

# Consortial Hyku for Open Resources

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Consortia

Hyku

OER

OER  
Consortia  
Hyku

# **Open Educational Resources (OER)**

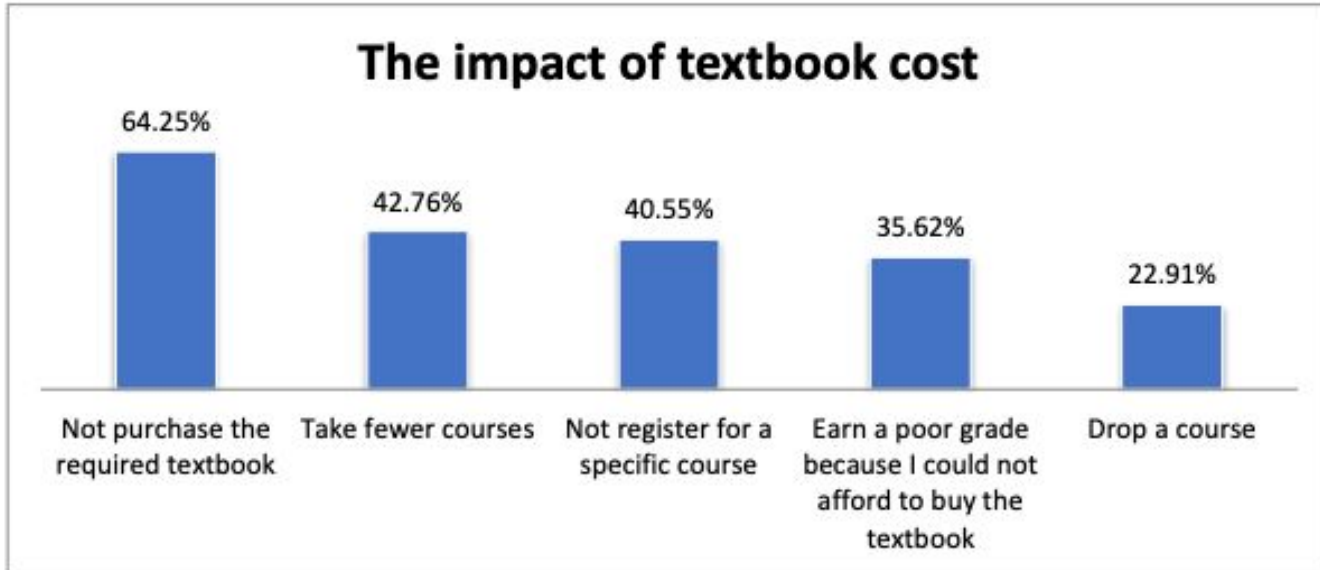
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# Fun Fact: College is Expensive

	Public two-year (in-district)	Public four-year (in-state)	Public four-year (out-of-state)	Private four-year
Tuition	\$3,570	\$9,970	\$25,620	\$34,740
Room and board	\$8,400	\$10,800	\$10,800	\$12,210
Books and supplies	\$1,420	\$1,250	\$1,250	\$1,220
Transportation	\$1,780	\$1,170	\$1,170	\$1,030
Other expenses	\$2,410	\$2,100	\$2,100	\$1,700
<b>Total cost</b>	<b>\$17,580</b>	<b>\$25,290</b>	<b>\$40,940</b>	<b>\$50,900</b>

Source: Florida Virtual Campus, 2018 Student Textbook and Course Materials Survey

# Textbooks Affect Student Learning



Source: Florida Virtual Campus, 2018 Student Textbook and Course Materials Survey

# OER Community

OER = Open (openly licensed) Educational Resource

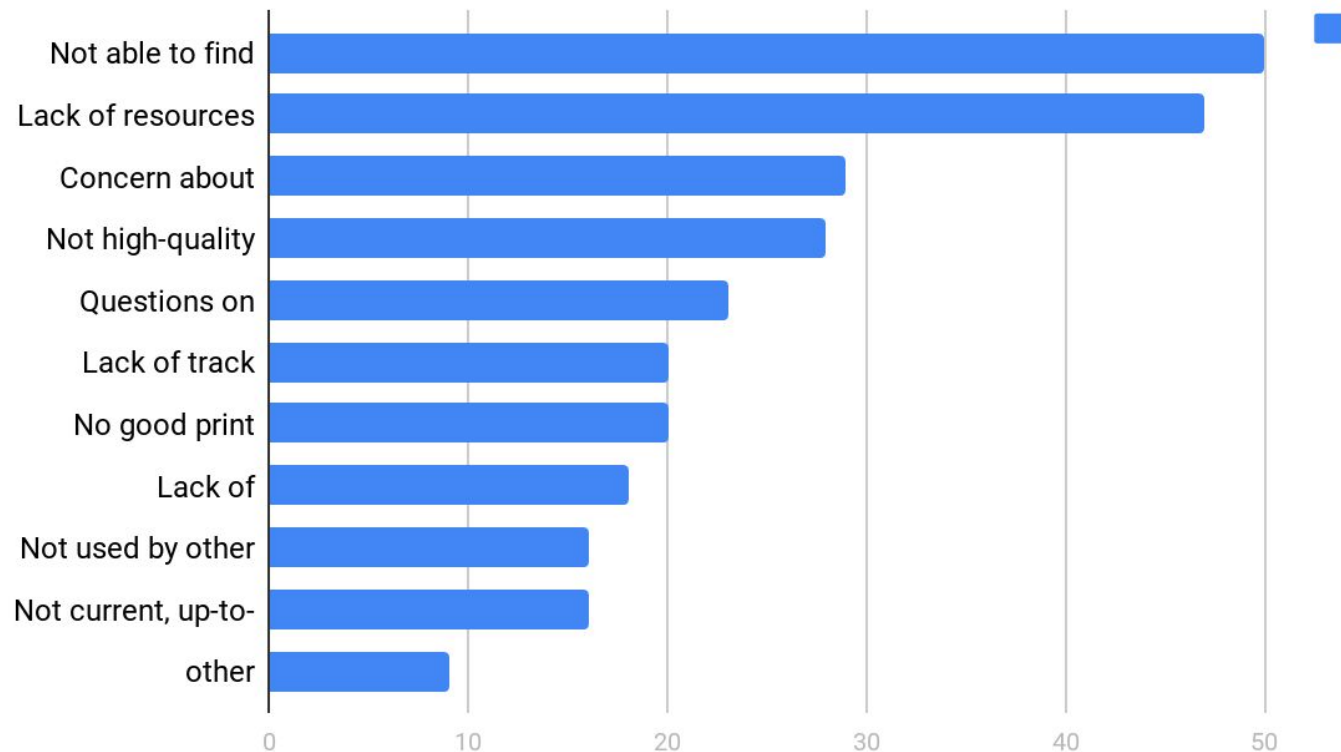
- Textbooks
- Quizzes and other assessments
- Classroom activities
- Complete online courses

Open license = free to use, adapt, and remix  
(in some cases)



## Why not OER?

### Barriers to Adoption of OER 2016-2017



Source: Opening the Textbook: Educational Resources in U.S. Higher Education, 2017



# Gaps in OER Repository Support

- Publishing and peer review workflows
- Remix and adaptation support
- Post-publication review and rating
- Support for interactive objects like quizzes and courses

Vendor hosted software isn't flexible enough

Support isn't built into Open Source options

# Consortia

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## Consortia Solve Problems

Resource Sharing  
+ Purchasing  
+ Infrastructure

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PALCI

# Need for a Consortial IR

- Solution for small-sized colleges
- Sustainable/controllable cost structure
- Multi-tenant/individual branding and theming
- Collaborative management
- Improvable, scalable, and customizable to support new and emerging needs

# PALs (PALCI/PALNI) working together



- HykuDirect Grant
  - Partner with DPLA, Stanford, DuraSpace (2017)
- CC-IR (Collaborative Consortial Institutional Repository) Phase 1 Pilot
  - 2018–2019
  - Stand-up Hyku and test basic features/functionality for consortial administration
  - Work with Notch8 to provide development and pilot hosting
- IR Task Force
  - Produced Vision Document and White paper

The logo consists of a stylized graphic on the left made of colored rectangles: a green square, a blue square, a cyan square, a blue horizontal bar, and a green-outlined rectangle divided into three sections. To the right of this graphic, the word "COMMONS" is written in a large, bold, blue sans-serif font, and the word "ARCHIVE" is written below it in a smaller, blue sans-serif font.

# COMMONS ARCHIVE

amanda-test-2.commons-  
archive.org

[amanda-test-2.commons-  
archive.org](https://amanda-test-2.commons-archive.org)

amanda-test.commons-  
archive.org

[amanda-test.commons-  
archive.org](https://amanda-test.commons-archive.org)

ambs.commons-  
archive.org

[ambs.commons-  
archive.org](https://ambs.commons-archive.org)

bl.commons-  
archive.org

Search Commons Archive

Enter search terms

Go

© Share Your Work

[Terms of Use](#)

Featured Works

Recently Uploaded

No works have been featured

Explore Collections

Featured Researcher

[View all collections](#)

**Hyku**

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# Hyku to the resku?

IMLS funded, 18-month grant to build a consortia-managed Hyku implementation as “Phase 2”:

*“Scaling Up a Collaborative Consortial Institutional Repository”*

- Multi-tenant installation and management
  - Roles/permissions
  - Shared workflows
  - Theme/brand templates
- Cross-institution searching
- DOI Services
- Two new worktypes
  - ETD & OER
- Business model



## Why Hyku?

open source

multi-tenant



hyku

sustainable

customizable

# Hyku Worktypes

Files + Metadata + Relationships<sub>(workflows)</sub>



# OER Worktype Development

## Environmental Scan

- OER Commons
- Open Textbook Network
- SUNY OASIS & Open Textbooks

## Worktype basics

- Review with state-based groups of OER experts
- Review from external experts

Development of state project to give grants for faculty OER adoption and creation

# OER Worktype: Files

Activity/lab

Assessments (tests, quizzes, etc.)

Case studies

Diagrams/illustrations/images

Homework/assignment

Lecture

Lecture notes

Student guide

Supplemental audio/video

Syllabus

Textbook

Tutorials

Audio

Still Image

Moving Image

Video

Text

...or a combination of these

>> OER worktype will support multiple digital file types with some specific features



# OER Worktype: Metadata



Metadata Application Profile influenced by OER Commons  
(<https://www.oercommons.org/>)

- Descriptive metadata primarily from Qualified Dublin Core
- Specific controlled vocabularies enforced
- Education specific metadata from LRMI/Schema.org
- Few locally defined properties

# OER Worktype: Metadata



Accessibility is a key factor

- Accessible OER are used more and impact student success more

>> The OER worktype will include metadata about accessibility features

# OER Worktype: Metadata



Highly inter-related material

- A quiz specific to a textbook chapter
- An adaptation of a resource into another language
- A student guide related to a course syllabus
- A supplemental video related to an assignment
- ...

The availability of ancillary materials play a large part in faculty decisions to use OER

>> The OER Worktype will have enhanced **metadata** relationships between **objects**.



# OER Worktype: Relationships/Workflow



Typical Proxy workflows already in Hyku

- Faculty member has a work to submit...
  - Scenario 1
    - Faculty member creates account and uploads
    - Faculty member assigns metadata
  - Scenario 2
    - Library uploads material as a proxy
  - Scenario 3
    - Faculty member creates account and uploads
    - Faculty member creates some initial metadata
    - Library assigns/updates metadata

## OER Worktype?



- Informal “peer review” continues after publication
  - Ratings, reviews, and course adoptions added to content through user interface
  - Highly influential in faculty decision making

>> The OER collection will have front-end features to support rating and review. It will also feature links between related items.

# Project schedule

OER worktype: in progress!

Design and Development of other features: Sep 19 - July 20

- Multi-tenant workflows
- Individual theming and branding

Pilot: July 20 - Sep 20

Business and Collaboration model development: Sep 20 - Nov 20

Closeout: Dec 20.

# Plea for more collaboration

Open Source and OER communities would make great partners

- Commitment to and understanding of “open”
  - Same puppy/beer metaphors!
- Desire to change the playing field for libraries and education
- Complementary skill sets
- Opportunity to have a huge impact
- Technology or advocacy/education won't solve problems in isolation



# Putting my money where my mouth is...

YouTube Studio interface showing channel uploads and video list. The video list includes:

- LS 575, SP 19: Week Thirteen (15:38)
- LS 575, SP 19: Week Twelve (29:31)
- LS 575, SP 19: Week Ten (29:10)
- LS 575, SP 19: Week Nine (27:20)
- LS 575, SP 19: Week Eight (29:11)
- LS 575, SP 19: Week Seven (31:27)
- LS 575, SP 19: Week Six (31:30)
- LS 575, SP 19: Week Five (30:49)
- LS 575, SP 19: Week Five (31:30)

Metadata: What Is It?

"Data about data"

- Identifying and descriptive information about a piece of content

Metadata Paperback – June 15, 2008  
by Michael Lesk, John D. Kuhl (Author), John D. Kuhl (Author)  
ISBN-13: 978-1558706367 ISBN-10: 1558706366 Edition: 1st  
Buy New Price: \$80.15 Rent Price: \$46.50  
Buy New from \$80.15 10 Used from \$55.50  
Rent from Amazon Price New from Used from  
Paperback \$46.50 \$60.15 \$60.15 \$59.99

NARAs definition uses the word issues that others would consider for digitization. Most digitization enhancement of materials.

Digitization purely for access v remember from the reading by with mass digitization being the selection usually isn't involved usually involved, i.e. we are go scan the library).

Access scanning would leave the quality must be good enough absolutely every need. The idea scan will meet 80% of needs a when a different quality is needed probably takes a similar amount So it's important to remember talking necessarily about a huge texts to make them machine-readable. This was developed but had big impacts on it. HTTP is the protocol for sharing in the world wide web possible.

This is also the beginning of development of object formats PDF – those are all standards for different types of digital of video, and documents).

I thought we'd

I think it is important because it helps today

The history of let's start with digital libraries

So starting with texts particularly

In this scenario, the sound is **analog** – meaning is has a wave or a pulse. That's what analog means in this sense continually changing -- like the channel you see on the view of the groove in a record.

A **digital** medium is composed of discrete signals, either we think of these as bits (the 1s and 0s of binary code), but it is rendered in discrete units. Like a pointillist painting sense.

CDs or DVDs for example, are digital even though they are physical and not synonyms (although they are after CDs and DVDs record data in optical "pits" which are spots are not – reflective, like you can see in the image on the computer whether or not the spot is reflective or not. So that data on the disc is digital, expressed on a physical medium; in order to render them usable on a computer they merely need to be translated by the computer.

The oft-repeated definition of metadata is "data about data"

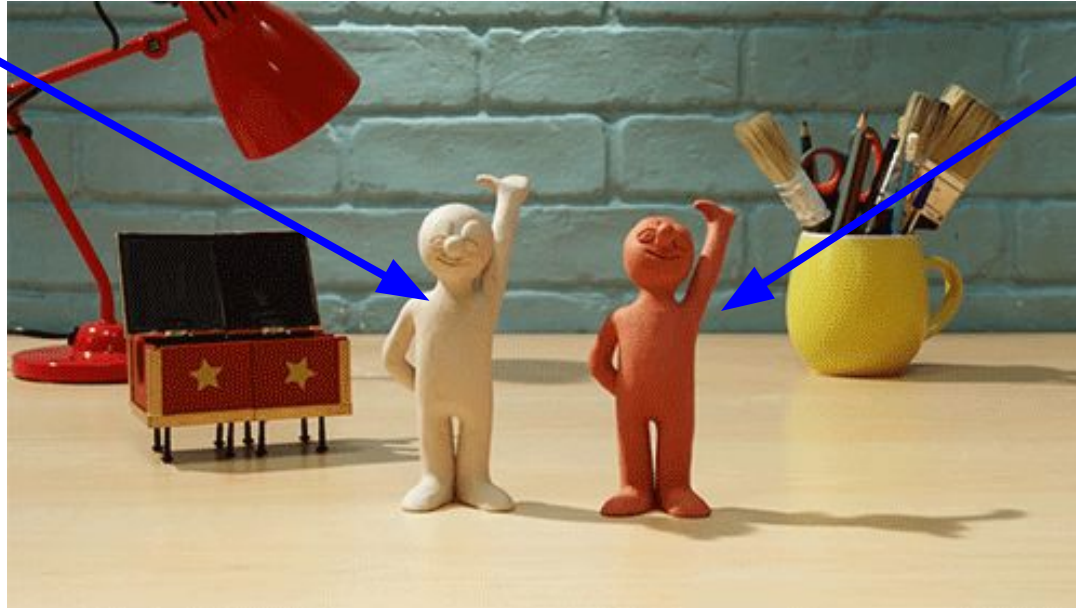
I've never thought that would make a lot of sense to someone who didn't already know what it is.

So then what is metadata: well, it's identifying and descriptive information about a piece of content. So the traditional bibliographic record, in MARC, is metadata, and this record from Netflix, or this one from Amazon

Public	Sep 17, 2019	Published	13	0	-
Public	Sep 17, 2019		15	0	-

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Thank you!