

## DIGITAL COMPETENCE OF A FOREIGN LANGUAGE TEACHER IN A VIRTUAL LEARNING ENVIRONMENT

### ЦИФРОВА КОМПЕТЕНТНІСТЬ ВИКЛАДАЧА ІНОЗЕМНОЇ МОВИ У ВІРТУАЛЬНОМУ НАВЧАЛЬНОМУ СЕРЕДОВИЩІ

*The article deals with the formation of digital awareness of foreign language teachers (FLT) that is considered important in the structure of professional competences along with psychological, pedagogical, information, communicative, personal and methodological competences. Taking into consideration the on-going process of digitalization and development of smart learning, we focus on the implementation of the set of innovative technologies and a variety of digital tools widely used in the virtual learning environment by FLT. The study of the problem is the subject of research of many Ukrainian and foreign scientists and still is the issue the day. Taking into account different points of view, the author describes the model of teacher's digital competences which are used by her working with students of non-linguistic higher educational institution. It consists of four blocks: instrumental, creative, organizational and communicative. Each block has got its own characteristics and presents different tools that play significant role in students' progress. The author gives a detailed description of each block and presents such technologies as interactive exercises, multimedia presentations, programs for creating quests, flash-cards, podcasts, digital stories, educational web resources, learning management systems, tools to assess students' knowledge etc. Above-mentioned technologies contribute much to the development of students' skills in reading, writing, listening and speaking, motivate them to set new goals and achieve results. Much attention is also paid to teachers' digital training as the work in the online environment has increased the demand of teachers in obtaining professional digital competences for the recent years. The author mentions online platforms, projects, seminars that are specially organized for FLT to meet the requirements which computer technologies offer nowadays. As a result, digitally literate FLT can assist the needs of new generation learners, broadening the context of lessons in the virtual learning environment and contributing to the formation of students' communicative competence.*

**Key words:** digital competence, innovative technologies, smart learning, digital tools, professional training.

*У статті розглядається питання формування цифрової компетентності викладача іноземної мови (ВІМ), яка вважається важливою в структурі професійних компетент-*

*ностей поряд з психолого-педагогічною, інформаційною, комунікативною, особистісною та методичною. Беручи до уваги постійний процес цифровізації та розвитку розумного навчання, ми зосереджуємось на впровадженні набору інноваційних технологій та різноманітних цифрових інструментів, які широко використовуються ВІМ у віртуальному навчальному середовищі. Вивчення цієї проблеми є предметом досліджень багатьох українських, зарубіжних вчених та й досі залишається актуальною темою сьогодення. Аналізуючи різні точки зору, автор описує модель цифрових компетентностей викладача, яка використовується нею у роботі зі студентами немовного вищого навчального закладу. Ця модель складається з чотирьох блоків: інструментального, творчого, організаційного та комунікативного. Кожен блок має свої особливості та представляє різні інструменти, які відіграють значну роль у роботі студентів. Автор надає докладний опис кожного блоку і представляє такі технології як інтерактивні вправи, мультимедійні презентації, програми для створення квестів, флеш-карт, подкастів, цифрових оповідань. У статті представлені освітні веб-ресурси, системи управління навчанням, інструменти для оцінки знань студентів. Вищезгадані технології роблять значний внесок у розвиток навичок читання, письма, аудіювання та говоріння студентів, мотивують їх ставити нові цілі і досягати результатів. Значна увага також приділяється цифровому навчанню викладачів, оскільки робота в онлайн-середовищі в останні роки підвищила потребу спеціалістів в отриманні професійних цифрових компетентностей. Автор згадує онлайн платформи, проекти, семінари, які спеціально організуються для ВІМ, щоб відповідати вимогам часу. Таким чином, ВІМ, які володіють цифровою компетентністю, можуть задовольнити потреби студентів нового покоління, розширюючи контекст занять у віртуальному навчальному середовищі, сприяючи формуванню комунікативної компетентності студентів.*

**Ключові слова:** цифрова компетентність, інноваційні технології, розумне навчання, цифрові інструменти, професійна підготовка.

UDC 378.004.811  
DOI <https://doi.org/10.32782/2663-6085/2023/57.2.52>

**Shcherbyna Y.M.**,  
Senior Lecturer at the Foreign Languages  
Department  
Sumy National Agrarian University

**Problem statement.** Integration process of information communication technologies (ICT) into the learning context is one of the key points of modernization of the higher education system in Ukraine. In the modern Information Society the requirements to the teacher's proficiency are getting higher. The circumstances Ukrainian teachers are facing nowadays make us not only strong, but capable to look for new approaches in teaching, be able to adequately and methodically correctly implement

the means of ICT in the educational process. These factors encourage a foreign language teacher (FLT) to work at his (her) proficiency, taking part in different seminars, conferences, webinars and trainings. For the recent years the work in the online environment has increased the demand of teachers in obtaining professional digital competences.

**Analysis of recent research and publications.** The digital environment requires teachers to have a quite different mentality, as well as a different picture of

the world, innovative methods and forms of work with students. Bulman G. and Escueta M. prove that the results of the impact of the use of digital technologies in the educational aspect and for the organisation of effective learning process are still few and the results are still mixed [2; 4]. Blossfeld H. P. and Süss D. state that the use of digital technologies can provide innovative and stimulating learning conditions and improve individual learning strategies and positively affect students' motivation [1; 10, p.19–45]. Special attention to the concept of digital competence of a FLT is paid in the studies of such scientists such as Gorlenko V., Sidorenko V., Dudeney G., Hockly N., Pegrum M. [3], Escueta M.[4], Krumsvik R.[5,6] and others.

A well-known Norwegian researcher Krumsvik R. [5] describes a teacher's digital competence as a skill of teachers implement ICT in their professional activities. He states that a teacher must critically evaluate different resources, use them, taking into consideration both pedagogy and didactics. "Digital competence is the individual teacher proficiency in using ICT in school with good pedagogical judgement and his/her awareness of its implications for learning strategies and the digital building of students" [5, p. 175]. Krumsvik's visual model of teachers' digital competence is presented in Figure 1.

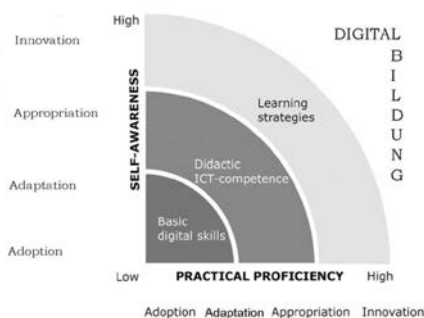


Fig. 1. Teachers' digital competence (Krumsvik, 2007; Krumsvik, 2012)

The vertical axes demonstrates self-awareness and shows that the 'digital competence journey' begins when teachers are relatively unaware (adoption) of what they can or cannot do in relation to educational technology and ICT. Then gradually they are becoming more aware and can reach different levels of adaptation, appropriation and innovation over time [6].

**The purpose of the article.** The lack of university teachers' competence to use the entire didactic potential of modern ICT hinders the process of informatization of education in general and the intensification of teaching foreign languages. So, the main scientific and practical purposes of the study are to analyse the main aspects of digital competence of

a FLT and demonstrate the effectiveness of English lessons implementing different tools, a range of new techniques, services and approaches in the learning process. A great attention to this problem is paid not only by school language teachers, but also by lecturers of higher educational institutions. We consider the stated problem is the issue of the day in Ukraine.

**Presentation of the main materials.** We think that the digital competence of a FLT should be considered as a significant component of the digitalization of the whole system of language learning. This competence is understood by us in this study as an integral professional and personal characteristic of a teacher, which reflects his (her) ability to design the educational process using digital technologies.

Having analysed a model of European Framework for the Digital Competence of Educators (DigCompEdu) [9], as well as taking into consideration the experience of teaching a foreign language to students in non-linguistic higher education institutions, we propose the following model of digital competence of a FLT. This model was tested by the author in the virtual learning environment. It consists of four blocks: instrumental, creative, organizational and communicative.

The instrumental block includes the competencies of using digital devices, programs and online resources for teaching a foreign language, namely:

- ability to conduct lessons using Skype, Zoom, Google Meet, Microsoft Teams platforms;
- knowledge of the principles of the Google Classroom, Moodle, Teams and other learning management systems;
- proficiency in using PowerPoint, Prezi, Canva, Google slides to present students a new educational material;
- ability to integrate online resources into the learning process. The author uses the following web-resources: Listenaminute, Listeningenglish, EIllo, Newsinlevels, Eslvideo to work on listening skills; Forvo, Youglish to practice correct pronunciation; Englishgrammar, Grammarbank, Grammarmonster can be proposed for improving students' grammar skills; Dictionsonline, Quill, Writeandimprove are good for developing writing skills; Randomlists, Wordhippo, Words-Explorer, Freecollocation are used for vocabulary learning; Eviebot, Personalityforge give students opportunities to improve their speaking skills; English E-reader, Commonlit we use to enhance students reading skills;
- willingness to use tools to assess students' knowledge. From our point of view the most popular services that teachers use in their work are Google forms, Easytestmaker, Classmaker, Liveworksheets, Kahoot, Quizizz;
- ability to use virtual pointers, timers and other virtual class tools;

- the ability to master new digital tools, assessing correctly their functionality and effectiveness;
- willingness to experiment with the implementation of new digital tools in the educational process.

The creative block includes competencies related to the creation of own digital educational materials and digital environment, namely:

- the ability to create various types of digital educational materials such as multimedia presentations using PowerPoint, Prezi, Canva, Google slides; interactive exercises for practicing new vocabulary and grammar, using Learningapps, Wordwall, Liveworksheets, En.islcollective; interactive videos working with the site En.islcollective. If a teacher is interested in making quests, we advise to implement Kahoot, Quizizz. For tests we propose such sites as Onlinetestpad, Easytestmaker. If there is a need in cards, we work with electronic vocabulary flash cards using Quizlet website.

Social nets like Instagram, Facebook, Telegram give a FLT an opportunity to create personal pages for publishing educational materials, posts and stories.

The organizational unit is related to the management of the process of teaching a foreign language using digital technologies focusing on the following competencies:

- ability to organize students' work in learning management systems (Google Classroom, Moodle, Teams);
- ability to organize a project work with students using Padlet, Google docs, Google slides, Jamboard tools;
- ability to organize individual work of students;
- teacher's willingness to provide students with any support they need;
- teacher's capability to motivate students and develop their skills in reading, writing, listening and speaking through innovative technologies of online teaching.

The communication block refers to the interaction of a teacher with students, colleagues, university administration. We think the following competencies should be taking into account:

- knowledge of modern digital technologies used for professional purposes;
- ability to create chats and channels in social networks for interaction with students and colleagues;
- ability to observe network etiquette rules and teach students to adhere to the rules and regulations of network etiquette;
- willingness to participate in digital professional communities, creating innovative educational projects, exchange experience and educational materials with colleagues.

Working with the first-year students of non-linguistic higher educational institution, using digital technologies in the virtual environment, we found out their effectiveness in teaching a foreign language.

Another example of tool that from our point of view is popular in teaching process is the use of QR codes. It provides students with quick and easy access to course materials. We must admit that QR code gives both teachers and students a lot of opportunities. The author often uses it in a teaching process. Text-based instructions, video presentations and URL self-test activities can be available to learners via QR codes. We can state that they diversify the learning process. Figure 2 demonstrates the QR codes that are created and proposed to students by the author of the article.

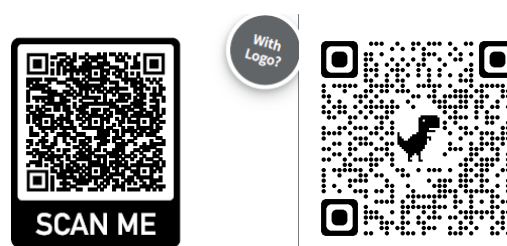


Fig. 2. The examples of QR proposed to students in the learning process.

Digitally literate FLT always uses modern pedagogical technologies, working in a close collaboration with students, creating strong teamwork that promotes students' success in language learning, motivating them always set new goals and achieve results.

Speaking about digital awareness of a FLT, we must pay special attention to the programs, projects, seminars specially organized for teachers. International Association of Teachers of English as a Foreign Language (IATEFL), British Council, Ukrainian Academy of Digital Development [11], Platforma Indyvidualnoi Traiektorii Profesiinoho Rozvytku Pedahoha (Ukraine) [8] and other organisations provide teachers with courses and different activities, let them acquire new skills, share their experience with others, be active participants of discussions and get professional development becoming more digitally literate.

**Conclusions from this study and further prospects in this direction.** Digital era of smart education is an innovation of the last few decades. It has revolutionized the approaches and strategies of the learning process giving new opportunities, opening access to information, providing valuable perspectives of ICT and benefits for further work. Digital competence is one of the key points in the modernization of education in Ukraine. A modern foreign language lesson must meet the requirements of new standards in teaching.

So, taking into consideration the results of study, foreign language teachers' digital competency includes the knowledge and ability to do the following: to provide students with the basics of information security during Internet project implementation; to use

Internet resources in a foreign language for academic purposes; to be able to create educational Internet resources, implementing different digital tools; to use tools to monitor students' progress in learning and assess their knowledge.

FLT are aware of the need to be digitally literate, applying new technologies and digital instruments in the virtual educational environment. Digitally professional teachers spark students' imagination, inspire them using effective learning activities in teaching. A variety of technologies and digital content of the lessons improve both the quality of teaching and learning, making lessons interesting, creative and enjoyable. All above-mentioned factors influence greatly both on the learning process in the whole and on a FLT's professional development.

#### REFERENCES:

1. Blossfeld H. P., et al. *Digitale Souveränität und Bildung*. Münster: Waxmann Verlag GmbH, 2018. 280 p.
2. Bulman G., Fairlie R. W. Technology and education: Computers, software, and the Internet. Ch.5. In: Hanushek E. A, Machinand S., Woessmann L. (eds.). *Handbook of the Economics of Education*. Amsterdam: Elsevier; 2016. Vol. 5. P. 239–280.
3. Dudeney G., Hockly N., Pegrum M. *Digital literacies*. Pearson, 2013. P. 20-25. URL: <https://www.risevision.com/blog/benefits-of-digital-technology-in-the-classroom>
4. Escueta M., et al. Education technology: An evidence-based review. *NBER Working Paper*. 2017. 102 p. URL: <https://www.nber.org/papers/w23744.pdf>
5. Krumsvik, R.J. (Ed.). *Skulen og den digitale læringsrevolusjon* [The school and the digital learning revolution; in Norwegian]. Oslo: Universitetsforlaget. 2007. P.175.
6. Krumsvik, R.J. Teacher educators' digital competence. *Scandinavian Journal of Educational Research* 2012. I first article. №58(3). P. 269-280. DOI: 10.1080/00313831.2012.726273
7. Motteram G. *Innovations in learning technologies for English language teaching*. British Council, 2013. 197p.
8. Platforma Indywidualnoi Trajektorii Profesiinoho Rozvytku Pedahoha. URL: <http://platforma-teacher.com.ua/>
9. Redecker C., *European Framework for the Digital Competence of Educators DigCompEdu*, 2017. 95p.
10. Süß D., Lampert C., Wijnen C. *Mediensozialisation: Aufwachsen in mediatisierten Lebenswelten*. In: Süß D., Lampert C., Wijnen C. (eds.). *Medienpädagogik. Studienbücher zur Kommunikations- und Medienwissenschaft*. Wiesbaden: Springer VS, 2013. P. 19–45.
11. Ukrainian Academy of Digital Development. URL: <https://www.digitalacademy.in.ua>