The World of Open

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Defining “Open”:
Open Educational Resources

- Textbooks
- Courses/Courseware
- Interactive Simulations/labs
- Videos
- Open Source Homework Systems
Technologies for Open Creation
Open Sharing of Information

Open Data
Open Science
Open Source Software
Open Pedagogy
Open Access Publishing

Open Science Notebook
Data World
TODAY'S REVOLUTION BROUGHT TO YOU BY THE LETTERS S C C
Creative Commons

Open License:

• Document that lets people use or modify a work for free.
• Allows copyright owners to set permissions and restrictions on how their works can be used.
• Response to current academic publishing.
5 Rs

• Retain- make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
• Reuse- use the content in a wide range of ways (e.g., in a class, on a website, in a video)
• Revise- adapt, adjust, modify, or alter the content itself (e.g., translate into another language)
• Remix- combine the original or revised content with other material to create something new (e.g., a mashup)
• Redistribute- the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy to a friend)
Benefits of Open
1. Supporting Student Learning

- Addresses basic needs of students
- Overcoming imposter syndrome
- Ensuring that students read textbooks

OpenStax, Lumen Learning, LibreTexts
2. Giving Instructors Flexibility

- Designing the ideal learning materials for students
3. Guiding Students to CT

- Foster active and critical reflection
- Foster group reflective dialogue
- Develop new learning experiences
What is Open Pedagogy?
• Creative approach to undergraduate education

• Combines creative educational practices and new technologies

• Practiced by hundreds of instructors across the nation

Inquiry based, real life learning (Constructivism)

Learner choice/collaborative learning and student creation of learning content

Critical thinking (Critical Pedagogy)

Facilitate connections across the boundaries of learning experiences
Rejection of the “banking” model of education
Encourage Students to:

2. Learn and demonstrate critical thinking through information creation.
3. Work together and show creativity.
4. Shape the public knowledge commons of which they are a part.
Bloom’s Taxonomy

**REMEMBERING**
Find or remember info
- list, find, name, identify, locate, describe, memorize, define

**UNDERSTANDING**
Understanding & making sense out of info
- interpret, summarize, explain, infer, paraphrase, discuss

**APPLYING**
Use info in a new (but similar) form
- use, diagram, make a chart, draw, apply, solve, calculate

**CREATING**
Use info to create something new
- design, build, plan, construct, produce, devise, invent

**EVALUATING**
Critically examine info & make judgments
- judge, critique, test defend, criticize

**ANALYZING**
Take info apart & explore relationships
- categorize, examine, organize, compare/contrast
Example 1:

Traditional Education:
• Instructor gives students grades based on their marking criteria

Open Pedagogy:
• Instructor asks students to think about what constitutes a good grade, to develop a criteria for marking themselves and explain what grades they deserve at the end of class
Example 2:

Traditional Education:

• Instructor gives students core readings for course

Open Pedagogy:

• Students examine why core readings are core.
• Develop annotated bibliography that explains that role.
• Subsequent classes update the bibliography, adding perspective to the original readings.
• Adding readings they believe are now core and describing why for the next group of students.
Student Motivation:

• “Renewable” as opposed to “disposable” assignments
• Student controlled learning environments
Simple Examples:

**Collaborative Syllabus Design**
Inquiry based critical thinking discussion that is collaborative, and learner driven

**Multiple Choice Questions**
Collaborative critical thinking exercise with creation of content

**Op Ed Writing**
Expanding learning to real life issues

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**Multiple Choice Question**
1. To ensure the quality of multiple-choice questions
   a. make some of the options and distractors negative.
   b. include qualifiers and absolutes.
   c. make all options and distractors similar in length.
   d. include several correct answer options.

**Expected Answer**
Correct Answer
Examples of Digital Open Pedagogy
Web Publishing as a Tool of Teaching

• Student learning and motivation through textbook creation

• Modifying and adding perspectives to existing OER

• Work done collaboratively, with student peer editing each other’s works

• Example: *The Open Anthology of Earlier American Literature*, edited by Robin Derosa
Personal Cyberinfrastructures

- Turning students into bloggers
- Learn to create authoritative information
- Create their own personalized learning architecture and manage their own data, collaboration etc.
- Decide how public or private these are
- Learn how to license their information
Wiki Teaching

• Teach your students how to edit Wikipedia articles.
• Students make direct contributions to public knowledge.
• Students engage with and understand the politics of editing, including how “truth” is negotiated by those who have access to the tools that shape it.
Social Media

- A form of student engagement
- Student discussions on social media
- Social media research projects
- Follow and interact with major figures in the field on social media
Melding of Open

- Students publish/share scientific data
- Students analyze openly available data
- Students design own science projects and explore open data to address issues
Open Pedagogy in Action
Scaffolding Structure

01
- Students choose a topic based on themes of the course
  - Receives instructor approval

02
- Create a first draft of an annotated bibliography on their chosen topic
  - Receive peer feedback

03
- Develop argument and chapter questions for other students
  - Receive more peer feedback

04
- Write first draft of their chapters and submit them in Canvas
  - Peer review and instructor grading

05
- Create a second draft of their bibliography
  - Again, peer input was provided

06
- Write a second draft and upload it on Pressbooks
  - Peer review this time is focused more on editing and quality of content
Public Writing and Copyright

How do you write for a public audience? How is this different from traditional class assignments?

Copyright issues and legal structure of information on the internet

Editing and book design from the perspective of students
Fostering the Right Student Mindset

• Time to respond to students
• Learner centered messaging
• Transparency and purpose
• Participation vs achievement
Benefits for You

• Build up your teaching expertise
• Understanding the publication process
• Learn how to manage your digital profile
• Enhance your research impact
Open Resources
Library Resources:

https://libraries.clemson.edu/teaching/oer/

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Thank You!

Questions/Comments