

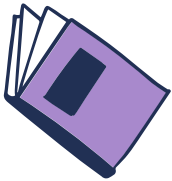
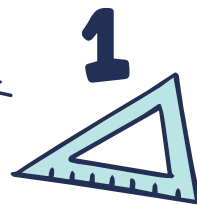
Gamification

Dr. Mariano Lao Webinar Series on Online Distance Learning



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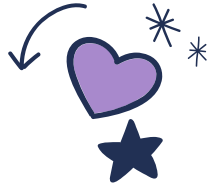
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Webinar Targets of the Day

1. Identify the general principles of games and gamification
2. Integrate gamification principles into education
3. Address common alternative conceptions (misconceptions) on gamification
4. Seek ways to integrate values in gamification techniques

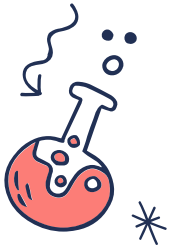




Do you agree to this?

The education system is a system in
an engagement crisis.

-Scott Herbert





Issues on Student Engagement

1

Boring

Signs: uses smartphones, sleepy, loves the view of the window, pretends listening

2

No sense of agency

“control” of their own destiny; their choices matter

3

“Toxic” Commitment to standards

you cannot always go by the books

4

TPACK of Teachers

the need to improve quality of teachers; open-mindedness





Boredom

an emotional and occasionally psychological state experienced when an individual is left without anything in particular to do, is not interested in their surroundings, or feels that a day or period is dull or tedious.



“

If we want to reignite innovation and passion, we have to humanize work.

”

—Brene Brown





Sense of Agency

feeling of control over actions and their consequences.



“

Control leads to compliance;
autonomy leads to engagement.

”

—Daniel Pink





“Toxic” Commitment to Standards

Instead of supporting education as a broadening of experiences, it will ensure that each student is taught no more and no less than every other student.

(Hart, 2019)



“

Learning is creation, not
consumption. Knowledge is not
something a learner absorbs, but
something a learner creates.

”

—George Couros





TPACK of Teachers

the Technological Pedagogical and Content Knowledge is a theory that was developed to explain the set of knowledge that teachers need to teach their students a subject, teach effectively, and use technology.



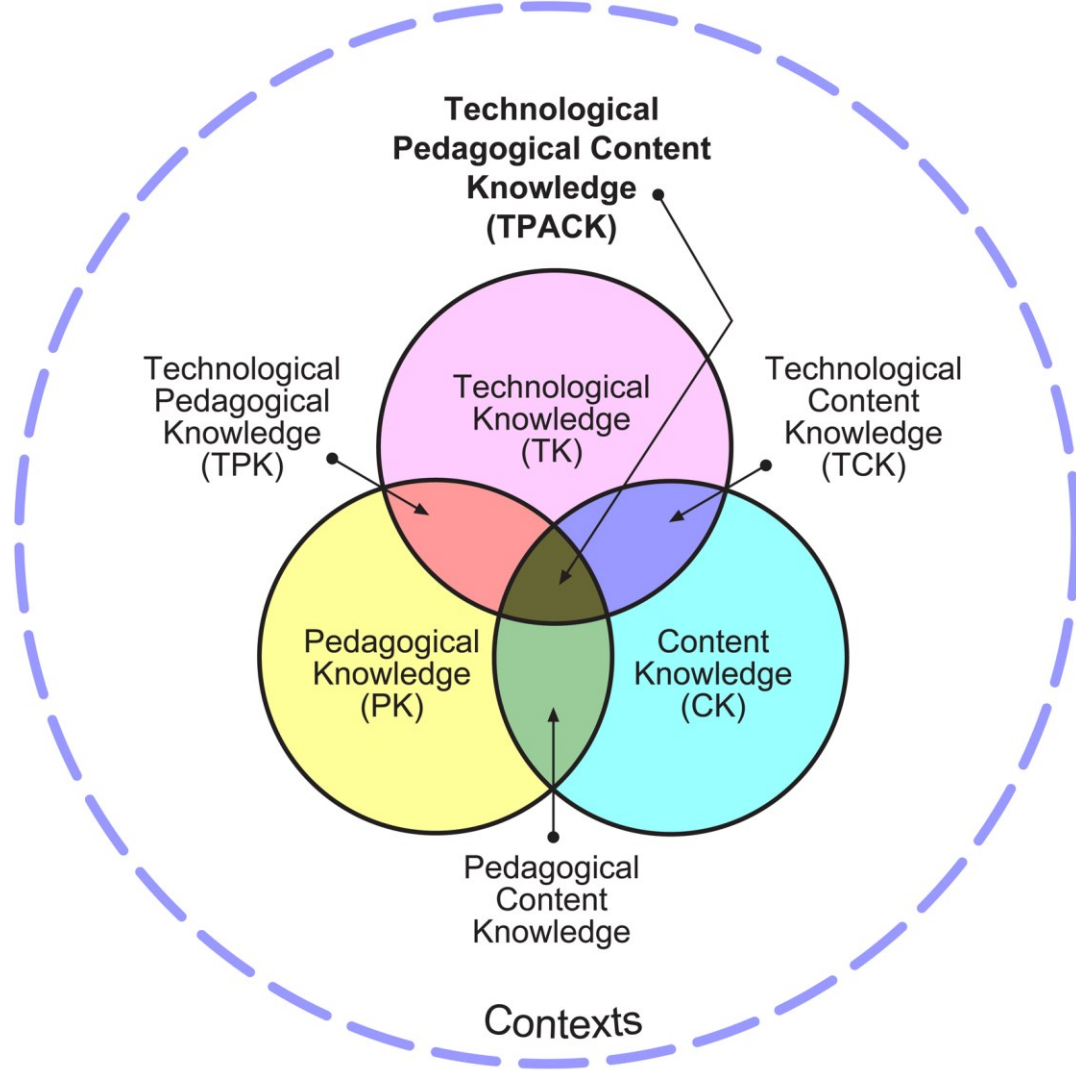
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When you know better,
you do better.

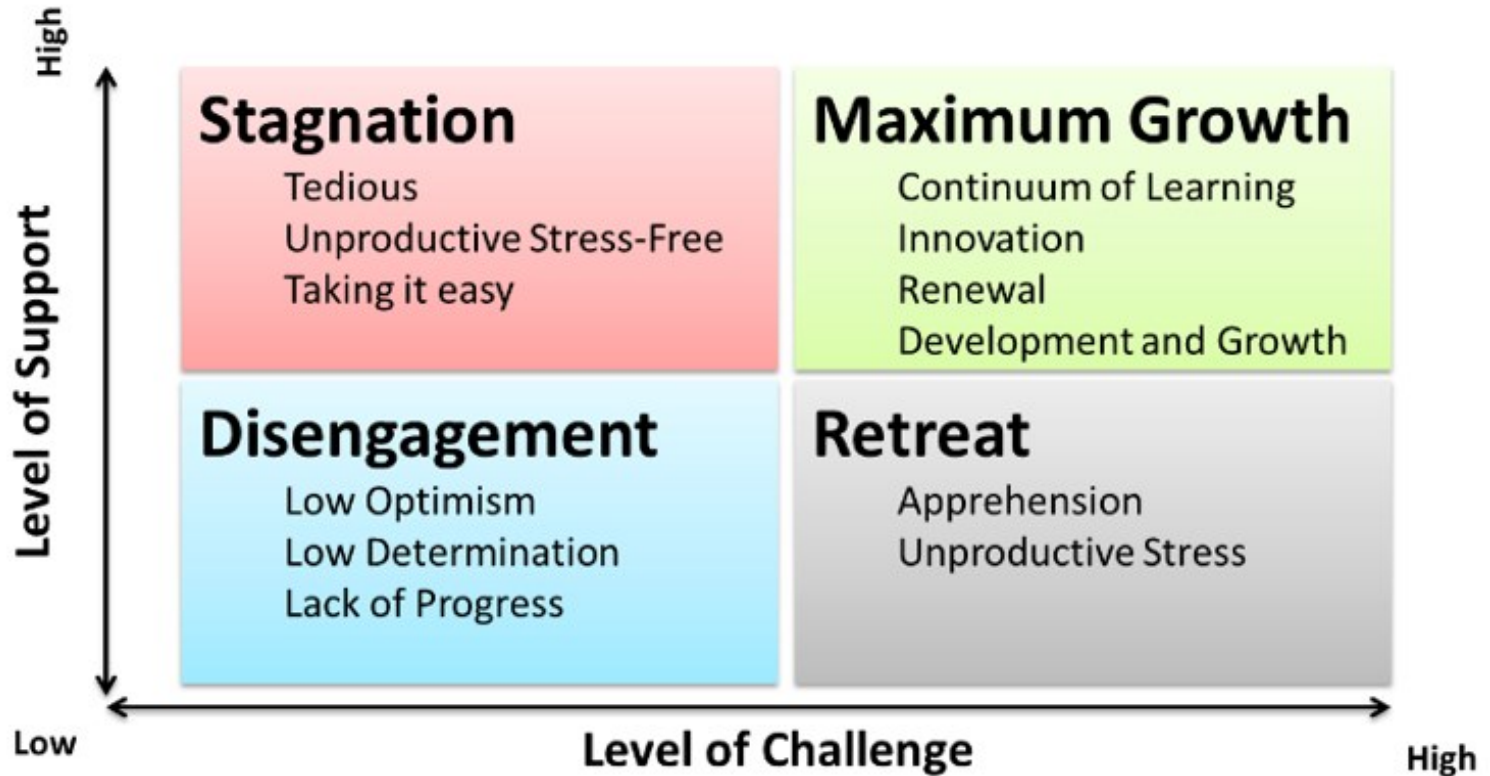
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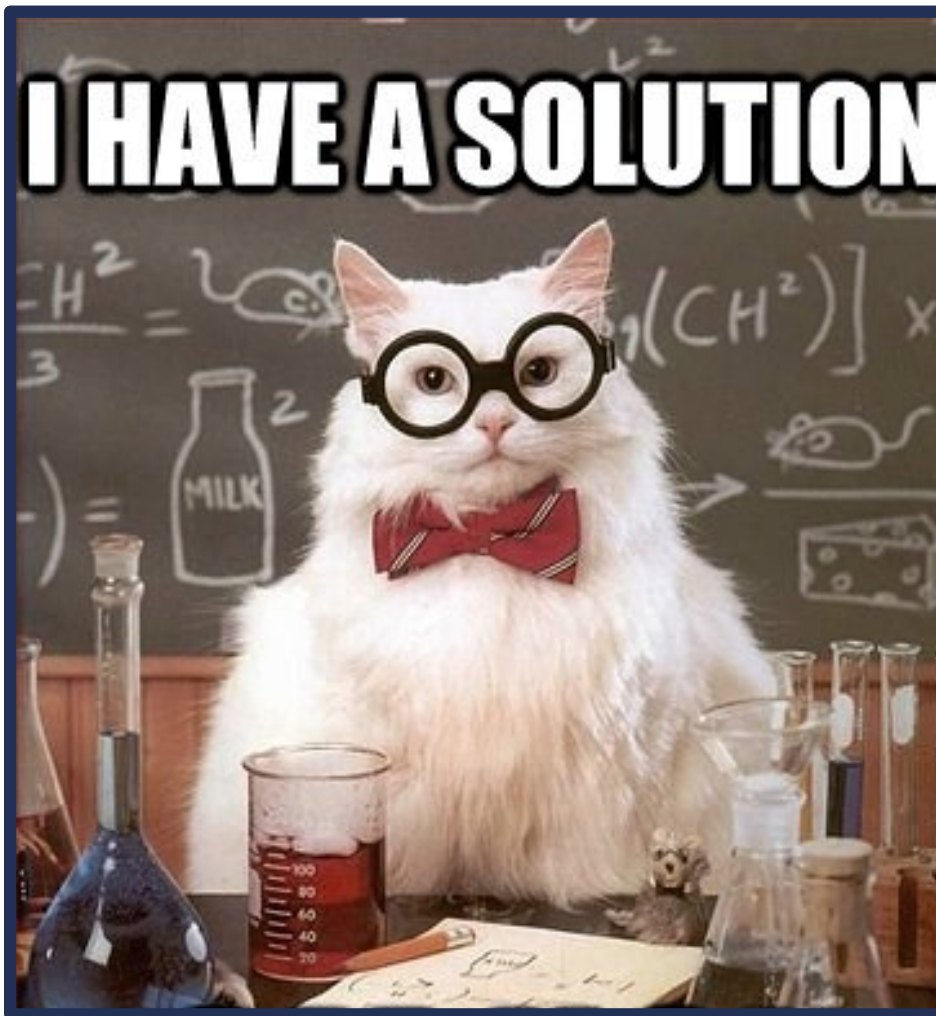
—*Maya Angelou*





Sanford's Theory of Challenge and Support







Gamification





ONLINE GAMER



What Society Thinks I do...



What My Friends Think I do...



What My Cat Thinks I do...





SUSG FB page



SUSG FB page



Jev Torres FB account



Jev Torres FB account



Jev Torres FB account



Jev Torres FB account



What are Sandbox Games? Why teens like them?

A sandbox game is a video game with a gameplay element that gives the player a great degree of creativity to complete tasks towards a goal within the game, if such a goal exists.



Freedom

Gamers are free to roam, build, and construct.



Creativity

Gamers are excited to make outstanding structure.



Agency

They have control to parameters.



**I JUST WANNA PLAY GAMES AND
HAVE FUN**



AND I'M ALL OUTA FUN





CLASSROOMS IN 1899



CLASSROOMS TODAY



<https://www.vintag.es/2016/11/38-amazing-vintage-photographs-that.html>



IN AN ONLINE CLASSROOM



Title	Due	
Task 1 - Question - Which best practices do you currently incorpo...	Jan 5	1/1
Task 2 - Essay 1 1	Jan 5	1/1
Task 3 - Question - Google Classroom can be used for	Jan 5	Turned in
Task 4 - About Me Presentation 1 1	Jan 5	1/1
Task 5 - Google Form Quiz 1	Jan 5	✓
Task 6 - Voki 1 1	Jan 5	1/1

Use these filters to filter student work by type

Turned in

Returned with grade

Missing

Click on any assignment to see the student submission









Game	Game-based Learning	Gamification
Games are just for fun, and may or may not have defined rules & objectives	Games have defined learning objectives	May just be a collection of tasks with points or some form of reward
Winning and losing is a part of the game	Losing may or may not be possible because the point is to motivate people to take some action and learn as an end result	Losing may or may not be possible because the point is to motivate people to take some action and do something.
Game play comes first, rewards are secondary	Sometimes just playing the game is intrinsically rewarding	Being intrinsically rewarding is optional.
Games are usually hard and expensive to build	Are usually hard and expensive to build	Gamification is usually easier and cheaper
Story and scenes are part of the game	Content is usually morphed to fit the story and scenes of the game	Usually game-like features are added to the LMS or any other system rather than the content



(Lahri, 2015)



Gamification in Brief



Gamification is an **integration** of game elements and game thinking in activities that are not games.





Key Features in Gamification



Users

Your students/ the teacher may be involved



Challenges/Tasks

What users perform/progress towards objectives



Points

Accumulated as a result of executing tasks



Levels

Which users pass depending on the points



Badges

Serve as rewards for completing actions



Ranking of Users

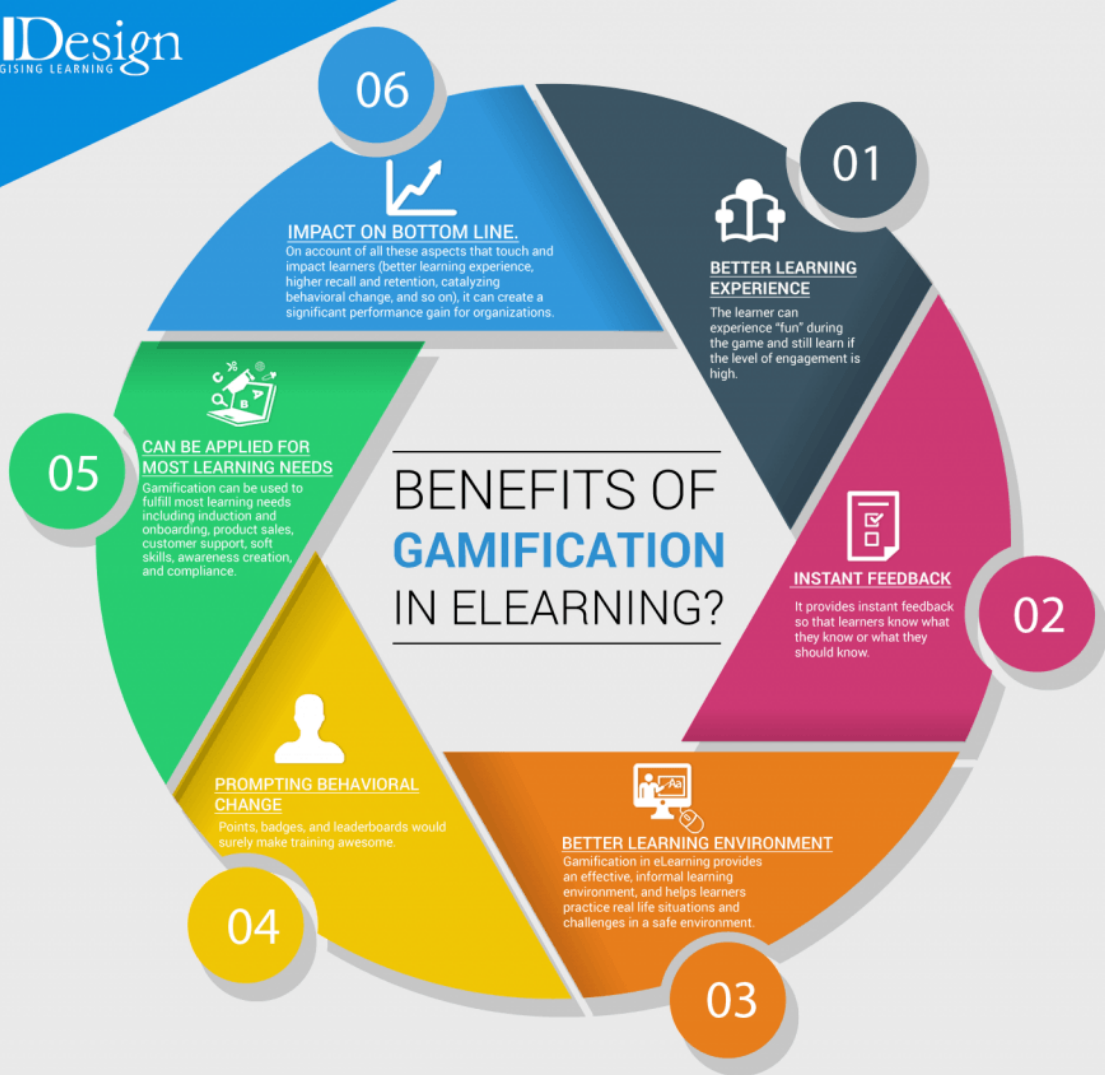
Simple ranking according to achievements





GAMIFICATION CONCEPT





The use of game mechanics improves the abilities to learn new skills by 40% (Giang, 2013).





THE GAMIFICATION OF EDUCATION

- GAMIFICATION MISCONCEPTIONS: What gamification **IS NOT**
 - A novelty. A 7th-century game with a fictional battlefield including foot soldiers, elephants, and chariots (Bepi Entertainment. *A brief history of wargaming*. www.faculty.virginia.edu/setear/students/wargames/page1a.htm). Modern examples: frequent flyer miles, reward system, Citicard Thank-You system, etc...
 - About Badges, Points, and Rewards. It is about engagement, storytelling, visualization of characters, and problem solving
 - Trivialization of learning. Gamification is a serious approach to accelerating the experience curve of the learning, teaching complex subjects, and systems thinking (Kapp, Karl M. p. 13)





THE GAMIFICATION OF EDUCATION

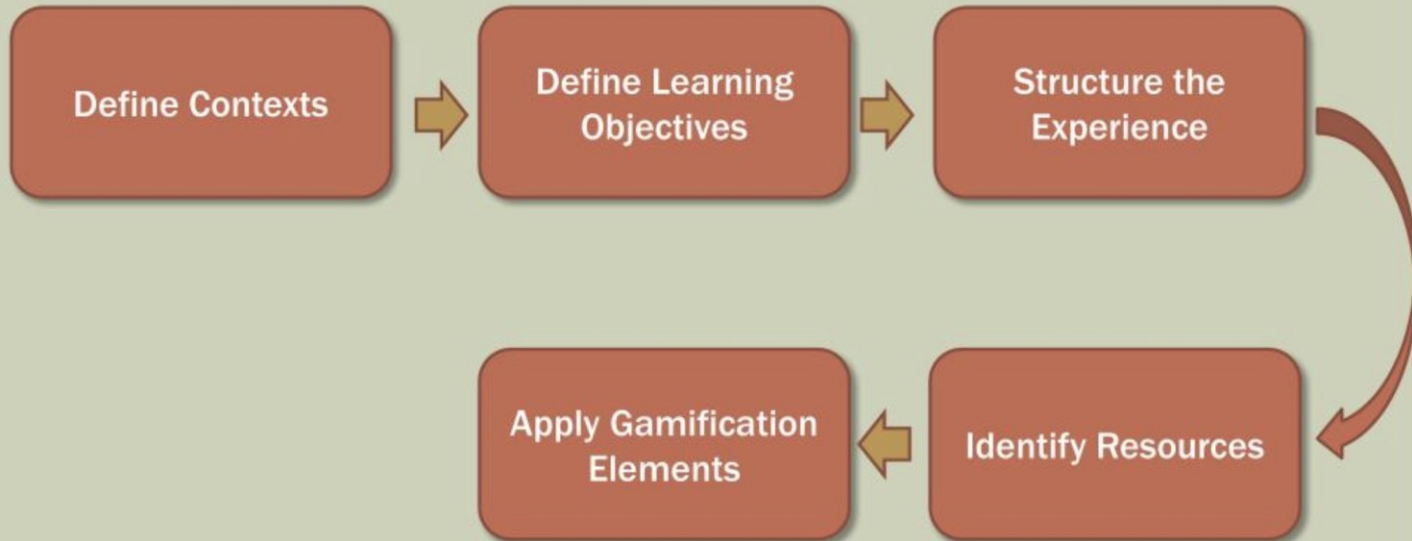
- **GAMIFICATION MISCONCEPTIONS:** What gamification *IS NOT*
 - Easy to design. A systematic approach is required to effectively build an impactful educational game
 - Perfect for Every Learning Situation
 - Not effective for some learning content
 - Not always the right tool to maximize learning
 - Not a magic bullet to eliminate boredom.
 - Game-based learning. First and foremost about the game and its cognitive residue (Example: Civilization V, Fate of the World)
 - Playing. The simple introduction of a goal adds purpose, focus, and measurable outcomes. This, in turn, transform playing into gaming



THE GAMIFICATION OF EDUCATION



■ GAMIFICATION IMPLEMENTATION WORKFLOW



(Andriamiarisoa,2014)



THE GAMIFICATION OF EDUCATION



■ WORKFLOW: DEFINE CONTEXT

■ DEFINE LEARNING CONTEXT

- Design gaming platform to be used individually or as a group
- To be used in a supervised/controlled environment (classroom, breakout rooms) or remotely (off campus)
- To be counted as optional activities, prerequisite, learning reinforcement tool, study aid, graded, extra credits

■ DEFINE LEARNER CONTEXT

- Define possible 'pain points' (factors that prevent a student from advancing through the learning program and/or achieving the objectives)
- Example: poor quality of assignments submitted could be due to
 - Delivery method (student is a visual learner while course was delivered orally)
 - Low motivation (assignment didn't count towards final grade)





THE GAMIFICATION OF EDUCATION

- **WORKFLOW: DEFINE LEARNING OBJECTIVES**
 - Identify goals to be achieved through the gamification process
 - Clearly state mastery level students will reach after completion of the game:
 - Avoid generalization such as 'comfortable with' learning component.
 - Instead, quantify learning level such as, 'memorize and know the top 200 pharmaceutical drugs.'

(Andriamiarisoa,2014)



THE GAMIFICATION OF EDUCATION

- **WORKFLOW: STRUCTURE THE EXPERIENCE**
 - Sequence knowledge and quantify what students need to learn and achieve by the end of each stage or milestone
 - Translate knowledge sequences into Game Levels
 - Categorize and group learning components

(Andriamiarisoa,2014)





THE GAMIFICATION OF EDUCATION

- **WORKFLOW: IDENTIFY RESOURCES** (1 of 2)
 - Sequenced learning material from content expert—the instructor
 - Aesthetic and game-building components (usually 3D assets)
 - Identify tracking mechanism to measure student progress
 - Define what determines the accomplishment of a level
 - Define currency (points, time)
 - Determine game rules
 - Define a feedback mechanism for both the instructor and students

(Andriamiarisoa,2014)





THE GAMIFICATION OF EDUCATION

- WORKFLOW: **IDENTIFY RESOURCES** (2 of 2)
 - Aesthetic and game-building components (usually 3D assets)



Time 02:32

Points 71543

(Andriamiarisoa,2014)



THE GAMIFICATION OF EDUCATION



- WORKFLOW: **APPLY GAMIFICATION ELEMENTS**
 - Gamification is the addition of game-like-elements, also called **game mechanics**, in non-game settings
 - Two types of game mechanics:
 - Self-elements
 - Social-elements

(Andriamiarisoa,2014)



THE GAMIFICATION OF EDUCATION

- WORKFLOW: **APPLY GAMIFICATION ELEMENTS**

- **Self-elements**

- Points
 - Achievement badges
 - Levels
 - Time restrictions

- Self-elements help students compete with themselves and recognize self-achievement

(Andriamiarisoa,2014)





THE GAMIFICATION OF EDUCATION

- WORKFLOW: **APPLY GAMIFICATION ELEMENTS**
 - **Social-elements**
 - Interactive competition (use of *Leaderboards*)
 - Group work or cooperation
 - Social-elements put the students in a community with other students, and their progress and achievements are made public (without violating FERPA rules)

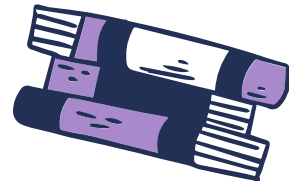
(Andriamiarisoa,2014)





My Challenge to Schools doing ODL

1. Make a team of online strategists and architects
2. Make and train a team of game developers
3. Make and train a team of interface designers
4. Make and train a team of 3D animators and designers





Awesome Words

Gamification offers instructors

- Numerous creative opportunities to enliven their instruction with competitions, leader boards, or badges
- Opportunities to give students a recognition mechanism and a positive attitude towards study
- Ability to measure progress toward clear goals, allowing students to compete against themselves



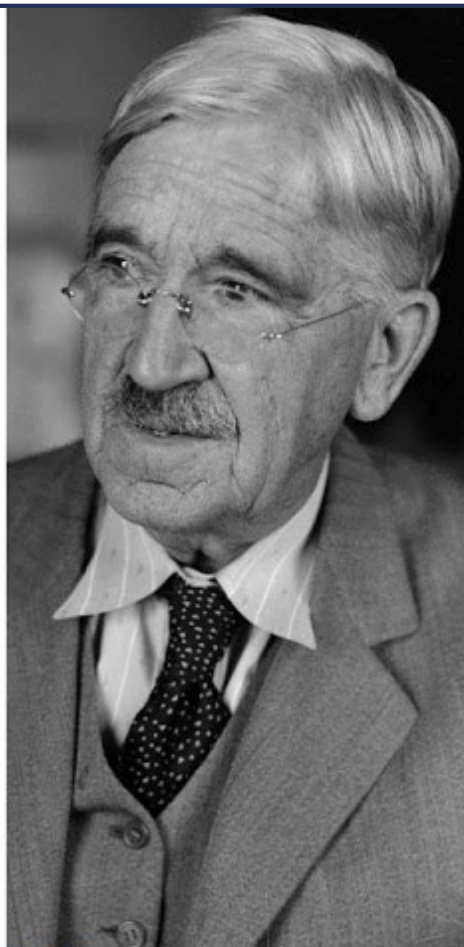
Awesome Words

Gamification is NOT about adding games to classes, but designing classes as games.



“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”

-John Dewey



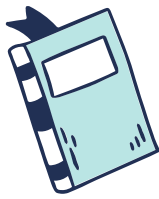
John Dewey was quoted to have said this in 1917. That’s 103 years ago...



THANK YOU!



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