FALL WEBINAR SERIES 2018

Problem Based Learning (PBL) for Success

with

Roberto Galvez, PhD
Olivia Coiado, PhD
What is PBL?

Why are we using PBL?

What is the process and roles for a PBL session?

What are the rules for a PBL session?
What is PBL?
WHAT IS PBL?

Traditional Approach
WHAT IS PBL?

How We Teach Now
WHAT IS PBL?

Problem-Based Learning

Case-Based
Small Group Format
Student-Focused
Facilitated, Not Taught
Role of Narrative
Why are we using PBL?
WHY ARE WE USING PBL?

This is how I learned. What’s wrong with it?
WHY ARE WE USING PBL?

Problems with Traditional Approaches

- Generally divide basic and clinical sciences
- No application of knowledge
- Acquisition and retention of information without regard to relevance
- Often tedious
- In this day and age, not an efficient use of student time
- No immediate feedback
- No faculty awareness of student understanding until the test
WHY ARE WE USING PBL?

Advantages of PBL

More enjoyable for students and teachers
More stimulating and humane learning environment
Self-directed learning skills enhanced and retained
Promotes deeper rather than surface learning
Promotes interaction between students and faculty
Promotes interdepartmental collaboration

WHY ARE WE USING PBL?

History of PBL

First introduced at McMaster in Hamilton, Ontario Canada in 1969 when the school first opened.

First spread to Australia, Israel, the Netherlands, New Mexico. Mostly new, smaller schools.

Harvard “New Pathway”

1985, initially a parallel track, quickly the “Common Pathway”

Same pattern at other schools.

100 schools by 1991
What is the process for a PBL session?
WHAT IS THE PROCESS OF A PBL SESSION?

Overall PBL Process

Traditional Learning
- Told what we need to know
- Memorize it
- Problem assigned to illustrate how to use it

Problem Based Learning (PBL)
- Problem assigned
- Identify what we need to know
- Learn and apply it to solve the problem

PBL Process
- Present Problem
- Students engage in self, peer, and tutor review of the process
- Students define the problem and brainstorm ideas based on prior knowledge.
- Students present their solution and review what they have learned.
- Students engage in independent study.
- Students share information, engage in peer teaching and work toward a solution.

(Source: http://www.slideshare.net/kategukaisen/problem-based-learning-basics)
WHAT IS THE PROCESS OF A PBL SESSION?

Roles for a PBL Session
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Roles for a PBL Session

LEADER
The leader ensures that the group stays on track and on time.

The leader may:
- Determine the order in which the learning issues for the day will be presented.
- Indicate when the group is ready for the next page of the case during the PBL discussion.
- The leader will receive peer-feedback at the end of the week.
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<table>
<thead>
<tr>
<th>Information</th>
<th>Problem List</th>
<th>Hypothesis</th>
<th>Action Needed</th>
<th>Learning Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquire and synthesize information related to the case.</td>
<td>Identify any past or present medical problems.</td>
<td>Brainstorm reasons that the problem is occurring.</td>
<td>List steps that need to be taken to resolve the problem or better understand the causation.</td>
<td>Identify what additional information needs to be learned to better understand problem and complete task.</td>
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AV TECH
The AV tech is responsible for setting up all of the technology in the room (laptops, monitors, etc.).

FEEDER
The feeder is responsible for bringing snacks, coffee or whatever food to keep the group energized!
What are the rules for a PBL session?
Rules for a PBL Session

Don’t be late

No personal electronic devices (except for the searcher)

Everyone needs to contribute

Be respectful of others and their opinions
Let’s Debrief

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Questions?