UF 100 Instructor Lesson Plan

Theme: History and Future of Education

Goal: As developing critical thinkers, students will begin to develop academic search strategies; utilize academic articles; and explore criteria for evaluating information.

Learning Outcomes: Students will:
1. Develop and apply strategies for locating articles, including selecting keywords and research databases.
2. List three characteristics of an academic article, and identify one such relevant article in a research database.
3. Identify criteria to use when evaluating information, and apply the CRAAP criteria to the evaluation of articles and websites.

Process Skill Goals:
- Information processing is a central characteristic of locating and evaluating information. This lesson plan features brainstorming keywords, selecting academic articles in research databases, and evaluating the reliability of articles and websites.
- Teamwork, oral communication, and management are structural features of the UF 100 library curriculum.

University Learning Outcome
The goal and learning outcomes of this lesson plan support ULO 3, Critical Inquiry: “Engage in effective critical inquiry by defining problems, gathering and evaluating evidence, and determining the adequacy of argumentative discourse.”

Underlying frameworks:
[From: ACRL’s Framework for Information Literacy for Higher Education]
Searching as Strategic Exploration: “Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops.”
Research as Inquiry: “Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field.”

PREP FOR SESSION
Instructor: Before the class starts:
- Bring up the Goals & Objectives on the UF100 LibGuide (also on student activity).
- Locate the class’ inquiry question on the UF100 LibGuide (relevant course tab) for use in Team Task #1.
• Talk to the discussion group leader about dividing up the class into teams. The class may already be divided up into teams. If not, plan for teams of 2-4 members. (If the discussion group leader has formed teams of 5 or 6, this is too many for our session; further break up the larger teams into two smaller teams.)

INTRODUCTION (5 min.)
Instructor:
• Introduce yourself and explain the Learning Objectives for today’s session.
• You may use the following questions (The Hook) to get an idea of where your students are at in regards to research and the explanation for the need to develop research skills below that.
  The Hook - The Bridge-in. How many of you start with Google when you are doing research? Does searching Google always give you exactly what you need? [Some students will say yes; some will say no.] Today we will cover some additional research “search engines” (research databases) you can use to find good, solid sources for assignments, and a couple of skills that you cannot survive college without learning.
• Academic research is a foundational skill, just like the other skills you learn in UF100 (teamwork, critical thinking, etc.). That is why the library curriculum is paired with the UF curriculum. The skills learned today are also important for doing research in ENGL102, courses in majors, in the workplace, and in your life. (Elaborate as desired.)

PREP FOR TEAM TASK #1 (2 min.)
Instructor:
• Ask students to write the inquiry question for their course at the top of Team Task #1.
• Notice you have a choice of research databases to use in this task (show the LibGuide for their section) that are listed on the UF100 LibGuide Education course tab. Academic Search Premier is a good general starting point, but one of the other, subject-specific research databases might also help.

Task 1: Creating a Search Strategy for Your Topic (20 min.)

Inquiry Question: How can Boise State University fulfill its potential as a university, as a Rising Star institution of 2030?

Part A. (5 min.)
Instructions
1. Write down 2-3 main ideas related to the inquiry question that you want to explore.

2. Brainstorm related terms for at least one of the ideas from step #1.

   Example: Related terms for the idea of “iPads” → mobile devices, tablets, technology

Instructor: remind them halfway through that they will write their search on the board if available (step 4).
3. Create one or more searches by connecting different ideas from steps #1 or #2 above with the word AND. Write your search(es) below.
   
   Examples: sleep AND grades  iPads AND education AND grades

4. Write your team’s search on the board.

DEBRIEF FOR TEAM PART A (5 min.)

**Instructor:**
- Ask 1-2 teams how the use of AND changes the search results you receive?
- Go over and comment upon the team’s searches that are on the board. Make notes/fix/modify/make suggestions on how they might improve or tweak their searches.

Part B. (7 min.)

**Instructions**
1. Go to the UF 100 guide on the library website (http://guides.boisestate.edu/uf100) on your device’s desktop, computer or iPad. Click on your course tab. Choose a database.
2. Type your team’s search(es) into one or more of the research databases.
3. Look at your results. If you are not satisfied with the articles you found, redo your search by changing your keywords or switching databases.
4. Email one of the articles, with its citation, to yourself or someone in your team.
5. Answer the critical thinking questions below.

**Critical Thinking Questions**

a) Did you find useful articles with your first search, or did you have to change your search strategies? Explain.

b) How could you use the research databases for other courses you are taking?

c) What other strategies do you use to find information for research papers and projects? These can be broad strategies about where to search, and very specific search strategies, including how to search.

DEBRIEF FOR TEAM PART B (3 min.)

Debrief on all CTQs. (Leave out debrief on (b) if low on time.)

CTQ (a) - Answers will vary, but make sure more than one team gets to answer, so that students can hear about various search strategies.

CTQ (b) - Answers will vary.

CTQ (c) - Answers will vary. The hope is that students understand the search strategies presented here are only a few of the myriad strategies possible. Hopefully, students list strategies such as asking friends and professors for advice, Internet searching, LiLI databases, searching by person's name, interviewing someone, etc., as optional strategies.
PREP FOR TASK #2 (1 min.)

Instructor: Discussion about critical thinking:

- So far, we have worked on the inquiry process and search strategies. For the rest of the session, we are going to focus on evaluating information.
- Every piece of information you use for academic purposes, and after college, should be evaluated to find out if it is reliable and credible. This is part of being a critical thinker: asking good questions.
- You have 8 minutes to complete Team Task #2 and answer the Critical Thinking Questions.

Task 2: Evaluating Articles and Evaluation Criteria (8 min.)

Instructions

1) View the two articles on the UF100 Education course tab.
   a) Article A: Liberal Education and the Republic of the Imagination
   b) Article B: Learning that Makes a Difference: Pedagogy and Practice for Learning Abroad

2) List three criteria for evaluating the quality of the articles and explain how each criteria helps you evaluate information.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Explain how this criteria helps you evaluate information</th>
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</tbody>
</table>

Critical Thinking Questions

a. Would you use these articles for a research paper or project? Explain.

b. Which article has characteristics of an academic article? When is it appropriate to use academic articles? When is it appropriate to use other types of articles?

DEBRIEF FOR TEAM TASK #2 (5 min.)

Instructor: First ask the large group what criteria they use to evaluate information (what they put on their charts).

Debrief on both CTQs.

CTQ (a) and (b) answers might meld together. Both of the articles are good. One is a peer-reviewed article, but both are informative. However, students still need to know what an academic article is. I
think the most important thing you can do is talk about the “world” of information and how it is important to evaluate every piece of information, which leads into the next thing: the CRAAP discussion. CTQ (b) - Article B is an academic article. If they quote from the pre-session video, academic articles include an abstract at the beginning (a summary of the article), a list of References at the end, and it’s written by an expert on the subject [elaborate as desired]. Answers to the other two questions will vary.

PREP FOR TASK #3 (3 min.)

Instructor:
(Because their instructors will ask students to do a CRAAP test on the sources in their annotated bibliography assignment, it’s important that they know the criteria and how to apply them.)

- Use students’ answers from Task #2 to talk about the CRAAP criteria. Bring up the CRAAP criteria on the UF 100 LibGuide. Connect the CRAAP criteria to what they already discussed in Team Task #2.
- Give them this tip before they start: Authority - look at the website’s “about” section (top, bottom of website usually)
- You have 10 minutes to complete Team Task #3 and answer the Critical Thinking Questions.

Task 3: Evaluating Websites Using the CRAAP Criteria (10 min)

Instructions:
1. Imagine you are trying to find information on creating global critical thinking skills.
2. View both websites below, using the links on the UF 100 guide.
3. Evaluate the information you find in each website using the CRAAP criteria.
4. Answer the critical thinking questions below.


<table>
<thead>
<tr>
<th>Criteria</th>
<th>Global Critical Thinking Project</th>
<th>Critical thinking in the context of global learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency</td>
<td>May 17, 2017</td>
<td>October 1, 2009 (hard to find)</td>
</tr>
<tr>
<td>Relevancy</td>
<td>Brief entry in Wikipedia</td>
<td>Explains the need for critical global thinking</td>
</tr>
<tr>
<td>Authority</td>
<td>.org Wikipedia contains brief information on the project with a few references and links.</td>
<td>.org Organization partners with/receives funding from agencies private, public and government agencies. Began in the 1980s.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Input by general public, have to verify.</td>
<td>References listed.</td>
</tr>
</tbody>
</table>
Purpose | Information on the project, project information is hard to find from any of the links. Most information is news links. | To develop thinking skills that are non-linear.
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Critical Thinking Questions

- **a)** Would you use these websites for a research paper or project? Explain.
- **b)** What should you do if an information source does not meet the CRAAP criteria?

DEBRIEF ON TEAM TASK #3 (5 min.)

Debrief on both CTQs.

- **CTQ (a)** - answers will vary.
- **CTQ (b)** - Answers will vary. Include discussion about choosing a different source when something does not do well on an evaluation “test.” So many information sources exist that it is wise to move on to a more reliable source.

PREP FOR TEAM TASK #4 (30 sec.)

**Instructor:** You have five minutes to complete Team Task #4.

**Task 4: Synthesis/Wrap-up (5 min.)**

**Critical Thinking Questions:**

- **a.** Describe a scenario outside of college life in which you could use any of today's research skills.
- **b.** Imagine you are describing what you learned from today’s class to a good friend. Make a list of 3 tips that you would pass on to them. Your tips can include what you found most helpful during today’s team tasks, what you have found useful in the past, or what you might do in the future.

DEBRIEF ON TASK #4 (2 min.)

Debrief on both CTQs.

**Instructor:** This section is titled “Synthesis” because the CTQ is intended to bring together everything students have done during the session. As teams report on their tips and strategies, you may want to talk about the “Searching as Strategic Exploration” idea, emphasizing the idea of trial and error.

- **CTQ (a)** - answers will vary; the goal is to extend today’s learning beyond college and into the real world. These skills are for life, not just for college.
- **CTQ (b)** – Ask one team what their three tips are. Ask the rest of the teams one tip they would like to add (just ask the whole class and teams can volunteer).