

**Pirate Maps, Tattoos, and Flus:  
Using a Problem-based Format to Teach Information Literacy Skills**

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**Session Timeline**

- Introduction – 10 minutes
- Use scenarios and prompts to create Problem-Based Learning Lesson Plan – 20 minutes
- Groups share lesson plans – 20 minutes
- Debriefing – 10 minutes

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**Problem-Based Learning**

- McMaster University one of early leaders (Enger et al., 2002)
- Students are presented with an “ill-defined” problem or issue “prompt”
- Students work in groups to identify problem, research issue, and present a solution or hypothesis (Kenney, 2008)

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**Problem-Based Learning and Information Literacy**

Many educators, despite their best intentions, are not teaching students how to think, how to ask questions, or how to use strategies to gather information to answer questions. In addition, by asking for a session focusing on information gathering, many instructors are separating the topic from this process – a disconnect that is entirely opposite of what really takes place when researchers conduct their own research. For this reason, problem-based learning may be the better approach.

-Debora Cheney (2004)

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**Elements of a Problem-Based Learning Session**

**Foundations –**

The problem-based learning task or session should be located within the Zone of Proximal Development (ZPD), defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers” (Vygotsky, 1978). While the ideal situation would be to collaborate ahead of time with the instructor to get an idea of students’ skill levels prior to the instruction session, that isn’t always a possibility. In the absence of an assignment or syllabus, you can gather clues about students’ skills through the class level or course description, and create a class structure that is flexible enough to adapt on the fly.

**Prompt –**

Cheney writes that a good PBL prompt “engage the students, because they are unstructured enough to require research and thought to develop a problem statement” (2004).

Barbara Ferrer Kenney adds “designing problems and pedagogy that are congruent with the students’ academic development will keep sessions fresh and challenging. The complexity of a problem can be developed based on a students’ prior experience with the library as well as their academic level” (2008).

Possible resources for designing prompts:

- Current events
- Local issues
- Visuals, Videos
- Issues relevant to students

### **Collaboration –**

Group work is essential to PBL. Dalsgaard and Godsk explain “According to the social constructivist approach, learning is considered an active, social process in which individuals actively construct knowledge (Vygotsky, 1978; Brown et al., 1989) within the social environment ...This means that learning necessitates the active and self-governed work of students” (2007).

### **Debriefing –**

This provides students with an opportunity to reflect on their work and hear how others’ projects may have differed from their own. It also allows the instructor to offer feedback and suggestions for future research.

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### Questions to consider when designing a PBL session

1. What are your learning objectives?
2. What ACRL standard(s) does your lesson plan address?
3. What foundational knowledge do students need to begin (e.g. lab safety for lab work)?
4. What is the most efficient way to provide students with those foundations?
5. What resources are available and will you give students a list of resources to use?
6. What are your learning objectives?
7. How much time do you have?
8. Do the students have an assignment?
9. Will you assign students to groups or allow them to self select?
10. Will you have students take on assigned roles within their groups (leader, recorder, devil’s advocate)?
11. How many students are there?
12. What problems/issues might students identify in the prompt?
13. How will you assess student learning?

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