

# HOW TO DESIGN AND MODERATE AN EFFECTIVE PBLD

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Society for Pediatric Anesthesia Meeting, Saturday March 8<sup>th</sup>, 2014

PBLD Workshop Outline: 1500-1700hrs

Dr. Kirk Lalwani and Dr. Nancy Glass

	Time	Activity	Moderator/s	Duration
1	1500-1505	Introductions, icebreaker	KL	5 mins
2	1505-1515	Benefits of case-based learning	NLG	10 mins
3	1515-1530	Characteristics of an ideal PBLD stem / case	KL	15 mins
4	1530-1545	<b>Breakout Session 1 – “Think-Pair-Share”</b> <u>Think</u> : Each participant develops a PBLD stem	Participants	15 mins
5	1545-1600	<u>Pair and Share</u> : Partners/neighbors exchange stems and critique to each other	Participants	15 mins
6	1600-1605	<b>Break: 5 minutes</b>		5 mins
7	1605-1615	<b>Breakout Session 2 - Small Group Discussion</b> Compile a set of Best Practices for moderating an inclusive, robust problem-based discussion	Participants	10 mins
8	1615-1625	<b>Breakout Session 2 - Large Group Discussion:</b> Small groups report to whole group	NLG / KL	10 mins
9	1625-1645	<b>Breakout Session 3 - Role Play</b> Volunteers and assigned individuals will play the role of participants and moderator of a PBLD , followed by debriefing	Participants + NLG / KL	20 mins
10	1645-1655	The nuts and bolts of the PBLD review process at ASA & SPA	NLG / KL	10 mins
11	1655-1700	Final questions and wrap up	NLG / KL	5 mins

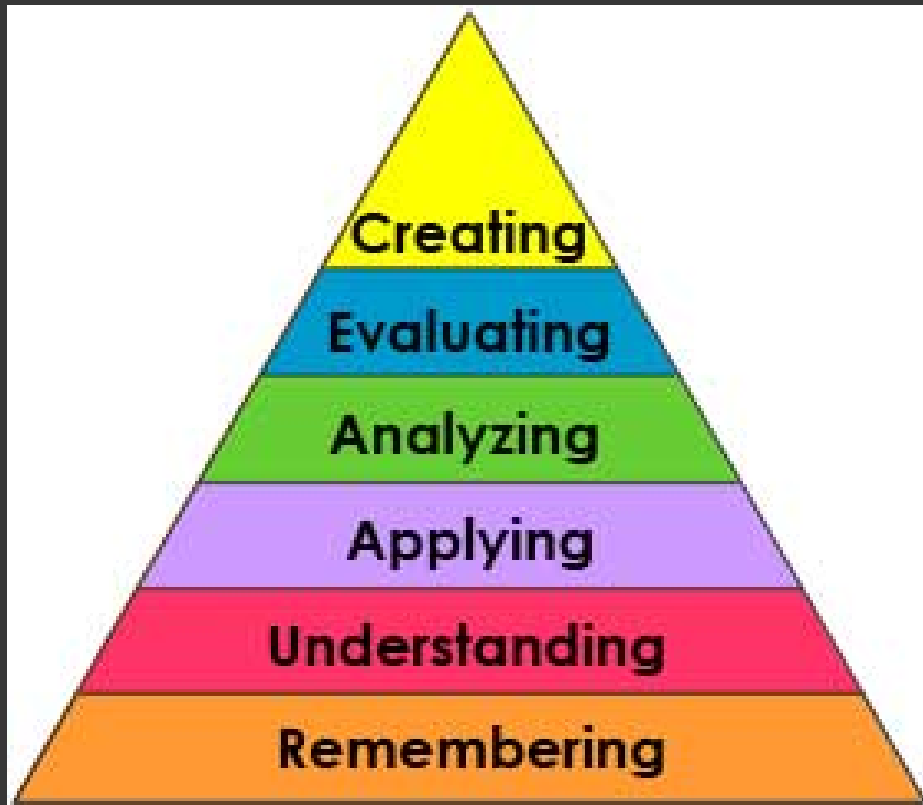
# CHARACTERISTICS OF AN IDEAL PBL STEM OR CASE

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# Elements of PBLD

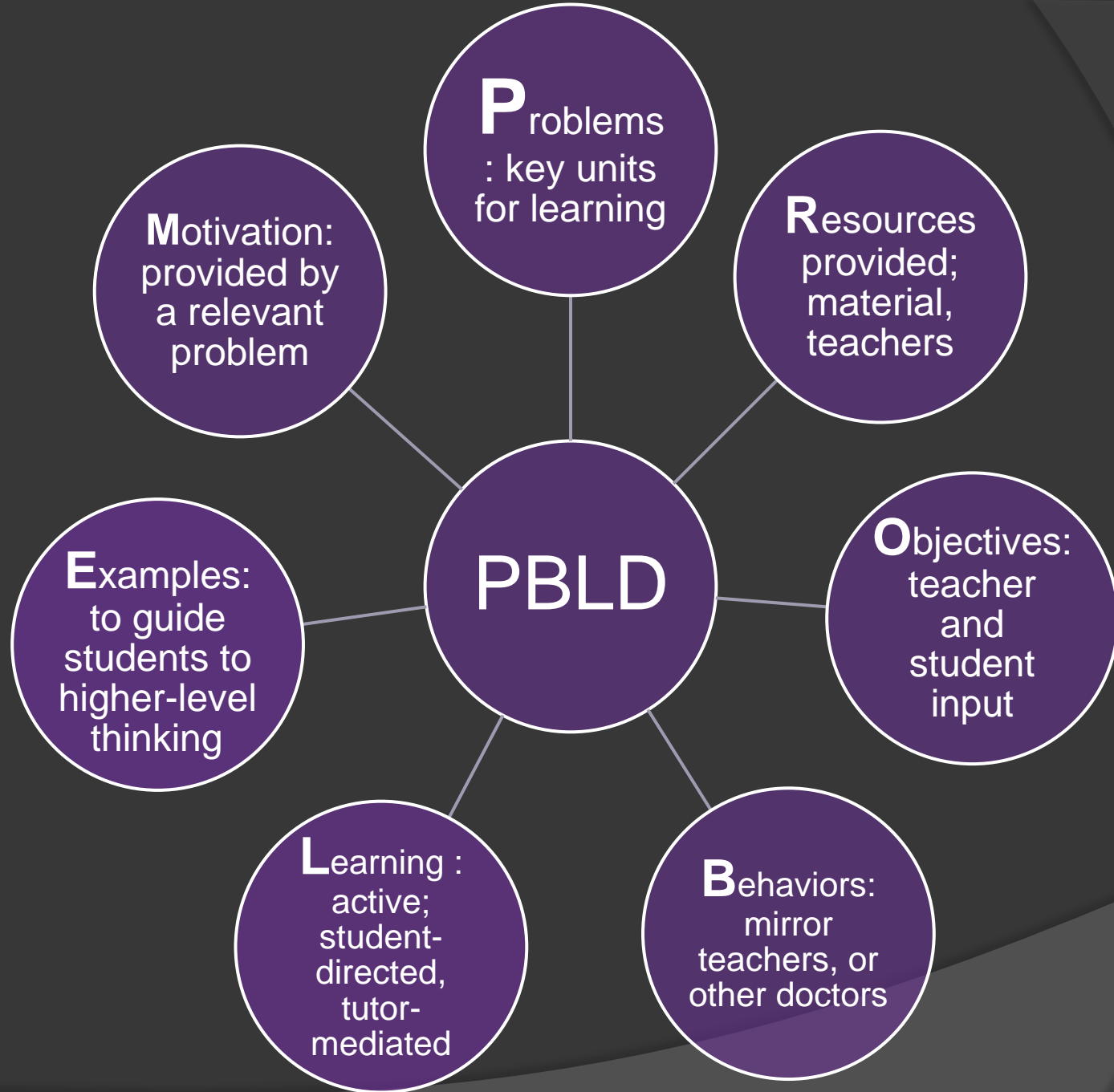
- Identifies learning needs
- Interactive process
- Use of patient problems as a context for students to:
  - Learn problem-solving skills
  - Acquire knowledge about basic and clinical aspects of the problems presented.
  - Apply new knowledge to problems
  - Summarize what was learned
  - Reflect on process

# Bloom's Taxonomy of Learning Objectives, 1956:(Revised 2001)



Higher Order Thinking Skills (HOTS)

Lower Order Thinking Skills (LOTS)



# Why should I present a PBLD?

- ⦿ Academic portfolio for promotion
- ⦿ Teaching resource for trainees, or as a Visiting Professor
- ⦿ Ability to get time off to attend ASA / SPA
- ⦿ Can be presented multiple times at ASA
- ⦿ Educational: learn from participants
- ⦿ Networking with your peers at the meeting
- ⦿ Conversion to **MedEdPortal** publication
- ⦿ ([www.aamc.org/mededportal](http://www.aamc.org/mededportal))

# Learning Objectives

- ◎ Statement that describes the knowledge, skills, and/or attitudes that participants will gain from the activity
  - Specific
  - Measurable
  - Attainable
  - Relevant
  - Timely
- ◎ Ask 3 questions about the participants
  - What should the result of this activity be for them?
  - What should they be able to do ?
  - What should they know ?



# Verbs for Formulating Objectives

INFORMATION (knowledge)	COMPREHENSION (knowledge)	APPLICATION (competence)	ANALYSIS (competence)	SYNTHESIS (performance)	EVALUATION (performance)	SKILLS (performance)	ATTITUDE	AVOID THESE
define	classify	apply	analyze	construct	appraise	diagnose	acquire	<del>understand</del>
describe	compare	demonstrate	categorize	design	assess	integrate	exemplify	<del>learn</del>
identify	describe	interpret	contrast	formulate	evaluate	measure	realize	<del>know</del>
indicate	differentiate	predict	debate	integrate	justify	predict	reflect	<del>appreciate</del>
recognize	explain	relate	question	organize	prioritize	project		<del>believe</del>
trace	interpret	report	summarize	prepare	select			
	review			specify				

# Source Material

- ⦿ An interesting case
  - Not simply a rare syndrome and/or unexpected complication
  - Interesting presentation of a common problem
  - Build controversy or discussion around the case
  - You can add complications or challenges to a real case
  - Presents management dilemmas
  - 3-4 main areas of discussion within the case
- ⦿ Can be professional, legal, or ethical issues
- ⦿ Quality Improvement: processes, tools and projects
- ⦿ Educational (PBLD on PBLDs, faculty development)
- ⦿ Controversies from the literature

# An example...

## Circulatory collapse during laparoscopic pyloromyotomy in a 12 day old infant

### *Objectives*

- Describe the fetal and transitional circulation
- Discuss the causes of circulatory collapse
- Discuss the electrolyte imbalances
- Review the algorithms for neonatal resuscitation

# Objectives: Got 'Hooks'?

- 3 or more risks associated with neonatal laparoscopy
- Factors associated with successful neonatal resuscitation
- Therapies to reduce ischemia/reperfusion injury
- Physical properties of embolized gases that contribute to outcomes
- 3 therapeutic interventions for each type of embolism
- List 8 never events

Susan Taylor, MD, MPH, Presented at the ASA Meeting, 2010.

# Cases are Stories with an Educational Message

*I will tell you something about stories; they aren't just entertainment. Don't be fooled.*

*They are all we have, you see, all we have to fight off illness and death. You don't have anything if you don't have the stories.*

*Leslie Marmon Silko, Laguna Tribe*

# What PBL is NOT

PBL is NOT a lecture or 'talk'

PBL is NOT a discussion about what YOU did for that patient, and how YOU did it

PBL is not a report of a rare, uncommon syndrome (often with ho-hum management)

# A Good Case

- Tells a story
- Is relevant
- Is short
- Has something to teach
- Is contemporary
- Has characters that evoke empathy
- Has controversies or conflict
- Requires that dilemmas be solved
- Has generality – the “take-home message”

# The Problem

- ⦿ Interesting, engaging, real-world
- ⦿ Requires decision-making or judgments
- ⦿ Open-ended questions
- ⦿ Connects to existing knowledge
- ⦿ Controversy
  - stimulates discussion and higher-level learning
  - analysis and synthesis of concepts
- ⦿ Objectives should be incorporated into problem
- ⦿ Not too many distracting issues (3-5 ideal)



# The Many Problems with Problems

- ⦿ **ZEBRAS** - once in a lifetime case
- ⦿ “Look how well we managed this rare event ”
- ⦿ Poorly written objectives
- ⦿ No avenues for productive discussion
- ⦿ No controversy
- ⦿ No decision-making required- case gives all the answers !
- ⦿ No twists and turns or gradual revelation of case details
- ⦿ Uninteresting; lack of engagement / relevance
- ⦿ Case does not follow objectives
- ⦿ Too many problems or objectives
- ⦿ Poorly written: typos, bad grammar, unqualified abbreviations, factually incorrect, inflammatory
- ⦿ Poor selection of references

# Breakout Session 1- “Think-Pair-Share”



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# How to be an Effective PBLD Moderator : Best Practices

# The Effective PBLD

## Moderator

- Prepares and reviews the material in advance
- Introduces self and participants to each other
- Opens discussion with a non-threatening question that should be familiar to everyone
- Asks open-ended questions
- Avoids being a content expert
- Does not lecture or give a talk
- Involves all participants
- Incorporates different practice settings
- Encourages higher-level learning with analytical, probing, or reflective questions
- Allows time for reflection and thinking after a question

# The Effective PBLD

## Moderator

- ⦿ Keeps the group focused
- ⦿ Guides the discussion through the objectives
- ⦿ Controls the dominant participant
- ⦿ Engages the quiet participant
- ⦿ Has some interesting historical or cultural tidbits to engage interest
- ⦿ Has some general queries for the group to vote on
- ⦿ Maintains a pleasant, collaborative learning dynamic
- ⦿ Keeps track of time
- ⦿ Summarizes the key points of the discussion at the end

# “Take not the easy path..”



- ⦿ Don't fail to prepare
- ⦿ Don't forget introductions and ice-breakers
- ⦿ Don't forget to use a seating chart and names
- ⦿ Don't start with a closed-end question
- ⦿ Don't discuss emotional material until the end
- ⦿ Don't forget to use the flip chart effectively
- ⦿ Don't forget to call on the quiet people
- ⦿ Don't allow domination by 1-2 individuals
- ⦿ Don't forget to listen and respond to students
- ⦿ Don't forget to correct factual errors