## Interactive methods of training for enhancing communication of IT-professionals

Svitlana Symonenko<sup>1,\*</sup>, Nataliia Zaitseva<sup>1</sup>, Viacheslav Osadchyi<sup>2</sup>, and Margaryta Vynogradova<sup>1</sup>

<sup>1</sup>Dmytro Motornyi Tavria State Agrotechnological University, Department of Foreign Languages, Melitopol, 72312, Ukraine <sup>2</sup>Bogdan Khmelnitsky Melitopol State Pedagogical University, Department of Informatics and Cybernetics, Melitopol, 72300, Ukraine

**Abstract.** The paper deals with the issue of enhancing communication of IT-professionals using interactive training methods. It is emphasized that this problem is urgent for IT-education, which has the quickest rate of the content change, formation of new knowledge fields, shift in types and volumes of communication and interaction. Regulations, guides and qualifications frameworks of European countries and Ukraine in terms of requirements to communication of specialists in different fields have been analysed. The concepts of interactive teaching, interactive teaching methods and activities, and their advantages have been studied. It has been noted that interactive methods can be successfully used in teaching general and special subjects for future IT-professionals. Main peculiarities of certain interactive teaching methods have been described. Some practical ideas of the project method, brainstorming, the gamification method, the debate use in the educational process with the focus on the English language at higher educational institutions for enhancing better communication of IT-professionals have been presented. It is emphasized that the meticulous combination of interactive methods and preparation fosters comprehension at the sufficient level both in use of language aspects and in live communication.

## 1 Introduction

Modern researchers and practitioners are in the search of the most efficient forms, methods and approaches of the vocational training of specialists in different fields. The search is urgent for IT-education, which has the quickest rate of the content change, formation of new knowledge fields, shift in types and volumes of communication and interaction. The issue of enhancing communication of IT-professionals is even more relative.

Importance of successful communication has been proved by a series of rules, guidelines, procedures, frameworks. The analysis of regulatory acts of European countries has shown that the communicative competence is one of the vital and professional necessities. The European Qualifications Framework for Lifelong includes Learning eight key competences: 1) communication in the native language; 2) communication in a foreign language; 3) mathematical competence and basic competences in science and technology; 4) information competence; 5) ability to learn; 6) social and civic competences; 8) a sense of initiative and entrepreneurship; 9) cultural awareness and expression.

The document emphasizes that all competencies are equal since each competence contributes to the successful life in the knowledge society; competences can be partially matched and combined; many topics can be used in the European Qualifications Framework for Lifelong Learning, as they play a significant role in key competencies: critical thinking, creativity, initiative,

problem solving, risk assessment, decision making and constructive management of emotions [1].

The necessity of constant competence improvement and development is confirmed by ISO (the International Organization for Standardization) which has issued ISO 10015:2019 "Quality management - Guidelines for competence management and people development" document where certain crucial modifications in comparison with the ISO 10015:1999 version have been introduced. The authors of the document offer specific guidelines for establishing, implementing, maintaining and improving systems for competence management and people development in order to get positive outcomes of their work. The authors insist that companies, employers or organisations are to encourage people to get or improve competences "by creating learning and training opportunities with circumstances to deploy the outcomes that have been acquired" [2]. ...

<sup>\*</sup> Corresponding author: asimonenko@ukr.net

## References

- Recommendation on Key Competences for Lifelong Learning adopted by the European Parliament and the Council in December. (Official Journal of the European Union, 2006), https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L: 2006:394:0010:0018:en:PDF. Accessed 08 January 2020
- 2. ISO 10015:2019 Quality management Guidelines for competence management and people development. (International Organization for Standardization, 2019), https://www.iso.org/obp/ui/#iso:std:iso:10015:ed-2:v1:en. Accessed 20 December 2019
- 3. Pro zatverdzhennia Natsyonalnoii ramky kvalifikatsii (On National Qualifications Framework). (Legislation of Ukraine, 2020), https://zakon0.rada.gov.ua/laws/show/1341-2011-%D0%BF?lang=uk. Accessed 29 October 2019
- 4. *PMI. A guide to the project management body of knowledge*. (Project Management Institute, Newtown Square, Pennsylvania, 2017), pp. 82–86
- R. Knapen, 20 interactive teaching activities for in the interactive classroom (2018), https://www.bookwidgets.com/blog/2018/06/20interactive-teaching-activities-for-in-the-interactiveclassroom. Accessed 20 December 2019
- 6. O. Sichkaruk, *Interaktyvni metody navchannya u vyshhij shkoli* (Interactive teaching methods at higher school). (Takson, Kyiv, 2006), pp. 19–20
- 7. L. Naseikina, Realizatsiya kompetentnostnogo podhoda pri formirovanii professionalnolichnostnyih kachestv studentovznachimvih programmistov (The implementation of the competence-based approach to the formation of professionally significant personal qualities of software engineering students). Bulletin of OSU 9(158), 34-41 (2013)
- 8. S. Sysoieva, *Interaktivni tekhnologii navchannia doroslykh* (Interactive technology for adult learning). (EKMO, Kyiv, 2011), pp. 120–121
- 9. V. Petruk, Dissertation, Vinnitsa National Technical University, 2008
- P. Lozynskyi, Vikoristannia kompiuternoi programy Skype na zaniattiah inozemnoi movy (Application of Skype at foreign language classes). Bulletin of Ivan Franko Zhytomyr State University 1, 230–235 (2015)
- 11. T. Andreieva, *Ukrainska mova (za profesiinym spriamuvanniam)* (Ukrainian for professional purposes). (Kyiv, 2012)
- J. González, R. Wagenaar, Universities' contribution to the Bologna process. (Publicaciones de la Universidad de Deusto, Bilbao, 2008), pp. 27–32

- 13. V. Kruglyk, V. Osadchyi, Formirovanie kompetentnosti v oblasti programmirovaniya u budushchikh inzhenerov programmistov (Developing Competency in Programming among Future Software Engineers). Integration of Education 23, 587–606 (2019). doi:10.15507/1991-9468.097.023.201904.587-606
- V. Osadchyi, V. Kruhlyk, H. Chemerys, K. Osadcha, in ICTERI'2019: Integration, Harmonization and Knowledge Transfer, ed. by V. Ermolayev, F. Mallet et al. 15th Int. Conf. ICTERI 2019, Kherson, Ukraine, June 12-15, 2019. Vol. II, p. 17–28
- 15. S. Rajkumar, in PMI® Research Conference: Defining the Future of Project Management, Washington, DC, 2010
- 16. A. Zub, Upravlenie proektami (Project management). (Yurayt Publishing House, Moscow, 2018), pp. 280–285
- 17. Kafedra inozemnykh mov (Department of foreign languages) (2020), http://www.tsatu.edu.ua/im/. Accessed 05 January 2020
- 18. Visokoyakisna vyshcha osvita IT fakhivtsia u Melitopoli (High-quality higher education for IT-specialists in Melitopol) (2020), http://inf.mdpu.org.ua/. Accessed 05 January 2020
- Business English for IT-specialists course (2020), http://nip.tsatu.edu.ua/course/view.php?id=1507. Accessed 05 January 2020
- 20. English for Computer Science students (2020), http://nip.tsatu.edu.ua/course/view.php?id=1507. Accessed 05 January 2020