Let them have Cloud Apps...
Embed an open source LTI CASA Cloud App Catalog into your LMS

UCCSC - July 11, 2016
Given by: Rose Rocchio, OIT, UCLA
Nick Thompson, OID, UCLA
What is an App?

- **Static Content**
  - Not Interactive
  - Reading material
  - Research Paper, Chapter reading

- **Functional Apps**
  - Not content-specific
  - Chat, Video, Discussion boards

- **Dynamic Content**
  - Interactive Assignments
  - Assessments, Quizzes, games, course specific
How do we

• Guide instructors to “shop” for Apps based upon important instructional and pedagogical criteria?
  • Mobile Friendliness
  • Accessibility
  • The availability of data analytics
  • Privacy principles
  • Security
We Need to Enable Flexibility...
While supporting informed choices

- Can I get data analytics out of this cloud app?
- What is the cloud app’s privacy policy?
- Is it secure?
- Is this tool accessible?
- Have other instructors like me used it in this kind of a class?
- What do they do with student data?
- How does this integrate with my system?
# Share Cloud Tool Reviews

## UCI Instructional Cloud Computing

### Tools & Services

The directory below provides a high-level summary of the tools that have been reviewed or are in progress. We recommend reading through the Rating Descriptions for an explanation of the icons used in the table. We also suggest you read the full review for any tool you are interested in using. If the tool you have in mind has not been reviewed yet, check our Planned Reviews for a list of the tools currently in our queue. Better yet, help us prioritize our list by letting us know which tools you are interested in using or what types of functionality you need.

<table>
<thead>
<tr>
<th>Name</th>
<th>Typical Uses</th>
<th>Functional</th>
<th>Privacy</th>
<th>Student Records</th>
<th>Security</th>
<th>Legal</th>
<th>Contract</th>
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<tbody>
<tr>
<td>Doceri</td>
<td>Conduct your lecture as you interact with the students in the classroom</td>
<td>✔️</td>
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<td></td>
<td>Annotate PowerPoint presentations during your in-class session</td>
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<tr>
<td>Google Apps (UCI)</td>
<td>Have student groups collaboratively create a presentation</td>
<td>✔️</td>
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<td></td>
<td>Collaboratively write a research paper or article for publication</td>
<td>✔️</td>
<td>✔️</td>
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<td>Google Hangouts (UCI)</td>
<td>Conduct online office hours</td>
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<td></td>
<td>Encourage student groups to collaborate synchronously</td>
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<tr>
<td>Kahoot!</td>
<td>Check for understanding during classroom lectures</td>
<td>!</td>
<td>✔️</td>
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<td></td>
<td>Engage the students in a competitive “quiz”</td>
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<td>✔️</td>
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<tr>
<td>Learning Catalytics</td>
<td>Assess student understanding of concepts</td>
<td>✔️</td>
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<td>✔️</td>
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<tr>
<td></td>
<td>Encourage students to work together in groups</td>
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[Read Full Review]
As an Integrated Experience

• Similar to the “Trip Advisor” experience
• We need to facilitate an “App advisor”

Or an **App Catalog**

• This App Catalog, needs to be informative and behave like an modern web experience that enables Point and Click course integration
# App Catalog Info Bar

## Kaltura Application Framework

**Store Categories**
- Featured

**Tags**
- online video platform

**Competencies**
- Student Upload

**Features**
- Video Platform, Web casting

<table>
<thead>
<tr>
<th>Official</th>
<th>Tool Review Status</th>
<th>Support</th>
<th>Accessibility</th>
<th>Privacy</th>
<th>Security</th>
<th>Mobile Friendly</th>
<th>Supports LTI®</th>
<th>Supports Caliper™</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>[iOS] [Android]</td>
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</tr>
</tbody>
</table>

- 4.0
- ★★★★☆
- 1 total
How is UCLA using an App Catalog to help manage its apps?
Simulated Demo:

Apps Plugin for MOODLE

Apps
Powered by CASA
UCLA’s Common Collaborative Learning Environment
Editing A CCLE Course

UCLA CCLE

Romantic Writers

Spring 2015 - ENGL251-1 - LORENZO / MANOQUIS / ROCCHIO / SAKABU / SELSKY / TRANCE

You are viewing a site for a course that is no longer in session. Student access will expire at the end of Week 2 of the subsequent term.

Week 8 - Learning Impact 2016 demo

This Section is going to be demonstrated at Learning Impact 2016.

Moodle Apps Plugin = LTI tool Catalog with Data Driven LMS Student "Opt-in" to unofficial learning tools

Andover Fulcrum
Library
VoiceThread
Online Polls
ChemVantage
The Apps Plugin

UCLACCLE Common Collaboration & Learning Environment

Week 8 - Learning Impact 2016 demo
Romantic Writers

Spring 2015 - ENGL251.1 - LORENZO / MANQUIS / ROCCHIO / SAKAKI
You are viewing a site for a course that is no longer in session.

Learning Impact 2016 Demo
Apps Plugin = LTI tool Catalog with data driven LMS Student "opt-in"
for unofficial Cloud tools

(Private Course Material)

+ Andover Fulcrum
+ Library
+ VoiceThread
+ Online Polls
+ ChemVantage

ACTIVITIES

- Apps
- Assignment
- Attendance
- Blackboard Collaborate
- Certificate
- Chat
- Choice
- Data
- External tool
- Feedback
- Forum
- Glossary
- HotPot
- Kaltura Media
- Assignment
- Lesson

Add | Cancel
Find, Review, & Add App
NGDLE Plug & Play via CASA

UCLA CCLE Common Collaboration & Learning Environment

Romantic Writers

Spring 2016 - ENGL251-1 - LORENZO / MANIQUIS / ROCCHIO / SAKABU / SELSKY / TRANCE

You are viewing a site for a course that is no longer in session. Student access will expire at the end of Week 2 of the subsequent term.

Week 8 - Learning Impact 2016 demo

This Section is going to be demonstrated at Learning Impact 2016.

Learning Impact 2016 Demo:

Apps Plugin = LTI tool Catalog with
Data Driven LMS Student "Opt-in"
for unofficial Cloud tools

Andover Fulcrum - unofficial Tool
Library
VoiceThread
Online Polls
ChemVantage
Kaltura Application Framework
Launches Official Tools
Unofficial Tools?

• Why would you have them in your catalog?
• What does doing that give you?
  • Ability to provide “opt-in”
  • Ability to deliver privacy options in the cloud
  • Tracking of how many courses are using the tool
Deliver opt-in Privacy in the Cloud

- Unofficial Tools require an “Opt-In” from Students

Privacy Waiver for Andover Fulcrum

Before you may continue you must agree to the following statements.

- I understand that by providing personal and academic information on this web site I am providing this information to third parties not affiliated with this institution.
- By providing personal or academic information I understand that I am publicly acknowledging my status as a student and my association with this institution.
- By providing personal or academic information on this web site I understand that I am waiving my rights to privacy.

I agree  I disagree (Please contact your instructor)

(For more information go to http://www2.ed.gov/policy/gen/guid/fpc/policy/ferpa/index.html)
CASA opt-in – FERPA waiver

- Allow Students to Opt-in
- Future:
  - Allow students to opt-in with an Alias
  - Allow students to pass a preference on how they would like to consume the tool/content (say with Zoom text...)

Privacy Waiver for Andover Fulcrum

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(For more information go to http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html)
CASA on Rails Review data

The Matrix App - Unofficial

**Tags**
- media

**Competencies**
- Uploading, Self - serve

**Features**
- video platform, web casting

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</tbody>
</table>

**Info Bar Status**

- ☺ ☑️ Recommended for use
- ☾ ❌ Use with caution
- ☿ ❌ Not recommended
- ☿ ☛ In progress
How do we share this meta data across Higher Ed?

We can use **CASA** to “peer” with other App Catalogs!

**CASA** (Community App Sharing Architecture) is an IMS Global Standard to share Cloud/Web/Mobile app meta data.
What is CASA?

CASA stands for ‘Community App Sharing Architecture’ and it is an IMS Global Standard to share Cloud/Web/Mobile app meta data.
CASA the Standard allows HE to

• Share Homegrown tools
• Share Cloud Tool Reviews & Meta Data about:
  • Privacy
  • Accessibility
  • Security
  • Licensing
  • LTI Versions
  • Caliper Metric Profile Streams
Goals in the UC

• Share Cloud Reviews within UC system
• Share Homegrown Tools with each other
• Share Configuration of Tools
• Instruct Tools on LRS Endpoint once
• Deliver opt-in Privacy in the Cloud
# Accessibility Reviews

## Accessibility

<table>
<thead>
<tr>
<th><strong>Accessibility Policy URL</strong> (?)</th>
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**WCAG 2.0 Guideline Adherence**

In this section, the WCAG 2.0 Guideline Success Criteria that the app meets can be optionally selected for the app. Each requirement also allows a conforming alternate version and a way to access a conforming alternate version.

1. **Text Alternatives**
   - 1.1.1 - Non-text Content – Level A
   - 1.1-conforming-alternate-version

2. **Time-Based Media**
   - 1.2.1 - Audio-only and Video-only – Level A
   - 1.2.2 - Captions (Prerecorded) – Level A
   - 1.2.3 - Audio Description or Media Alternative (Prerecorded) – Level A
   - 1.2.4 - Captions (Live) – Level AA

3. **Adaptable**
   - 1.3.1 - Info and Relationships – Level A
   - 1.3.2 - Meaningful Sequence – Level A
   - 1.3.3 - Sensory Characteristics – Level A
   - 1.3-conforming-alternate-version

4. **Distinguishable**
   - 1.4.1 - Use of Color – Level A
   - 1.4.2 - Audio Control – Level A
   - 1.4.3 - Contrast (Minimum) – Level AA
   - 1.4.4 - Resize Text – Level AA
Links

- http://imsglobal.github.io/casa/learn/tutorial/publish/


- CASA Mailing list link: http://www.imsglobal.org/casa/

UCLA

CASA on Rails (available FREE – AGPL):
• @ Github: https://github.com/ucla/casa-on-rails
• CHEF: https://github.com/ucla/chef-casa-on-rails-cookbook
Questions?

Feel free to drop us a note @

– Rose Rocchio: rrocchio@ucla.edu
– Nick Thompson: nthompson@oid.ucla.edu
– Rex Lorenzo: rex@oid.ucla.edu
Appendix
Protect Data going into the Cloud & Map it Back to students in the LMS
CASA Standard Roadmap

- LTI Attribute Validation
- Accessibility Attribute Validation
- Accessibility Review Sharing
- CASA Instance Conformance Test
- Global CASA Registry
- Caliper Attribute Validation
Share Tool Configurations

LTI launch endpoint
https://staging.onlinepoll.ucla.edu/auth/lti/launch

LTI launch parameters
oauth_version = 1.0
oauth_nonce = 08a1938d8a4f14780995aafa1dc2466b
oauth_timestamp = 1463764266
oauth_consumer_key = demo
resource_link_title = Online Polls (debugging enabled)
resource_link_description =
user_id = 8504
lis_person_sourcedid = 202734107
roles = Instructor
context_id = 2195
context_label = 15S-ENGL251-1
context_title = Romantic Writers
context_type = CourseSection
lis_course_section_sourcedid =
lis_result_sourcedid = {"data": {"instanceid": "42", "userid": "8504", "typeid": null, "launchid": "1984124592"}, "hash": "73933365801F90266554A9C627B488D8"
lis_person_name_given = ROSEMARY
lis_person_name_family = ROCCHIO
lis_person_name_full = ROSEMARY ROCCHIO
ext_username = rocchio@ucla.edu
lis_person_contact_email_primary = rocchio@oit.ucla.edu
resource_link_id = 42
launch_domain = en\_us
ext_lms = moodle-2
tool_consumer_info_product_family_code = moodle
tool_consumer_info_version = 2014051214
oauth_callback = about:blank
lti_version = LTI-1p0
lti_message_type = basic-casa-launch-request
tool_consumer_instance_guid = test.ccele.ucla.edu
tool_consumer_instance_name = CCLE TEST
custom_event_store_url = http://example.com/Lrs
custom_event_store_api_key = 123456789
custom_sso_type = Shibboleth
custom_sso_idp_url = http://example.com/idp
launch_document_target = window
auth_signature_method = HMAC-SHA1
auth_signature = lpxSK+a/cSyXAx7pQ4s2kco31ds=

Supports LTI

Set As Default Config (?)

Launch URL (?)
http://example.com

Configuration URL (?)

Registration URL (?)

Version (?)
1.0

OAuth Key (?)
test

OAuth Secret (?)
test

LIS Outcomes (?)
No

Launch Params (?)

resource_link_title=LTI Example
&resource_link_description=LTI Example Description
&lis_person_name_given=$Person.name.given
&lis_person_name_family=$Person.name.family
&roles=$Membership.status
&context_id=$Membership.collectionSourcedId
Configure LRS Endpoint in 1 place

Edit LTI Consumer

Name
CCLE Test

Key
ccle-test

Secret
8a6kvu26z5

Event Store URL
http://example.com/lrs

Event Store API Key
123456789

SSO Type
Shibboleth

SSO Identity Provider URL
http://example.com/idp

Save Consumer  Back without Saving