

Appendix A: Library Instruction lesson plan

Honors General Biology

Concept:

This is an assignment for freshman science majors. It will provide them with an orientation to library-subscribed and open access disciplinary resources, the skills to independently develop their knowledge in the field, and the confidence to communicate verbally and in writing.

Students will be challenged to research and synthesize information from various sources, from news to scholarly. They will use technology tools to curate a page of RSS feeds, identify and explain key findings on the topic, and create a brief newscast for a general audience.

The intent of the project will be for students to understand the breadth and depth of resources on a science topic, gain familiarity with discovery tools and platforms, and practice communicating their knowledge of the topic to a general audience.

Learning Goals:

1. RSS feeds:

- a. Students will demonstrate an ability to define different types of subject expertise. (Authority is Contextual)
- b. Students will demonstrate an ability to determine the initial scope of the task required to meet their information needs. (Searching as Strategic Exploration)

2. Tables and Figures:

- a. Students will demonstrate the ability to give credit to the original ideas through proper citation. (Information has Value)
- b. Students will demonstrate the ability to understand the increasingly social nature of the information ecosystem where authorities actively connect with one another and sources develop over time. (Authority is Contextual)

3. Newscast:

- a. Students will demonstrate an ability to organize information in meaningful ways. (Research as Inquiry)

4. Reflective Essay

- a. Students will demonstrate the ability to develop an understanding that their choices impact the purposes for which the information product will be used in the message it conveys. (Information Creation as a Process)

Librarian script and stated lesson objectives:

Your assignment is to determine a topic to research, synthesizing information from a variety of online sources that include news as well as scholarly publications. You will curate a page of RSS feeds, identify and explain key findings on your topic, and create a brief newscast of 3-5 minutes aimed at a general audience. Please refer to your handout for full details.

Today, we will demonstrate exploring subject headings and keywords in a sample search to help each of you develop your topics, and then we will demonstrate how to search for and set up RSS feeds, locate tables/figures applicable to support your research topic, and we will touch on how to begin developing a script for your newscast.

The lesson objectives are:

- RSS feeds
 - Understand sources and authority, critique your sources and searches
 - Use search terms to narrow and expand your search
- Tables and figures
 - Understand role of data in science and credibility of researchers
 - Correctly cite sources
- Newscast
 - Communicate scientific information to a general audience
 - Address the question and form conclusions

Input Modeling:

- Demonstrate exploring subject headings and keywords in a sample search.
- Demonstrate examples of NetVibes (<https://www.netvibes.com/en>) for creating RSS feeds.
- Demonstrate difference between three tiers of resources – primary, secondary, and tertiary.
- Demonstrate the difference between types of science sources.
- Demonstrate finding tables and figures as well as finding biographical information.
- Demonstrate how to appropriately cite resources consulted.
- Describe an ideal newscast – address the question, coherent structure, appropriate target audience.

Guided Practice:

- Set up Netvibes and Google accounts.
- Practice importing Feeds. Use help guide.
- Exploring subject headings and keywords to understand subject area.
- Begin table and figures document.
- Begin drafting outline/script of the newscast.
- At least one third of the class should be devoted to helping students individually to understand and progress toward the learning outcomes.

[QEP Program] Pedagogies:

Reflective component. Students are invited to reflect on their research experience – developing and researching their topic, utilizing NetVibes and Google, creating RSS feeds, creating tables and figures to support their found data, and crafting their newscast. Students are encouraged to reflect on the challenges they experienced in this project, as well as share lessons learned and how they overcame these challenges.

Assignment text for students:**Guest Expert Library Assignment****Part 1 – The Newscast****Description:**

As a science professional, you have been asked to appear as an expert guest on a national news program to discuss an area of biology research. In preparation for your appearance on TV, you want to improve your knowledge of the subject area, keep up-to-date with new developments, and find other experts in the field. You will use NetVibes (<https://www.netvibes.com/en>) to create RSS feeds in your topic, discover key research data, and find biographical information on researchers in the discipline. Finally, you will record your newscast segment.

Instructions:**1. RSS feeds page**

Curate a page of RSS feeds using the NetVibes platform on your assigned topic and the research area that the topic falls under. Organize the RSS feed into the 3 tiers of scholarly communication: open web, deep web, and published resources available through the library. The content of your RSS feeds page should reflect your understanding of the topic area and available science resources.

2. Tables and figures

Copy and paste up to 10 figures or tables from credible sources on your topic into a Word document. Organize the figures and tables in sequence and tell a story about the research on this subject that demonstrates that you know what you're talking about. No more than 2 tables or figures can come from an individual source. Cite each source and annotate each citation with a one sentence biography on the primary author of the source to indicate their expertise and credibility on that topic.

3. Newscast

Create a recording of yourself delivering a newscast on your topic to a nightly news audience (Be sure to consider what assumptions you are making about your audience). Your segment should be no longer than 5 minutes. A minimum of five tables and figures you found in your research need to be used in your newscast.

Post the newscast to the D2L Dropbox and provide your instructor with the file saved to a jump drive. Go to the Digital Media Studio in the Library for help with this portion of the assignment if needed.

Assistance:

You are encouraged to seek assistance from your instructor, reference librarians, and the Library Makerspace for help in completing this assignment.

PART 2 - Reflective Essay about Guest Expert Assignment

In a brief essay (no longer than one page), explain what you learned and accomplished in the Guest Expert Assignment. What skills did you have before the assignment that helped you, and what skills did you learn along the way? Do you think this project will help you in your future academic work?

Rubric:*Biology Information Literacy Rubric*

Frame	Assignment	Exceptional (4)	Proficient (3)	Needs Development (2)	Novice (1)
Searching as Strategic Exploration	Newscast	Correctly identifies scope of the task and parties that may produce information about the topic. Includes a broad range of sources.	Correctly exhibits understanding of two of the following: Scope of the task. Parties that may produce information about the topic. Includes a broad range of sources.	Correctly exhibits understanding of one of the following: Scope of the task. Parties that may produce information about the topic. Includes a broad range of sources.	Incorrectly produces three of the following: Scope of the task. Parties that may produce information about the topic. Includes a broad range of sources.
Authority is Constructed and Contextual	Newscast	Students utilize and define different types of authority, and sources correctly. Students critique the type of information	Students utilize and define different types of authority, and sources correctly. Students do not or incorrectly critique the	Students utilize at least one type of authority or source correctly. Students do not or incorrectly critique the information	Students do not or incorrectly utilize at least one type of authority or source correctly. Students do not or incorrectly

		presented in the newscast.	information presented in the newscast.	presented in the newscast.	critique the information presented in the newscast.
	Tables and Figures	Tables and Figures correctly demonstrate the social nature of the information ecosystem and represent connections between several sources over time (4 or more)	Tables and Figures correctly demonstrate the social nature of the information ecosystem and represent connections between source over time. (3)	Tables and Figures correctly demonstrate the social nature of the information ecosystem and represent connections between source over time. (2)	Tables and Figures correctly demonstrate the social nature of the information ecosystem and represent connections between source over time. (1 or less)
Information has Value	Tables and Figures	Tables and Figures include valid samples, are from a variety of sources, and are cited properly.	Tables and Figures are from a variety of sources, and are cited properly.	Tables and Figures are not from a variety of sources but are cited properly.	Tables and Figures are not included and/or not properly cited.

Research as Inquiry	Newscast	<p>The newscast correctly addresses a specific question on the topic.</p> <p>Information in the newscast is presented in a meaningful order and follows the logic of the topic.</p> <p>Conclusions are relevant to the information.</p>	<p>The newscast correctly includes at least three of the following:</p> <p>Addresses a specific topic.</p> <p>Information is presented in a meaningful order.</p> <p>Information follows the logic of the topic.</p> <p>Conclusions are relevant to the topic.</p>	<p>The newscast correctly includes at least two of the following:</p> <p>Addresses a specific topic.</p> <p>Information is presented in a meaningful order.</p> <p>Information follows the logic of the topic.</p> <p>Conclusions are relevant to the topic.</p>	<p>The newscast correctly includes one or less of the following:</p> <p>Addresses a specific topic.</p> <p>Information is presented in a meaningful order.</p> <p>Information follows the logic of the topic.</p> <p>Conclusions are relevant to the topic.</p>
Scholarship as Conversation	Newscast	<p>Information is correctly presented in a manner that is relevant to the audience.</p> <p>Sources are correctly cited in the newscast.</p>	<p>The newscast addresses at least two of the following:</p> <p>Information is correct.</p> <p>Information is presented in a manner that is relevant to the audience.</p> <p>Sources are cited in the newscast.</p>	<p>The newscast includes a presentation in a manner that is relevant to the audience</p>	<p>The newscast is not relevant to the audience and does include sources.</p>

Information Creation as a Process	Reflective Essay	<p>Students demonstrate an understanding of the tools and sources.</p> <p>Students demonstrate understanding of the choices made as well as the importance of organization and presentation of the information to specific audiences.</p>	<p>The essay demonstrates student understanding of at least two of the following:</p> <p>Proper use of the tools and sources.</p> <p>The correct choice of sources.</p> <p>The correct organization and presentation of information to specific audiences.</p>	<p>The essay demonstrates student understanding of at least one of the following:</p> <p>Use of the tools and sources.</p> <p>Choice of sources.</p> <p>Some organization and presentation of information.</p>	<p>Student does not demonstrate understanding of the use of tools, sources, choices of sources, or organization and presentation of information.</p>
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