Designing Authentic Assignments to Engage Students

Collaborations for Empowerment & Learning
Center for Academic Excellence Conference 2014: Innovative Pedagogy & Course Redesign XIII

Joan Clark & Anita Fernandez

Session plan

- What is Information Literacy?
- Backward design
- Components of authentic assignments
- Our collaboration
- Plan a great assignment
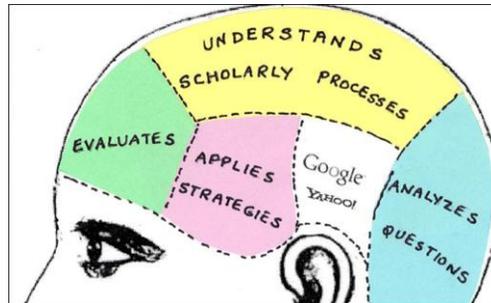
Information Literacy

Image source: http://www.beloit.edu/library/infolit/

". . . is the set of skills needed to find,
retrieve, analyze, and use information."

Source: http://www.ala.org/acrl/issues/infolit/overview/intro
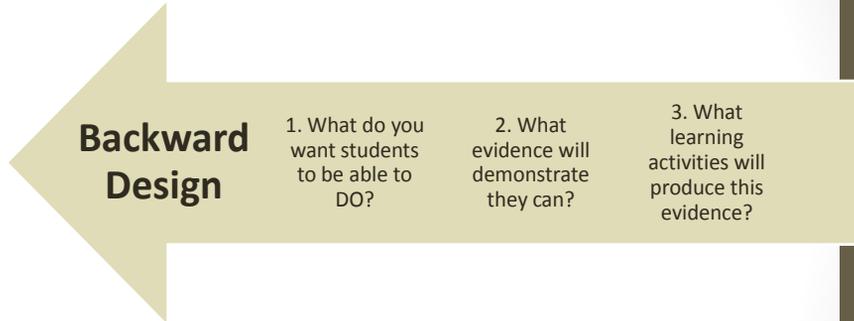
Information Literacy: recent research

- **Project Information Literacy**—national research study from University of Washington Information School (Head and Eisenberg
  - College students feel overwhelmed and don't know where to start
  - They rely on same few tried and true resources
  - In the workplace, employers want new hires to be more patient and persistent in information seeking, and to use co-workers as a resource

- Health and financial literacies

Backward Design

(Grant Wiggins and Jay McTighe)

Backward Design | 1. What do you want students to be able to DO? | 2. What evidence will demonstrate they can? | 3. What learning activities will produce this evidence?
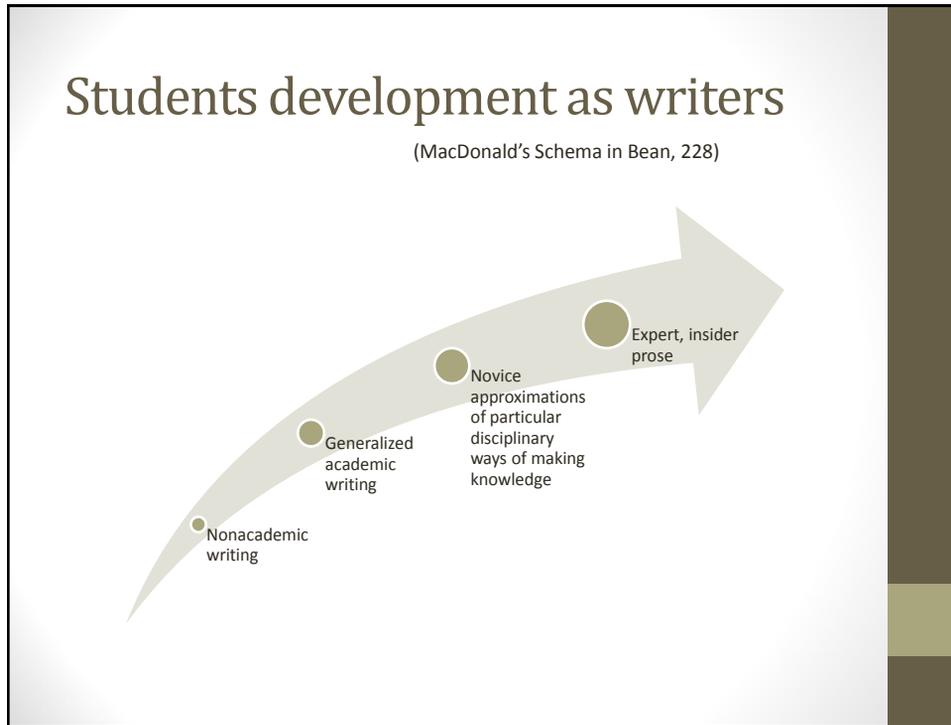
Design last assignment first . . .

then earlier, scaffolding assignments that give students the skills needed for the final assignment.

Subskills of Research Writing

- Asking discipline-appropriate research questions
- Establishing rhetorical context – audience, genre, purpose
- Finding sources
- Using sources effectively
- Integrating sources – writing in own voice
- Taking notes
- Citing sources

Bean, John C. "Designing Problem-Based Assignments." In *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*.

Students development as writers

(MacDonald's Schema in Bean, 228)

Expert, insider prose

Novice approximations of particular disciplinary ways of making knowledge

Generalized academic writing

Nonacademic writing

Example 1

- "Write an eight- to ten-page research paper on therapeutic touch (TT). Follow APA conventions for documentation." (Bean, 92)

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"*Data dump*"

Effective assignments

- Interactive components
- Meaning-constructing task
- Clear explanations of expectations/rubric

"Meaning-constructing" tasks

Rhetorical context = RAFT	Authentic task = TIP
• Role • Audience • Format • Task	• Task as • Intriguing • Problem

Example 2

• "You are a staff nurse at a large urban hospital. Recently the hospital became embroiled in a major controversy when several nurses were discovered to be practicing TT on patients without the permission or knowledge of their supervisors or attending physicians. The hospital governing board reprimanded the nurses and issued a general statement forbidding the practice of TT, which they called "non-scientific quackery." Research the professional literature on TT, looking especially for evidence-based studies. Then write a decision to forbid the practice of TT. Support your position with reasons and evidence based on the professional literature." (Bean, 92)

Think of how you want students to use sources.

BEAM: Using a source as . . .

- B – a background source
- E – an exhibit or evidence
- A – an argument source
- M – method or theory sources

Scaffolding Assignments

1. All students have same topic/problem
   - Provide students with all sources
   - Provide students with some and ask to find 1 or 2 on own
   - Require students to find all sources
2. Use sources as evidence—e.g. therapeutic touch
3. Use sources as argument
   - Students write focused literature review - controversy, state of the art, or gaps
   - Students create annotated bibliographies

My challenge

- An honors seminar for NON-biology majors
- Any format, subject, scope

At the Course Design Institute

- "Backwards design"
- Designing authentic assignments

"Genetics, Ethics, and Society" Goals

- To learn the molecular genetics used in biotechnology applications
- To be able to thoughtfully engage in discussions about how this technology is used in our society
- To be able to critically analyze arguments about the use of biotechnology in our society

Class activities

- Lectures on biology
- Readings about biotechnology and its impact on society
- Class discussions about readings

How we collaborated

- Wrote a draft of the prompt during Joan's workshop at the CDI.
- Meetings
  - Library class
  - Online guide
  - Expectations from students

The assignment

- Role Audience Format Task
- Task as an Intriguing Problem

How we prepared the students

- Lecture on biotechnology in class
- Discussion of GMO article in class - scaffolding use of sources
- Assignment prompt given
- Library class

Library Class

- Intro to course guide and database
  - Background sources-more scaffolding
- Exercise on evaluating bias

Student responses: positive

- Strong engagement
- Loved the role playing
- Positive comments on course evaluation

Student responses: negative

- Recognizing bias exercise
  - Comfort with Internet sources
  - Our time constraint
- Assignment too confining (1 student)

My reactions: positive

- Students were thoughtful and creative
- They came up with interesting ideas
- They found appropriate sources to cite

My reactions: negative

- Some students did not follow assignment cue
- Reliance on reviews
- Variable quality articles on controversial subjects

Primary v. Secondary Sources

- Original data analysis a requirement of informed citizenship?
- Recommendations of databases intended for scientists/physicians

(e.g. PubMed)?

Assignment was a Success

- Students cared about the assignment
- Output was interesting and thoughtful
- Authentic task

Librarian = Ally

- Database access
- Library class to help scaffold assignment
- Perspectives on desired outcomes/ information literacy

Faculty = Ally

- Database use
- Encourage evaluating vs. locating
- Connect as a liaison
- Information literacy as more than library jargon

Alternative Assignments & Multimedia Formats

- Integrate special sources or original research: interviews, polling, data
- Oral reports/ posters
- Video, Podcast
- Social media: Twitter, RSS, Wikis
- Recreations & Simulations
- Public exhibit/ performance

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