Serious Gaming, Gamification and Game making: new avenues towards learning innovation?

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MAGICAL
Making games in collaboration for learning
Framing the concept of Learning Innovation

Following OECD- CERI* Learning innovation should be regarded as:

“any dynamic change intended to add value to the educational process and resulting in measurable outcomes, be that in terms of stakeholders satisfaction or educational performance”

Framing the concept of Learning Innovation

Change

New tools

New approaches

Learning innovation

Observable outcomes

Learning more...

Learning more easily...

Learning more in depth...

X

Y

Z
New tools = Games

Games of different types
(role play, virtual worlds, exercises, simulations…)

used in combination with

A variety of (new) Educational Approaches
(collaboration, discovery learning, learning by doing, problem solving…)

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3 different experiences in game-based learning

Serious Gaming
LOGIVALI [Italian national project]

Gamification
eSG [LLP- Erasmus FEXI]

Game making
MAGICAL [LLP- KA3]
Defining Serious Gaming

Games “can be shifted”, to serve an educational purpose. Such “purpose-shifting” of entertainment games is an extremely promising method of using games as teaching tools. We call it “Serious Gaming”.

Djaouti, Alvarez, Jessel (2011)
The project LOGIVALI

The games adopted (puzzles, brain teasers, mind games)

The objective
trigger and sustain reasoning and problem solving abilities
The results

Change

- New tools
- New approaches

Learning innovation

Observable outcomes

- Learning more...
- Learning more easily...
- Learning more in depth...

X
Y
Z
Gamification is the use of game design elements in non-game contexts.


In the field of education, gamification is used in applications and processes to improve learning.

Gamification

The project  eSG
(stimulating Entrepreneurship through Serious Games)

The games adopted
(Business Games)

The objective
Supporting the development of entrepreneurial mindset and develop some related skills
Gamification

The results

Change

New tools

New approaches

Learning innovation

Observable outcomes

Learning more...

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Game making refers to the design, development & implementation of digital games. In the field of education, game making is adopted as an educational strategy where students are engaged in building (instead of simply using) digital games.

The project: MAGICAL (LLP-KA3)

The games adopted: (built on purpose game environment MAGOS)

The objective: support the development of children’s ICT Literacy + transversal skills + creativity
The results

Change

New tools

New approaches

Learning innovation

Observable outcomes

Learning more...

Learning more easily...

Learning more in depth...

X

Y

Z
In particular:

*Designing and building games means possessing:*

- **all** those abilities required to reach the solution during the traditional playing sessions (problem solving)

  +

- the ability to embed them effectively within a specific game format (critical thinking)
The MAGICAL results

X = increased motivation and engagement

Y = enhancement of collaborative attitudes

Z = space and support for personal and group creativity
Concluding…

Game-based learning

- Serious Gaming
- Gamification
- Game Making

Learning Innovation
REFERENCES