GAME-BASED LEARNING AND THE SURMISED MOTIVATING POWER OF GAMES

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https://www.gaminghorizons.eu/
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ISTITUTO PER LE TECNOLOGIE DIDATTICHE (ITD)  
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**Istituto Tecnologie Didattiche (ITD)**
Institute for Educational Technology
- Founded in 1970
- Headquarters in Genoa
- A branch in Palermo
- Around 60 staff members

**ITD is part of CNR (National Research Council)**
- main Italian public research body
- 109 institutes (11 departments)
- range of disciplines
Opening up the dialogue about the role of video games in society education

Considering the intended and unintended consequences (ethics and social responsibility) of the pervasive use of games

Challenging the “taken for granted” narratives and propose alternatives.
ITD’S ROLE

• Investigate the relationship between digital games and learning

• Identify contentious issues: the «tensions»

• Produce «recommendations» for education stakeholders: teachers, parents and players
GAMING HORIZONS IN A NUTSHELL

Informed challenge: Methodological Framework; Literature review, critical analysis of official docs, interviews with stakeholders

Areas of tensions and draft recommendations

Cultural expansion: Public engagement, webinars; workshops

Recommendations for stakeholders
HOW?

- Literature Review
- Themes
- Interviews
- Tensions
- Focus Groups
- Recommendations
GAMES AND LEARNING

Fun from games arises from mastery. It arises out of comprehension. It is the act of solving puzzles that makes the games fun. In other words, with games, learning is the drug. (Mc Gonigal,  2011, p.16)

I argue that schools, workplaces, families, and academic researchers have a lot to learn about learning from good computer and video games. Such games incorporate a whole set of fundamentally sound learning principles, principles that can be used in other settings, for example in teaching science in schools. (Gee, 2003)
GAME-BASED LEARNING
FOUR RESEARCH STRANDS

• Serious games
  • games designed for a purpose other than entertainment (Ratan and Ritterfeld, 2009)

• Entertainment Games for learning
  • Es “that dragon, cancer” or “Fragments of him”

• Gamification
  • the use of game design elements in non-game context(s) in order to influence user behaviour (Deterding et al., 2011)

• Game making
  • Using e.g. Minecraft, Unity, Scratch
INTERVIEWS METHOD

• 73 online interviews with teachers, players, developers, researchers and policy makers
FOCUS GROUP APPROACH: METAPHOR

Resources
Experiences
Opinions
Problems & Solutions

Area of tension

Suggestions
Recommendations
What are games good for?

Different for different skills

Games do not always train the skills we want and need.
AREAS OF TENSION

Games & Formal Education
- Can gaming be a compulsory activity?
- Competition: good or bad?
- Serious games vs COTS
- The surmised motivating power of games

Gaming literacy: who is it for?
- What are games good for?
- Gender differences: can games counter social influence?
- Inclusion: are games an asset?

Games & Society
- What is the future of gaming?
- Are games the 8th art?
- Regulating games
- From games to the real world...

From games to the real world...
AREAS OF TENSION (EXAMPLES)

- Games and formal education: a difficult marriage?
  - What are games good for?
  - The surmised motivating power of games
  - Games inclusive power is not obvious (digital divide; special needs)
  - Compulsory gaming activities / catering for game preferences
  - Balancing competition and collaboration
  - Serious vs entertainment games vs art games: teachers tend to underestimate the artistic value of games, while players recognise it
  - Players call for more creative/innovative games and game narratives
The motivating power of (serious) games has been questioned: when extrinsic and intrinsic motivation are not aligned, the routes followed to succeed in the game may be very far from the desired ones (Westera, 2015; Wouters et al, 2013).

Gaming is by definition a free activity, while formal education has its rules, its constraints, and sometimes the use of games isn’t compatible with these restrictions.

Not all players are in favour of this “marriage”, especially when the choice of games falls in the category of serious games, whose engaging power is often not as strong as that of entertainment games.

Playing at school is almost an oxymoron: the nature of play is such that it cannot be done “under teacher supervision”
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FOCUS GROUPS METHOD
## RECOMMENDATIONS

### Parents
- Acknowledge the positive outcomes of videogaming
- Play with kids, watch over adolescents and see games as an opportunity to understand them better
- Introduce “soft” regulations when needed: the aim is to empower rather than forbid

### Players
- Reflect more on what effects games do to them, both in positive and negative terms
- Consider gameplay as a chance to achieve better self-knowledge and self-control

### Teachers
- Develop competence in designing effective GBL activities
- Educate to games as part of media education
- Do not overestimate the motivating potential of games and their inclusive power
- Avoid compulsory gaming and respect personal preferences: blanket student acceptance is not a given

### Decision makers
- Support research and teacher training on principles for designing GBL activities and game literacy as part of media education
- Soften school organisation to facilitate taking advantage of students’ LEs
- Invest in the development of games with cultural and artistic value
A Manifesto for European Video Games

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Gender, minorities and society

THE GAMING HORIZONS SCENARIOS (3/4)
LEARNING DESIGN remains the core set of skills of the teacher, and it cannot be learnt once and for all.
BIBLIOGRAPHY ON GAMING HORIZONS


