Foothills to Fourteeners

Preparing students for research in the real world

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How do students transfer IL skills among academic, work, and daily life?

(Ferran-Ferrer, Minguillón, Pérez-Montoro, 2013)
(Head, 2012; Head, 2013; Lloyd, 2013; Jacobson & Mackey, 2013)
How can we...

- convey the importance of research skills outside of academic contexts?
- position students to be lifelong learners?
- show transferability of research skills from academic to real world problems?
Problem-Based Learning & ARCS Model of Motivational Design
Problem-Based Learning

- Problems must be complex; no one correct answer
- Students must be allowed to self-direct
- Instructor is “guide on the side”
- Scenarios should be authentic, realistic

(Barrows, 2002; Strobel and van Barneveld, 2009)
Sample Problem

You are babysitting your niece for a few days, and she comes home from school with red, itchy eyes.

You need to find out a little information about what this could be and what you should do about it. You want the information to be from a trusted source.
**Little PBL Library**

- 12 PBL scenarios ranging from 5-10 minutes to semester long projects

[libguides.colorado.edu/foothills](libguides.colorado.edu/foothills)
ARCS Model of Motivational Design

Attention
Relevance
Confidence
Satisfaction

(Keller, 2010)
ARCS Model of Motivational Design

Attention

- Uses a “hook”
- Uses eye contact and tone of voice
- Incorporates learner experiences, interests, or goals into examples, stories, problems.

(Keller, 2010)
Relevance

- Explains how materials relate to learners’ personal interests, experiences, goals, and current or future jobs
- Allows time for learner comments and questions

(Keller, 2010)
Confidence

- Uses small group instead of individual responses in icebreaker or other warm-up activities
- Uses positive body language
- Uses neutral, task-oriented words to correct a learner
- Makes statements attributing learner success to learner effort

(Keller, 2010)
ARCS Model of Motivational Design

Satisfaction

- Gives recognition of accomplishment at the end of instruction,
- Expresses appreciation, when earned, of learner effort and accomplishment

(Keller, 2010)
Research in the Real World Study

Photo credit: Stephanie Flores
Which of these websites is probably a more reliable source of information about the new healthcare laws? Why?
Research in the Real World

...in everyday life?

“Diagnosing medical conditions, research for voting in election season, academic work for research papers.”

“When looking for reliable info for any topic, really”

“I can beat my roommates in disputes more effectively”

“Searching for information on where to buy a house”

“Product reviews, key words in articles”

“Questioning those who share information and where they got it.”
Let’s talk!

- When and where could PBL and motivational design be integrated into a lesson or for-credit course?
- What one idea or strategy can you take back to your institution to use next time you teach?
Thank you!

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