

Gamification of Learning Processes (gamification of education)

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In order to understand gamification of learning processes, one must first understand *gamification*. Please check the article related to it.

Now that you are familiar with gamification, its moral issues, pros and cons, you have enough elements to consciously decide whether or not it will be appropriate to apply it in learning and training contexts. Before going deeper into the subject, however, it is important to explain why is “gamification of learning processes” instead of “gamification of education” the main term. Education is a learning process, an institutionalized and hierarchical one, implying that there is one superior individual (be it in the sense of age or titles) transferring information, knowledge or skills to an inferior one. However it has been proven that children can teach parents and teachers, that students can teach professors and that everybody can teach themselves.

Thus, if our focus is not just an institutionalized hierarchical process, but embraces other forms of learning processes such as *networked learning* or *collaborative learning* for instance, the term learning process, not education, is the most suitable definition for what we will try to emphasize here, once it is broader in its scope than education, containing it. The analysis of education as an institution is nevertheless highly relevant as an introduction, since it regards the current and generally diffused understanding of learning processes.

The first gamified institution?

As mentioned in the article about gamification, the educational system was one of the first gamified institutional environments. The process starts with stars stickers and cute stamps distributed by kindergarten and early school teachers for those well behaved children. Some teachers even keep track of bad behaved children by maintaining a “dark list”, which may after a given number of faults lead to punishment, followed by the chance to try again. When they grow up, stars are replaced by grades which are themselves a form of minor rewards, when compared to the accomplishment of leveling up to the next school grade in the following year; in this case, being forced to repeat the level is the highest failure and punishment. Grade by grade, year by year, the student has one final goal, to finish the game, by achieving the highest and ultimate level and mastering it.

Graduating (the ceremony and diploma) is in the educational system the greatest reward, once it unlocks higher level games to be played (such as university), not to mention that in the case of school, the graduation is what will finally allow the student to leave the game (since the student has in the vast majority of cases no choice on whether to play it or not), what turns this reward even more valuable than simply unlocking higher levels, it is up to some extent synonym to “freedom” of an educational system (the traditional ones) that is based on conditioning and control.

The university is another gamified institution, being constituted by sub games (under grad, grad, post grad, etc.), each one with its own ultimate reward, “the diploma”, which will unlock other games such as jobs and which may be in their way to be also gamified, as we saw in the article on [gamification]. In contrast to school, university is nevertheless “optional” (although sometimes job market conditions may make it seem obligatory) and the participant has the choice to leave the game at any time.

Degamifying education

Today many educational approaches focus on degamifying education, by criticizing the way children and the youth are submitted to tests, which fail to assess the real potential of the student or criticizing the censorship of play (so natural for children) in favor of “productive work”. Doesn’t this sound contradictory, like a gamified practice (education) which condemns the incontrollable will of play? Shouldn’t gamification promote playfulness? If one takes a look at the history of education, one will find that before the advent of agriculture, followed by feudalism, slavery, industrial line production, all accompanied by religions, humans as hunter-gathered groups used to let their children learn by themselves through free play and interaction with the environment. Taking this fact into account, what can we conclude about the relation of play – education – gamification? Food for thought.

Overgamification or regamification?

Others are seeking to overgamify or regamify education; however, it is already a gamified system. To overgamify may be understood as being redundant, for instance by adding points to something that is already based on points. That would be a waste of time. To regamify may be understood as deconstructing and reconstructing the system, by letting the old aside and implementing innovative strategies, even if armored with the same principles.

As an example of [over- or re-] gamification (it will be up to you to conclude), one may take a look at the use of platforms, such as [Class Dojo](#) which are exploring the power of the virtual world by creating avatars (representation of the persona in this virtual world) for each kid, and the avatars get the rewards (it may be a skill through badges, a title such as Dr. or Prof., a new jacket or a hair style) for educational achievements of the “real” student.

It turns out that it is effective. But what makes it so effective, if it is using the same old reward systems, just dressed up in a different way? What is the difference between the old reward and the digital, visual reward? Three theories follow:

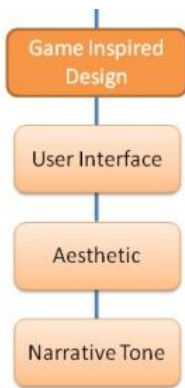
1. Game Inspired Design

As defined by Andrzej Marczewski:

“This used to be called gameful design, but this now has more gamification like connotations. This is where no actual elements from games are used, just ideas. So user interfaces that mimic those from games, design or artwork that is inspired by games or the way things are written. All of these have links to games, but do not contain anything that you would consider to be part of a game (mechanics, dynamics, tokens etc.)”¹

The visual appeal of games is ludic, what makes people more willing to interact with it. Through user interface, aesthetic and the use of the right narrative tone, it is possible to turn some boring website or even a text (or a course) into something that resembles the aesthetic of video-games, borrowing from it its ludic appeal, its playfulness and therefore motivating users/learners to interact.

¹Andrzej Marczewski in : <http://marczewski.me.uk/2013/10/21/game-thinking-breaking/>



One may think like this: if your reward after succeeding in a test does not look like a “10” or an “A”, but it is a beautiful designed badge, which will be attached to your “hype” avatar, who may even get the possibility to buy new shoes as a reward of your efforts. That is game inspired design.

2. *The performance exposure – embracing competition*

What is the point of making the reward look nice if nobody will see it? So maybe the point is making everybody see it!

Your score/grade used to be private, teachers used to give the results personally without announcing **it to the whole class, to avoid public shame (in the case of those who did not perform so well).** Now with [over- or re-] gamification (or pointsfication) the points of the avatar and its achievements are public, anyone can see (in the case of explicit exposure). And if the points are not public, just those who did “well” will have a nice badge (which are per definition public), and those who do not have a badge had obviously a “not good enough” performance to earn one, which is an implicit exposure.

Before [over- or re-] gamification, students used to ask their colleagues “hey, what was your grade in the math test?”, which reflects the human innate inclination for competition, and there was choice of revealing it or not. As we have seen, in [over- or re-] gamified processes, this choice is (in most cases) no longer available. The use of leaderboards is also a common practice in [over- or re-] gamification, which is the highest sign of a system that embraces competition as a way of improving performance.

3. *Both - theories numbers one and two resemble the pleasure of playful activities, in which students take part in during their free time, therefore the combination of both turn out to be effective.*

After attending a [over- or re-] gamified class, when given the choice for the format of upcoming classes, the majority of interviewed students would go for the [over- or re-] gamified class once more, stating that it is “less boring” (but they also do not say that it is fun, because it is not a game in its full sense). This shows that either the competitive environment or the game inspired design is highly appreciated by students, or both as a combination.

Moral Issues

According to the rule discussed in the article on gamification, when: 1) there is a choice of taking part in the game or not; 2) one is free to leave the game whenever he/she wants to; 3) the game is trying to help people achieve things they want to achieve (as a good performance in a course); then gamification is morally acceptable.

However, especially in the case of children and young adults in groups of a face to face course, the choice of taking part on the gamified platform or not through a formal question in the beginning of the course may not be relevant. That is because the social pressure of “belonging” may drive a person who actually does not enjoy the exposure and the competition environment, to join anyway, for not being left aside by the colleagues.

Food for thought: if the education system is a gamified one, as we have discussed, and children have no choice on whether or not to play or on when to leave it, is it morally acceptable?

Overlapping terms

It is impressive to see how many people are still talking and writing mistakenly about *game-based learning* (*learning games, serious games*) and *game design* (also *player generated context, player generated content*, or learner instead of player) and naming it gamification of education, - of the classroom, - of learning and training. The distinction between these terms is paramount. Check the respective articles in Click4it to know more about each of the terms, which may be more meaningful options to be applied in learning contexts.

In addition you may follow the links below, which relate to articles distinguishing gamification of education/learning processes of game-based learning:

[Gamification vs. Game-based learning in education](#)

[Game-based learning vs. gamification](#)

[Game-based learning, gamification, game](#)

Two types of gamification of learning processes

If after reading the articles on gamification, game-based learning and serious games, you want to gamify your e-Learning or face to face course, you will first have to choose between two types of gamification, coined by the specialist Karl Kapp: structural gamification and content gamification. Read [Kapp's article](#) where he explains both terms.