

# Contemporary Pedagogy:

## The Layered Learning Approach for Supporting Innovative Technology

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## Continuing Nursing Education



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## •Conflict of Interest

- Eric Bauman: CAE Healthcare (Stock Shareholder excluding mutual funds); Clinical Playground LLC (Consultant); Clovis Oncology Inc (Stock Shareholder excluding mutual funds); General Electric (Stock Shareholder excluding mutual funds); Pfizer (Stock Shareholder excluding mutual funds); Springer Publishing Co. (Royalties); Zynga (Stock Shareholder excluding mutual funds)
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- Angela Samosorn: no disclosures
- Julia Greenawalt (INACSL Conference Administrator & Nurse Planner) reports no conflict of interest
- Leann Horsley (INACSL Lead Nurse Planner) reports no conflict of interest

## •Successful Completion

- Attend 90% of session
- Complete online evaluation



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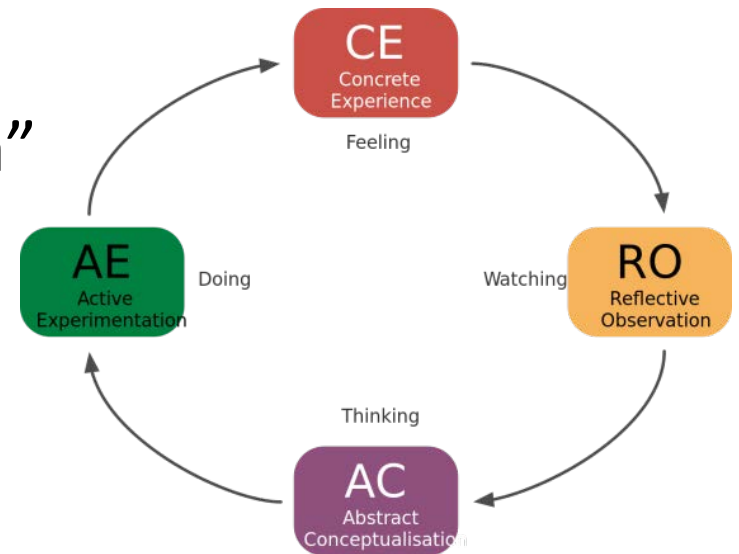
# Objectives

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

1. Compare and contrast traditional experiential pedagogy with contemporary pedagogy designed to support multi-media technology such as game-based learning
2. Demonstrate the concepts of innovation and fit for curriculum through the storyboarding process
3. Design, discuss, and critique game-based interventions applicable to identified curriculum needs

# Traditional Experiential Pedagogy

- Kolb – Experiential Learning Cycle
- Schön – Reflection “in” and “on”  
action
- Benner – Thinking in Action



# Traditional Theorists

- Could theorists like Kolb, Schön and Benner have predicted the rapid advances in technology being used for clinical education?
- Many contemporary theories that support multimedia teaching and learning draw in part from experiential learning theories

# Contemporary Pedagogy

For the digital learning landscape

- Gee – Socially Situated Cognition
- Squire – Designed Experience
- Games & Bauman – Ecology of Culturally Competent Design
- Bauman – Layered Learning Model

# Gee – Socially Situated Cognition

Socially Situated Cognition: Refers to learning that is situated within a material, social, and cultural world. Learning that is situated takes place in contextually specific and authentic environment with a host of values and expectations.





# Squire – Designed Experience

Designed Experience: Is engineered to include structured activities targeted to facilitate interactions that drive anticipated experiences. These activities are created to embody participant experience as performance.



# Games & Bauman

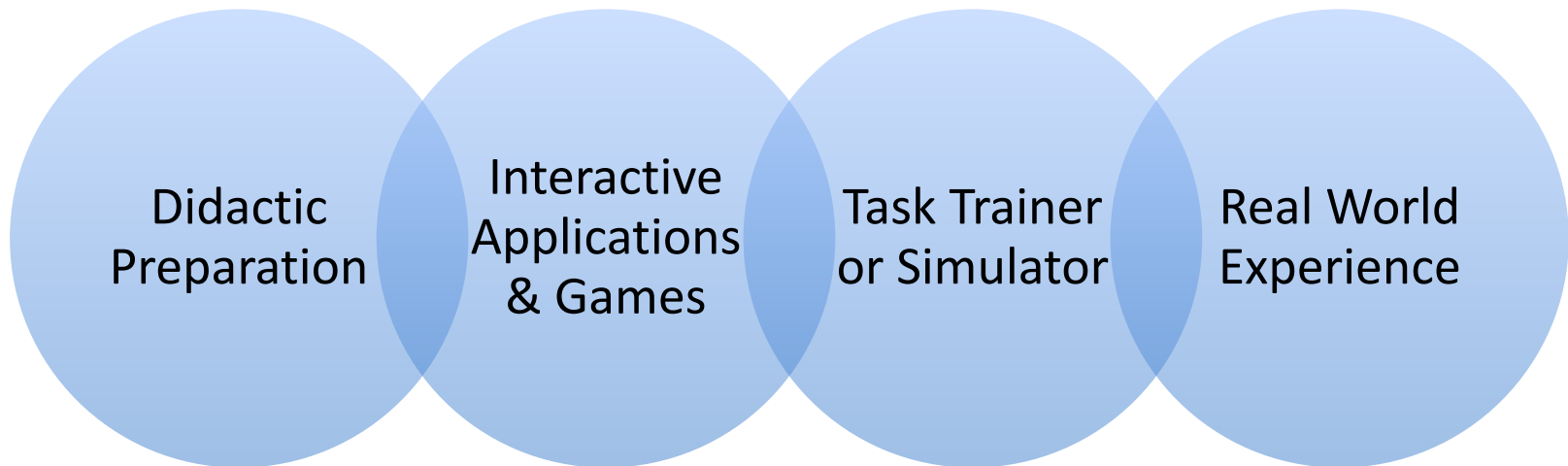
## Ecology of Culturally Competent Design

Four-element model that emphasizes the importance of:

1. Activities: What players/learners do in the game or environment
2. Contexts: The context in which activities take place
3. Narratives: The story that situates the learning and drives psychological fidelity
4. Characters: How player and non-player characters are represented in the digital environment

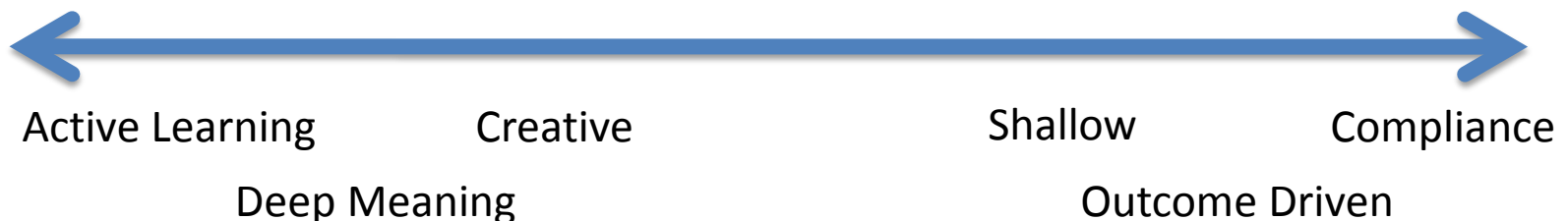
# Bauman - Layered Learning Model

Situated learning experiences link didactic content with practical hands on experiences



# Why Embrace Game Based Learning Pedagogy: Connect Learning with Reward

Intrinsic	Extrinsic
Reward comes from Mastery	Tangible Reward
Goals are clear, meaningful and situated	Goals assigned
Progress is intuitive apparent and immediate [real-time or just-in-time]	Progress is determined or assigned outside of the current activity
Endorses or reinforces behavior you are already committed to or hope to engage in the future – <u>Represents Player Agency</u>	If you complete this task you will be given access to another task – <u>Hierarchical Direction</u>
<b>Autonomous</b>	<b>Directed</b>



# Lets Play!

iPad

8:31 AM

38%

## Games & Sims



iAnesthesia



Medical Bon...



Embryo Tempus



Handwashin...



Diagnose\_Me



Histology Card!



Veterinary B...



Airway Lab Sim

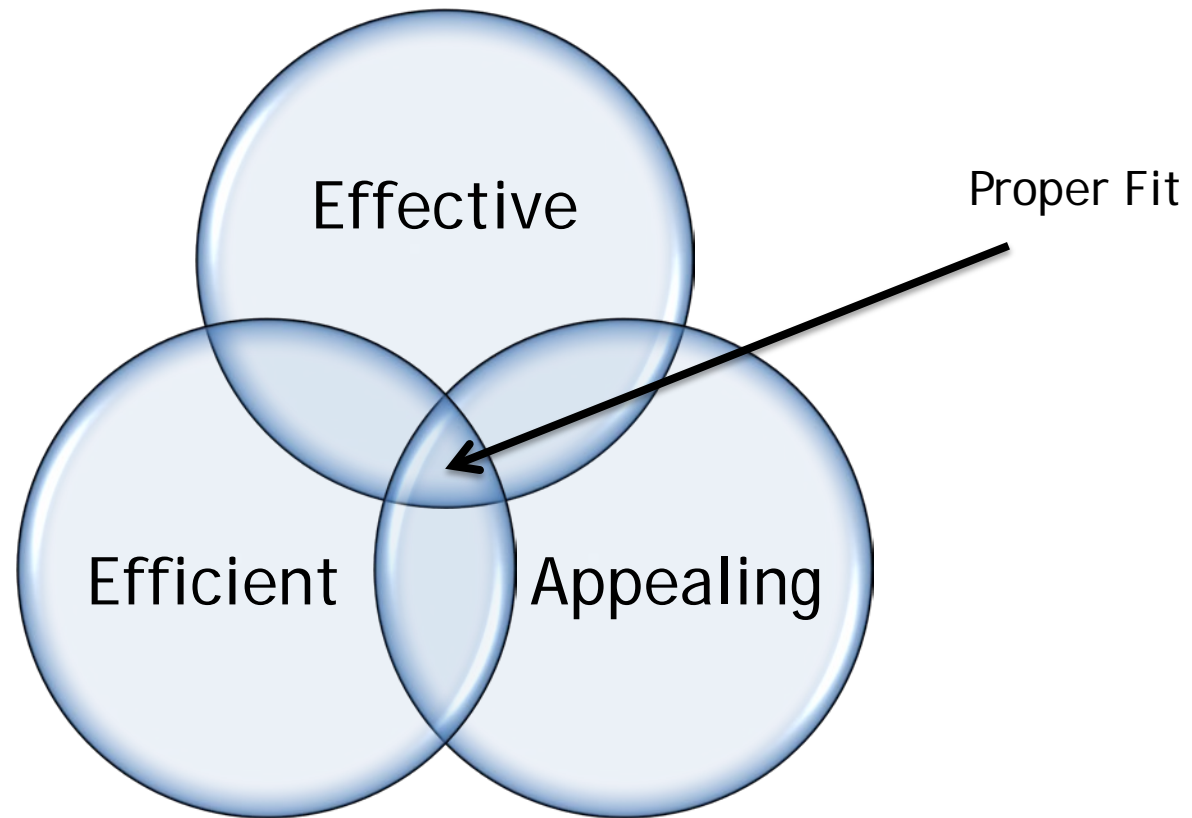
# Identifying Opportunities to Integrate Game Based Learning

## Identify and Solve a Problem

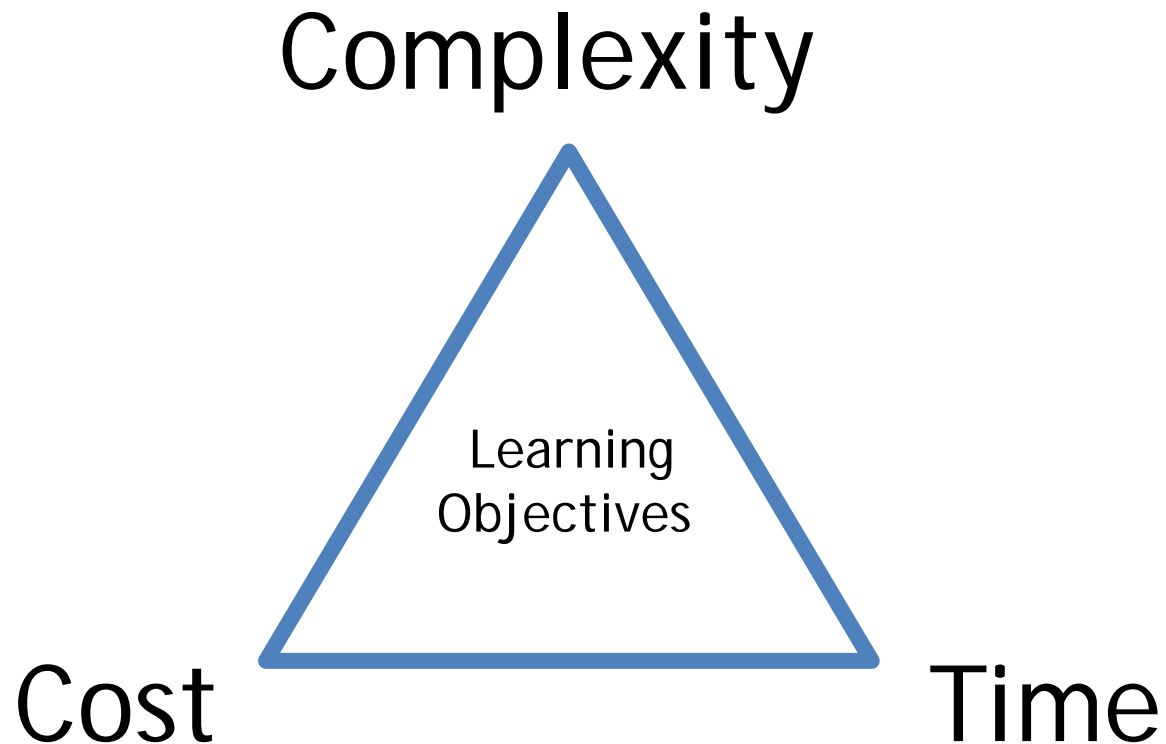
- Ask: Can game based learning solve this problem?
- Ask: Is game based learning a good fit?
- Ask: What is the cost/benefit analysis?



# Aspects of Fit: Impact



# Aspects of Fit: Constraints





# Digital Fit for Learning Situations

Learning Situation or Goal	Type of Game or Simulation
Boring, mundane, undesirable tasks	<a href="#">Games that level up</a> ; intrinsic motivation
Distinct levels of achievement or competency	Meta-gaming; <a href="#">use out-of-game resources</a> or strategies to succeed
Reinforce information or processes	<a href="#">Mini-games within game</a>
Define terms; use appropriately; syntax	Quick games; <a href="#">reward for speed</a> ; <a href="#">replay from pool</a>

# Storyboarding

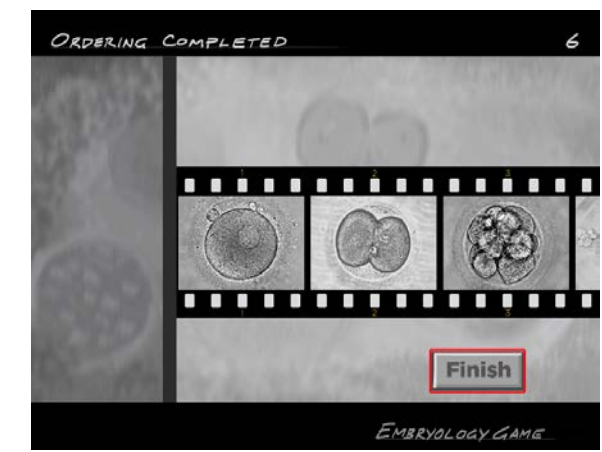
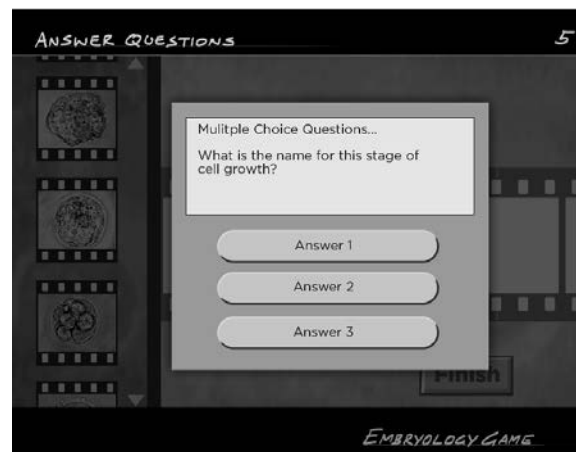
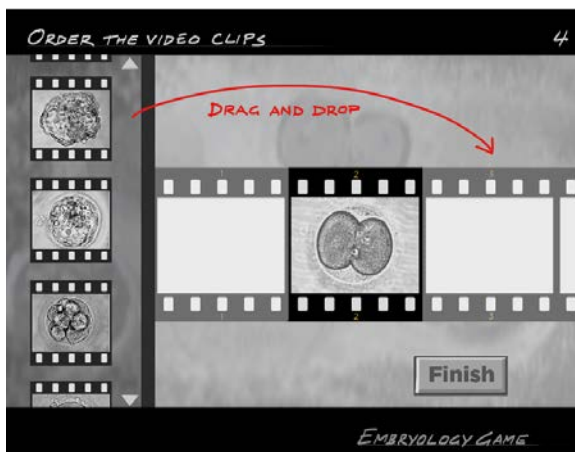
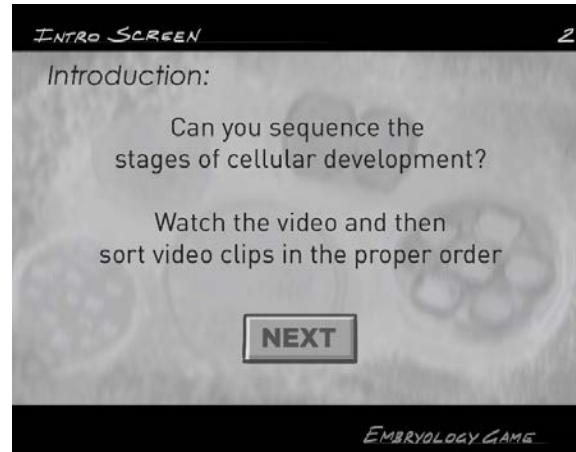
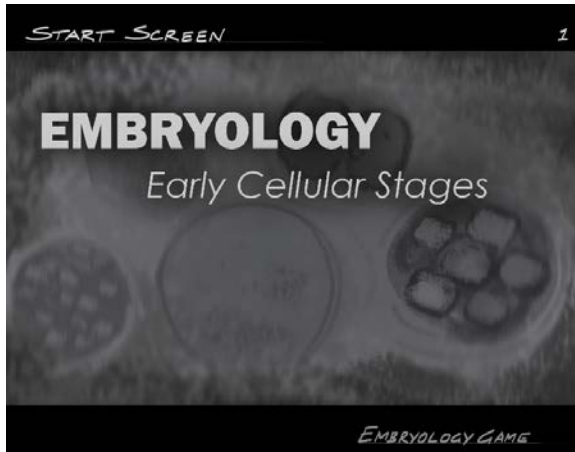
If you can build a PowerPoint presentation you can build a rudimentary Storyboard

Think about how a comic book or graphic novel unfolds



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# Storyboarding

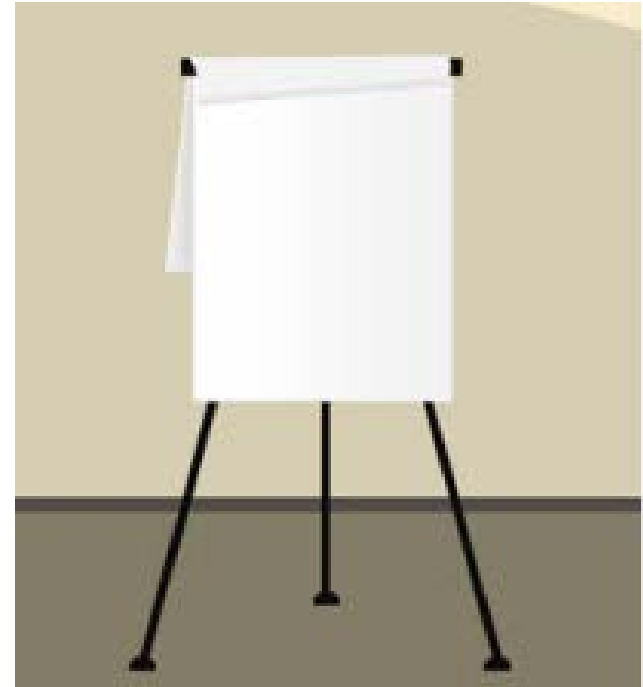


# Storyboarding



# Create Your Storyboard

- Work in small groups
- What problem are you trying to solve?
- Define objectives
- Use flip charts
- Narrate with pictures instead of words
- Share with larger group
- Vote on top 3
- Feedback from group
- Regroup and refine
- Present to larger group
- Vote on 'Best Storyboard'



# Discussion & Questions



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