## UNDERSTANDING EDUCATORS' EXPERIENCE AND ATTITUDE TO GAMIFIED LEARN-ING APPLICATIONS

Anastasiia V. Tokarieva, PhD of Pedagogical Sciences, Associate Professor, Foreign Philology, Translation and Professional Training Department University of Customs and Finance, Dnipro

E-mail: nastia003@gmail.com

ORCID: http://orcid.org/ 0000-0001-8980-9559

Inna V. Chyzhykova, Senior Teacher, Foreign Philology, Translation and Professional Training Department University of Customs and Finance, Dnipro, postgraduate student, Alfred Nobel University, Dnipro

E-mail: innachigikova1502@gmail.com ORCID: http://orcid.org/0000-0003-2722-3258 DOI: 10.32342/2522-4115-2022-1-23-25

Key words: gamified learning applications, new learning models, students' academic autonomy.

This article is devoted to the analysis of the experiences and attitudes of Ukrainian educators to gamified learning applications (GLAs) in the context of a new educational paradigm formation. With the metaskills (collective intelligence, a variety of thinking styles, empathy, etc.) coming to the foreground, the development of innovative technologies and teaching approaches that would enhance students' cognitive, motivational and social potential, skills of team-working, problem-solving, and critical thinking are becoming important. As the result, the necessity of educational paradigm's change and of designing new learning models that will be relevant for students of the XXI century are obvious. To meet this challenge, digital pedagogy, playful learning, gamification and educational digital games are gradually getting their part in everyday toolkit of educators.

The present article attempts to analyse how educators from Ukraine interact with and relate to gamified learning applications. Gamified learning applications (GLAs) in this research are defined as a wide spectrum of digital tools that includes educational games (for example, "Pandemic", game "Fake News", "Backpack", "Trivia Time"); interactive quizzes (for example, "Kahoot", "Quizlet", "ClassDojo", "Edmodo"); virtual game universes (for example, "Minecraft Edu", "Second Life", "Hytale"); gamified learning management systems (for example, "Classcraft", "Lingua Attack", "Socrative", "DyKnow").

The principal tasks of the authors' investigation in this work are: 1) the experience of educators from Ukraine in using gamified learning applications: frequency, titles and the main purposes of GLAs' application; 2) the attitude of the educators to GLAs: skills that gamified learning applications can develop in students, the educators' outlook on gamified learning applications; 3) educational potential of GLAs as seen by the educators: advantages of GLAs, possible difficulties that prevent teachers from using gamified learning applications as an educational tool.

To solve the present tasks, a qualitative research method was used based on the questionnaire compiled and conducted within the frame of "Digital Technologies' Application in the Process of Students' Professional Skills' Development in Ukrainian Universities" research project implementation (Department of Innovative Technologies in Pedagogy, Psychology and Social Work, Alfred Nobel University). The sample of the participants included 74 respondents. The research took place in December 2021 – January 2022.

The results obtained can be summarised as follows: 1) gamified learning applications (GLAs) are becoming a part of an instructional toolkit of the Ukrainian educationalists; 2) the most popular GLAs used by educators from Ukraine are interactive quizzes, educational games and gamified learning systems; 3) the majority of the respondents see educational role as the main purpose of GLAs. The ability of GLAs to motivate, entertain and to create "communities of learning" are on the second place according to our data; 4) more than a half of the interviewed educators expressed their willingness to use gamified learning applications in their practice. At the same time, 16,7% are satisfied with the traditional methods and 4,2% feel it risky to use new teaching methods; 5) among the main obstacles to wider application of GLAs in practice are the absence of knowledge about GLAs, the low level of digital skills and technical challenges.

The authors conclude that Digital Pedagogy formation as a new strong branch of Educational Sciences is on the stage of its formation globally, as well as in Ukraine. The need to develop serious video games' and digital learning applications' courses for educators with an integrated teacher-training program to help educators understand, design, evaluate and apply serious video games and GLAs into their practice, a Digital Learning Unit creation as an indispensable part of a contemporary Ukrainian Higher Educational Institution are seen as the vectors of further research and work.

## References

1. Young, M. (2007). Bringing Knowledge Back. From Social Constructivism to Social Realism in the Sociology of Education, 1<sup>st</sup>. ed., Routledge.

2. Friere, P. (2005). Pedagogy of the Oppressed. US: The Continuum International Publishing Group Inc., New York, NY.

3. Ball, S.J. (2016). Policy Mobility: Education, Globalisation and Neoliberalistion. Presentation at VIII International Seminar of the Doctoral Program in Educational Science, Porto, Faculty of Psychology and Education Sciences, University of Porto.

4. Technology Imperative, Microsoft and McKinsey & Company's Educational Practice. (2017). The Class of 2030 and Life Ready Learning. Available at: https://education.minecraft.net/wp-content/uploads/13679 EDU Thought Leadership Summary revisions 5.10.18.pdf

5. Luksha, P., Cubista, A., et. al. (2018). Global Education Futures Report: Educational Ecosystems for Societal Transformation, Global Education Futures.

6. Prensky, M. (2010). Teaching Digital Natives: Partnering for Real Learning, CA, Corwin, Thousand Oak.

7. Jenkins, H. (2012). Confronting the Challenges of Participatory Culture. Media Education of the 21 Century, Chicago, The MacArthur Foundation. doi.org/10.17231/comsoc.17(2010).1017

8. Interactive Software Federation of Europe (ISFE) (2020). *Games in Society*. Available at: https://www.isfe.eu/

9. Zemliansky, P., Wilcox D.M. (Ed.) (2010). Design and Implementation of Educational Games: Theoretical and Practical Perspectives, 1<sup>st</sup> edition, Information Science Reference, Hershey.

10. Arnab, S., de Freitas, S., Bellotti, F., Lim, T., Louchart, S., Suttie, N., Berta, R., De Gloria, A. (2015). Pedagogy-Driven Design of Serious Games: An Overall View on Learning and Game Mechanics Mapping, and Cognition-Based Models, British Journal of Educational Technology, 46 (2), 391–411. doi.org/10.1111/bjet.12113

11. Becker, K. (2017). Choosing and Using Digital Games in the Classroom, Springer International Publishing Switzerland, 411. doi.org/10.1007/978-3-319-12223-6

12. Wouters, P., van Nimwegen, C., van Oostendorp, H., van der Spek, E.D. (2013). A metaanalysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, *105*(2), 249–265. doi.org/10.1037/a0031311

13. Alkind Taylor, A.S. (2014). Facilitation Matters: A Framework for Instructor-Led Serious Gaming, Doctoral dissertation, University of Skövde, Sweden.

14. Marklund Björn, B. (2015). Unpacking Digital Game-Based Learning: The Complexities of Developing and Using Educational Games, Dissertation Series, University of Skövde, Sweden, no. 8.

15. Felicia, P. (2010). Digital Games in Schools: A Handbook for Teachers. Available at: https://hal.archives-ouvertes.fr/hal-00697599

16. Emin-Martinez, V., Ney, M. (2013). Supporting Teachers in the Process of Adoption of Game Based Learning Pedagogy. ECGBL – European Conference on Games Based Learning, ACPI, Porto, Portugal, 2013, pp. 156-162.

17. Production of Creative Game-Based Learning Scenarios: A Handbook for Teachers. (2010). Available at: http://www.ub.edu/euelearning/proactive/documents/handbook\_creative\_gbl.pdf

18. Beaconing. Horizon Project. Breaking Educational Barriers with Contextualised Pervasive and Gameful Learning (2020). Available at: https://beaconing.eu/

19. Nutriciencia (2016). University of Porto, EEA, Ministry of Health, Portugal Project. Available at: https://nutriciencia.pt/

20. Jogos Sérios no Ensino Superior. Impactos, Experiências e Potenciais Project, CIIE/Faculty of Psychology and Education Sciences of the University Porto, (2019). URL: https://www. fpce.up.pt/ciie/?q=en/content/josees-%E2%80%93-serious-games-higher-education-impactsexperiences-and-potential

21. KidCOG (2019). The University of Skövde. The Change Attitude Foundation, Sweden Project. Available at: https://www.his.se/en/research/informatics/media-technology-and-cul-ture/kidcog/

22. GameHub. Erasmus+ Project. (2018). Available at: https://erasmusplus.org.ua/ novyny/2916-znaiomtes-proiekt-yes-erazmus-gamehub-spivrobitnytstvo-mizh-universytetamyta-pidpryiemstvamy-v-sferi-industrii-ihor-v-ukraini-university-enterprises-cooperation-in-gameindustry-in-ukraine.html

23. Tokarieva, A., Volkova, N. et.al. (2019). Educational Digital Games: Models and Implementation. CTE 2018 6th Workshop on Cloud Technologies in Education. Kryvyi Rih, pp. 74-89. Scopus ID: 2-s2.0-85072758016, DiVA.org: his-17783DiVA, id: diva2:1359985.

24. Education and Training Monitor. Executive Summary. Publications Office of the European Union (2020). Available at: https://op.europa.eu/webpub/eac/education-and-training-monitor-2020/en/chapters/chapter1.html

25. Whitton, N. (2010). *Learning with Digital Games*: A Practical Guide to Engaging Students in Higher Education. Routledge, pp. 85-88.

26. Tokarieva, A., Volkova, N. et.al. (2021). E-learning in the Present-day Context: From the Experience of Foreign Languages Department, PSACEA., in: ICon-MaSTEd 2020: XII International Conference on Mathematics, Science and Technology Education, Kryvyi Rih State Pedagogical University, Kryvyi Rih, Ukraine. (Scopus). doi:10.1088/1742-6596/1840/1/012049

Одержано 23.05.2022.