Instruction Session Lesson Plan

**Analyzing Topics and Discovering Search Strategies**

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LIBR 287- Information Literacy

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**Title:** Analyzing Topics and Discovering Search Strategies

**Intended Audience:** Entering 5th grade students on class trip to public library at start of school year for assistance with class research project

**Assignment**: Find one resource that helps you further explore something you did during your summer vacation and discuss in a 3-page research paper. For example: students can write about a place they’ve visited, an activity they want to learn more about, or a friend/family member.

**Time Needed**: 20 minutes

**Learning Environment**: Online via Collaborate web conferencing

**Materials**:

* PowerPoint slides
* Collaborate Whiteboard tool

**AASL Information Literacy Standards:**

* Standard One: The student who is information literate accesses information efficiently and effectively.
* Performance Indicator Five: Develops and uses successful strategies for locating information.
	+ - Outcome A: Develops understanding of and distinguishes between keyword and subject searching
* StandardThree: The student who is information literate uses information accurately and creatively.
	+ Performance Indicator One: Organizes information for practical application.
		- Outcome B: Creates search terms based on key topic ideas
	+ Performance Indicator Two: Integrates new information into one’s own knowledge.
		- * Outcome C: Applies new learning to hands-on search with support of classmates and instructor
* Standard Nine: The student who contributes positively to the learning community and to society is information literate and participates effectively in groups to pursue and generate information.
	+ Performance Indicator Three: Collaborates with others, both in person and through technologies, to identify information problems and to seek their solutions
		- * Outcome D: Students will discuss relevance of search results to their information needs.

**Pre-Session Preparation:**

* Insert blank whiteboard slide for student collaboration (Slide #7)

**Lesson Content:**

**Introduction and Attention-Grabber** [SLIDE 1: TITLE SLIDE]

1. Welcome students and explain the session’s purpose.
2. Question 1:How many of you have read or seen The Hunger Games?
3. Question 2: How many of you have used a library catalog?

**Overview:**

Utilize familiar image as icebreaker and present searching the library catalog as a quest (ala Hunger Games). Explain how choosing search terms will help them find sources for their research paper to appeal to the WIIFM principle. [SLIDE 2: HUNGER GAME LOGO SLIDE]

**Objectives:** [SLIDE 3: OBJECTIVES]

1. Analyze topics to develop search terms.
2. Discover new strategies for searching the library catalog.
3. Evaluate information sources based on relevance.

**Introduce Content:** What are Search Terms? [SLIDE 4: DEFINITION]

1. Define search terms in a manner understandable to 5th graders.
2. Search terms are words or phrases you choose to describe the main idea of your search. For example, if you want to find information about New York City, you can type “New York City” into a search engine, but you’ll get a lot of hits because it’s a broad subject. Search terms should get to the heart of your search to yield relevant results. Creating useful search terms can help us better understand our topics.
3. Give example of a search term [SLIDE 5: SEARCH TERM EXAMPLE]
4. Allow time for questions.

 **Participation Exercise:** [SLIDE 6: HUNGER GAMES MEME SLIDE]

1. Introduce collaborative exercise to apply socio-cultural learning theories and aid cognitive load theory as well as engage students in higher order thinking skills. Students will be divided into pairs and ask one another about how they spent their summer vacation. Using Wordle (wordle.net), partners will type exactly what they say into the text box to create a mind map to aid their topic analysis. They will post Wordles to a blank whiteboard slide. (allow about 4 minutes)

**Formative Assessment:** [SLIDE 7: Wordles]

1. Introduce students to Pointer tool. Ask them to locate main ideas or possible search terms based on Wordles.
2. The class will discuss the main topic ideas as highlighted by the word clouds and begin creating search terms. [SLIDE 7: WORDLES]
3. Allow time for questions.

**Introduce Content:** Learning Search Strategies [SLIDE 8: Katniss the Archer Slide]

1. Define a keyword search in comprehensive terms. [SLIDE 9: Keyword Search example]
	* “A keyword is a term that is chosen, either from actual text or from a searcher’s head, that is considered to be the “key” to finding certain information.” – *Introduction to Cataloging and Classification, 10th Ed.* by Arlene G. Taylor
2. Define a subject search in comprehensive terms. [SLIDE 10: Subject Search example]
	* “A subject search is used to “seek information by topic (as opposed to author or title).” – Retrieved from Glossary of library terms: <http://library.wur.nl/desktop/faq/faq_glossary.html>
3. Allow time for questions.

**Participation Exercise:** Hands-On Searching [Mill Valley Library Catalog]

1. Reacquaint students with Mill Valley’s library catalog by briefly indicating the search box using the Pointer tool.
2. Introduce students to the search option dropdown menu to navigate between keyword and subject search.
3. Demonstrate two sample searches using keyword and subject search.
4. Seek volunteers to try both a keyword and subject search (using the raise hand tool) with teacher guidance and classmate support. (allow 3 minutes)
5. Discuss and evaluate results.
6. Allow time for questions.

**Reinforce Learning and Knowledge Retention:** [SLIDE 11: Recap]

1. Review main points of the lesson:
	* Developing search terms by analyzing topic
	* Understanding the difference between keyword and subject searching.
	* Evaluating search results based on information needs.

**Check for Understanding:** [SLIDE 12: Library Hours, Name and Contact Info]

1. Allow time for questions.
2. Provide contact info for follow-up.

**Methodology:**

**Efficient Search Strategies**

The key to cultivating efficient search strategies is to understand the core of one’s information need. By analyzing the purpose of one’s search, students can isolate elements of an idea to select “key words” to best represent the aboutness of that need. In turn, they will develop an awareness of how that information may be stored which aids retrieval. Understanding and applying efficient search strategies is one of the primary outcomes of AASL’s Information Literacy Standards for Student Learning (AASL, 2006). Proficient navigation of information environments is a critical aspect of information seeking and will prove vital to the future endeavors of our current students. Equally imperative is the creation of a healthy, self-sustaining relationship with the search process and library catalogs. This positive interaction will also help foster “good feelings” about library services and encourage lifelong learning.

**Organization**

I organized this lesson with consideration and a firm understanding of the following principles: Universal Design, Cognitive Load Theory, “What’s in it for Me?” or (WIIFM), and constructivism. I included simple techniques to ensure “equitable use” in my instruction session like sans serif or cleanly designed fonts, and employed the flexibility of “active learning methods that engage multiple senses.” (Chodock, 2007, p. 27) Providing an overview and list of objectives served as a signpost or roadmap to facilitate information transfer and aid cognitive development. I also included segments that incorporated Tempelman-Kluit’s “modality effect” which is understood as an aid to alleviating “cognitive load” and helps facilitate cognitive transfer. Presenting content in manageable “chunks” throughout the session allowed students to grasp new knowledge more readily. (Booth, 2007). To answer the WIIFM question, I presented the learning session as a quest and incorporated imagery from the popular *Hunger Games* series to appeal to my 5th grade (tween) students. By aligning the students with Katniss, I hoped to facilitate intrinsic motivation to actively engage the students.

**Teacher Identity/Persona**

Younger students are especially wary of authority figures and require additional support and engagement to connect with teachers. Developing a friendly, approachable teaching persona is critical to fostering positive student connections, and can make or break a learning experience.

**Active Learning**

Meeting students where they are is a fundamental pedagogical building block that educators understand to be necessary for introducing new concepts. This lesson was created to appeal to tween sensibilities and learning resistance among this particular age group. Direct involvement provides tweens with a sense of purpose, allows for greater intrinsic motivation and answers both the IAKT and WIIFM questions. I incorporated icebreaker questions at the beginning of the lesson to gauge preliminary student understanding. Keyser (2000) suggests icebreakers as a means of actively engaging students as well as a way to gauge their library experience levels to meet learners where they are.

Implementing a collaborative learning model engages “higher order” thinking skills because memory “is activated and influenced by meaningful learner experiences.” (Booth, 2011, p. 51) The Wordle exercise was loosely based on the reciprocal model as described by Wang (2007): it “can be used to analyze the main ideas of a research topic” (p. 154) Through group brainstorming, keywords and related terms will be apparent due to their larger size on the page. Through group feedback and analysis, search strategies will be constructed based on the suggested descriptors.

To encourage inquiry-based learning by promoting student-led searches, I incorporated Harris’s student-led search method where “Students…do a hands-on search for all to see. They can call on their peers for help, and I am also standing right there to give clues and tips.” (Harris, 2010, p. 14) This method gives students a sense of agency by creating a supportive environment for their inquiries and discoveries. As Conger (2001) writes “once students are given agency in the bibliographic instruction session, they begin to develop the critical thinking skills essential to mastering the tools and methods of library research.” (2001, p. 309)

For fifth-grade students or tweens navigating the liminal state between child and teen, peer influence and support is crucial to their learning development. My goal for this session was to create communal and creative participatory processes where students could interact, reflect, and experience a shared adventure while contributing to the ongoing research conversation.

References

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