Make a UNESCO and ACRL Learning Goals Sandwich
Connecting Sustainability Education and Information Literacy Instruction to Solve Global Problems

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NUTRITION INFORMATION

Sustainability education and information literacy instruction for undergraduate students have the shared underlying goals of teaching learners to build and apply critical-thinking skills, while being aware of and skeptical of norms and values that may impact one's interpretation of a problem or information source.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has created **Education for Sustainable Development Goals** [SDG]: **Learning Objectives** that aim to "[empower] and [motivate] learners to become active sustainability citizens" and participants in "shaping a sustainable future" (p. 54). Among the key cross-cutting competencies articulated by UNESCO are critical thinking and the ability to "reflect on the norms and values" that impact sustainability challenges (p. 10). UNESCO, in discussing these learning objectives, points to the "rapidly proliferating amount of information available" as a contributor to the complexity of addressing local and global sustainability problems (p. 10).

ACRL's **Framework for Information Literacy for Higher Education**, like the UNESCO **Edu-cation for SDG: Learning Objectives**, aims to cultivate critical-evaluation skills in a prolific information environment. For example, the Frame Authority *Is* Constructed and Contextual aims for learners to "critically examine all evidence [and]…respect the expertise that authority represents while remaining skeptical of the systems that have elevated that authority and the information created by it."

Both the ACRL **Framework** and the UNESCO **Learning Objectives** suggest that learners must understand that access (or lack of access) to information can impact the ways that communities solve problems. Under the Frame Information Has Value, ACRL explains that "experts understand that value may be wielded by powerful interests in ways that marginalize certain voices." UNESCO addresses information access in the **Learning Objectives** that support specific SDGs. The SDG focused on Good Health and Well-being, for example, suggests that learners should know that "relevant prevention strategies to foster positive physical and mental health and well-being" (p. 16) include information access for the impacted communities.

DIETARY GUIDELINES

This sandwich provides a serving of each of the following nutrients:

- **ACRL Information Literacy Frames.** Information Has Value; Authority Is Constructed and Contextual
- **UNESCO Education for SDG Learning Objectives.** Critical Thinking Competency; Normative Competency

PART 1: THE BREAD—INFORMATION ACCESS AND PRIVILEGE IN SOLVING GLOBAL PROBLEMS
Cooking Time
40–60 minutes, to taste

Ingredients and Equipment
- Worksheet with questions (1 per student)
- Networked computers (for ⅔ of the groups)
- Computers on a mobile hotspot (for ⅓ of the groups)
- Select print materials (e.g., encyclopedia or desk reference; printout of relevant Library of Congress classification outline) for "rural" groups with limited internet access

Preparation

Create a scenario involving a real public health or environmental concern in a remote location, and develop a worksheet that requires students to find specific answers, some of which may be addressed by scholarly research articles. See the example developed by Dailey and Wertzberger, in which students investigate the outbreak of polio-like symptoms, or develop your own (e.g., perceived cancer cluster near mining operation; respiratory ailments due to air pollution).

Cooking Method

1. Split students into small groups, each of which will work to investigate a problem using a different level of information access. Hand out and review the worksheets.
2. Give each group a different level of access to information resources. Depending on the class size, several groups may have each of the three types of access listed below. The first group, representing researchers at a university, can connect to all resources provided by your college, as well as anything freely available online. The second group, representing a small nonprofit in the US, can access only information (via a wireless hotspot, so they have no IP access to college resources) that are freely available online. The third group, which represents an individual working for a rural nonprofit in a location where electricity access is inconsistent, has 3–5 minutes of online

access to college resources, followed by additional time to do offline library research (supplemented by relevant print materials supplied by instructors).

3. Have groups complete the worksheet, answering factual questions with varied levels of success, depending on their level of information access. Students also reflect on the following questions:
   - How did your level of information access impact your ability to answer these questions?
   - What sources did you use to find the answers?
   - Whose responsibility is it to provide information to the public about this topic?
4. Facilitate class discussion to help students
   - Understand and encounter their information privilege
   - Reflect on the impact that lack of quality information could have on a community's sustainability challenges
   - Consider what could be done to improve outcomes for those who have limited information access

Allergy Warning

We stop the group research portion of the activity when the "university researcher" groups—those with the greatest level of information access—have completed the worksheet. Putting a reasonable limit on the time allotted for students to conduct research magnifies the disparities among access types.

PART 2: THE FILLING—CRITICAL ANALYSIS OF INFORMATION SOURCES IN A COMPLEX INFORMATION LANDSCAPE

Cooking Time

30–50 minutes, to taste

Ingredients and Equipment

- Video from a traditional news platform that has an attention-grabbing headline purportedly reporting on a study (e.g., "Study Claims Nutella Can Cause Cancer")
- Computer with projector
- Worksheet with questions (1 per student)
- Networked computers (1 per student, pair, or group)

Preparation

Queue up the selected video, ensuring that it will display both visuals and audio (as needed).

Cooking Method

1. Explain that students will be asked to watch a brief video and then research the main claims.
2. Pass out the worksheet to all students. Encourage them to take notes as they watch the video.
3. Play the news video.
4. Students research the claims of the video and answer the following questions:
   - How did you locate the research article that was the basis for this

video? Was it easy or hard to find?

- What were the main findings of the research article? Was the research article easy or difficult to interpret?
- What other related sources did you find? Were they similar to or different from the video? The research article?
- What are the strengths and shortcomings of the video? What would you change?
- Who should be responsible for communicating health-related research findings to the public?
- How does this investigation of the video's claims relate to our earlier discussion about information access?

5. Discuss students' answers. Address the role that authority plays in determining the quality of a source; reflect on the process of information creation, communication, and dissemination, including the platform in which information is shared, and again reflect on how information access impacts a community's ability to address sustainability concerns.

Assembly

The class discussion in this second activity is an opportunity to construct your sandwich, bringing together the bread and the fillings—the information access challenges with critical analysis of a news source. Urge students to think about ways to counter the norms and privileges being supported in the information landscape so that communities

can be better equipped to solve sustainability challenges.

CHEF'S NOTE

Dailey and Wertzberger created the bread "starter" via the Open Access Challenge, which provided the basic structure of the activity in Part 1**.** We adjusted some of the ingredients and ultimately ended up with a different style of bread, but this recipe would likely have been equally delicious with their flavoring.

ADDITIONAL RESOURCES

Association of College and Research Libraries. *Framework for Information Literacy for Higher Education*. Chicago: Association of College and Research Libraries, 2016. http://www.ala.org/acrl/standards/ilframework.

Dailey, Amy, and Janelle Wertzberger. "Open Access Challenge." Open Access Week, Gettysburg College. November 11, 2015. https://tinyurl.com/y6uvsgdv.

United Nations Educational, Scientific and Cultural Organization. *Education for Sustainable Development Goals: Learning Objectives.* Paris: United Nations Educational, Scientific and Cultural Organization, 2017. https://tinyurl.com/y7wbegjs.