

# Professional Development in Microbursts

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## Disclosures

- We have none

## Why do we need professional development?

Start the presentation to see live content. For screen share software, share the entire screen. Get help at [pollev.com/app](https://pollev.com/app)

## Why professional development is critical

### For clinicians





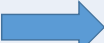

- Rapidly growing medical knowledge
- Changing delivery systems
- Increasing complexity and volume of patients

### For teachers



- Problematic learning environment
- Changing pedagogy and technology
- Clinicians frequently have not received formal training as teachers
- Increasing numbers of trainees

## How it is generally done

Lectures		30-60 minutes
Seminars		60-90 minutes
Workshops		60-120 minutes
Courses		1/2 to 14 days or more

**What are the major obstacles to providing professional development?**

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## Major challenges



- Time
- Increasing clinical responsibilities and other non-clinical responsibilities
- Motivation
- Lack of prioritization of medical education

## What usually happens?

**People who don't need it, show up**

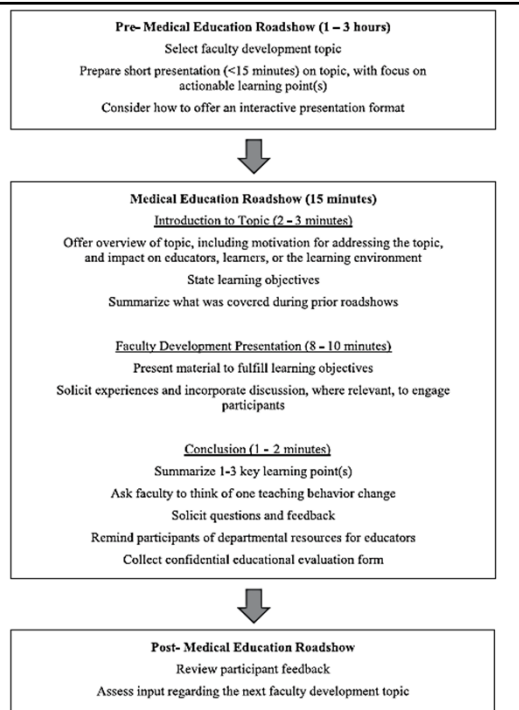
**People who need it, don't show up**

## New Model – The Microburst

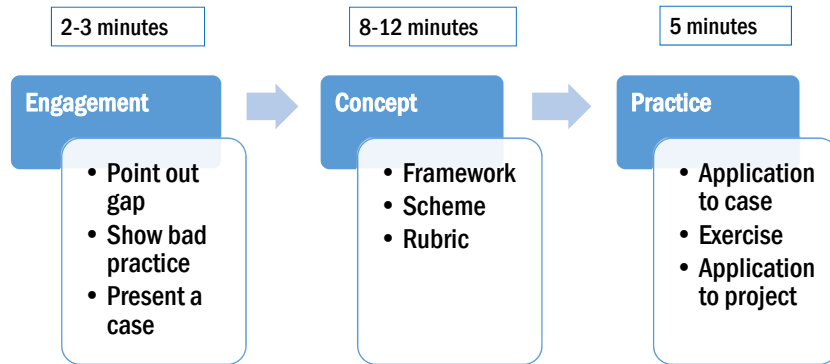
- Embedded in existing meeting → **Convenient**
- Condensed, focused learning → **Efficient**
- Existing meeting is mandatory → **Motivated**

## The Medical Education Roadshow: Delivering Faculty Development to Busy Clinician Educators When They Least Expect it

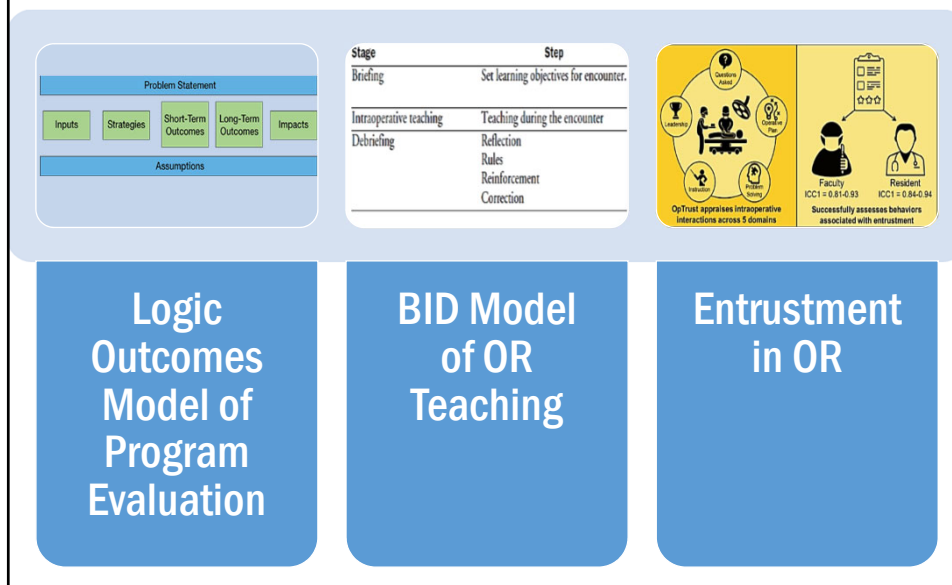
Lau, et al. JCEHP 2021;41:157-160  
Department of Obstetrics, Gynecology,  
and Reproductive Biology, MGH



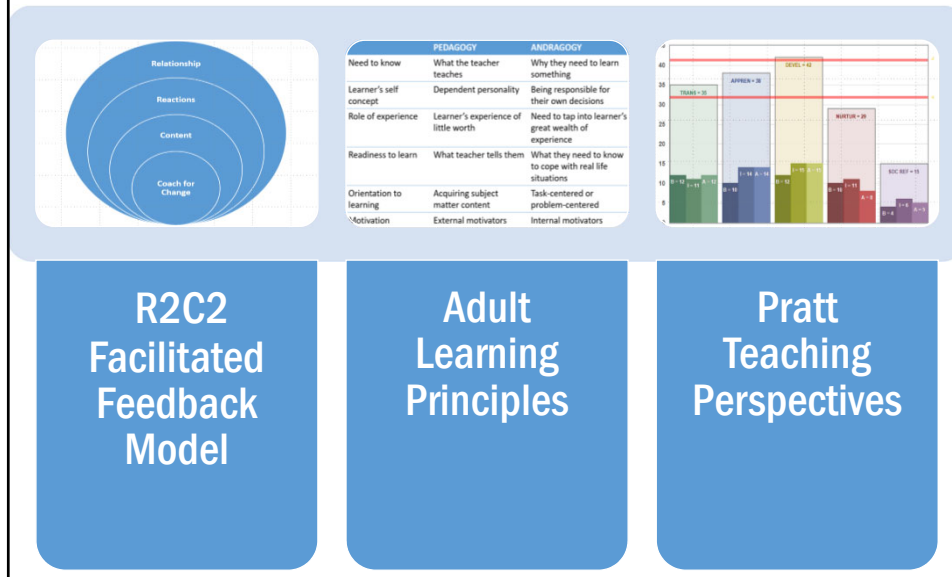
## Format I have used



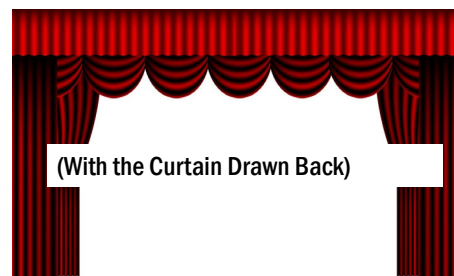
## Microburst Examples



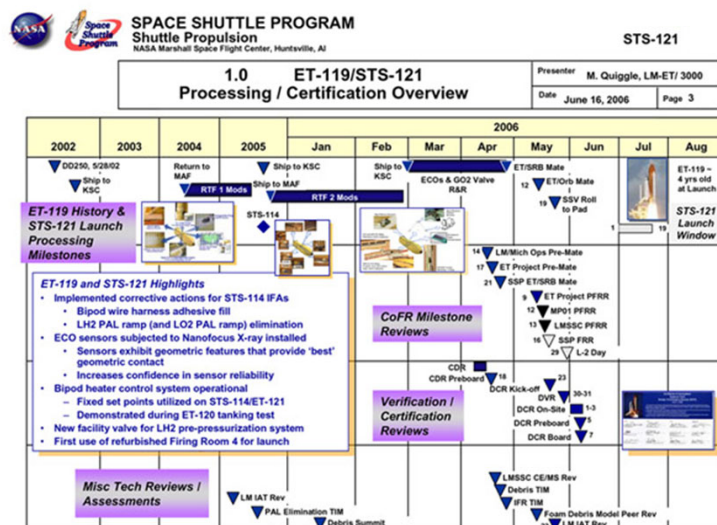
## More Examples



## Microburst: Cognitive Load and Learning

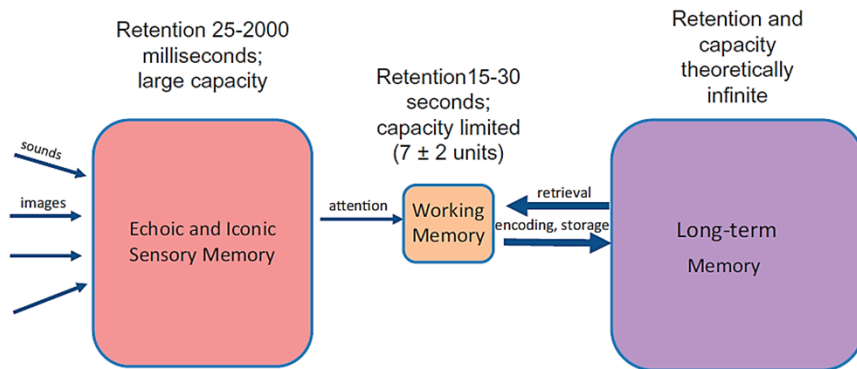


# What's wrong with this PowerPoint slide?



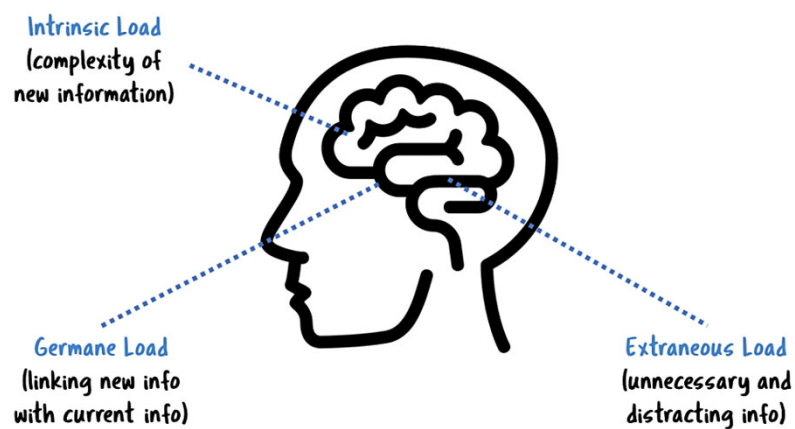


## Human Memory



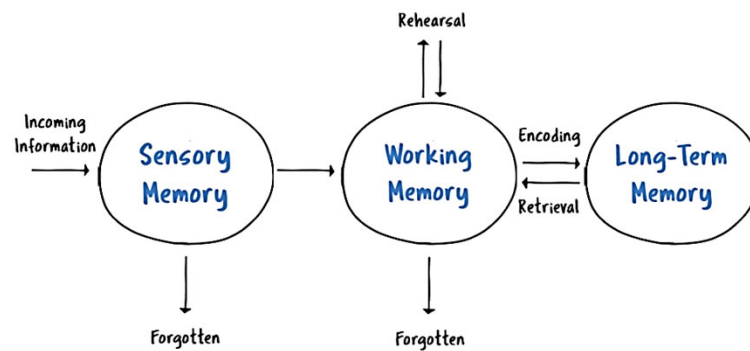
**Figure 1.** Atkinson-Shiffrin three-stage model of human memory.

## Cognitive Load Theory



barefootTEFLteacher.com

## Human Memory – with lower cognitive load



barefootTEFLteacher.com

## Maximizing learning

### To decrease Extrinsic load

- Avoid distractions or splitting attention
- Use problem completion
- Provide worked example
- Use visual and auditory modalities (and don't overload either)

### To manage Intrinsic load

- Chunking
- Progress from simple to complex
- Progress from low to high fidelity

### To optimize Germane load

- Activate prior knowledge
- Interleaving (not AAA-BBB-CCC, but ACBBACBAC)
- Provide variability
- Use generation effect

## **Understanding cognitive load, how would you respond to this challenge...**

You have been asked to give a talk to beginning healthcare professional learners on the 27 different steps in discharging a patient from the hospital. How would you approach this challenge in order to maximize learning.

## **Managing Cognitive Load: Take-home approaches**

1. Minimize distraction by non-essential elements
2. Pre-digest difficult concepts
3. Help them build frameworks of knowledge

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