Game-based learning? Or game-informed learning?

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Games and learning

- Introduction
- Games in education
- Effective game design
- Towards game informed learning
- Discussion
Introduction

• Once a marginal activity
• Growing interest

• Deep, engaged, situated experiences, grounded in subject matter, repetitive practice, reinforcement, fidelity

• Military / business
Context of healthcare

- Advances in treatments
- Reduced inpatient times
- Shorter working hours
- Fictive encounters in the curriculum (CBL, PBL, simulations, virtual patients) .... Games
But ...

- Costs
- Complex authoring
- Incompatible designs and workflows between education and commercial sectors
Games in education

- Online games - $46bn
- HEI’s want to leverage
- Gamers want to show that they are not just all about violence
- But economic models are very different
- Development timelines – poles apart
Games in education

- But there are ventures and initiatives
  - Serious Games Initiative
  - Education Arcade
  - Team Play Learning Dynamics

- Also MSc programmes in universities
What is a game?

- Fun, play
- Fun – “enjoyment with surprises”
- Play – “manipulation that indulges curiosity”
- Rules, conflict, internal logic, won/lost, interactive
- Cognitive responses triggered in players – what we want in learners
Cognitive responses

- Engagement
- Concentration
- Enjoyment
- Active
- Pursuit of goals
- Team working
- Solving problems
- Listening to feedback
- Interacting with simulations
Games – myths

• Only boys play games
• Only teenage boys play games
• Teenage boys only play on their own
• Teenage boys only play violent videogames on their own
• Etc ...
Game informed learning

• Like game based learning – games = exciting, engaging, repetitive attempts at difficult tasks, intrinsically motivating, the player is a consequential agent

• But ... game based learning seeks to make games educational ... game informed learning seeks to make education more playful
Game informed learning

- Narrative scenario – compelling narrative
- Learners adopt character roles – sometimes choose character roles
- Learners work thru pathways – take individual routes through scenarios
- Learners experience consequences of their actions – long term consequences that they can’t fully correct
- Narrative flow – emerging / surprising narratives
But

- Technology challenge – to host more branching, more sophisticated interactivity, more learner choice
- Editorial challenge – templates, authors and editors who can create these
Technology challenge

- Build from scratch or
- Build more interactivity into existing templates or
- License in (Labyrinth)
Editorial challenge

• Getting authors to follow even simple linear templates and simple guidelines is not straightforward (even though they can be storytellers / facilitators face-to-face)
• Do we write them ourselves?
• Do we make their creation part of the learning experience for educators?
Remember

• Don’t think - shooting cancer cells in an arcade game

• Don’t think edutainment – it implies learning is an unpleasant experience that has to be sugar coated

• Also edutainment is about users being passive recipients of an edutainment product which it not what gaming is about
Remember

- Games do exist out with computers
- Games = process of learner engagement > end-product
- Should we move incrementally toward game informed learning and evaluate results?
We can’t ignore games
The future – by the time current students graduate from school ...

They will have spent
• 10,000 hours playing games
And sent
• 50,000 e-mails/texts

But will only have spent
• 5000 hours reading books
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