3. WHY GAMIFICATION OF THE LEARNING PROCESS?

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Abstract   Scientists and researchers all over the world have always searched for unknown ways of motivating learners in education. Although new is not always effective and satisfactory, the new trend "to use game design elements in non-game contexts" (Deterding et al., 2011, p.1) might bring an enourmos benefit to learner motivation. Yet, a brief reflection suggests that motivation is a crucial factor in an educational proces and nowadays it seems very challenging to keep learners engaged in a world with a plethora of exciting places, pictures, activities, social media opportunities and Google's temptations. Learners are now used to the game enviromnet everywhere, they enjoy it, they want to play and have fun, compete with others in a social environment, they want to get immediate feedback and information about their progress. Moreover, they want to be connected, be a part of a social system, attached to their mobile phones, continuously searching for new information and broadcasting news to others. That paper consider a meaningful gamification (Scott Nicolson, 2012) based on internal motivation and self-determination theory (Deci and Ryan) without external rewards and a gamification system based on external rewards. Both are combined and applied in Logistics language course where gamified e-learning environment serves as a drive to learn a language with external rewards such as badges, points and leaderboards.

1. INTRODUCTION

This paper discusses two approaches to gamification, basically in education. Meaningful gamification and BLAP gamification (Scott Nicholson, 2012) will be explored including intrinsic and extrinsic motivation aspects. A demonstration of game elements, technics and mechanics will be shared and Logistics Language Open Training project will be addressed to emphasize the successful application of game elements to a learning process.

Nowadays, motivation and students' engagement are becoming increasingly important issues for all educators and educational systems, schools and training institutions. It has always been an issue but at the time of the 'invasion' of new technologies and the amount of knowledge needed to be acquired, it is a critical facet. Therefore, gamification can be a way to success in education as it may fulfil learners' expectations for interactivity, technology, competition, and sometimes simply pure play.

The phenomena of gamification of learning and business processes is overwhelming. Educators cannot underestimate this fact and pretend that education can cope without innovations. Education is able to follow and implement the newest world trends. The gamification idea lies upon and takes advantage of the fact that most people are gamers.

2. GAMIFICATION

2.1. What is gamification?

The most common definition of gamification is "to use game design elements in non-game contexts" (Deterding et al., 2011, p.1). Gamification can be also defined as "the process of using game thinking and mechanics to engage audiences and solve problems" (Zichermann, 2010). It means to effectively apply game mechanism and technics to work in education field. By this process a learner can experience an educational voyage in a game environment. Gamification is based on the assumption that people are players and they easily engage with activities that have game characteristics such as players, engagement, progress, choices and a goal of the game. These elements are only a part of the game system, they serve

to help people with engagement by gaining points for doing new exercises, entering e-learning system or reaching badges or leaderboards to compete with other people. Evidently, most of gamification examples in education and business are based on external motivation systems, and external rewards. Developers use points to show progress, provide feedback, award badges to signal more significant achievements, inform about the status of the player and leaderboards to connect players, show the ranking of players. These systems also emphasize the need for competition in social environment.

Where did this gamification come from? Before we explore the basics of gamification we should approach the root of gamification which is a game.

According to Raph Koster (2005, Theory of Fun) "A game is a system in which players engage in an abstract challenge, defined by rules, interactivity and feedback, that results in a quantifiable outcome often provoking an emotional reaction". Underlying gamification are game elements such as goals, rules, competition or cooperation, time, rewards, feedback, levels (Karl M. Kapp, 2012). Gamification is definitely not a game but it is a combination of a variety of game elements:

- a goal – almost the most important facet in a game, also valuable in gamification, should be clear and feasible, should be neither very easy to reach nor extremely difficult. A player/learner/customer/employee should know what the goal in the game or in a gamified learning system is.
- rules – each game-like environment should be built on a set of rules. The rules make the game and they should be clear and possible to perform. They describe how to score points, reach levels, go to the next level, how to win,
- competition and cooperation – two options are possible even in one game: competition, where players compete with each other to leave other players behind to win, to be the first in a ranking. Cooperation is also used by game and gamification systems where participants cooperate to reach a common goal.
- time as a crucial game element which leads to gaining or losing, some games/gamified learning/business systems have a limited time to reach the goal, get to the next level or finish the game.
- rewards – points, badges or a goal of the game. Rewards can serve as an intermediate goal,
- feedback- keep players engaged, immersed, serve as information whether they are right or wrong,
- levels – levels show the progress of a player or a degree of difficulty, a player can also build up and consolidate his/her skills with the level progress,

- storytelling – a narrative behind the game, a player can follow the narrative, there are often some characters, plot, tension, resolution (Karl M. Kapp, 2012).

2.2. Meaningful gamification

Meaningful gamification is inspired by intrinsic motivation and the Self Determination Theory. Players should make meaningful choices to acquire new knowledge. Each person has a different frame of reference, different things have meanings for different people. "Meaningful gamification is the use of game elements to help someone find meaning in non-game context and is therefore a tool to help people learn through changing their perspectives on life." (Scott Nicholson, 2012) Although many examples of effective external rewards may be found, Kohn (1999) emphasizes how incentives limit progress and performance. Better performance can be reached through non-reward methods of motivation. A reward, points system is a loop that is never-ending, people once rewarded will need it again (Kohn 1999). Play is the crucial aspect in meaningful gamification as it helps find a meaning. People often find a meaning in an activity that has a play element rather than in an activity without play. Play is also connected with fun that involves activities like role paying, teamwork or our imagination and surprise. Another aspect of meaningful gamification is the relations to a person's personal goal, which enhances the internal motivation of the learner which is the aspect of Self Determination Theory (Deci and Ryan, 2004).

2.3. Self-determination theory and motivation

"Self –determination is the capacity to choose and to have those choices, rather than reinforcement contingencies, drives, of any other forces or pressures, be the determinants of one's actions. But self-determination is more than a capacity; it is also a need (Deci, Ryan, 1985)'. In the Self Determination Theory basic psychological needs for autonomy, competence and relatedness are responsible for human wellbeing, health and good functioning. We distinguish two types of motivation – intrinsic, i.e. doing something for satisfaction, having fun and experience a challenge rather than for some external rewards or pressures. Extrinsic motivation, on the other hand, is related to external rewards and some separable outcomes. Most of our lives we are extrinsically motivated, from school grades, work rewards or gathering points at the supermarket.

The Self Determination Theory concept can be easily applied to gamified language learning where the need for language autonomy, gaining a capacity and maintaining social relations is obvious.

Motivation is a state of cognitive and emotional arousal, which leads to a conscious decision to act, and which gives rise to a period of sustained intellectual and/or physical effort in order to attain a previously set goal (or goals) (Williams and Burden 1997: 120).

People are aroused to act by a huge variety of factors. Often the arousal is generated by curiosity and interest. External factors, such as other people or incidents, also stimulate a person to act. Adults who decide to enrol in foreign language courses do so to achieve pre-set goals, so motivation plays a big role in their decision. They are also able to maintain a high level of motivation until the goal is reached.

According to Brown (2000), there are different kinds of motivation, which can be divided according to what triggers the arousal or what goals need to be achieved. As has already been noted, we can distinguish between intrinsic and extrinsic motivation. Some adults learn languages because it brings them some kind of joy or satisfaction, which is an example of intrinsic motivation. Intrinsic motivation comes from personal interests and inner needs. Therefore, this kind of motivation can have a great impact on adult education and a lifelong learning process. On the other hand, extrinsic motivation comes from a drive from external sources, for example material rewards. Learners can as well be motivated extrinsically; for example, when they need to achieve some kind of proficiency in order to improve their qualifications, to be promoted, to find a new job or to earn more.

When it comes to the goals of the learning process, motivation can be divided into integrative and instrumental. When students learn a foreign language because they want to reach some instrumental goals, such as a better job, passing exams or to be able to translate, then this is instrumental motivation. Integrative motivation occurs when students learn a foreign language because they want to integrate themselves into the culture of the second language group. Both integrative and instrumental motivation are virtually equally important. Actually, it depends on the learner which motivation drives him more, whether s/he is more integratively or instrumentally motivated (cf. Brown 2000: 162,164).

2.4. LLOT system as an example of gamification of language learning

The Logistics Language Open Training was partly built on the BLAP concept of gamification and partly on the idea that lies upon the Self Determination Theory. In brief, the developers took into account the fact that students strive for language autonomy and capacity as well as they constantly need to remain in a relation with others and that can reinforce or dominate the BLAP solutions applied. BLAP comes from the abbreviation of Bagdes, Levels, Achievements, Points and can be considered unfairly as not effective and not powerful. However, some students, tasks or areas of activity may need that type of extrinsic motivation as they lack the intrinsic type of motivation in specific activities. Most people are not intrinsically motivated to study or perform an activity, especially because we are used to this type of motivation from our childhood. As an example, a child ca be highly motivated to eat a vegetable when the mother promises to give him/her a chocolate afterwards. Schools systems are mostly based on external rewards for students, such as grades and then we gather points at supermarkets on our loyalty cards to get a reward.

Logistics Language Open Training system is an eLearning platform with a language courses for logistics on B1/B2 level according to CEFR. The courses (English, German, Italian and Polish) are designed for students of logistics and professionals working in logistics. To trigger the students' involvement in the course and to attach them to the course for a longer time and boost their motivation, the BLAP gamification was added to the platform. The following game elements that were added to the course:

- points, scores – to show progress, students can get points for quizzes and compare with the other results
- levels - to show the progress, different levels, depending on the quantity of points
- badges – possibility to collect badges that show a variety of tasks completed,
- avatars – personification with a possibility to add a photo, picture – students can add a photo to be recognizable or an avatar to be hidden on leaderboards,
- storytelling – a learner can follow a narrative shown in animated videos with professor Linguistics as a protagonist, a plot, resolution and sometimes some tensions. Animated videos with original native speakers' voices are the central part of each language course module

The system shows the progression of the student, also in comparison with other students. Moreover, it gives the possibility of social integration, of amusement and just a pure play pleasure.

3. CONCLUSION

Given that most educational systems, starting from primary school, are not designed in a way that would involve intrinsic motivated behaviours, it seems quite reasonable and at the same time effective to use the external reward system for the aforementioned Logistics Language Open Training. That paper briefly presented meaningful gamification based on intrinsic motivation and the Self –Determination Theory (SDT; Deci and Ryan, 1985) versus BLAP gamification based on external rewards implemented successfully in the LLOT project.

We pointed out that intrinsically motivated behaviours are not common, especially within traditional educational systems and in order to involve those behaviours in education we should fulfil the need for relatedness, autonomy, and competence. Implementation of gamification elements in the educational system is not an easy process. Gamification is not only about a fascinating game, a pure-pleasure experience. It is a successful application of game elements to non-game environment which has the capacity to boost the engagement of students.

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BIOGRAPHICAL NOTES

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