- 3. Jekat S. J., Massey G. The puzzle of translation skills: towards an Integration of elearning and special concepts of computational linguistics into the training of future translators. Linguistik online. 2003. Vol. 5. №17. P. 41–55.
- 4. Robert I. S., Remael A., Ureel J. J. Towards a model of translation revision competence. The Interpreter and Translator Trainer. 2017. Vol. 11. №1. P.1–19.
- 5. Mossop B. Revising and Editing for Translators.  $3^{rd}$  ed. New York: Routledge, 2014. 254 p.
- 6. Konttinen K., Salmi L., Koponen M. Revision and post-editing competences in translator education. Translation Revision and Post-Editing. Abingdon-on-Thames: Routledge, 2020. P. 187–202.

#### DEVELOPMENT OF DIGITAL COMPETENCE OF TEACHERS IN HIGHER EDUCATION USING LMS MOODLE

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Abstract. The study aims to explore the development of digital competence of teachers in higher education using Learning Management System Moodle. This paper analyzes the current state of digital competence among teachers, identifies the challenges they face in using digital tools in their teaching practices, and proposes solutions for improving their digital competence using LMS Moodle. The article presents a system of online courses developed for teachers in high education. The study findings show that the training program was effective in improving the teachers' digital competence, as they were able to design and implement interactive and engaging online courses using LMS Moodle. The study concludes that the use of LMS Moodle can significantly contribute to the development of digital competence among teachers in higher education, and recommends the integration of LMS Moodle into teacher training programs.

**Key words:** e-learning, Moodle, digital competence, online courses, Learning Management System

**Introduction.** Teachers in higher education need to have a high level of digital competence and stay up-to-date with modern teaching methods because of the increasing importance of technology in education. In today's world, students expect to use digital tools and resources as part of their learning experience. Therefore, teachers who lack digital competence may struggle to engage students, receive feedback, create interactive and engaging learning activities, and prepare students for the digital age.

Moreover, digital competence is essential for teachers to enhance their own professional development and stay competitive in their field. With digital competence, teachers can access a wide range of online resources, collaborate with other educators, and provide their students with access to the latest research and developments in their field. It also enables teachers to use data-driven approaches to analyze student performance and make informed decisions about their teaching practices.

Teachers in higher education need to have a high level of digital competence to meet the changing needs of students and to enhance their own professional development. Without digital competence, teachers risk falling behind in their field and failing to provide their students with the best possible learning experience.

The main material of the study and its results. Lifelong Learning Center at Kherson State Maritime Academy is a rather young institution [1]. It was created in 2021 at Kherson, Ukraine. Online courses on different topics for teachers in higher education are based on LMS Moodle [2]. Topics of online courses are the following: E-course development on LMS MOODLE using e-learning tools and services; Blended learning as an innovative form of organizing the educational process at educational institutions; E-learning practical on active methods; Practical on pedagogical excellence; Workflow at Higher Education Institutions.

To start with "E-course development on LMS MOODLE using e-learning tools and services" online course developed to provide teachers with the knowledge and skills needed to develop effective e-learning courses [3]. It consists of nine modules (General; Course division;

Main elements; Quiz settings; SCORM; Gradebook; Gamification; Infographics; Completion). The beginning of the course is a map which represents all nine modules (Figure 1).



Fig. 1 "E-course development on LMS MOODLE using e-learning tools and services" online course beginning

Course contains a wide range of activities on the topics mentioned above:

- 1. Assignment: Teachers can create online assignments that allow students to submit their work electronically. Teachers can also provide feedback and grades to students through the LMS Moodle.
- 2. Forum is a discussion board where students can ask questions, share ideas, and interact with their classmates and teachers. Forums can be used to promote collaborative learning and peer-to-peer support.
- 3. Quiz is an online assessment tool that enables teachers to create and deliver quizzes, tests, and exams. Teachers can also set time limits and grading criteria for each quiz [4].
- 4. Glossary is a tool that allows teachers to create a list of terms and definitions related to a specific topic. Students can use the glossary to look up key terms and improve their understanding of the subject.
- 5. Wiki is a collaborative tool that enables students to create, edit, and share content online. Teachers can use wikis to encourage students to work together on projects and assignments [5].
- 6. Workshop is an activity that enables students to give and receive feedback on their work. Teachers can use the workshop to promote peer review and peer feedback.
- 7. Choice is a tool that enables teachers to create a poll or survey to gather information from students. Teachers can use choice to gauge student preferences, opinions, or knowledge gaps.

Course participants do all the activities (e.g. to create a quiz) in their own separate online course where they have a teacher's role. The example of an online course fully created by course participants according to guidance of "E-course development on LMS MOODLE using e-learning tools and services" online course is shown in Figure 2.

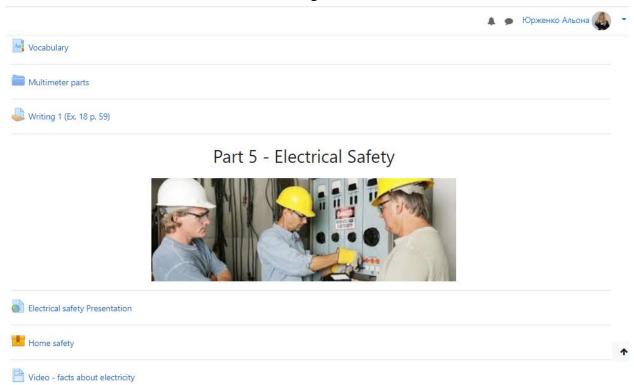


Fig. 2 Example of online course created by participant of "E-course development on LMS MOODLE using e-learning tools and services" online course

The teachers who participated in Lifelong Learning Center online courses managed to write their feedback (LMS Moodle survey, Google survey, course comments, course forum, Facebook page of Lifelong Learning Center). All participants of courses who managed to gain minimum 60 points have received the certificate. Maximum amount of points to gain is 100. Online gradebook is the tool used to reflect the number of points received, names and links to all course activities, list of course participants etc.

Overall, online course participants, particularly teachers, tend to view advanced training courses as valuable opportunities to enhance their digital competence and to improve their teaching practices in the digital age.

**Conclusions.** In conclusion, this study has highlighted the importance of developing digital competence among teachers in higher education and has demonstrated the potential of using LMS

Moodle as a tool for enhancing their digital competence. The study findings indicate that the use of LMS Moodle can help teachers in higher education to design and implement interactive and engaging online courses, and improve their digital competence. The case study presented in this article demonstrated that the training program that focused on enhancing teachers' digital competence through LMS Moodle was effective in improving their skills and knowledge. The teachers who participated in the program were able to design and deliver online courses that engaged students, used a variety of multimedia resources, and supported collaborative learning.

The integration of LMS Moodle into teacher training programs can help to address the challenges that teachers face in using digital tools and resources in their teaching practices. However, it is important to note that digital competence is an ongoing process that requires continuous training and development. Therefore, it is essential to provide teachers with regular opportunities to update their skills and knowledge, and to support them in their efforts to integrate digital tools and resources into their teaching practices.

In summary, the development of digital competence among teachers in higher education is critical for ensuring that students receive a high-quality education that prepares them for the digital age. The use of LMS Moodle can be an effective tool for enhancing teachers' digital competence, and its integration into teacher training programs can contribute to the improvement of teaching and learning practices in higher education.

#### References

- 1. Advanced training courses for pedagogical and scientific-pedagogical workers, internships, trainings, seminars, webinars, master classes. (2022, October 6). Retrieved from https://ksma.ks.ua/?page\_id=9149&lang=en
- 2. Learning management system of the Kherson State Maritime Academy. (n.d.). Retrieved from https://mdl.ksma.ks.ua
- 3. Yurzhenko, A. Y., Bevzenko, J. Y., & Kononova, O. Y. (2022). Creation of a distance communication channel with Gamification elements. Handbook of Research on the Influence and Effectiveness of Gamification in Education, 226-240. doi:10.4018/978-1-6684-4287-6.ch012
- 4. Diahyleva, O. S., Gritsuk, I. V., Kononova, O. Y., & Yurzhenko, A. Y. (2021). Computerized adaptive testing in educational electronic environment of maritime higher education institutions. doi:10.31812/123456789/4448
- 5. Sherman, M., & Yurzhenko, A. (2020). Experimental research on the formation of future ship engineers' communicative competence based on gamification approach. Educational Dimension, 3, 251-266. doi:10.31812/educdim.v55i0.3939