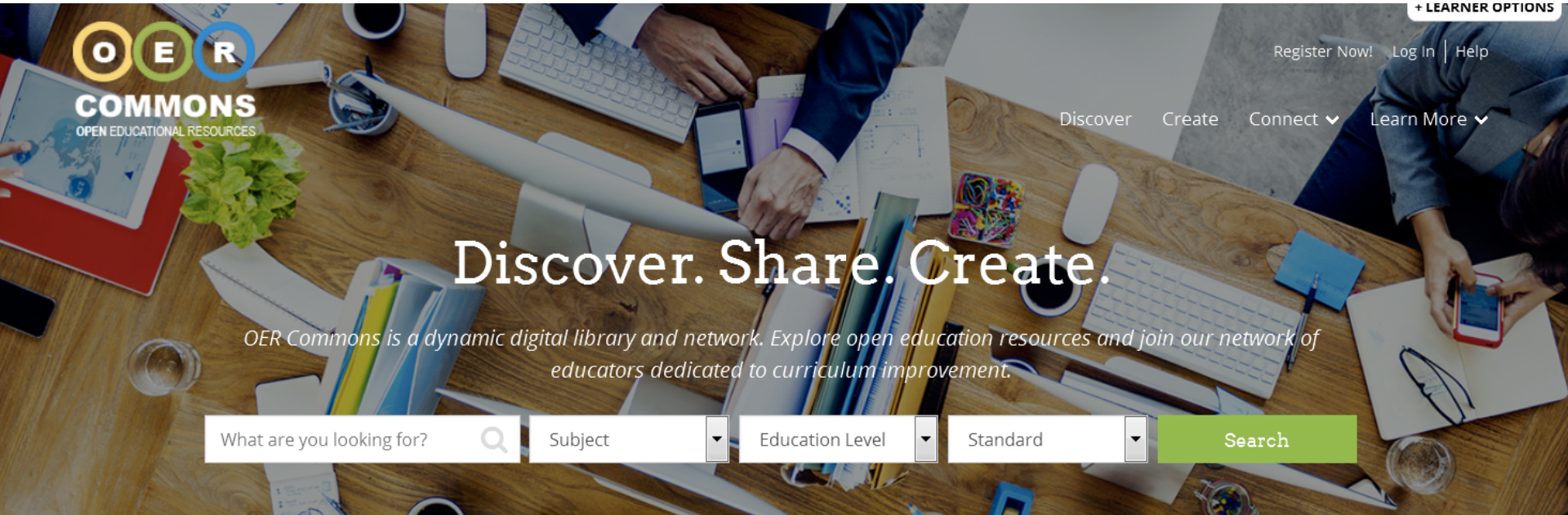
Faculty Fellowship Kickoff Meeting

K-12 Librarian Education and Open Education Practice

ISKME and GSC, IMLS Project Year 2

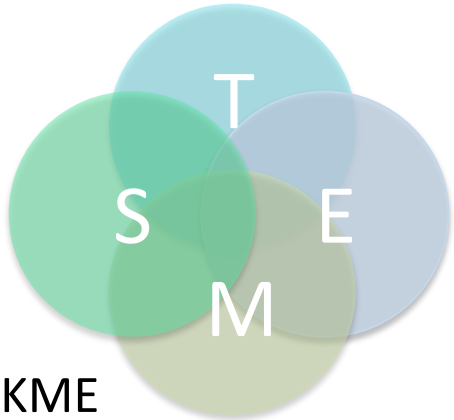
May 18, 2016



School Librarians Advancing STEM Learning

Introductions: Project Team

- Amee Godwin, Director, Innovation, ISKME
- Megan Simmons, Education Lead, ISKME
- Letha Goger, Education & Library Consultant
- Cynthia Jimes , Director, Research & Learning, ISKME



Open Educational Resources (OER)

Answering global and local demands for…

- Finding high quality learning resources that are free and openly available
- State and local agency decision making in adopting content and meeting learning standards
- Enhancing educator practice with deeper engagement with resources
- Ensuring resources are continually improved through use, reuse, and evaluation

Project Platform/Toolset

- OER Commons is a digital public library of OER *and* a collaboration environment to support curriculum improvement
- Infrastructure leverages best practices in library science and interoperability
- Focused on improving the practice of continuous learning, collaboration, and change in the education sector

School Librarians Advancing STEM Learning

An IMLS-Supported Project

A project to elevate and expand the role of school librarians by **building their capacity as instructional leaders and partners to advance STEM learning**

on Twitter
#SLASL
@iskme
@oercommons

K-12 Librarians as Partners in Practice

SLASL Project Goals

- Expand traditional roles of librarians and educators across discipline
- Understand and experience potential of open educational resources (OER) and shared digital library
- Build community of practice around inquiry, instructional shifts, and advancing school librarianship
- Focus on inquiry and literacy across subjects and across STEM
- Model collaboration and leadership

Exploring a Text-Based Inquiry Lesson

OER COMMONS
OPEN EDUCATIONAL RESOURCES

+ LEARNER OPTIONS

Search
Use Advanced Search

Hello, Letha Goger | Logout | Help

Discover / Create / Connect / Learn More

Edit | Delete | Remix This Resource | Export To Google Docs | Download (Teaching Bundle) | Download (PDF) | Download (Epub) | Download (SCORM Package)

Summary | Table of Contents

This lesson on fingerprinting takes a unique approach to a standard topic in Forensic Science. While students will learn the basics of fingerprinting, how to lift a print and learn unique characteristics of fingerprints, they will become aware of the flaws of fingerprinting. By investigating the case of the Madrid Spain Bombing students will discover a match is not always accurate.

Version History

Cite this work

Forensics Fingerprinting Lesson Grades 9-12

Created Jan 28, 2016 by , Joanna Schimizzi, Lynne Jackson, Kerri Simpson

Lesson Abstract

Students will read an article about a man who is falsely arrested for the Madrid Spain bombing in 2004 based upon fingerprint evidence. He was later cleared of this crime when it was discovered that the FBI examiner mistakenly matched the print to him. Students will then go on to learn the science behind fingerprint matching and how forensic evidence can be flawed. This lesson is facilitated by teacher guided inquiry which will allow students to develop their own conclusions and develop an argument derived from the information they obtain through lesson activities.

Lesson Themes & Essential Questions

Lesson Themes

Literacy instruction is balanced with traditional science activities and lessons. The students will read the anchor text, watch a news clip supporting that text, and the following days will be spent on Fingerprint Labs and Activities. The combination of literacy and "traditional science lab activities" will keep the students engaged in the overall unit. This will help to ensure that the stamina to read and write will be offset by practical lab activities. Students will also learn to question the validity of scientific methods for interpreting evidence.

Essential Questions

Why is evidence important in criminal justice?

Are fingerprints enough forensic evidence for conviction?

What are the limitations of fingerprint analysis?

Can a fingerprint be used for conviction of a crime?

Supporting Questions

What types of evidence are there?

What are the flaws of certain types of evidence or collection and interpretation of evidence?

Should a person be convicted with only one type of evidence linking them to the crime?

Standards Addressed

STEM Inquiry Standards

HS-FS-F-1 Understand the characteristics of fingerprints that allow them be systematically classified.

(Taken from Charlotte Mecklenburg Forensics Standards)

Clarifying Objectives:

View Evaluations / Comments / All

Ryanne Dennis *on Oct 30, 01:35pm* Link | Reply
I can see piloting this lesson in a biology class and using the findings (and anticipated student excitement and interest) as a basis for an entire course on forensics. I'm sure that this lesson would go over well with any level of student simply for the fact that the topic is so interesting. Great idea!

Molly Horn *on Oct 29, 12:13pm* Link | Reply
I love that this lesson has a basis in reality! Students tend to get more into the problem solving if it has a relationship to something real. They can make the connection between what happened to the man who was falsely accused to times in their lives when they got into trouble for something they may not have done.

Madeleine Wright *on Oct 21, 08:03am* Link | Reply
This lesson is based on a true event where a man is falsely accused due to a fingerprint analysis error. Students will be hooked by the use of a real life event to investigate the science behind fingerprinting. The lesson uses an excellent mix of reading, video, and hands on activities.
Madeleine wright

Lydia Campos *on Oct 14, 01:50pm* Link | Reply
The two things that stood out to me about this lesson are :
1.This lesson plan incorporates a differentiated instruction in the way students can answers questions by working/discussing fingerprints in a small group or pair.
2. This lesson is a great introduction to all the elements that go into identifying fingerprints.

What I like about this lesson is:
) Students are able to integrate knowledge from a variety of subjects in this project. Students who are interested in law, anatomy and physiology or

Kim Kerns *on Oct 14, 01:44pm* Link | Reply
I never realized how complex fingerprinting is! I like that it brings to your attention fingerprinting mistakes that were made by multiple sources. Fingerprinting Labs are great and this is a very detailed and lengthy lesson plan! Great fun!

Sue Heimberg *on Oct 08, 06:20pm* Link | Reply
This is a high-interest topic that must appeal to most students. It offers both real-world situations to investigate and hands-on activities for experiential learning. The finger printing labs that are featured in 2 of the links are comprehensive, clear, and simple to carry out in any classroom.

Overview of the Faculty Fellowship

- Participate in virtual project meetings and training in using OER Commons, IMLS Project Hub, Module Builder
- Author and publish one courseware module in OER Commons relevant for LMS certification and that advances librarianship through open educational practice
- Share your curriculum to gather feedback and refine; publish and share your refined version
- Identify a small set of resources from OER Commons, for example, related to your module and/or to instructional leadership around literacy or inquiry-based learning

Timeline for Faculty Fellowship

Year Two Timeline	
May	Introductory Webinar
June	Share topic and module ideas; reflect on how ideas fit LMS course needs and project principles
July	Create first-draft Module and check in on progress
August	Present draft Module and offer and receive feedback
September	Refine module based on feedback
October	Publish your refined module by October 24th

Faculty Cohort Introductions

- Share your name and affiliation
- What are area(s) are you currently teaching or working in that are relevant for project?
- What area(s) do you expect to be teaching or contributing to, at Granite State or elsewhere?
- What do you hope to accomplish as a Fellow this year (your individual goals)?

Open Education Practice: Guidelines

DOMAIN of PRACTICE

I. COLLECTION DEVELOPMENT Open Educational Resources	II. TEACHING & LEARNING School-wide Culture of Inquiry
III. LIBRARY ENVIRONMENT & PROGRAMMING Places of Inquiry & Discovery	IV. LEADERSHIP & ADVOCACY Collaborative & Open Practice

Guidelines: http://bit.ly/1TYUfv9

Integrating Open Practice: Reflections on Guidelines

I. COLLECTION DEVELOPMENT

Open Educational Resources

Librarian Candidates practice building and sustaining digital collections that support learning across the curriculum and across school needs through the ability to:

- Understand how open educational resources (OER) support school curriculum and instructional goals;
- Access and use OER collections in a variety of formats and genres, and determine if resources are openly licensed, freely accessible, adaptable, and portable;
- Evaluate OER for their instructional value as outlined in recognized guidelines, such as Achieve's Rubric for Evaluating OER Objects, EQUiP's CCSS Rubrics; and
- Identify and organize online and digital collections of OER for seamless access and use by teachers and students.

Integrating Open Practice: Reflections on Guidelines

II. TEACHING & LEARNING

School-wide Culture of Inquiry

Librarian Candidates practice building and supporting authentic inquiry and effective teaching and learning across the curriculum through the ability to:

- Advance multiple literacies, including Common Core-aligned literacy, STEM-focused literacy, and digital literacy, and support cross-disciplinary inquiry across the curriculum (meta knowledge and skills);
- Provide guidance on the use of open digital resources and technologies that support teaching and learning, in alignment with national frameworks and standards (CCSS, NGSS, AASL, ISTE, C3); and
- Model collaborative instructional practice with peers and foster partnerships across the school.

Integrating Open Practice: Reflections on Guidelines

III. LIBRARY ENVIRONMENT & PROGRAMMING

Places of Discovery & Inquiry

Librarian Candidates practice building library environments (physical, digital, experiential) that advance open education practice in the school culture through the ability to:

- Build library environments comprised of both physical and digital resources, tools, and spaces, designed to provide a local connection to a globally connected information landscape;
- Understand and apply principles of open learning and maker culture toward building a library environment that provides non-cognitive learning experiences and discovery.

Integrating Open Practice: Reflections on Guidelines

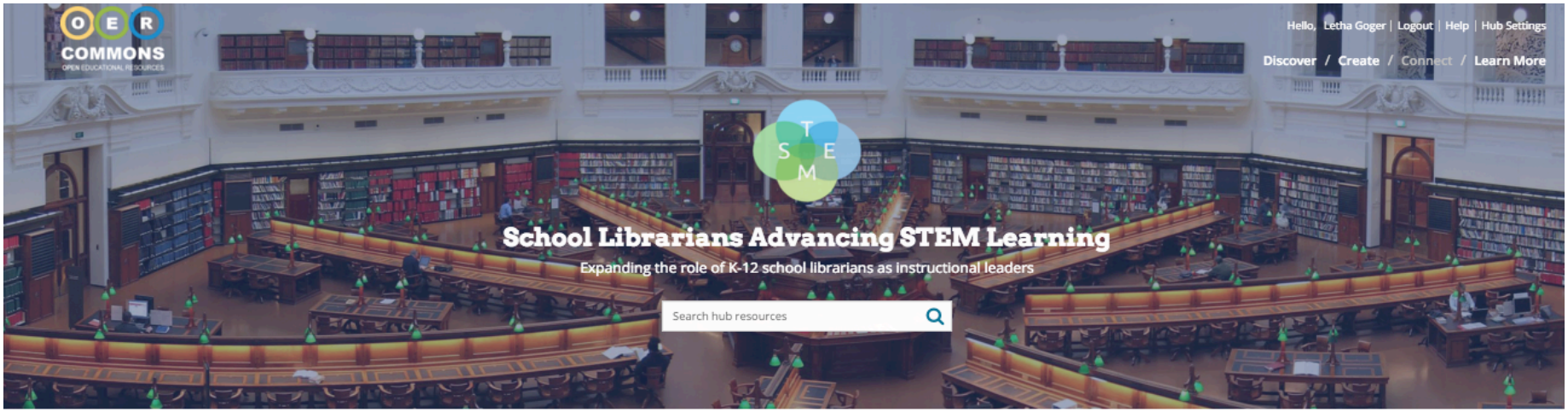
IV. LEADERSHIP & ADVOCACY

Building Collaborative & Open Practice

Librarian Candidates practice professional leadership in the form of thought partnership, dialogue, shared learning and accountability through the ability to:

- Understand, model, and share how open education practice brings a transformative shift from a proprietary and industrial education model to a participatory education model;
- Use action research methods and personal reflection to build their own professional growth plan, to include aspects of open education practice, outreach and advocacy;
- Build a time-bound plan for providing professional development training to peers around open education practice, cross-disciplinary inquiry, and building student literacy across the curriculum with a school department, at a school or district-wide training, or at regional, state or national professional gatherings.

Project Hub on OER Commons (www.oercommons.org/hubs/imls/)



Learn About the Project

The goal is to support professional learning cohorts to elevate and expand the role of school librarians, and transform their capacities as instructional leaders, who support advancements in STEM learning.

Participants will collaboratively create and review curriculum using ISKME's OER Commons library of freely available resources. The resources developed will support student critical thinking, analysis, and problem solving across STEM disciplines as well as close reading of texts and math integration, in alignment with the Common Core State Standards (CCSS) and state and national science standards.

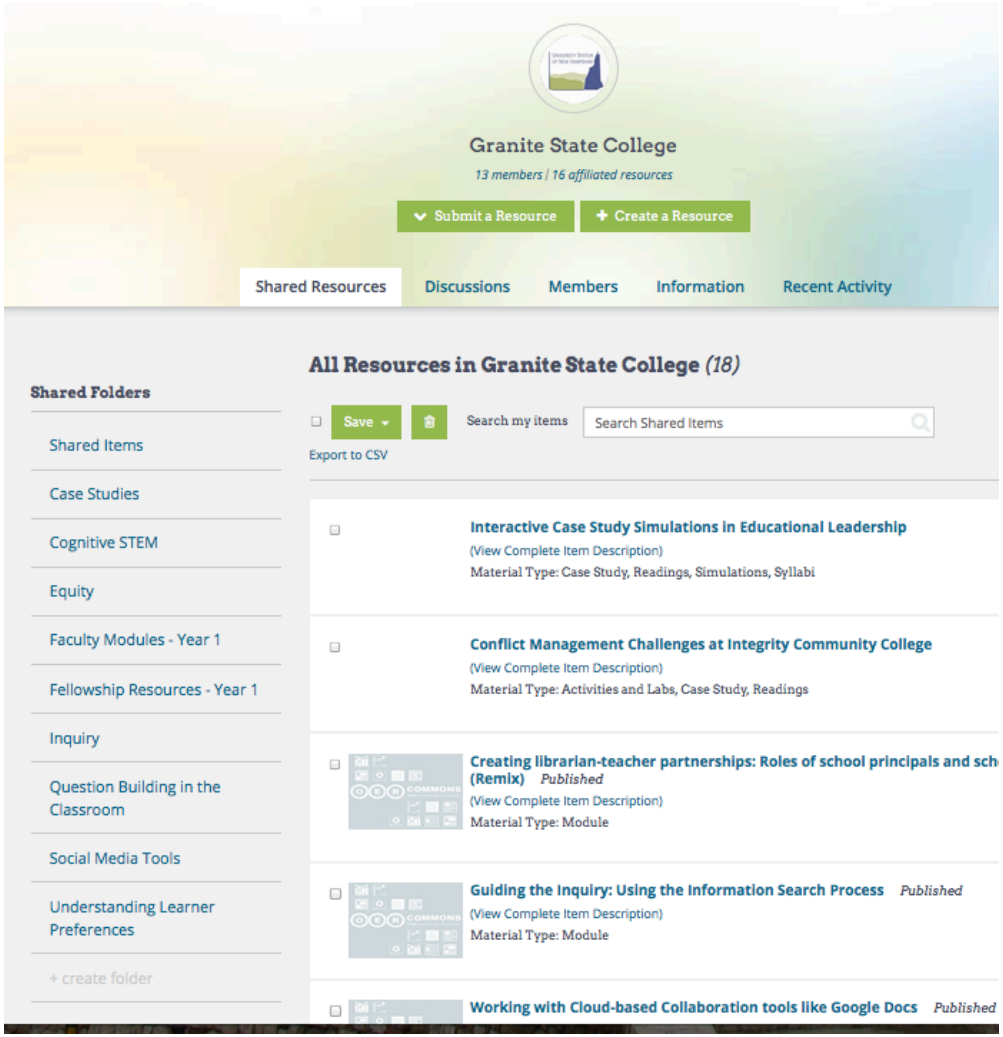
The project is led by ISKME, in partnership with the New Hampshire Department of Education, Granite State College, and New Hampshire's Institutions of Higher Education (IHE) Network. The project is supported by the Institute of Museum and Library Services. The institute of Museum and Library Services (www.imls.gov) is the primary source of support for the nation's 123,000 libraries and 35,000 museums.

Twitter Feed

Groups

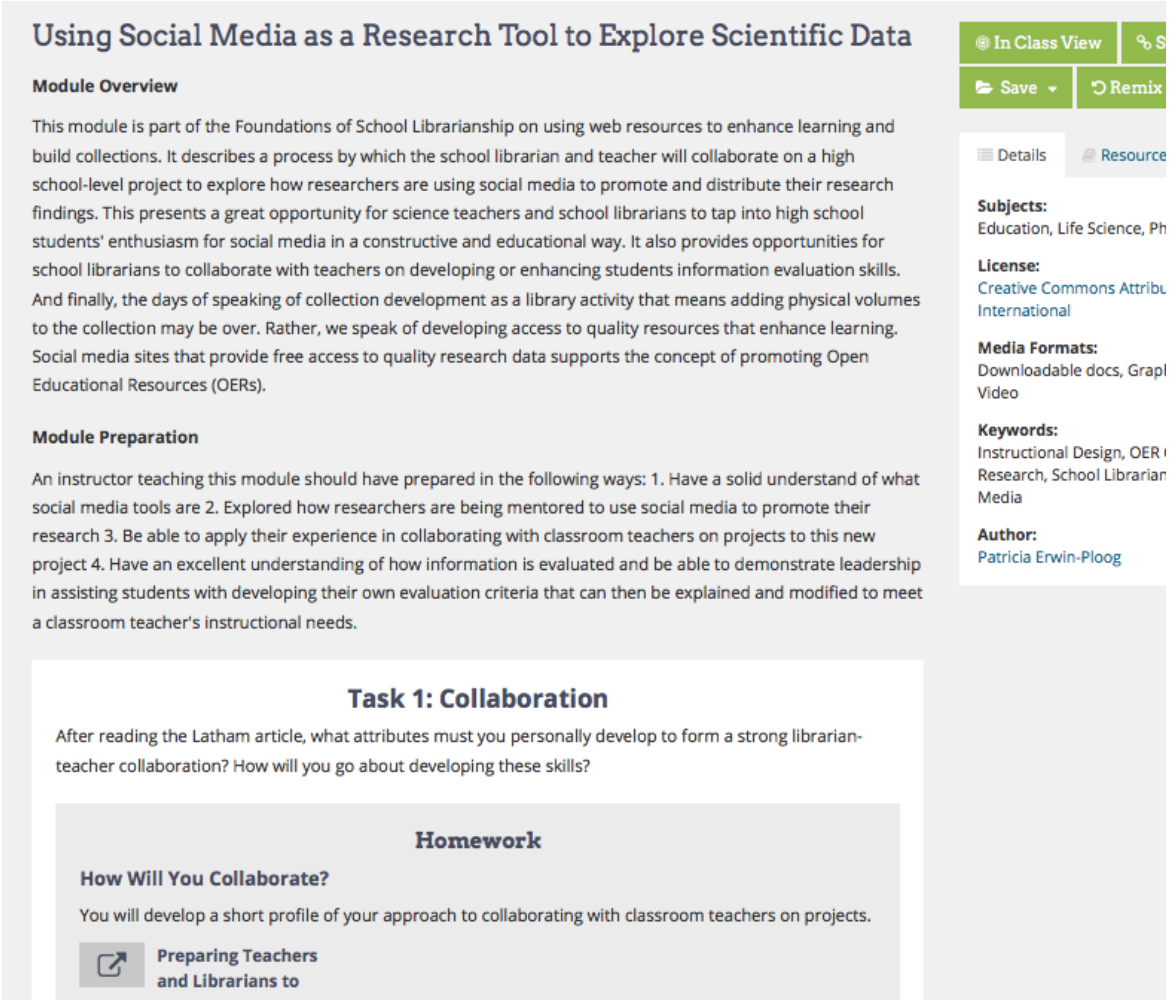
OER Commons Toolset and Workflow

Organize Resources with Groups and Collaboration Tools



OER Commons Module Builder

Authoring Course Modules



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Megan Simmons megan@iskme.org

Cynthia Jimes cynthia@iskme.org

23rd Annual NMC Summer Conference

The Global Ed Tech Forum for Higher Ed, Museums, Libraries, and Schools

June 14-16, 2016 — Rochester, New York

#GoOpen #OER #SLASL
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