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ABSTRACT

The purpose of the investigation is to examine the gaming method from the perspective of the educational paradigm and to identify the potential for its use in higher education. The scientific novelty of the research consists of systematizing the advantages of using the method of gaming for educational purposes and of the selection of gaming tools, realizing the didactic principles noted by the authors of the article. The result of the investigation is the producing of methodological recommendations set for teachers of pedagogical higher educational establishments, aimed at the qualitative integration of the gaming method into the educational process and the creation of an effective environment for teaching students by the gaming system.

Keywords: higher education, English language teaching, gaming, gaming practical training, methodological recommendations

INTRODUCTION

Relevance of this research lies in the widespread trend of gaming, which has already spread over all spheres of social activity. Gaming itself arouses a genuine interest in the object of this method, which makes it possible to consider it in the education of students. As follows, there is a need to examine gaming in the educational paradigm and to identify its further potential in this field.

To achieve the above purpose, the following objectives were formulated:

- 1) defining the principles of gaming and the advantages of this method.
- 2) study of gaming tools and identification of didactic principles in which they can be applied.
- 3) the practical significance of the research is the establishment of a list of methodological recommendations, aimed at creating a successful educational environment for the implementation of the gaming method in the English language teaching at higher educational institutions.

Theoretical research methods were used to solve these objectives, such as the deduction method, content analysis, the method of generalizing the positive advanced teaching experience and the systematic approach to studying theoretical sources.

The theoretical basis of the research includes the publications of V.V. Artamonova, N.A. Lobacheva, O.V. Orlova, V.N. Titova which examine the development history and principles of using the gaming method in the organization of a certain activity.

XXI century is characterized by an incredibly rapid digitization in all spheres of human life. Nowadays people are forced to adapt to a changing environment, which requires not only a capacity for self-development but also a flexible system of adaptation to a dynamic environment.

Consequently, the task of developing and raising a modern personality for educators is becoming increasingly complex, prompting teachers to use more modern teaching methods and technologies that would enable them to achieve their educational goals.

One of the methods that is becoming increasingly relevant nowadays is the gaming. Gaming or gamification — is a technique based on one of the primary human activities - the game (Orlova, 2015).

The term «gamification» was firstly used by the British researcher R. Bartl in 1980, and this term was understood as the joint work of users (Artamonova, 2018). Gaming is a strategy consisting of a wide range of different game mechanics used in non-game situations to increase motivation and interest in the process (Koval, 2016).

This method has been widely used since 2010, when the sufficient positive experience with gaming projects

appeared (Artamonova, 2018). The wide popularity and relevance of gamification is explained by the fact that playing games, as a process, is one of the basic ingredients of personality formation and accompanies a person throughout life (Artamonova, 2018).

The term gaming is used in many areas of human activity, such as health, personnel management, business and others (Orlova, 2015). For example, in marketing, gamification has been widely used since the early 20th century to stimulate and increase sales (Artamonova, 2018). Moreover, games constructed with game technology reflect essential problems of mankind such as world conflicts, famine, climate changes, poaching and others (Orlova, 2015).

In addition, the trend of gaming has become widespread in various social spheres in terms of the socio-educational paradigm. This is due to the very simple and effective integration of the game into the non-game context (Artamonova, 2018).

Teachers, through the creation of a virtual universe, achieve a high motivation of learners. This fact effectively influences the quantity and quality of gained knowledge (Orlova, 2015).

Oleg Fedorov, a researcher at the National Research University Higher School of Economics, believes that games in pedagogical activities have always existed in the form of quizzes and role-playing games, but with the development of digital capabilities the tools of the gamification method have undergone a qualitative change (Ya psiholog,2021).

Based on the above, it can be said that the current educational paradigm and the design and technology type of education make it possible to consider the role of game in terms of educational discourse.

MATERIALS AND METHODS

The gaming method stimulates one of the main levels of activity that is the primary source of human occupation – a game that has a transformative, creative character (Orlova, 2015).

The main principle of gaming is including game items in the teaching process. It is important to note that these tools are used in a non-playable context, that is, a full game is not created, but only certain game fragments are used. Also among the structural elements of gaming, it is important to mark the following:

1. Motivation, i.e., activity, consisting in the competitive moment and actions of the pupils, influencing the final result;
2. Discovery, an element that contains the possibility for students to reach new levels;
3. A status is an element based on the fact that the pupil is directly involved in the game and the educational process through the method of gaming;
4. The reward, which is the prize one can get in the final (Ya psiholog,2021).

It is necessary to note that methodologists refer the gaming practice to the tool of educational simulation technology, therefore it is obligatory to include specific conditions for achieving the goals and tasks, creating the game reality with certain roles (Orlova, 2015).

So, some of the gaming principles are:

1. Monitoring the progress of participants, that is, a visual representation of success. Progress may be seen in the form of levels, points, etc.;
2. Investment - that is, direct contribution to the game. Investments include achievements, new assignments, teamwork;
3. Gradual discovery of information. Unexpected rewards, time limits, burnable results, ability to improve the game by retaking a task (Koval, 2016).

Sum it up so far, the concept of gaming suggests that there must be a strategy that incorporates all the above-mentioned principles and structural elements which will support participants' engagement and narratives, what is the link of the whole concept (Lobacheva, 2018).

For example, in the process of practicing this technique, the student can face both educational tasks (for example, mastering the grammar future in the past) and game tasks (gaining 5 points to complete the task in a limited time to open the next level). It should be noted that educational goals are always a priority, and games in turn are intended to keep students motivated to achieve the tasks set by the teacher (Lobacheva, 2018).

There are some advantages of the gaming which can be observed in classroom activities:

1. Using game elements in learning makes it more interesting and comfortable which is due to the activation of the brain region reacting to the game;
2. Relief and fear of making a mistake;
3. Active emotional inclusion leads to better focus and memory;
4. Universality;
5. Effective and rapid adaptation to the educational environment, contributing to the best reflections of the learner (Orlova, 2015).

Scientist Diane Schaffhauser also highlighted the following advantages of using the gaming method in educational activities:

1. Direct interaction of the personal experiences of learners and learning, that is, the use of a virtual environment

with the simulation of situations, phenomena and subjects studied;

2. Using iteration to achieve the best result;
3. Developing systemic thinking (Pahomova, 2015).

Also, gamification has a number of advantages directly affecting the learning quality and structure of the teacher's educational trajectory:

1. The use of the gamification method makes the educational process more structured;
2. Educational activities are becoming more manageable;
3. Gamification gives the opportunity of activating of study process;
4. Distance form of interaction with students whose faces are hidden behind the profile pictures allows testing the level of knowledge of students as objectively as possible;
5. The use of gamification tools facilitates non-standard and interesting communication between educators and students (Lobacheva, 2018).

In addition, in today's world, higher education has to compete with various phenomena of pop culture, especially entertainment including computer games (Lobacheva, 2018).

The method of gaming, in turn, is a substitute for computer shooters and other game genres, allowing the user to enjoy the benefits of the game, which is undoubtedly an important factor in student learning (Lobacheva, 2018). It can also be noted that in using the gaming method in education, all speech activities such as reading, writing, speaking and listening develop simultaneously through the active participation of a student in gaming (Fadeeva, 2018).

Thus, all the above advantages make it possible to consider the method of gaming as an effective method of carrying out educational activities, which makes the process of studying a large amount of information a fascinating process, although the content of the methodological material remains the same.

Taking into consideration the above-mentioned evidence in favour of viewing gaming in terms of the educational paradigm and analyzing the didactic potential of gaming, it should be said that pedagogical science understands the structure of the learning game as an intensive activity aimed at achieving an educational goal and including targeting and planning (Lobacheva, 2018).

In this way, gamification can successfully implement such didactic principles as:

1. the principle of conscientiousness and activity of the learner resulting in a timely reflection;
2. the principle of using visual aids including multimedia teaching material;
3. the principle of consistency – step-by-step complexity of material;
4. The principle of individualization, consisting of the possibility of choosing an educational strategy;
5. the principle of memory durability - active inclusion of the emotional and psychological component of learners;
6. The principle of accessibility and affordability - the possibility of individual selection of the complexity and scope of the educational material (Titova, 2019).

American scientist Kevin Verbach has set six stages for a successful gaming system:

1. Specific achievable, measurable and time-bound goal;
2. Forecasting the potential behaviour of participants. Identification of possible actions and design of the system;
3. Description of players needed to establish current motivation;
4. Planning a feedback and rewards system to motivate the participant to continue the course;
5. Looking at the system from a participant's side and finding a sufficient interest to the tasks;
6. Selecting a suitable platform, adding dynamics and game mechanics, that is, rules, achievements, levels, participants' scenarios (Koval, 2016).

In considering gaming as an educational tool, it is necessary to consider its toolkit, which is a fundamental part of the gaming strategy:

1. A scorecard that is an indicator of the result, with an obligatory record of the results. Each module may contain a certain number of maximum points which a participant needs to gain. For example: To be allowed to take an exam, a student must score between 30 and 70 out of 100 points. An additional 30 points can be obtained during the midterm assessment;
2. Level distribution. It is important to note that the levels are divided according to the competences defined in the curriculum:
 - a) elementary – the ability to express an idea based on a learner's point of view;
 - б) intermediate – ability to participate in intercultural and interpersonal dialogues;
 - в) advanced – critical analysis and evaluation of speech, intercultural communication in professional activities.
3. Mission execution. This tool includes the general purpose of instruction, which is correlated with the internal aims of students studying in a particular branch of higher education. Thus, missions can include both studying a major and optional subjects;
4. Awards, which are presented in the individual portfolio of each student, i.e. a demonstration of achievements. The types of awards can be structured as follows:
 - a) continuous, minimum motivation (for each task completed);

- б) Fixed, corresponding to a certain number of actions (5 responses per section);
в) single, non-fixed, rewards that ensure maximum motivation (performing high-complexity tasks).
In the process of encouraging participants in the educational process, the teacher should control the multiplicity of awards not to let them affect the student's internal motivation by replacing it with an external one;
5. Resources and artifacts collections. During the course, students are expected to complete their methodological range by studying scientific articles, compiling glossaries and creating the mind maps aimed at mastering particular competencies.
6. Choosing an image and character by using profile picture. This tool helps not only to emphasize the personality of the student, but also to increase the objectivity of the evaluation if the teacher does not know what student hides behind the picture;
7. Delegation of authority and formation of alliances. In the course of performing creative tasks or high-level tasks, students can form teams, assigning tasks to each other (Lobacheva, 2018).
Thus, gaming as a methodical technique has a large toolkit that allows constructing a suitable methodical plan taking into account the purposes and objectives of a discipline, for achieving the best possible learning by students.

DISCUSSION & RESULTS

However, there is still a widespread view among educators and parents that gaming is primarily a pedagogical tool for primary school teachers. In fact, gaming is not only applicable in higher education, but it has already found its place and strengthened in the form of hidden gaming – rating tables, exams and midterms.

Based on this fact, it can be argued that gaming is not an innovative technique, but advances in computer technology have allowed the gaming toolbox to be qualitatively expanded in the educational paradigm.

The authors believe that using game mechanics which influences the activity of university students will increase the effectiveness of learning by activating the subjective activity of students.

An important proof in the use of this method is the words of the famous 19th-century Russian teacher Ushinsky K.D., who wrote that the use of elements of the game allows engaging emotions and feelings of a person, thus it broadens the rigidity of the educational process, turns the learning process into an easy, playful activity with serious study material.

Scientists of the Educational Development Centre of the Moscow School of Management Skolkovo are convinced of the effectiveness of the use of gaming for educational purposes, noting that this method is an important criterion of the modern educational platform (Orlova, 2015).

Therefore, the authors of this article consider it possible to propose the following methodological recommendations, which should be taken into account in the implementation of the curriculum with the focus on the gaming method.

I. Scoring.

At the initial stage of gaming implementation, all students have zero score. Students should be rewarded with points only if they successfully complete their assignments. Thus, students will not be demotivated by negative scores, but will try to score through positive scores as many points as possible.

Students must be informed of the point system. So, students should be proposed several options how to get points for performing given assignments. An example of scoring is the rating system of the game «Amongus», in which the player receives a certain number of points for performing certain tasks varying in complexity level. A prototype of this system can be used in gaming, for example, a student gets 1 point for attending a class, 3 points for correctly completing homework, and 5 points for using additional literature. This approach encourages students to undertake additional educational activities, which will have a positive impact on the outcome.

II. Forming a level system in the classroom.

For effective monitoring, evaluation and encouraging students, the criteria should be established to improve students' knowledge of subjects. For example, the first levels are obtained by a small effort, after which the number of successfully completed tasks required for a new level must increase. This level system is represented in the online game «Dota 2».

This system differs qualitatively from the traditional rating system, because in such a case the student does not focus on the achievements of the classmates, but on his own properly performed tasks. Thus, there is no risk that a student may lose interest in a subject because of his low rating.

III. Method of subdivision of work.

This recommendation includes a method for dividing the global learning challenge, such as the «final battle with the boss» (taking the exam) on small subtasks, such as learning the vocabulary, doing a complex of exercises, writing the test. In turn, the sub-tasks are divided into various simple tasks: doing homework, home-reading, preparing for discussions on problem questions, presentations and so on.

As the tasks included in the sub-tasks are completed, the student receives points motivating him to take new tasks and to obtain new, higher levels.

IV. The use of game vocabulary in class.

The integration of the video game language, which is rich in terminology and slang, into the educational process makes it possible to create an atmosphere of game activity that facilitates the process of mutual understanding between students and teachers. This innovation also avoids the psychological difficulties which can be arisen in students during their studies through the use of gaming, which has a positive impact on their overall productivity.

Thus, at a certain stage, the words «examination», «test», «intermediate certification», «homework» should be replaced by the words provoking students' association with game, such as: «push» – preparation for a monitoring and measuring event, «rush» – writing of a test, «quest» – homework, «loot» – knowledge received independently, and other associative words.

V. Account creation

An essential condition for realization of the gaming method is the creating of accounts in which progress and all achievements of students are recorded. Such accounts can be represented by the text document or table «Microsoft Excel».

The account must show all points and achievements of the owner, the dates of the measuring and control activities and the student's earned skills. In addition, all students must have access to their profile accounts in order to monitor their progress at any time.

VI. Penalty system.

If discipline is not observed in the classroom or if homework is not done, certain sanctions must be imposed on the students, which should not discourage them, but rather encourage them to take active positive action.

Thus, besides the system of penalty points, which the student receives for incorrectly performed tasks, there should be such sanctions as «report» – additional tasks when no points are awarded, as well as «ban» – suspension of the student from performing tasks. “Ban” is the strictest punishment and implies that the student will not be able to earn points to achieve a global goal.

VII. Full instruction for learners.

Since gaming is an entirely new type of educational activity for students, it is necessary to give them clear instructions, in other words «the guide». For better understanding this guide should be available in print. The instruction must reflect the scoring system, the options for moving to new levels, the execution of missions and subtasks, the course of the global assignment, all possible sanctions and a vocabulary with terminology.

This way, the recommendations will increase the effectiveness of the use of the gaming method and increase the students' interest in learning foreign languages.

CONCLUSION

To sum it up, gaming can be seen as a way of delivering learning with almost unlimited pedagogical potential. However, this potential can only be realized if certain principles and recommendations proposed by the authors of the article are followed. With the successful integration of gaming in the higher education curriculum, it is possible to increase the students' motivation to study a particular discipline, which has a positive impact on the overall level and quality of the knowledge acquired.

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