



You Got Game! Learning Games and Games in Learning

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1. The encounter

The classroom and the first person shooter game; an encounter of two very different worlds!

Serious, subject-based education and killing as many bad guys as possible; it seemed from the start as video games were invented to disturb the sound learning of young people: as soon as school is over, we can start doing the real thing.

So, how all of a sudden are video games regarded powerful learning resources for “serious learning”?

The idea is not that new. It emerged in the 90th, especially in the US. It was to some extent a result of the increasing use of technology in education. In the beginning the idea was to make learning more attractive for learners by making education more entertaining. Basically, it was about an entertaining form and a “serious” content, also known as *edutainment*. It should be fun to learn.

The achievements were not excellent: low quality and primitive games on one hand, poor learning on the other.

In Europe the interest in learning games emerged in the beginning of the last decade. Again, the interest in games was a result of the increasing interest in technology in education: internet, software, e-learning, etc.

Nevertheless, the explosion of the video games market did not at all result in the creation of games for education, of learning games. Still in 2012 very few quality learning games have been developed in Europe and the worlds of video games and education are still not in any kind of dialogue – apart from very few exceptions.

Why is that?

2. Games for learning, learning games

The video game market of entertainment games has grown at an incredible speed throughout the last decades, now worth the double of the film industry.

From both sides of the scene, game designers and educators, the question is: *should these great potentials not be exploited for learning and not only for entertainment?*

This is discussed all over the world now, and the discussions are closely linked to the highly needed innovation in education. Learning games might very well be a very important element in this innovation, especially when it comes about the learning of young people.

But the many debates and research activities are not linked to a learning game practice in education. Numerous conferences are discussing the emerging field of serious games and learning games, but very few games are produced.

The post-edutainment approach is most qualified: now researchers and game developers are discussing what learning potentials are included in the very activity of gaming itself, and thus in the very design of video games, serious or commercial.

It is being debated that the very design of computer games, no matter the content, represents a very powerful learning process, due to the basic design elements in video games.

The focus is thus shifted from the entertaining form of video games to the learning potentials of the gaming itself.

This shift caused a tremendous upswing in the interest in learning games and for the first time in Europe educational players joined the discussions and they showed a serious interest in games for education. This interest was strongly supported by the development of the social dimensions of gaming and the design of open games.

Still, few learning games are being produced. Why?

3. The romanticism of gaming

As could be expected, many educators are very sceptical towards this kind of innovation. The scepticism is very much linked to a general resistance towards technology in learning.

On the other hand, game designers praise the learning potentials of video games and gaming. Some writers even believe that social gaming can help save the world.

Be that as it may, a certain romanticism of gaming can be felt in these debates: video games are in themselves the didactic innovation so badly needed in education, as they are designed to take the learners through a learning process much more powerful than any classroom.

Some US writers believe that learning games are the answer to the highly needed innovation in learning. Some writers even promote the idea that serious games at global scale can help save the world. In fact, a school in the US has been designed like a game.

The romanticism of gaming no doubt contributes to a certain resistance in the educational world. The romanticism of gaming neglects numerous educational realities, such as didactics, curricula, resources, assessment obligations and... financial issues.

This brings the romanticism of gaming to play the role of naïve adventures and many educationalists to step back from the world of gaming.



Even seriously interested educators ask the simple question: who will develop learning games? How can it happen? Who will pay for quality learning games?

How will learning games ever be anything but an interesting and innovative exception from normal everyday practice?

4. Learning games, then?

More calm writers stress that only so-called good video games possess this potential, the word "good" not referring to the content of the game, but to the game design of the game: to what extent it allows the gamer to learn and learn together.

More critical writers insist that games for learning should be designed for learning, and that we have not yet seen what that means.

But, then again the questions: who are qualified to design and produce learning games? Who will finance the very expensive game production?

The free market is not very interested in learning games. Learning games are not considered good business; unless, of course, learning games can be produced for a huge English speaking market.

Furthermore many game developers do not see learning games as a very creative field for game development: social care for people with dementia might not be the dream vision for young developers.

So, learning games in all its state of the art forms are in the same situation as communication and media technology in general: the educational sector slowly integrates small elements of innovation, but basically plays the role of a turtle compared to the technological high-speed train.

But why?

Why are the great potentials of learning games and game learning not unfolded and exploited? Potentially the worlds of computer games and education now have a strong mutual language: the language of social didactics and the language of powerful learning processes build into the very heart of computer game design.

And, one more: the mutual language of an educational sector losing still larger groups of disengaged youth...

5. New business models, new forms of collaboration

So, despite the many academic discussions on learning games and game learning most educations in Europe are a very long way from benefitting from the undeniable great learning potentials of digital games.

The worlds of video games and education have not met in reality, only at academic level.

This situation will most likely not change, unless dramatic shifts in the behaviour and mentality of the two worlds are practiced.

Developing learning games for education with high quality is a very demanding task: topics are different, learners are different, didactics are different, teachers and institutions are different; and on the other side educations have quite precise aims and objectives to which it must adapt.

Developing learning games requires skills and competences far beyond what can be expected from game developers.

The crystal clear conclusion is that learning games in general cannot be produced for the free market.

Dramatic different business models must be developed, if education should exploit the learning potentials of gaming.

Real encounters between the game world and the educational world must be organized, on an ongoing basis, through which (young) game developers and teachers and institutions can meet and develop mutual platforms of collaboration.

The design and production of learning games takes a long time and a very close collaboration between gamed designers and educators is needed. The collaboration includes mutual understanding of game design and of educational processes and content.

This calls for dramatic shifts in the mentality on both sides:

- (young) game designers must learn to work in contractual labor market situations quite different from the free market conditions

- educational institutions must learn to accept that the institutions will be populated by other professionals than teachers, technicians and ICT supporters in the future, such as game designers and media designers.

Thus, in this model, the young game designer will not be paid by the amount of sold games in the market, but by the number of work days in the institution.

Of course, educations can apply for different kind of funding in different national and European programs, but this is only a short-term option within pioneer contexts, not a solution that can be used permanently.

Different forms of contracting between (young) game developers and educations might be developed, according to the scope and nature of the collaboration.

6. Learning games contextualized

Designing games for education and learning includes reflections on basic didactics, pedagogy, learning processes and learners, and also on the nature of the topics in questions.

Learning games should be an integrated element in the learning process, in certain cases even the organizer of the learning processes, and therefore the game designers should be involved in a long-term and deep collaborative process in which they work together with teachers, mentors and students.



Learning games should not be used to celebrate exceptions in learning processes, but should be fully integrated in the didactics and learning principles of the learning community. At the same time, learning games should highly explore and exploit the social gaming approaches developed recently, and expand the gaming to social networks and to the surrounding community.

The learning simulations should meet the social reality, so to speak.

All this explains the complexity of designing learning games, and also explains why a close collaboration between game designers and educations is a *sine qua non*.

Furthermore, the use of learning games should be embedded in innovative media and laboratory based didactics, replacing the old and totally outdated classroom.

If integrated in such learning communities, learning games can be exploited to the full, and it will be possible to re-motivate many groups of disengaged young people.

But, there is more...

In creative learning communities gaming is not only interesting as consumption (using games produced by others), but as production. The learning, both of young learners at risk and of other learners, can be dramatically enhanced by allowing students and teachers to take part in the design and production of games.

The very design process offers tremendous learning potentials, and facilitated by (young) game developers, such process might lead to strong and creative learning – for all kinds of learners.

7. A Scandinavian example, and a European one

European projects are at the moment experimenting with letting young game designers and educations work together.

One of the great challenges of these new scenarios is: how does the game designer learn to collaborate with educations? How do game educations and game communities motivate young designers to take an interest in such collaboration?

In the 3 years EU InterReg project Scandinavian Game Developers (1) the idea is to support young developers by establishing game incubators, facilitating the ways from game education to game market.

An important dimension in this process is to motivate young game designers to establish meetings and collaborations with different educations in the region in which the project is implemented.

The young game designers will be motivated to such alternative business models

- Through their education as game designers
- Through their traineeships
- Through the post-educational game incubators
- Through events and activities in which the encounter of game designers and educations will be facilitated
- Through a regional/national database in which the young game developers can promote themselves and look for partners

Within the project lifetime practical experiments will be carried out in which young game developers collaborate with educations to develop learning games and to facilitate a game mentality among teachers and students.

A similar project, but focused on media and laboratory didactics, is carried out at European level. The EU LABlearning (2) project will establish media laboratories for young people in and after school to support their learning interest, and a natural dimension in these laboratories will be gaming and learning games.

The aim of both initiatives is the deliver models and best practices for long-term collaboration between game design communities and educations.

References

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