**Using Games and Gamification to Foster Serious Play in Higher Education**

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**Presentation Overview**
- Constraints and needs of university professors
- Play as a subjective phenomenon that requires a ludic attitude
- Focusing on serious play instead of serious games
- Fostering a ludic attitude in the context of a university classroom
- Challenging the idea that sophisticated technologies and gameplay are needed to foster serious play

**Basic Needs and Constraints...**

- 48% of the students « often » send text messages during their course and 15% browse the Internet (Michaut and Roche, 2017; Clayson and Haley, 2013)
- Students spend 37% of their time browsing the web during a course (Ravizza and al, 2016)
- Facebook uses 34% of the WiFi bandwidth at Université Lyon-III (Nunès, 2018)

**Students Browsing and Texting in Class**

"OUPS! Students browsing and texting in class"
**FIRST SOLUTION:**

**FILLING THE STUDENTS’ SCREENS**

Using online voting systems to collect feedback and create quizzes.

**SECOND SOLUTION:**

**DIVERTING THE STUDENTS’ ATTENTION FROM THEIR SCREEN**

Using a concept mapping software to create puzzle games.

**INSUFFICIENT TIME**

Serious games for university classrooms should:

- Be easy to learn and master
- Last between 30 min and 1 hour
INSUFFICIENT RESOURCES

Serious games for university classrooms should be:

- Paper games that professors can print directly
- Applications that can be played on smartphones and that students can access for free

DIVERSITY OF CONTENT

University professors need:

- Game templates that they can easily customize and fill with their own curricular content

A CONVERSATION WITH HUGO

Une conversation avec HUGO

CONTENT EDITOR SECRA (CCDMC)

Serious games do NOT always generate serious play...

PLAY IS A SUBJETIVE PHENOMENON

LUDIC STRUCTURE OR SITUATION

PLAY

LUDIC ATTITUDE
"If the material and structure of the thing we are playing with do not take on a ludic meaning and value when someone decides to use it for playing, the result is that the only thing we should define when it comes to play is the type of thinking, the mental attitude, the special consciousness of the person who discovers, within this material and this structure, occasions or means of playing" (my translation, 1989: 123)

Jacques Henriot

“Game studies”

What are games DOING to people?

vs

What are people DOING with games?

Play Studies

“...objects with little play potential can also be apprehended with a ludic attitude ...

Fostering a ludic attitude in the classroom

- not all students are players
- the activity is not entirely free and voluntary
- the context of the classroom is usually not “framed” as play and playing outside of an “appropriate” context can be embarrassing for some people (Deterding, 2014)

Katie Salen & Eric Zimmerman

Jespér Juul

“A game is a rule-based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values. The player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are negotiable” (2005: 36)
Gamification techniques can feel like an electronic whip.

How can we foster a ludic attitude in the classroom?

Making play optional

The playful attitude is favored by the feeling of being free to play.

Play is a voluntary and free activity.
Focusing less on ludus and more on paidia

Ludus
Rule-driven pole of play

Paidia
Free exploration, improvisation and creativity

Creating and playtesting a card game with a template and curricular content

Creating a machinima

Gamified workshops should be presented to the students as autotelic* activities

* From the Greek *autotelēs*

- *Autos* : self
- *Telos* : goal

"I don't think anybody should make games to try to motivate somebody to do something they don't want to do. If the game is not about a goal you're intrinsically motivated by, it won't work." (March 14, 2012)
PROFESSORS SHOULD INSIST ON INTRINSIC REWARDS SUCH AS:

- Positive Emotions
- Social Connections
- Feeling of Mastering a Knowledge
- Contribution to Something Bigger

FAVORING TEAM WORK AND COOPERATION

- What keeps people playing at a game is social (Jansz and Tanis, 2007)
- Online gaming is foremost motivated by possibilities of cooperation and communication (Frostling-Henningsson, 2009: 257)
- Cooperative contexts encourage players to engage with the objectives of the game more than competitive contexts (Peng et Hsieh, 2012)
- Players are more engaged when they are present in the same physical space (Greenberg and Voids, 2008)

FAVORING TEAM WORK AND COOPERATION

- 66% of Canadian university students feel very lonely (Beaudette, 2016)
- The feeling of loneliness is the main cause of depression and psychological distress among students (Lessard, 2016; FAECUM, 2016)

FAVORING HEALTHY-COMPETITION

- Most players prefer to play against other humans than against AI since it triggers stronger emotions (Mandryk and Inkpen, 2004)

FAVORING HEALTHY-COMPETITION

- 47% of PhD students and 37% of master students have episodes of depression, anxiety and burnout
- Students sleep on average 6.6 hours / night (Panger and al., 2014; Lessard, 2016)

OPTING FOR THE FORMULA: "NOTHING TO loose AND EVERYTHING TO Gain"
Gamification is about framing a serious activity as play and using social signals to sanction this framing (2016: 312-324).

The two monkeys’ actions or signals were similar but not identical to those of combat (1972).

It was evident for both of them and for the human observer that they were not really fighting (1972).

These actions in which we now engage do not denote what those actions for which they stand would denote (1972: 211).

To play together, people have to accept a metarule according to which: “this is play”.

Sophisticated technologies and gameplay are not necessary to foster a ludic attitude.
**All Games Can Generate Serious Play**

Traditional Definition of Serious Games

Games in which **Education** (in its various forms) is the primary goal, rather than entertainment.

(Alb in Michael and Chen, 2006: 23)

Growing Consensus

All games have serious implications as they enhance:

- Motor skills
- Spatial perception
- General curiosity
- Cognitive skills
- Mental maps

(Koster in Michael and Chen, 2006: 25)

Using Entertainment Games to Generate Serious Play and Knowledge

Entertaining games can encourage us to question cultural models, show us that they reflect the partial point of view of certain groups in a particular context, by simply putting us in someone else’s shoes and forcing us to adopt other people’s perspectives.

(2003: 146-153)

Relying on Games’ Capacity to Do Something to People Instead of Their Capacity to Make People Do Something

(James Paul Gee, 2014: 54)
Unlike serious games, persuasive games “convey ideas effectively” without aiming towards a specific end. They question the way things work, challenge social conventions and oppose the “fixed worldviews of institutions” (2007: 29).

The persuasive potential of these games can rely on procedural rhetoric, that is to say rule-based arguments built into the program code (2007).

The serious attitude is also a type of thinking, a state of mind, an interpretative framework, based on the idea that “I can learn while playing”

How can we foster serious play with entertainment games?

Entertainment games can foster serious play when framed as serious by a professor in the context of a classroom
Conclusion

Even when few serious games are available to teach in a domain, it is still possible to foster serious play with:

- basic paper games
- role-playing games
- game design
- entertainment games

Conclusion

We should not lose sight of the most basic need when it comes to learning with games: the necessity to foster a serious ludic attitude among the players and the importance of the context of play in doing so.

Thank you!