Like Peanut Butter & Chocolate: Problem-based Learning and the ACRL Framework in Medical Education

Rachel Vukas, MLS, MA
Heather Collins, MLS
Thomas Yankee, Pharm.D., Ph.D.

Library Instruction West
June 9, 2016
Salt Lake City, Utah
Collaboration

Collaboration

Collaboration
Collaboration
Collaboration

PBL for Med Ed + ACRL Framework = ☺️
Objectives

- ID components of problem-based learning
- ID strategies for teaching IL in PBLs
- ID strategies for applying the ACRL Framework into subject content (medicine) with faculty
Problem Based Learning

Pedagogy for learning through the experience of solving an open-ended problem. Honing thinking strategies and domain knowledge (Hmelo-Silver, 2004).
PBL

- Instructor
  Guide on the side
  Encourage questions
  Create environment
  Provide resources

Create the experience!

- Student
  Active
  Ask questions
  Discover
  Apply resources

Find the answer!
PBL & Case-based Learning

- Hypothetical case
- Clinical context
- Relates basic sciences to the clinical setting
Inflammation & Immunology Module (Pre-Matriculation Students)

- Integrated Introduction to Library Resources
- Hypothetical case
  - Symptomatic asplenic patient in ER
  - Guided questions for diagnosis and treatment
  - Should you admit the patient to the hospital?
Librarian and Instructor’s Role
Creating an Experience

Guide
- Co-lesson planning
- Lead dx/decision-making process

Encourage Q’s
- Plan q’s
- Allow break-out time

Create Environment
- Create case
- Difficult “maze” or mystery

Provide Resources
- LibGuides (Finding Clinical Resources, Health Stats)
- Class links
Student’s Role

**Active**
- Group work
- Individual work

**Ask Q’s**
- Lecture responses
- Small-group assistance

**Discover**
- Responsible for dx, plan
- Many paths

**Apply Resources**
- Use LibGuides
- Engage library resources
Student Learning Objectives - Knowledge

- Explain the pathogenesis and clinical progression of septic shock
- Describe the immunologic function of the spleen
- Compare and contrast conjugated and non-conjugated vaccines
Student Learning Outcomes:
Process Skills

- Demonstrate the ability to use resources to address medical questions
- Describe how to rationally proceed through a clinical case

For this class, the correct answer is not as important as learning how to find it.

Dr. Thomas Yankee
Information Literacy Outcomes

- Demonstrate the ability to use resources to address medical questions
  - Select resource based on type of information required
  - Identify level of evidence for resource
  - Evaluate resource based on established criteria
  - Determine quality of evidence found based on EBP criterion and source evaluation
ACRL Framework

Authority is Constructed and Contextual

Information resources are:
1) Evaluated based on the info need and the context/usage

2) Contextual- info needs helps determine the level of authority required
ACRL Framework

Authority - Knowledge Practices

1) Define different types of authority
2) Use research tools
3) Use indicators of authority (EBP) to determine credibility
ACRL Framework

Authority- Dispositions

1) Develop and maintain an open mind when encountering varied and conflicting perspectives

2) Motivate self to find authoritative sources
Adapt Framework to the Discipline

Define different types of authority, such as subject expertise, societal position, or special experience.

Define different types of authority, such as scholarship, levels of evidence, guidelines and regulations, and clinical experience.

Framework

Medical Education
Adapt Terminology to Discipline

Information Literacy

Evidence-based fluency
Framework Mapped to KUSM Graduation Competencies & ACGME Common Requirements

- **Framework** - *Use research tools and indicators of authority to determine the credibility of sources, . . .*

- **Mapped to:**
  - **KUSM** - Access updated, reliable, high-quality scientific information in order to support clinical decisions
  - **ACGME** - Locate, appraise, and assimilate evidence from scientific studies related to their patient's health problems
Challenges

- Time commitment
  - Translating Framework
  - Clinical content mastery
  - LibGuide
  - Teamwork
Opportunities

- Curriculum integration of Evidence Based Fluency
- Develop collaborative relationships
- ID Champions
- Use as a catalyst for future (new curriculum 2017)
Rachel Vukas
rvukas@kumc.edu

Thank You!
References