

Gala is an open platform for collaborative authoring, revising, and sharing interactive learning modules and case studies.



The Gala team is based out of the University of Michigan School for Environment and Sustainability



Core team Members:



Rebecca Hardin Principle Investigator (UM-SEAS Faculty)



Carly Hagen Developer

n Patrick Killian Quantitative Research

(Grad Students)



Deepika Ganesh Qualitative Research



Ed Waisanen Platform and Program Manager (Staff)

We are focused on providing a tool that is:

Open

- Minimal barriers to use
- Open licensing
- Accessible
- Transparent

Delightful

- Fun and simple to create and share
- Inspires a community of teachers, authors, and learners

Collaborative

- Quick prototyping and updating
- Easy to co-author and review

Gala makes it easy for anyone to create a learning module

Make an account and start authoring in seconds.



Collaborate with multiple authors in real time with an intuitive, dynamic, editor.



Authors can integrate multimedia and data tools

Embed images, audio, video and more. Choose from a growing list of embeddable content, visualizations, and tools.

> <u>Customize</u> previews of resources from anywhere on the web, with thumbnails, captions and pull quotes, or auto-generate a preview card à la Twitter or Facebook.

> > Easily add accessible captions for screen readers.



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'The news breaks a story and you get water': Family with poisoned well retains attorney

"I'm just really upset that people can know about something and harm children. I don't understand it "

mlive.com >

Publish and share modules as widely as you like



Link directly to your published module from anywhere. With one click, generate offline *.pdf* modules.



Contribute to a growing collection of open educational resources with Creative Commons-licensing. (alternative licensing available for partners)



Gala works responsively across devices, including cell-phones and laptops.



Create versions of modules in multiple languages.

Cree versiones de módulos en varios idiomas.

Share curated collections

Institutional and organizational partners can create branded libraries of modules.



Anyone can customize reading list of modules to share, with optional commentary.



Teach any module from a growing list of open libraries

- → Use or create Gala modules in flipped or conventional classrooms; remote, hybrid, or field learning environments.
- → Deploy across courseware platforms: Create review or discussion groups and invite members with a single link.
- → Add and customize pre- and post-assessments to check reader progress.



1 THREAD cleanups decreased to a mere 8 in 2014. As a result, EPA typically negotiates consent orders with PRPs to study sites and develop cleanup alternatives, subject to EPA I wonder where Ann Arbor would score. @ 131 @ 269 Ø 1:16 A 1 COMMENT For a site to be designated as a Superfund site, the EPA and state agencies first use the Hazard Ranking System (HRS) to calculate a site score (ranging from 0 to 100) based on the actual or potential release of hazardous substances from a site through air, soil, surface water or groundwater. A score of 28.5 places the site on the National Priorities List (NPL), making the site eligible for long-term remedial action (i.e., cleanup) under the Superfund program. The HRS uses a structured analysis approach to scoring sites that assigns numerical values to factors related to risk based on conditions at the site. The factors are grouped into three categories: 1. Likelihood a site has released or has the potential to release hazardous substances into the environment; 2. Characteristics of the waste (e.g. toxicity and waste quantity); 3. People or sensitive environments affected by the release. @ 133 @ 244 \$ 1:22

Gala has been used in a range of teaching contexts

Place-based learning



Place-Based Narratives Detroit River Story Lab (DRSL)

The Detroit River Watershed is one of the nation's most deeply and visibly implicated in the troubling legacy of the carbon economy. The DRSL project is working with Gala to research and amplify stories of the Detroit River, and to make the rich history and current challenges facing the river and adjoining communities more present, palpable, and real. The modules, which are piloted at the University of Michigan and in schools or sites in the Detroit area, focus on themes of Indigenous relationships to water and land and connecting decolonization with decarbonization. are piloted at University of Michigan and in schools or sites in the Detroit area.

Online labs



Enhancing Ecology Learning Online Content for Experiential Learning of Tropical Systems (OCELOTS)

OCELOTS is an international network of tropical ecologists, educators, media specialists, instructional designers, and software developers, exploring best practices in research-based modules for teaching tropical biology and conservation. Funded by a National Science Foundation Grant (RCN-UBE proposal ID: 2120141), members of the network have integrated interactive data applications into cases to create online labs, used video and sound to capture place-based experiences, and pioneered collaborative online "networkshops" to exchange feedback on cases in progress.

Remote Masters Programs

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Sustainability and Development for Global Learners Sustainability and Development MasterTrack™ Certificate

This online masters program focuses on the United Nations' Sustainable Development goals and has students analyze three Gala cases and synthesize their lessons for sustainability and development, before creating their own cases and developing an instructional component for the case of their choosing with a faculty member. This program was created by University of Michigan School for Environment and Sustainability (SEAS) faculty who have gone on to create a new, and more modular curriculum for an in person field of specialization at U-M SEAS on Sustainability and Development.

Student module authorship



Grounded Engagement

Cases in this library have been created in the University of Michigan's Environmental Justice Certificate and Masters Degree programs, by a combination of students, faculty and alumni and other professionals in advocacy, policy and research sectors. Each case addresses an environmental justice topic, from ableism in the environmentalist movement to indigenous rights and resource development.

...and work that bridges research and practice

Collaborative workforce training



Accessible Data Science Tools
Data Learning for Better Drinking Water in
Small Utilities

In partnership with the U-M School of Civil & Environmental Engineering with funding from Public Interest Technology University Network, in collaboration with SEAS professor Kyle Whyte, the City of Ann arbor, the BlueConduit startup, and U-M's Blue Sky Initiative for water sector engagement the team is using Gala to make learning tools for classrooms, communities and workforces facing challenges in the monitoring and improvement of quality drinking water distribution systems. These tools can be shared among utilities in cities like Michigan's Benton Harbor and Flint—and eventually, shared with rural communities and tribal water utilities.

Broader research impact



Learning at the Edge of Applied Research Distributed Solar Energy Harvesting for Carbon-Free Ammonia Synthesis

Funded by the National Science Foundation (EFRI DChem award #2131709), this project aims to provide the scientific and technical foundation for producing fertilizer close to the farm and avoid the enormous greenhouse gas footprint of the industrial Haber-Bosch ammonia synthesis process. As the research group, based at the University of Michigan, works to pioneer the concept of photoenhanced thermal catalysis in the lab, they are also prototyping, piloting, and assessing training modules to convey the innovations to stakeholders, inspire students, and move towards implementation.

Gala is built for rapid prototyping and continuous improvement across networks



Example workflow: 1. Author creates a draft module on Gala.

2. Author solicits feedback from network via feedback workshop and/or asynchronous comments. 3. Updated module is piloted with learners and assessed. Feedback is incorporated back into the module. 4. Module is published in a library and may be updated or adapted as needed.









Flexible workflows for partner organizations and networks

Partners can create their own practices and guidelines for authorship and review, or draw from our growing knowledge base.

1 Introduction & Roadmap

5 Pedatogy & Engatement

6 Diversity, Equity, Inclusion and Justice (DEIJ)

7 Assessment and Evaluation

8 Interactive Data Learning Objectives

10 Creating Custom Interaction

Interactive Data Tools
 Interaction

11 Incorporating Media

14 Evaluating your OCELOTS Module - A Rubric

15 Professional Growth in the

2 Getting Started



OCELOTS: An Invitation to a Participatory Process for Creating Modules in Tropical Biology

A new network, OCELOTS (Online Content for Experiential Learning of Tropical Systems) brings together a diverse community of tropical biology researchers and experts in active-learning pedagogy, interactive data tools, and multimedia content creation. We invite you to join in catalyzing a process that enables researchers in tropical biology to create engaging online modules based on their own research. These

Learning objectives

- · Create an authentic, research-based module that incorporates best practices in pedagogy and the Four-Dimensional Ecology Education (4DEE) framework
- · Evaluate which components of your module need some extra attention, including media and interactive data tools
- · Collaborate with mentors and/or experts to make the most of the resources available for your module
- · Share feedback on your experience, leading to future improvements in the process



Modules or Libraries can integrate into partner websites and Learning Management Systems

Online Modules

Please register on Gala to access these modules. If you are interested in creating an OCELOTS module that is based on your peer-reviewed research in tropical biology, please contact Ann Russell (arussell@lastate.edu), Gala supports content in many languages - your module does not have to be in English Please note that OCELOTS has a friendly peer-review process, which starts with the author 'deploying' a draft of their module, thus enabling OCELOTS participants to post comments directly on the module. The module author then presents their module draft during a one-hour-long Zoom meeting - the Networkshop - which allows time for discussion and suggestions for improving the module. This participatory process enables authors to improve their modules, and for participants to gain insights about module creation in a congenial, collaborative way intended to grow the community.





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Healing the Scars - Tropical

rainforest carbon cycling





Author Guidelines These Author Guidelines are designed to assist module authors throughout this participatory process of creating a new OCELOTS module or adapting an existing

A long-term field experiment in Costa Rica connects the dots about how carbon cycling traits of species at the whole-plant level translate into global-level effects.

Restaurando Bosques Tropicales This case study of tropical forest restoration in Costa Rica (in Spanish) lets students interpret har graphs use B Shiny to visualize seed rain in different restoration treatments, and learn about social obstacles to restoration

Gala is open source and development ongoing.

We invite contributions from partners and users to:

 $\langle \rangle$ The Gala codebase



Documentation/Guides



Translations of modules and user interface



Third-party tools that extend what modules can do



More about Gala: **about.learngala.com**

Try it yourself: **learngala.com**

Testimonials: https://tinyurl.com/trygala