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APPLICATION OF THE GAMIFICATION PRINCIPLE AND ITS ROLE IN THE EFFECTIVENESS OF EDUCATION

Abstract. The paper intends to focus on a vital topic of educational technology in the modern era, gamification, which refers to the idea of using and employing game elements in the process of teaching and learning in more ease and effective way. Dividing the game into a group of elements and returning them to their original components makes it easier to employ these elements, each one by one, in the most appropriate place in the framework of the educational process in general, thus allowing specialists, teachers and researchers to expand the scope of employing these elements in all topics and with all stages. In the past, educational games were used with specific classes, specific stages and specific topics, but after the emergence of gamification the overall concept has changed, the scientific application process is not limited to specific topics or fields. In general, the aim of research is to build a scientific perception of how to use gamification in teaching. Search limits are based on the theoretical foundations of gamification and how to employ it in the teaching processes.

Keywords: gamification, educational games, electronic learning environment, motivation, process of teaching, strategy, activities.

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ПРИМЕНЕНИЕ ПРИНЦИПА ГЕЙМИФИКАЦИИ И ЕГО РОЛЬ В ЭФФЕКТИВНОСТИ ОБУЧЕНИЯ

Аннотация. Представлена одна из актуальных технологий обучения – геймификация, сопряженная с идеей применения игровых элементов в процессе преподавания и обучения. Описан процесс разделения игры на группы элементов и возвращения к исходным компонентам, что облегчает ее использование специалистами, преподавателями и исследователями в рамках образовательного процесса в целом. Отмечено, что в прошлом обучающие игры применялись только на отдельных занятиях, при изучении отдельных тем, но с появлением геймификации их использование не ограничивается только отдельными темами или областямии, определенные рамки существуют только на теоретическом уровне и в выборе механизма геймификации в учебном процессе.

Ключевые слова: геймификация, обучающие игры, электронная образовательная среда, мотивация, процесс обучения, стратегия, деятельность.

The world today is witnessing a period of rapid technological development at all levels. Therefore, researchers in the field of education strive to keep pace with this development. As technology has been included in education significantly over recent years, the methods and strategies of teaching followed have been applied to suit the development of the times. The main purpose of education and learning is not to collect information and fill it in the mind of the recipient but quite the opposite, to develop the cognitive ability, improve ways of thinking and incorporate styles. Innovations help learners to interact with their environment, discover the problems they face, solve them, and obtain a meaningful education.

The Internet is considered one of the most important means of modern technology that has the greatest impact in many fields, including the field of education, as it helps spread education easily and made it available to any learner in any place and at any time. It also contributes to making learners an active and positive role in building and producing information after their role was limited in the past to the fact that they would only be receiving the information.

The Internet provides an opportunity to organize training based on distance learning technologies. Now everyone understands that Internet has colossal information capabilities and no less impressive services. But we must not forget that no matter what properties this or that means of teaching, the informational-subject environment possesses, didactic tasks, the peculiarities of

the cognitive activity of students, conditioned by certain goals of education, are primary. The Internet with all its capabilities and resources is a means of realizing these goals and objectives. Therefore, first of all, it is necessary to decide for the solution of what didactic problems the resources and services provided by the worldwide network may be useful [11, c. 71].

In light of the spread of e-learning, many educational technological applications have appeared on the Internet. These applications vary from among the general, specialized, free and private payment. This type of educational environment forms an alternative to the traditional physical environment. It can be said that the capabilities of technology contribute to the development, management and evaluation of the learning process.

In a time of rapid development, the methods and strategies of education in the electronic environment have also evolved. Some have achieved remarkable success, even if the application is partial and implicit in the education curriculum. When we refer to these strategies, it is necessary to refer to gamification.

The origins of non-gamification as a term in digital circles date back to 2005, but the term was not widely adopted until the second half of 2010. It should be noted that the elements of game design have been used in contexts other than games to stimulate and increase user activity, maintain the speed of learning and gain momentum for learning under the name of "gamification". Its applications can be used in education, health, etc. Also, there are alternative reality games which take the essence of everyday life in depth, through which interaction with the real world takes place [6, p. 10].

In this context, S. Deterding and others [6, p. 9] believe that the gamification strategy is based on using the technology of games and games thinking about applications other than playing with the aim of involving learners in the educational process, to continue playing and using the same elements in a non-game context, to influence behavior in different educational contexts.

The use of gamification in education is somewhat new, and educational websites also benefit from the use of game elements in order to motivate their users and help them participate in a greater and successful way. Websites are able to maintain the spirit of racing for their users and strengthen communications between them by using gamification elements. The use of gamification applications, in general, stimulates and improves students' commitment to their lesson activity and often gamification has a positive effect on the process of learning and success [4].

It has been noticed a continuous increase in the number of users of social games in recent years, as many have shown their interest in measuring the potential of innovative educational materials. Gamification can be described as a new concept that aims to use elements from video games in applications other than games as education is an area with high potential to apply this concept because it seeks to encourage the motivation and participation of people [10, p. 348].

It can be said that the main idea of gamification is to use the motivational power of games for purposes appropriate to education. The goal here is not entertainment as in the original game but rather work to create an appropriate atmosphere of fun and education that contributes to education and increases the effectiveness of the larger group of learners. Gamification has been implicitly included in the curriculum of schools to improve peace and interaction in the classroom.

As the main goal of gamification is to increase the number of participants by using some game techniques such as leader boards and feedback, which makes learners feel more ownership as it gives learners better guidance and helps them achieve themselves in order to reach the desired learning [8].

Research in this area shows that people with high motivation are more successful in school, and get promotions in their jobs. Successes in running their businesses are more than those with low motivation, and those with high motivation tend to choose medium-difficulty and challenging missions.

The low motivation of students towards learning is noticeable and seen as one of the things that are common in educational settings during many practices that come from students, such as being absent from school without a reason and lack of focus during learning, delays in doing homework, frequent complacency, and frustration at school. M. Cluck [3] states that studies have shown that motivation to learn is a widespread problem among schoolchildren.

This behavior aroused the minds of the specialists to try to explain what made the games more exciting and interesting than learning and how it can be invested in the educational context.

I. Glove [7] attempted to explain it by noting that most gamification activities involve three main parts: goal-focused activity, reward mechanisms, and progress tracking. It is what it creates attraction, suspense, and interaction. This reinforces, as M. Cluck [3] points out, the scientific studies

and emphasizes that focusing on changing teaching methods can improve student motivation and that the use of rewards such as grades, verbal praise, and tangible rewards may enhance a learner's natural curiosity. Therefore, the metaphor of game element in education will improve the educational process and make it more attractive and impact on students' learning.

O. Dreon and D. Polly [5, p. 85] state that the implementation of gamification in educational settings remains a relatively new practice, this educational output can be effective in teaching and creating enriching content and help with problem solving, invites collaboration and increases communication skills. It is reinforced by R. Jared and P. J. Rich [9, p. 318] who say that a large proportion (77.7 %) of participants in the organizational behavior course reported that, in general, the educational stimulus environment with the elements of gamification increased the perceived motivation.

The importance of gamification lies in achieving the required educational goals. Because gamification conserves teamwork among students, helps them adhere to and discipline, gives more freedom and reduces boredom, leads to high results S. Carmichael [2] and makes the materials more enjoyable and the results are higher than the average comparing to traditional education.

Gamification is a concept capable of increasing students' motivation towards learning and providing them with different and varied knowledge and skills to develop their thinking towards modern learning with new thinking. However, the meaning of gamification must be defined and it is necessary to evaluate games, identify their benefits and drawbacks, discover their applications, and build an understanding of the basis [1, p. 140].

Thus, one can use gamification in development of creative thinking skills because of its positive role in the education process and raising thinking skills.

This method is in line with the psychological foundations of learners and their tendency to play and get bored quickly from long school tasks, as educational games lead to an increase of their motivation and interaction with the games, in addition to that to encourage students and attract their attention.

Gamification strategy is suitable for the level of the learner and contributes to the development of their creative thinking.

This strategy contains many shapes, graphics and images that have a positive effect, and interactive audio and visual materials.

Teaching using gamification has a clear effect on developing students' creative thinking skills, so design educational games and learning using gamification strategies may allow students to pass on educational experien-

ces about the way of playing. Besides, gamification is a new method that differs from the prevailing methods of teaching, raised motivation.

The student is about fluency in ideas, which led to the development of creative thinking for them and made them more capable to produce diverse, multiple and original ideas, taking into account several educational principles, namely, observance of capabilities and feedback, motivation, social dimension, transportation and evaluation, also includes important elements for refinement of student personality, which is the elements of gamification that include achievement, appointment, symbolic image, behavioral momentum, comfortable productivity, rewards, consecutive information theories, evaluation and feedback.

Gamification is a guarantor to make students more flexible and fluent, as well as spreading the spirit of competition and participation among them, and pushing them towards teaching in a way that is all exciting, encouraging them to produce original and different ideas. It is also working to increase productivity of students and changing the direction of their thinking from the usual to new and varied patterns, without addition to provide students with an abundance of feedback, which contributes to improving their responses to the electronic educational games. Correcting students' answers and providing them with an explanation is out of the ordinary, and clarifying the most important points for them in time faster than other school activities.

From the above, two things stand out. The first, the urgent need to search how to motivate students to learn, and the second, a rising trend – gamification – includes specific techniques that have motivated students in contexts other than direct education. Therefore, the problem how to use gamification elements to increase students' motivation to learn is a research gap. It needs research input and investigation.

The aim of the research is to build a scientific perception of how to use gamification in teaching public education curricula in order to determine the most used ones to facilitate their employment and drop it in the educational context.

Search limits are based on the theoretical foundations of gamification and how to employ it in the teaching processes, that suites with the educational levels with inclusion of gamification elements directly.

References

1. *Aşıksoy, G.* The effects of the gamified flipped classroom environment (GFCE) on students' motivation, learning achievements and per-

ception in a physics course / G. Aşıksoy. Text: print // Quality & Quantity. 2018. Vol. 52, is. 1. P. 129–145.

2. *Carmichael, S.* 5 reason to use gamification in the classroom / S. Carmichael. Text: electronic // Classcraft. 2016. 7 Sept. URL: https://www.classcraft.com/blog/5-reasons-gamification/.

3. *Cluck, M.* Improving student motivation through the use of the multiple intelligences / M. Cluck, D. Hess. Text: electronic // Mater Research project, Saint Xavier University. Illinois, 2003. URL: https://www.researchgate.net/publication/234739701_.

4. *Çeker, E.* What Gamification is and what it's not / E. Çeker, F. Özdamlı. Text: print // European Journal of Contemporary Education. 2017. Vol. 6, is. 1. P. 221–228.

5. *Dreon, O.* Teachers' Education for Ethical Professional Practice in the 21st Century / O. Dreon, D. Polly. USA: University of North Carolina at Charlotte, 2016. 430 p. Text: print.

6. *From game* design elements to gamefulness: defining "gamification" / S. Deterding, D. Dixon, R. Khaled, L. Nacke. Text: print // In Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments. New York (USA): ACM, 2011. P. 9–15.

7. *Glove, I.* Play as you learn: gamification as a technique for motivating learners / I. Glove. Text: electronic // World Conference on Educational Multimedia, Hypermedia and Telecommunications. 2017. URL: https://www.researchgate.net/publication/266853048_.

8. *Hamari, J.* Framework for Designing and Evaluating Game Achievements / J. Hamari, V. Eranti. Text: print // Proceedings of Digra 2013. P. 235–246.

9. *Jared, R.* Does educational gamification improve students' motivation? If so, which game elements work best? / R. Jared, P. J. Rich. Text: print // Journal of Education. 2018. Vol. 93, is. 7. P. 314–321.

10. *Simaes, J.* A social gamification framework for a k-6 learning platform / J. Simaes, D. Redondo, R. Fernadez Vilas. Text: print // Computers in Human Behavior. 2013. Vol. 29, is 2. P. 344–354.

11. *Демьяненко, Н. М.* О применении компьютера на уроках иностранного языка / Н. М. Демьяненко, А. В. Иванов, С. И. Калинина. Текст: непосредственный // Социокультурное пространство России и зарубежья: общество, образование, язык. 2015. Вып. 4. С. 68–78.