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INNOVATIVE FOUNDATION FOR CREATIVE THINKING AND PROFESSIONALISM DEVELOPMENT OF MANAGERS AND ECONOMISTS

TANCHYK O.,
candidate of economic sciences,
associate professor
Donetsk State University of Management

У статті обґрунтовується ефективність гейміфікації як інноваційного підґрунтя для формування у майбутніх менеджерів та економістів професійних знань та творчого мислення. Доводиться, що застосування інструментарію комп'ютерних ігор в освітньому процесі, по-перше, посилює мотивацію суб'єкта приділяти більшу увагу освітньої діяльності, по-друге, підвищує ймовірність досягнення поставленої мети. Від інших ігрових практик (рольових, ділових ігор) гейміфікація відрізняється неімітаційним характером активності, при цьому зберігаючи незмінним зміст освітньої діяльності.

Ключові слова: *гейміфікація, ігрові технології, студенти спеціальностей менеджмент та економіка, освітні підходи.*

В статті обосновується ефективність гейміфікації як інноваційної основи для формування у майбутніх менеджерів та економістів професійних знань та творчого мислення. Доказується, що використання інструментарію комп'ютерних ігор в освітньому процесі, во-первых, повышает мотивацию студентов уделять больше внимания образовательному процессу, во-вторых, повышает вероятность достижения поставленных задач. Были рассмотрены отличия геймификации от других игровых практик (ролевых, деловых кейсов): неимитационный характер активности, при сохранении содержания и целей образовательного процесса.

Ключевые слова: *геймификация, игровые технологии, студенты специальностей менеджмент и экономика, образовательные подходы.*

The article substantiates the gamification effectiveness as an innovative foundation for the professional knowledge and creative thinking formation by future managers and economists. It is proved that the use of computer games in the educational process, firstly, increases the motivation of the student to pay more attention to educational activities, and secondly, increases the likelihood of achieving the goal. Gamification differs from other game practices (like role playing, gaming) and is characterized by an unimitated character of activity while maintaining the content of educational activity unchanged.

Keywords: *gamification, gaming technology, students of managerial and economic specialties, educational approaches.*

A problem statement. Game techniques and technology have been actively applied in teaching practice since the ancient times. Along with work and learning, playing is one of the main activities of a person who inherently has a need for a game.

The current stage in the development of humanitarian thought is characterized by the promotion of the game as the innovation basis and the creative thinking trigger. It is becoming more and more widespread to integrate digital tools and technology into the teaching practices for students of managerial and economic specialties and this approach brings efficient gains in students' academic achievements, motivation and support.

It could seem that the phenomenon of the game is not a state-of-the-art approach for pedagogical research. However, the emergence of a generation of "digital aborigines" (as the children who grow up in the Internet era are called) began to stimulate, among other factors, "a transition to a new educational paradigm (the paradigm of a post-industrial society) and a new type of education (technological or project-technological)" [1, p. 12] makes educators accept the role of games, including digital ones, in educational activities from a different perspective. One should not underestimate that gamification is able to make learning process more manageable and planned, and thus it contributes to achieving more productive educational results especially for students of managerial and economic specialties where a lot of case studies and situations are envisaged.

Analysis of recent research and publications. In the domestic pedagogy, recognized researches as L.Vygotsky, G. Shchedrovitsky and others investigated the specifics and peculiarities of game activity in the process of education and upbringing. The notion of play and computerized games was mentioned in 1980 when Thomas Malone released the study "What Makes Things to Learn: A Study of Intrinsically Motivating Computer Games" [2]. The next significant stage in the theory was made in 2002 when the Woodrow Wilson International Center for Scholars created the Serious Games Initiative to study the influence and usage of games while educating learners. Finally, the term "gamification" was coined by Nick Pelling in 2003 [3]. Nowadays researches have been developing the concept of gamification or "gameful thinking" in their studies.

The purpose of the paper is to identify the peculiarities of gamification application in the educational process for the students of managerial and economic specialties.

Description of the main research material. The practice of computer games and just games is often recognized by public opinion as a danger of dependence and a waste of time. However, the game developers point out that educators have to pay closer attention to the aims, construction and mechanisms of computer plays in order to understand that those entertaining moments can help elaborate students' skills and be applicable in educational process while investigating business case studies. Apparently, the notion of games has to be studied accurately from different angles and after that, according to programmers' opinions, computer games can be included in modern education and be a good supplementary material to traditional methods.

The term gamification is not new; it was first used by an American programmer Nick Pelling in 2002. Nowadays, it is being penetrated in a lot of areas of human activity as business, personnel management, health, education and is used to designate a special way of solving various problems of different degrees of complexity. Kevin Werbach, the researcher from Pennsylvania, defines gamification as "...the use of game elements and game design techniques in non-game contexts" [4]. The appliance of games in order to engage the students of managerial and economic specialties in a

variety of activities has been becoming a trend. Studying the statistics on the Internet users in Ukraine the following results were obtained (as for February 2016) – Fig.1 [5]. 55% of users are residents of large cities and they are people from 15 to 44 years old. Thus, the target group for applying various games and gamification process is young people aged 15-29 who can be potential learners of schools and universities; so applying game-based approach is actual for them.

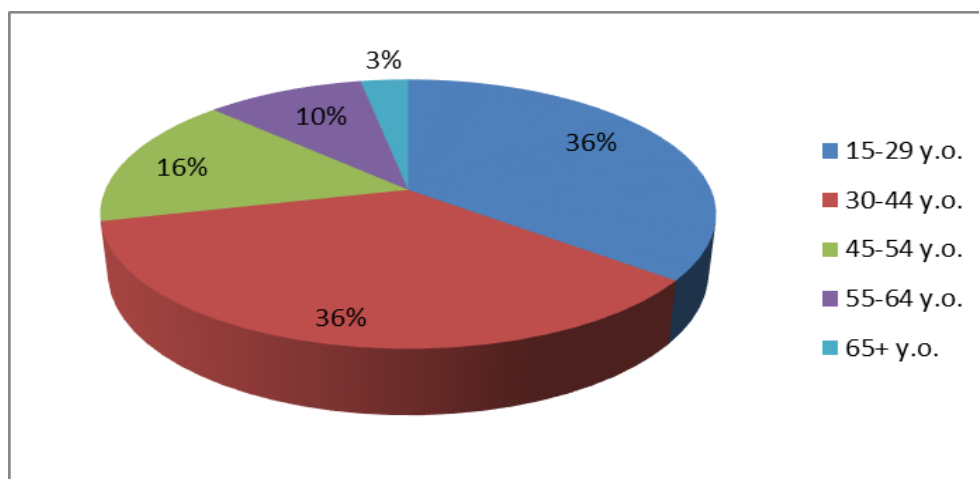


Fig. 1. Internet users in Ukraine (by February 2016)

The majority of modern learners are visual ones who have immersed in graphics and videos. Therefore, it is a modern necessity to include a visual component into the classroom. Educators at all levels have to find approaches to integrate visual elements into practices, in the tasks that they ask students to complete. Learners, who work in a familiar medium, show more interest and desire towards assignments.

It is important to understand the specific of gamification versus computer games or just games and its peculiarity while teaching students of managerial and economic specialties. First of all, gamification has unlimited nature and maintains the unchanged content of activities (for example, independent memorization of foreign words, real-life business cases) which is essential for the learners of managerial and economic majors. As a gaming practice, gaming is radically different from previously known educational playing forms. The essence of this difference is that reality remains a reality, not turning into a game, and game installations are introduced into the system of operations of the subject with this reality. Students of managerial and economic specialties tend to practice more business-oriented topics based on real facts and examples, therefore for them it is a beneficial method of obtaining new skills and knowledge.

Kevin Werbach, who has been mentioned in the article before, has pointed out that gamification is neither a game, nor game theory; there is no simulation, no use of games in business, no earning points [4]. The essence and features of gamification can be seen in game elements pyramid for gamification – Fig. 2 [6].

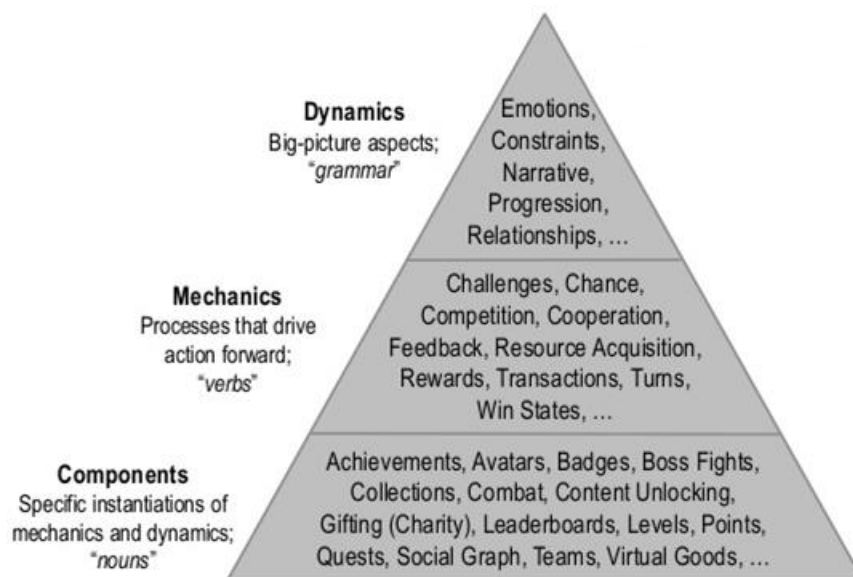


Fig. 2. Game elements pyramid for gamification

So, the gamed educational course is not a computer entertainment for students of managerial and economic specialties (although at times it is very similar to it if there is supporting course software). During the course, the student meets both educational and playful tasks. For example, the educational task is to master different soft skills while solving and participating in business cases and trouble-shooting. In this case the game task is to score 50 points for completed written tasks by a certain date for the transition to the next level and the educational goals always remain in priority, and game goals are only meant to help keep internal motivation for educational tasks. One can clearly see the difference between game and gamification in Fig. 3 [7].

	Game thinking	Game elements	Virtual World	Game play	Non Purposeful
Game Inspired Design					
Gamification					
Simulation					
Serious Game					
Game					

Fig. 3. Game and Game-like experiences split by Design intent

Findings and perspectives of further research. The concept of the game is a traditional object of study in the theory and methodology of education; gaming elements have been used at teaching for centuries, gaming technologies are well

described, studied and systematized. In addition, the scientific task of describing a special way of learning that introduces game tools at educational space requires a different name, such as the "business game". Therefore, from this point of view, the term "gamification" is the most accurate one for determining the processes that were discussed in the article. Practitioners claim that it is the sense of the significance of achievements which simply and understandably shows the progress and the gradual increase in the load that gives the best results when using games for educational purposes for students of managerial and economic specialties.

References:

1. Igna O.N. Conceptual bases of technological development of vocational and methodical teacher training: abstract of the dis. ... doctor of Education Sciences: 13.00.08 / Igna Olga Nikolaevna; [Tomsk State Pedagogical University]. - Tomsk, 2014.- 38 p.: ill. RSL PD, 9 15-1/286. (In Russian)
2. Malone, T.W. (1981). What makes things fun to learn? A study of intrinsically motivating computer games. *Pipeline*, 6(2), 50 p.
3. Leaning, M. (2015). A study of the use of games and gamification to enhance student engagement, experience and achievement on a theory-based course of an undergraduate media degree. *Journal of Media Practice*, 16 (2), 155-170 p.
4. Werbach K. Gamification. Coursera. [Electronic resource]. – Access mode: <https://class.coursera.org/gamification-002/lecture>.
5. Uanet 2016: Internet penetration overcame 60%, and 35% of calls fell on the Mobile. [Electronic resource]. – Access mode: <https://ain.ua/2016/03/28/uanet-2016-internet-proniknovenie-preodolelo-60-a-35-zaxodov-prishlis-na-mobajl> (In Russian)
6. Gamification of Learning Design Environment. [Electronic resource]. – Access mode: <https://www.slideshare.net/mikederntl/gamification-of-learning-design-environments-workshop>
7. Game thinking: differences between gamification and games. [Electronic resource]. – Access mode: <https://www.gamified.uk/gamification-framework/differences-between-gamification-and-games/>

The article substantiates the effectiveness of gaming as a new approach of organizing educational process for students of managerial and economic specialties. It is proved that the use of computer games in the educational process, firstly, increases the motivation of the student to pay more attention to educational activities, and secondly, increases the likelihood of achieving the goal. One should not underestimate that gamification is able to make learning process more manageable and planned, and thus it contributes to achieving more productive educational results especially for students of managerial and economic specialties where a lot of case studies and situation are envisaged. The difference of gamification from other game practices (like role playing, gaming) was shown and its features as for an unimitated character of activity while maintaining the content of educational activity unchanged were described. The peculiarities of gamification application in the educational process for the students of managerial and economic specialties were identified.