Teaching Infographic Source Evaluation to Freshman Biology Majors

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Challenge
How can we design an information literacy session on source evaluation for freshmen Biology students that doesn’t duplicate what they learn in English Composition?

Solution: Infographics!
Given the importance of data in the sciences, the ability to critically assess visual representations of it is an essential component of information literacy in this field. However, it is often overlooked owing to time and other constraints. We (science librarian and biology professor) collaborated to develop two infographic source evaluation sessions embedded into an epidemiology-themed course for freshman Biology majors.

Audience & Classroom Environment
• Biology learning community
  • Epidemiology theme (“Disease Hunters”)
  • 25 students
• 1 credit-hour seminar course for first-year students
• Assignments designed to introduce students to campus resources (including the library)
• Engaged Active Learning Space (EASL) classroom
  • iPads for every student
  • Group seating
  • Screen sharing monitors

Student Learning Outcomes
★ Apply evaluative criteria to infographic sources in order to assess them for accuracy and bias
★ Locate and use real data from appropriate sources in order to create their own infographics

Results
Student outcomes
• IL as it applies to data presentation
• Application of infographic evaluation standards to their own work
• Early contact with Biology subject librarian
• Use of media and digital resources in the library

This project was also successful beyond the classroom. This librarian-faculty collaborative effort leveraged our two distinct skill sets to enhance student learning and foster a successful interdepartmental relationship.

General Approach
Read
Infographic source evaluation chapter in course iBook

Listen
Brief lecture in class by librarian

Evaluate & Discuss
Use criteria to evaluate existing infographics from pest control and drug companies

Apply
Students create their own infographics using data from the World Health Organization and critique one another’s work (see images on either end of the poster).

Future Plans
• More formal assessment
  • Align more closely with ACRL Visual Literacy Standards 3, 4, and 6
• Session 1: Collect image evaluation worksheets from groups
• Session 2: Develop infographic rubric and score
• Integrate sessions into other science learning communities