



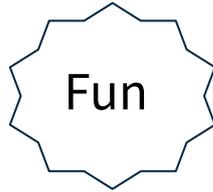
# The Art of Game Design

How to imply Game Design to create better learning experiences

# Gamification

Competition

Collaboration



Winning/losing

# What do you associate with playing games?

Pastime

Distraction

Connection

Flow = The most enjoyable experience

To get into flow you need...

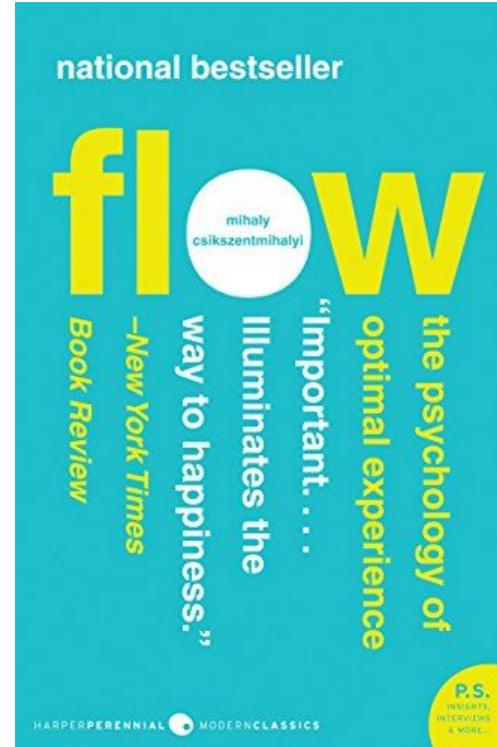
Goals

Challenges

Focus

Skills

Feedback



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**LEARNING**

**PLAYING**

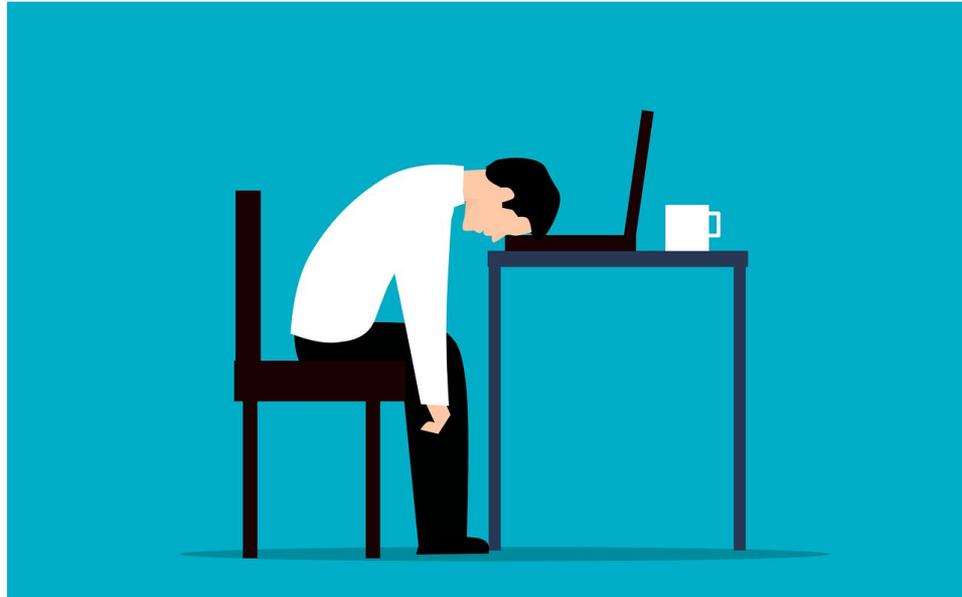
Corporate needs you to find the differences between this picture and this picture.

**FLOW**

They're the same picture.

# The problem with Gamification

1. Incentivising Education
2. Not every subject is suited for games



# You are the (Game) Designer!

Create experiences that other people will enjoy!

“How can I make my lesson into an enjoyable experience?”

“What makes learning experiences enjoyable to me?”

“What do I know about what makes learning enjoyable for others?”



# Observing

Think about the times you played games, the ones you liked and the ones you didn't like. What made them fun?

My observations about myself as a player

Cooperatives games with lots of communication

Skill more important than luck

Competition is only fun if you have a real chance of winning

Showing off skills

Playing is more important than winning

Are there things that you've observed about others while playing with them or designing games for them?

# My observations as a Game Designer

Simple, straightforward rules

Motivators

Confusion and boredom kill the fun

Nice layout

Surroundings



What are your experiences when learning? What makes a learning experience enjoyable to you?

# My observations about myself as a learner

Lots of communication

Basic skills help

Not a fan of grades

Once I'm interested I'm motivated

Learning through teaching

What have you observed in your learners?  
When did you feel they had the most learning  
success?

# My observations about other learners as a teacher

Don't like long lectures

Teacher is very important

Confusion and boredom lead to disengagement

Nice materials

Surroundings



# Merge your observations about yourself

## **Games**

Communication, Cooperation

## **Learning**

Communication, sharing experiences

**Communication necessary to reach goal**

# Merge your observations about others

## **Games**

One or two players motivate everyone else to play

## **Learning**

Teacher's personality motivates learners

## **Motivated leader**

# Merge observations

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Game Design as a method helps you create better learning experiences because...

...it helps you identify and focus on the most interesting parts of your curriculum

...you (re)spark your own curiosity

...you get to know your learners better which leads to more sustainable teaching and learning

...you get to create challenging lessons that are not dependent on incentives

...you train your own skills to become a better listener and observer

...you spot difficulties and disturbances more quickly

...you challenge yourself to become a more creative teacher and try out new ideas

...you will have fun!



**Thank you!**

*A*

# Sources and helpful links

Csikszentmihalyi, M: Flow. Klett-Cotta

<https://www.amazon.de/Flow-Psychology-Experience-Perennial-Classics/dp/0061339202>

Donnellan, E. et al: How are Curiosity and Interest Different? Naïve Bayes Classification of People's Naïve Belief

<https://psyarxiv.com/697gk>

FitzGibbon, L. et al: The seductive lure of curiosity: information as a motivationally salient reward

<https://www.sciencedirect.com/science/article/pii/S2352154620300875?via%3DIihub>

Matyjek, M. et al: A Multidimensional View on Social and Non-Social Rewards

<https://www.frontiersin.org/articles/10.3389/fpsy.2020.00818/full>

Murayama, K.: The science of motivation

<https://www.apa.org/science/about/psa/2018/06/motivation>

Murayama, K. et al: People Underestimate their Capability to Motivate Themselves without Performance-based Extrinsic Incentives

<https://osf.io/5uvyf/>

Murayama, K. et al: Motivated for near impossibility: How task type and reward modulates intrinsic motivation and the striatal activation for an extremely difficult task

<https://www.biorxiv.org/content/10.1101/828756v1.full>

Ozono, H. et al: Magic Curiosity Arousing Tricks (MagicCATs): A novel stimulus collection to induce epistemic emotions

<https://link.springer.com/article/10.3758%2Fs13428-020-01431-2>

Pekrun, R. et al: The power of anticipated feedback: Effects on students' achievement goals and achievement emotions

<https://www.sciencedirect.com/science/article/pii/S0959475213000637>

Roth, G./Strüber, N.: Wie das Gehirn die Seele macht. Klett-Cotta

[https://www.klett-cotta.de/buch/Denken / Handeln / Fuehlen/Wie\\_das\\_Gehirn\\_die\\_Seele\\_macht/48964](https://www.klett-cotta.de/buch/Denken / Handeln / Fuehlen/Wie_das_Gehirn_die_Seele_macht/48964)

Roth, G.: Bildung braucht Persönlichkeit. Klett-Cotta

[https://www.klett-cotta.de/buch/Schule\\_und\\_Unterricht/Bildung\\_braucht\\_Persoenlichkeit/144044](https://www.klett-cotta.de/buch/Schule_und_Unterricht/Bildung_braucht_Persoenlichkeit/144044)

Schell, J: Die Kunst des Game Designs: Bessere Games konzipieren und entwickeln. mitp-Verlag

<https://www.schellgames.com/art-of-game-design/>

Wilson, T. et al: Just think: The challenges of the disengaged mind

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4330241/>

