Presentation Overview

• Why there needs to be a major change in education practices
• “The Super Mario Effect”
• Breaking down “gamification”
• Examples in education
• YOU TRY
• Wrap up
Why Education Needs To Change
Why Education Needs To Change
Why Education Needs To Change
“THE EDUCATION SYSTEM IS A SYSTEM IN AN ENGAGEMENT CRISIS.”

-SCOTT HEBERT
Why Education Needs To Change

“CONTROL LEADS TO COMPLIANCE; AUTONOMY LEADS TO ENGAGEMENT.”

-DANIEL H. PINK
“ANYTHING THAT IS ROUTINE OR REPETITIVE WILL BE AUTOMATED.”

-MINOUCHE SHAFIK
Why Education Needs To Change

One Answer:

(PROPER)

GAMIFICATION
“The Super Mario Effect”

How to play
1. Help the car get through the maze to the "win" square.
2. Build a computer program by dragging code blocks from the center and clicking them together in the space on the right.
3. Click "Run" to see what your program does.
4. Try to solve the puzzle using the least number of code blocks.

Total Score: 100
“The Super Mario Effect”

That didn’t work. Please try again.
“The Super Mario Effect”

That didn’t work. You lost 5 points. You now have 195 points. Please try again.

How to play
1. Help the car get through the maze to the “win” square.
2. Build a computer program by dragging code blocks from the center and clicking them together in the space on the right.
3. Click “Run” to see what your program does.
4. Try to solve the puzzle using the least number of code blocks.

Total Score: 200
“The Super Mario Effect”

That didn’t work. Please try again.

That didn’t work. You lost 5 points. You now have 195 points. Please try again.
“The Super Mario Effect”
“The Super Mario Effect”
"The Super Mario Effect"
“The Super Mario Effect”

The Super Mario Effect

Focusing on the Princess and not the pits, to stick with a task and learn more

-5 points  no penalty
“The Super Mario Effect”
“The Super Mario Effect”

TEST

1) Push button 3 for 5 seconds.
2) Push button 6 for 1 second.
3) Push buttons 3 and 5 for 6 seconds.
4) Push button 1 for 2 seconds.
5) Push button 4 for 3 second.
6) Push buttons 6 and 1 for 6 seconds.
7) Push buttons 2 and 4 for 2 seconds.
Gamification

WHO PLAYS GAMES?
- Average age is 35
- Over 70% are over 18
- Almost 50% are women
WHAT IS GAMIFICATION?

POURING GAME ELEMENTS INTO NON-GAME (BORING) CONTEXTS
WHAT IS GOOD GAMIFICATION?

STARTING WITH CORE DRIVES THAT LEAD TO ACTION AND UTILIZING GAME MECHANICS TO ELICIT THOSE DRIVES
Gamification
Gamification

Core Drive 1: Epic Meaning and Calling

KEEP PAIN IN ITS PLACE
Gamification

Core Drive 2: Development and Accomplishment
Gamification

Core Drive 3: Empowerment of Creativity, and Feedback

FOLDI T
Gamification

Core Drive 4: Ownership and Possession
Gamification

Core Drive 5: Social Influence and Relatedness
Gamification

Core Drive 6: Scarcity and Impatience

The Most Compact, Powerful and Simple-to-Use Laser Engraver

HyperLaser redefines the laser engraving with powerful features and user-friendly operation. It makes laser creation easy, safe and fun.

$74,569
pledged of $10,000 goal

137 backers

23 days to go

Back this project

All or nothing. This project will only be funded if it reaches its goal by Thu, September 17, 2020 6:59 AM MDT.
Gamification

Core Drive 7: Unpredictability and Curiosity
Gamification

Core Drive 8: Loss and Avoidance

HOW IT WORKS

Walk, jog or run anywhere in the world.

Hear your mission and music through your headphones.

If you’re chased by zombies, you’ll have to speed up!

You’ll automatically collect supplies to build up your base.
Gamification

- 70% solved
- 5 tries: 52%
- 12 tries: 68%
- -5 points: 40%
- no penalty: 70%

Black Hat Gamification
Examples in Education

Christopher See

Structural Comparison

<table>
<thead>
<tr>
<th>Escape room</th>
<th>Education / Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solving mental puzzles</td>
<td>?</td>
</tr>
<tr>
<td>Recalling information</td>
<td></td>
</tr>
<tr>
<td>Identifying patterns in data</td>
<td></td>
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<tr>
<td>Communicating ideas</td>
<td></td>
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<tr>
<td>Working under pressure</td>
<td></td>
</tr>
<tr>
<td>Limited period</td>
<td></td>
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</tbody>
</table>
Examples in Education

Christopher See
Examples in Education

Physical Design

Christopher See
## Examples in Education

**Grades**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>Very Satisfactory</td>
<td>100, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, ...</td>
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<tr>
<td>A</td>
<td>Satisfactory</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>Marginally Satisfactory</td>
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</tr>
<tr>
<td>B+</td>
<td>Not Satisfactory</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Marginal</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>Below Marginal</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>Far Below Satisfactory</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Far Below Marginal</td>
<td></td>
</tr>
<tr>
<td>C-</td>
<td>Below Below Marginal</td>
<td></td>
</tr>
<tr>
<td>D+</td>
<td>Far Below Below Marginal</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Below Below Below Marginal</td>
<td></td>
</tr>
<tr>
<td>D-</td>
<td>Far Below Below Below Marginal</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
<td></td>
</tr>
</tbody>
</table>

*Keep trying!*
Examples in Education

Todd Partridge
Examples in Education

Todd Partridge
Examples in Education

MINI DUNGEON
(Costs 7 Large Coins)

Todd Partridge
Examples in Education

MAXIMUM POSSIBLE SCORE

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Examples in Education

COURSE GRADE

EXAM 1
Unlock With 12 Stars

EXAM 2
Unlock With 8 Stars

EXAM 3
Unlock With 10 Stars

Todd Partridge

Assignment 1
Assignment 2
Assignment 3
Assignment 4
Assignment 5
Assignment 6
Assignment 7
Assignment 8
Assignment 9
Assignment 10
Assignment 11
Assignment 12

70% 90% Extra Q Extra Q Timely
Examples in Education

Assignment 1
Assignment 2
Assignment 3
Assignment 4
Assignment 5
Assignment 6

COURSE GRADE

EXAM 1
Unlock With 12 Stars

EXAM 2
Unlock With 8 Stars

EXAM 3
Unlock With 10 Stars

Todd Partridge
Examples in Education

Some Benefits I’ve Seen So Far:

- Increase in students’ willingness to try.

- Students intuitively recognize the difference between a formative and summative assessment, and react accordingly.

- Conversations are less likely to be about grades, and more likely to be about course material.
In Breakout Rooms:

1. Have one person choose an aspect of their classroom experience they would like to try to gamify in some way.
2. Explore each of the drives. Discuss which might be most appropriate to elicit through familiar game mechanics for this classroom experience.
3. Come up with a basic plan/structure of how you would gamify the experience.

Complete steps 1-3 about 3 times in your breakout room.

We’ll come back together at 3:30 PM ET to share what you came up with.
GAMING MAKES LEARNING EASIER

LEARNING IS EFFORTFUL AND DELIBERATE

GAMIFICATION INCREASES THE LEARNER’S WILLINGNESS TO TRY
Wrap Up

References


