ESUP-Portail, network of c160
Cooperative management of IP
Cooperative contribution of artefacts
Code, documentation, other effort
Sustainability through cooperation
Towards a Cooperative “Cloud”?

Built around cooperative principles
By Higher Ed, for Higher Ed
Built around open source software
(Role for commercial partners)
Auditability underpins trust
Open and agreed affordances for innovation
The Coming Year

A very different Open Apereo 2020
Building new partnerships
Strengthening existing partnerships
    ESUP-Portail, LAMP, Japan, South Africa
New Challenges: Low carbon cooperation