

GAMIFICATION AS AN EFFECTIVE METHOD FOR CURRENT STUDENTS

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Abstract

Gamification is a concept that uses certain mechanisms or techniques to increase people's engagement and change their behavior and habits. Gamification is widely used in marketing, sales, personnel management and increasingly in education. The purpose of this work is to develop practical solutions for game educational processes. These solutions are based on the mechanisms used in online games and the results of empirical research in the field of motivation. The article analyzes the theories of motivation and motivational aspects of popular online games. The author suggests using gamification mechanisms in training, including financial schemes and a set of functions based on natural human desires, such as cooperation and competition. The article presents a theoretical analysis of gamification in the educational process and attempts to answer the question whether it is the only acceptable alternative to boredom and despondency in teaching students. The authors evaluate the possibilities of using gamification in higher education and diagnose the attitude of students to this form of education. The results obtained indicate a high level of acceptance of gamification programs among students and the need to develop this method of learning.

Keywords: gamification, gamification, student learning styles, financial programs, scores, points, levels, tasks, online games, internal motivation of students, game learning mechanisms, ratings, game design, group tasks, online tests, result tables, aesthetics of the game, game elements, game mechanics, game dynamics.

Statement of the problem in general form and its connection with important scientific and practical tasks. The dynamic development of communication and information technologies currently stimulates the introduction of innovative solutions in various spheres of human life. In recent years, new concepts that enhance human motivation have been used more and more. An example of such a concept is gamification. Gamification is a process that uses tools and ways of thinking taken from game projects [1]. Gamification means the conscious and purposeful application of various mechanisms and methods aimed at increasing loyalty and changing habits. It uses the elements of games (which make up its mechanics) and the rules of their design (which are its dynamics) to solve problems that are not games themselves [2].

Analysis of recent studies and publications in which aspects of this problem were considered and on which the authors are based; identification of previously unresolved parts of the general problem. The key elements of gamification are:

- points that are a reward for progress or for desired actions (getting closer to victory);
- levels that determine the status of a player and show his place in the ranking in relation to other players, which motivates them to continue playing;
- result tables that enhance further interaction and allow the player to compare himself with others, as well as brag about the results achieved;
- icons showing the problems the player has faced and what he has achieved;
- tasks that the player needs to complete in order to score points or reach a higher level of the game.

Gamification also has a third element – aesthetics
- a description of emotions that should accompany the

interaction of players during their participation in the game. It is this element that often has a very strong influence on the involvement and behavior change of participants in the game.

Gamification uses game "thinking", i.e. the user of a gamified program should perceive his activity as a kind of game (to be completely immersed in the game), and not a duty. However, critics of this phenomenon note that gamification is often reduced to simply achieving levels and rewards in various scoring systems, which ultimately leads to undermining internal motivation and ultimately to a decrease in interest in the activity. For example, after the gamification experience, the airline's customer support staff began to process customers instrumentally, i.e. exclusively as a means to get points.

According to the author, an exemplary multimedia game that requires consideration is "World of Warcraft". This is one of the most successful and highly motivating games in recent times. A typical player starts playing after being "seduced" by a game advertisement or the enthusiastic opinions of friends. He becomes a child who has received a favorite toy. To begin with, he can select and configure his persona (avatar), and after a moment his first goals and tasks are presented to him. After a few minutes, his character kills a couple of virtual enemies and communicates with a couple of virtual allies, and also goes to a new level. Thanks to this, he now has new skills and can deal more damage, which helps him in confrontations with stronger opponents. After a few hours, the player can test their skills in competitions (battlefields where ten teams of players fight against each other) or together with other players test themselves against more severe monsters. He has more and more expensive things in

his bag that can be sold to merchants or other players at an auction. Being a newly invited participant in the game, he meets new friends and communicates with them between fights with monsters. The tournament is arranged in such a way that not only and not so much specific knowledge is revealed and encouraged, but the ability to understand and solve the problem [3]. He explores new zones, visits new towns and villages. He learns to cook and fish, sews his clothes like a tailor, or forges weapons out of metals. He challenges a higher-level player to a duel. Reaching the next levels takes more and more time, and his favorite combination of spells, repeated hundreds of times, becomes tedious. Fortunately, destroying the enemy and crowdsourcing communication with comrades is still interesting [4]. When the player's character finally reaches the maximum level, a new stage of gameplay begins. Further progress is possible within the rating table (PvP) or the rating of the best players (PvE). If a player wants to be really successful, then he must take up many weeks of tedious "farming". In PvE mode, this means killing monsters in groups of 10 or 20 players. In PvP mode, he competes on battlefields or arenas. PvE activity takes at least 10-15 hours per week; PvP – from one to 10 hours. In his "free" time, the player can process and harvest crops (from 10 minutes to one hour, a daily task) or progress in "replication" with various factions (usually less than one hour, also a daily task). He can also try to score points in so-called achievements. The game is built in such a way that every non-playing week means a loss. In PvE mode, the probability of obtaining the loot that the player dreamed of decreases; in PvP, buying the perfect equipment takes longer (due to the weekly limit of collectible points). An untidy harvest means the loss of serious funds. When, after several weeks of effort, the player has received everything he planned, the game starts from the very beginning, i.e. new, more powerful weapons become available and new and more complex tasks appear. A typical "World of Warcraft" player starts playing with curiosity and fun. Soon, however, his strong internal motivation is replaced by the need to receive rewards [5].

The structure of the game described above shows, paradoxically, the external motivation that underlies the motivation of most players. After reaching the weekly limit of conquests, players usually stop participating in PvP battles (because this is

This effect is the effect of excessive justification. And when the boundary between self-interest and the race for rewards intersects, another mechanism begins to regulate the behavior of players – a psychological trap. Players become motivated not by rewards per se, but by the rejection of abandoning activities in which they have invested time and effort. Every day spent in the game brings their dreams closer to the goal. The external motivation of the players is formed through the use of linear progress and point rewards [6].

In this game, the following external reinforcements can be distinguished:

- constant reinforcement, i.e. points for killing monsters (to increase the level of experience, which determines the basic strength of the character), points for

killing a player's person or for winning on standard battlefields (to get an exchange currency to buy better equipment), progress in the development of the avatar (in the case of production of more complex items);

- a graph with a variable ratio, i.e. the value of loot obtained from non-player characters (from poor to epic), progress in avatar development (in the case of the production of less complex items), reputation points for some factions;

- a schedule with a fixed interval, i.e. points for winning arenas and rating battlefields (loot is exchanged for the best equipment), harvest from scraps, reputation points from most factions, rewards for daily quests.

On the other hand, the internal motivation of players is determined by the need for membership, i.e. the possibility of joining a guild, the need for cooperation between characters with different skills or professions; studying game content; dominance and competition with other players or non-player characters [6].

Some game features increase both internal and external motivation: rating in PvP, progress in PvE (comparison of guild achievements), other achievements and badges. In many cases, players receive remuneration relative to the level of difficulty of the task: from the lack of remuneration for too simple tasks to large rewards (more points) for more complex tasks [6].

A common mistake is to assume that players are motivated primarily internally. The effect of excessive justification leads to the fact that external rewards are the driving force, i.e. a person still experiences autonomy, but his behavior is regulated from the outside. From the point of view of the theory of organic integration, it can be said that external control was integrated. However, if we compare the integration of external control between students and players, then students have a gradual increase in the level of autonomy, and players have this level of autonomy decreases. The use of game functions to motivate students can lead to failure if their initial motivation is too low. For example, "cheerful communication" reduces the positive effect and can lead to zombification, i.e. to a senseless search for external rewards [7].

In the absence of independence, students may perceive gamification programs as an additional source of stress [8]. Instead of being safe, they will be afraid of the additional pain associated with an insufficient level of "pumping" or a high rating. External rewards in games are used to support interaction when initial interest began to decrease. They provide tools for more efficient management of game content.

If a student is not interested in acquiring knowledge or skills, the tools that help to do this will not motivate him. When there is no autonomy, external rewards (for example, small money) obtained through trial and error can serve the purpose of increasing internal interest. In addition to the opportunity to earn money, students can convince themselves that their activities were fun.

In case of lack of interest in obtaining knowledge, mechanisms should be used to increase initial motivation. Internal motivation can be formed by mechanisms

that facilitate social interaction (research of game content and immersion in it, competition between students). External motivation can be formed by the structure of knowledge (goals and objectives, tasks, linear progress and achievement of a certain level, awards that allow you to gain an advantage over other students). Low motivation can be increased by using monetary rewards paid in accordance with fixed-income schedules. Inserting a bill into a slot machine is not an exciting activity if it is not accompanied by a sense of potential victory. The possibility of winning always encourages players to take action. The use of elements of "gambling" and "winning schedule" in the educational program should serve to maintain involvement in the absence of other motivation.

The possibility of fraud is one of the most important issues in gaming educational programs. Lack of control over who is actually playing can lead to abuse. More advanced students can complete tasks for less advanced or unmotivated ones. The problem becomes even more serious when the desire for trouble can cause unintended cooperation, i.e. the use of the help of more competent students. Possible solutions in this situation are as follows:

1. The game takes place exclusively under the supervision of the coordinator at certain hours and in places designated for this (for example, a computer class). This provides full control over the players, but will significantly reduce their autonomy.
2. The game can take place anywhere and whenever you like. This gives the player full autonomy, but there is a possibility of abuse, i.e. most of the game content can be played anywhere else and at any time, but certain levels can be achieved only after completing tasks under the supervision of the game coordinator (this will be a control test to check how the student dealt with course material personally)
3. Great control over the player and minimal reduction of autonomy.

From the point of view of the effectiveness of training, the third variant seems to be the most interesting. Of course, other intermediate solutions are also acceptable.

The aim of the research conducted by the author was to diagnose the attitude of students to the use of rating assessment with gamification elements in higher education and to find out what solutions to increase their involvement concerning the mechanics and dynamics of gamification can be offered by them. Initially, the main hypothesis was put forward that gamification can be a valuable method of involving marketing students in their learning process. Senior marketing students were familiar with the theoretical provisions and examples of practical implementation of the concept of gamification in involving customers in commercial activities [9]. To the first question of the questionnaire about whether it is possible to use the concept of gamification in training, 63% answered unequivocally yes, and 18% – rather yes. The answer "probably not" was given by 11%, and only 8% do not agree to "play" in education. To the second question about whether students will participate in game learning, 68% confirmed their positive attitude (53% of the answers are "yes" and

15% are "very yes"). The rest reject this form of training (27% "are unlikely to participate" and 5% "categorically reject").

Summing up the above results, it can be said that more than 60% of respondents see the possibility of using gamification mechanisms in senior courses, more than 65% of students want to participate in this form of increased involvement. In addition, the implicit advantage of using gamification is the adaptation of the student in the university environment and in the social environment [10].

Then an open question was asked, with a suggestion to indicate examples of areas of activity at the university for which students would like to receive additional points. Among the most frequently mentioned reasons for scoring points in the field of marketing are the following: active participation in seminars, speaking in front of a group, online knowledge testing, group projects at senior courses, 100% attendance at seminars, maximum attendance of optional lectures, certificate in a foreign language, participation in additional trainings organized by the university and training centers, active participation in scientific conferences and publication of results research in scientific publications [11]. In the public sphere, points can be obtained, for example, for participation in work in student organizations or in student self-management.

The number of points scored is usually the basis for creating a university-wide rating. A high position in the ranking gives the student a sense of satisfaction from previous efforts, while a low position most often increases motivation and increases the level of involvement in various types of activities [12]. In the study, students pointed out the importance of assessment tables in which they can constantly check their progress in comparison with colleagues from the group [13].

Scores, ratings and levels are the key elements of gamification, which must necessarily be associated with prizes. Among the most coveted prizes, students noted the following: passing a subject without an exam as a result of getting into the rating list in the first 10% group of students who scored the highest number of points in this subject; participation in a paid internship in an organization cooperating with the university; paid business trips to other universities; material prizes; an invitation to an individual meeting with the rector or a famous graduate of this university; small symbolic gifts and university gadgets. Students expect that the winner will be able to choose the form of remuneration that he most desires. In addition, prizes will be awarded to the students who became winners at the general university gala concert.

One of the key problems of using hieroglyphics in higher education is related to the reasons for the lag of students in this process. Many researchers point to the problem of increasing external motivation at the expense of internal. In the long term, gay mythology can be an unfavorable factor, as it reduces internal motivation. The incentive of an external nature can be cash prizes for winning the competition. In the process of higher education, they began to be treated with great caution - nostalgically, since students did not study for

financial gain. Gamification can only keep students engaged for a short time. The limitation of the use of gamification in education can be the fact that the motivation of students with the help of scores, levels, ratings and grades can be most effective in the first period after its introduction, when it is perceived as an element of novelty. Its longer-term use becomes common for students. According to the idea of gamification, information about the pre-stigmatized results of the game can be obtained in real time. Usually, this requires IT programs that allow you to record actions, set tasks, form ratings and regularly receive feedback. Such IT programs are usually accompanied by significant expenses in the university budget, which can hinder or significantly limit their use.

An additional factor influencing the success of the introduction of gamification in higher education may be the direction of study and the associated chances of receiving an attractive job offer from employers. For example, students whose direction is related to public service do not even have profiles on social networks, so as not to write too much or accidentally make a criminally punishable repost. The condition for the effective implementation of gamification at the university is also the acceptance of this concept by the teaching staff and its implementation in real benefit for learning outcomes. For example, the introduction of the educational process of seminars, which can take place in the form of seminars, discussions and conferences to organize independent work of students and allow them to work on improving general cultural and professional competencies.

Research findings and prospects for long-range searches of these areas. Summing up the above, it follows that the use of gamification in the process of higher education can lead to many advantages associated with increased student involvement in the process of their own development. The results of the study confirm that students of creative specialties (marketing and advertising - independent business, International management, enterprise economics and entrepreneurship, international journalism) have a positive attitude to this concept, and many of their solutions are not only compatible with the mechanisms of gamification - civilized, but easily implemented at the university

In subsequent studies, it was necessary to diagnose which elements of the mechanics and dynamics of gamification were more in line with the expectations of students and teachers. It is also worth checking the level of acceptance of gamification in educational institutions, depending on the direction and abilities of learning, as well as the ultimate achievements of the student.

Recognizing new areas of research related to the advantages of introducing gamification in higher education, one should keep in mind its various limitations, since the main goal of all activities in this area is to create a system that will influence the involvement of students in a positive and long-term lifestyle and stimulate their internal motivation.

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