

HOW TO DESIGN AND MODERATE AN EFFECTIVE PBLD

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Society for Pediatric Anesthesia Meeting, Saturday March 14th, 2015

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	Breakout Session 1 – “Think-Pair-Share” <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	Break: 5 minutes		5 mins
7	1605-1615	Breakout Session 2 - Small Group Discussion Compile a set of Best Practices for moderating an inclusive, robust problem-based discussion	Participants	10 mins
8	1615-1625	Breakout Session 2 - Large Group Discussion: Small groups report to whole group	NLG / KL	10 mins
9	1625-1645	Breakout Session 3 - Role Play 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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I have no conflicts of interest to disclose.

Objectives

Upon completion of this workshop, participants will be able to:

- ① State the rationale for case-based group learning.
- ① Recognize the characteristics of a case suitable for discussion.
- ① Be able to differentiate between a case appropriate for a Medically Challenging Case and a PBLD.
- ① Take a brief stem and develop a PBLD suitable for the designated audience.
- ① Compile a set of Best Practices for leading an inclusive, robust discussion

Elements of PBLD

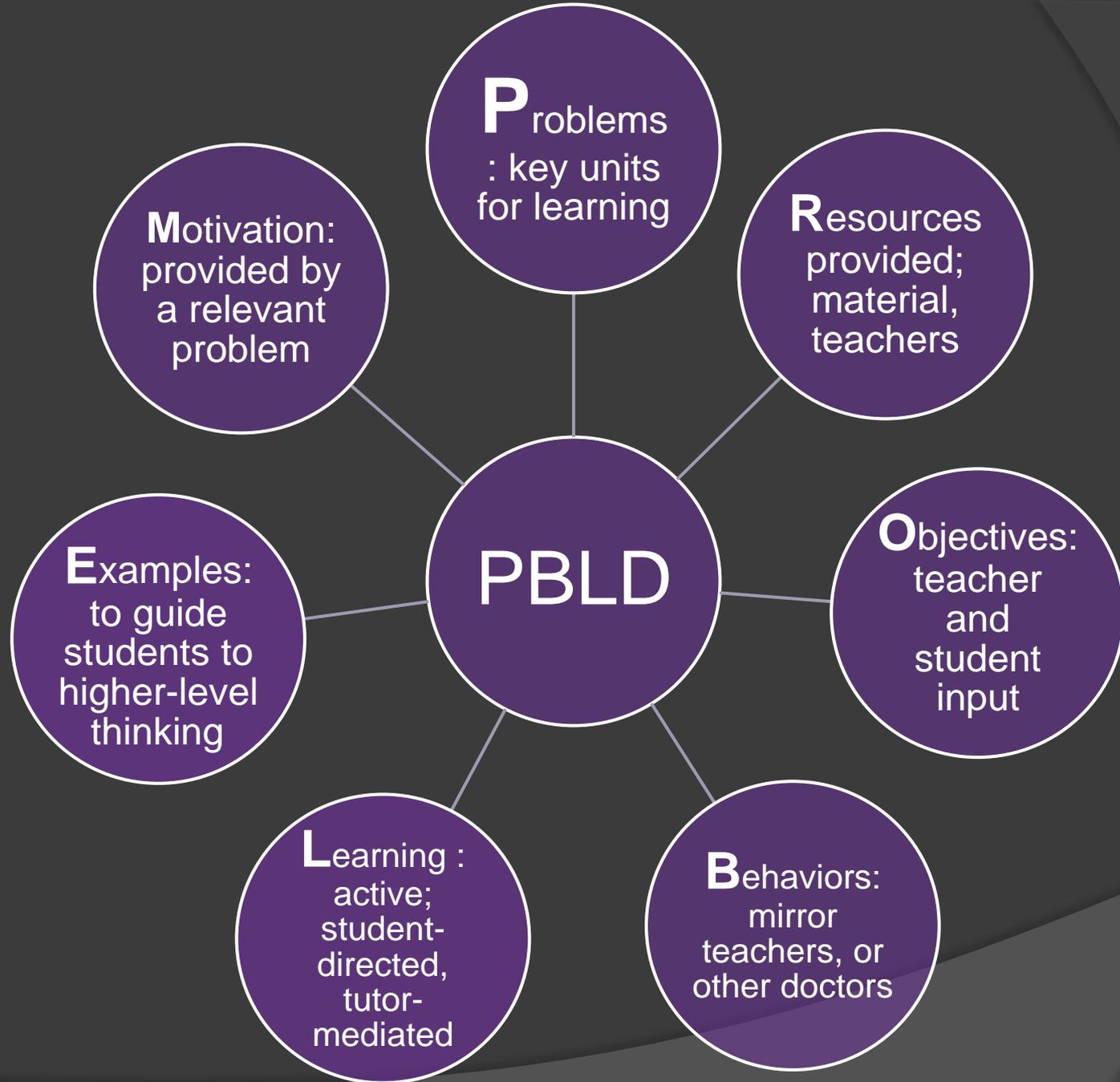
- Identifies learning needs
- Interactive process
- Use of patient problems as a context for students to:
 - Learn problem-solving skills
 - Acquire knowledge about basic and clinical aspects of the problems presented.
 - Apply new knowledge to problems
 - Summarize what was learned
 - Reflect on process

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)

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	understand
describe	compare	demonstrate	categorize	design	assess	integrate	exemplify	learn
identify	describe	interpret	contrast	formulate	evaluate	measure	realize	know
indicate	differentiate	predict	debate	integrate	justify	predict	reflect	appreciate
recognize	explain	relate	question	organize	prioritize	project		believe
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