

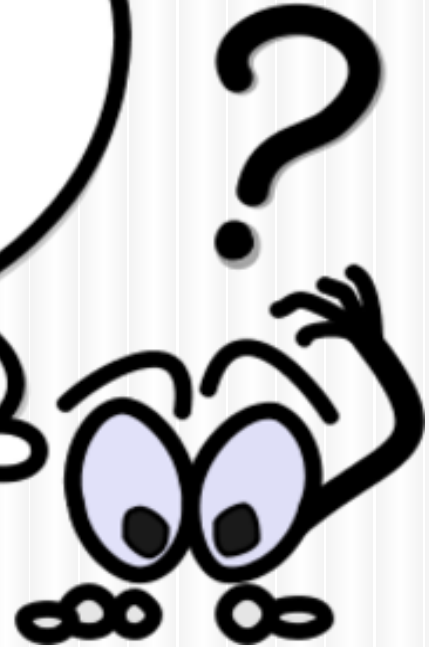
Using Game Mechanics to Motivate Learning Behaviors

Angela Lanier, Ed.D.

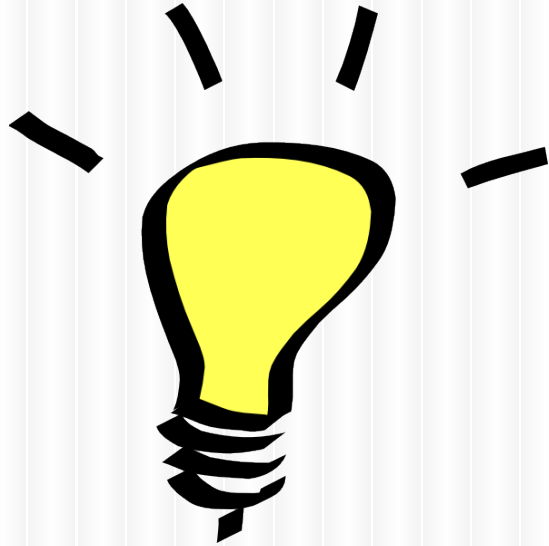
Gamification...

Who?

Me?



Student Engagement....Persistence....Cooperative Learning
Critical Thinking....Problem Solving....

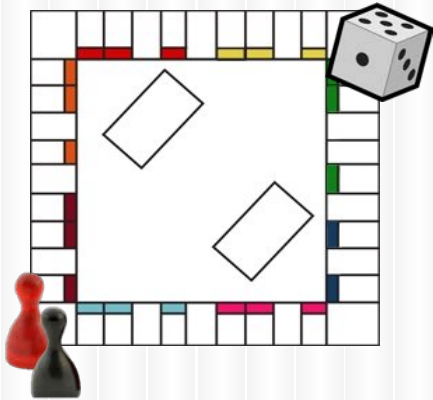


Outcomes

- ♠ Distinguish gamification from game-based learning
- ♠ Describe several game mechanics, their purposes and examples of each
- ♠ Identify which game mechanics can target learning behaviors relevant to your course

Gamification vs. Game-Based Learning

Game-based learning is the use of games to reinforce concepts and skills.



Gamification is the application of game mechanics to a non-game situation. Gamification can be structural or content-based.



Difference between games and gamification

Adapted from: Gamification Wiki: https://badgeville.com/wiki/education#how_to_gamify

Game	Gamification
Defined rules & objectives	Often a collection of tasks with points or some form of reward
Possibility of losing	Losing may or may not be possible; goal is to engage/motivate
Can be difficult or expensive to build	Usually easier and cheaper to implement

Game Mechanics

♣ Narrative

♣ Quests

♣ Instant Feedback

♣ Freedom to Fail

♣ Leveling

♣ Competition

♣ Collaboration

♣ Rewards

2 Types of Gamification

Structural

add elements around instruction without changing content (ex. awarding badges to mark mastery of skills)

Content

alter course content to be more game like (ex. students use skills to complete real-world or fictional quests; completing a quest unlocks advantages for the next quest)

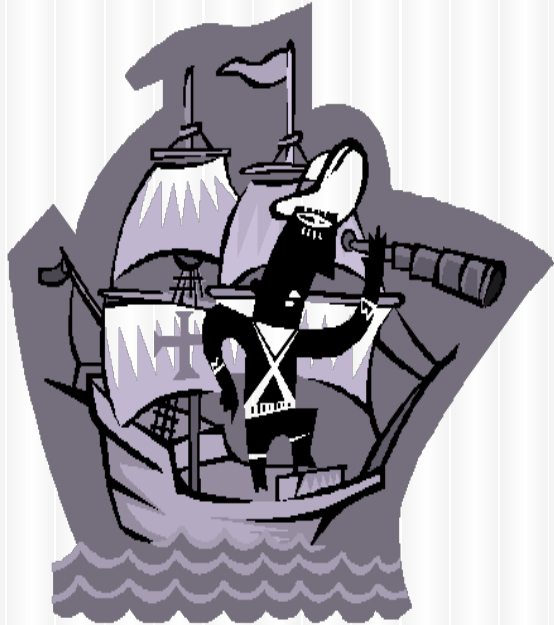
Narrative

A word cloud of narrative-related terms. The words are arranged in a roughly triangular shape, with 'Plot' at the top and 'theme' at the bottom. The words are in various colors (green, brown, olive) and orientations (vertical, horizontal, diagonal). The words include: 'twists', 'fantasy', 'suspense', 'characters', 'reality', 'narrative', 'familiar', 'original', 'backstory', 'events', 'roles', 'story', and 'theme'.

[See this chemistry example](#)

Quests

Sets of tasks requiring students to:



Explore

Destroy

Solve

Discover

Create

Unlock

Instant Feedback



So, how am I doing?

Freedom to Fail

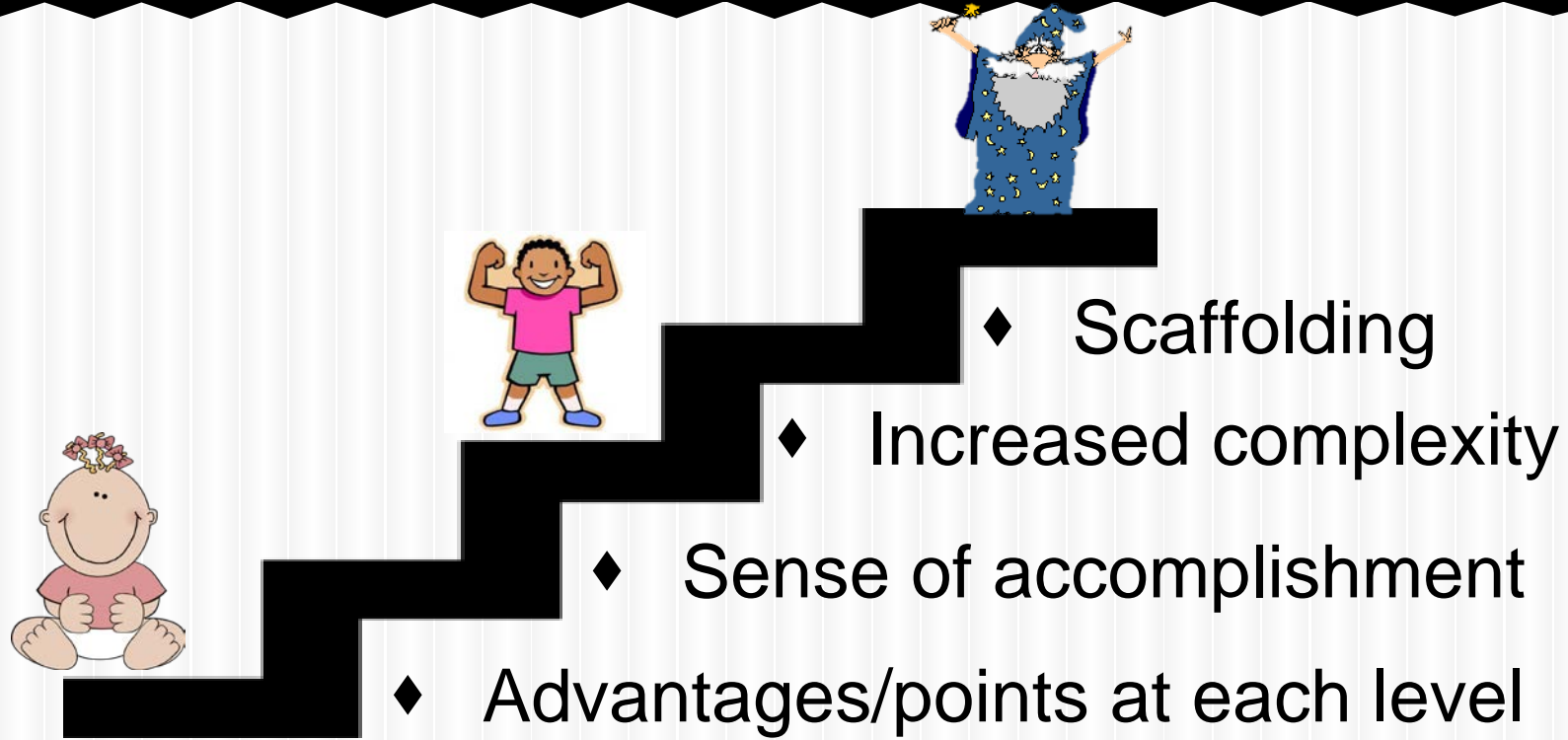
FAIL

Yes!

If at first you don't succeed...



Leveling



Competition & Collaboration



- ♠ Beat the Clock
- ♠ Student vs. Self
- ♠ Group vs. Group
- ♠ Class vs. Class



- ♠ Social Value
- ♠ Meaningful Tasks
- ♠ Cooperative Roles

Rewards



points....badges....leaderboards....power ups....rolling rewards....chances to win prizes.... honorary responsibility

Pitfalls

- ♥ Losing sight of learning outcomes
- ♥ Rewards that students don't care about
- ♥ Students finding work-arounds to get rewards
- ♥ Not enough time for freedom to fail opportunities
- ♥ Rewards that are too difficult to earn, esp. early on
- ♥ Using too many mechanics without a purpose (it's best to tie each mechanic to a learning behavior)

Gamification Activity

- ◆ You will receive a gameboard
- ◆ Go to **START HERE**



- ◆ Work through the board and complete the tasks as directed

A Few Resources

- ♣ [Classroom Gamification Tips for Even the Non-Gamer](#) (video)
- ♣ *The Elements of Gamification* with Karl Kapp (lynda.com course)
- ♣ *The Multiplayer Classroom* by Lee Sheldon (book)
- ♣ [Gamification to Improve Our World](#), (TED Talk)
- ♣ *Does Gamification Work?—A Literature Review of Empirical Studies on Gamification* by Hamari, Koivisto, & Sarsa, 2014 (study)
- ♣ *Analysis of Gamification in Education*, Stott & Neustaedter, 2013 (study)
- ♣ [The Power of Narrative in Course Gamification](#). (ELITE newsletter article)