FORMATION OF FOREIGN-LANGUAGE COMMUNICATIVE COMPETENCIES OF STUDENTS OF PROFESSIONAL PRE-HIGHER EDUCATION INSTITUTIONS

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Summary

In the article, the author analyzed the pedagogical conditions for the formation of foreign language communicative competences in institutions of professional pre-higher education in the process of teaching students of 121 program subject area – Software Engineering. During the study, a comprehensive approach was used, including a deep analysis of psychological and pedagogical literature: the study of scientific papers, articles and other sources of information on the topic under study. Analytical work with information sources: synthesis and systematization of acquired knowledge, clear formulation of key concepts and aspects of the topic.

It has been established that modern employers expect software engineering professionals to have not only deep technical knowledge but also a high level of English language proficiency. This includes the ability to work with English-language technical documentation, communicate effectively in international projects, and write professional documentation in English. This is especially true for professionals studying at institutions of professional pre-higher education. Foreign language training should be aimed at developing the communication competencies necessary to work effectively in an international environment.

The author identifies the main pedagogical conditions, in particular, the formation of motivation in future IT specialists to learn foreign languages; systematic use of digital interactive technologies as a means of forming foreign language communicative competences; creation of professionally oriented teaching and methodological support (in particular, workbooks in in English for professional purposes for each semester); readiness of foreign language teachers to use professionally oriented teaching and methodological support.

Key words: pedagogical conditions, students, IT specialists, digitalisation, educational process, interactive technologies.

DOI https://doi.org/10.23856/6502

1. Introduction

The war has made significant adjustments to Ukrainian education, posing a number of challenges to educators. In particular, there was a need to ensure the continuity of education for all students, regardless of where they were. In addition, it was important to create a safe educational environment, to distinguish pedagogical conditions and to maintain high quality education even with limited resources. In response to these challenges, Ukrainian educators have developed and are actively implementing new approaches to the organisation of the educational process. It is worth noting that today, foreign language skills have become an integral part of success in the modern world. It not only allows you to communicate effectively with people

from different countries, but also opens up access to global knowledge, promotes academic growth and personal development. It is especially important that future specialists studying at higher education institutions receive high-quality foreign language training aimed at their future professional activities. Graduates must demonstrate a high level of foreign language proficiency that will allow them to conduct effective business correspondence and communicate successfully with foreign partners. In addition, they must be able to understand specialised literature and scientific articles, as well as be fluent in the international information space in order to continuously improve their skills *(Oletskyi, 2011)*.

The problems of professional training of a modern specialist in higher and professional pre-higher education institutions attract the attention of a wide range of scientists. The main trends in the development of higher education and the personality of a future specialist are studied by O. Kovtun, O. Spirin, I. Smyrnova, A. Kononenko, V. Bykov, L. Sergeeva, T. Sorochan, L. Kartashova, K. Osadcha and others.

The issues of improving the professional foreign language education of students are the subject of research by such scientists as L. Bashmanivska, I. Stavytska, S. Haletskyi, R. Kravets, V. Imber, O. Stepanenko, S. Musiychuk, O. Maksymenko, T. Dudley-Evans, J. Harmer, D. Nunan, R. Oxford, T. Hutchinson and many others.

At the same time, in the theory and practice of higher education, the problem of forming the readiness of future specialists in the 121 program subject area – Software Engineering to communicate in foreign languages has not yet been studied sufficiently, which confirms the relevance of this area of research.

It should be noted that professionally oriented teaching of a foreign language, in particular English, is not limited to learning professional vocabulary and reading literature in the speciality. Such learning is embedded in the educational process and has, among other things, a socio-cultural component that meets modern requirements for language education *(Tereminko, 2016)*. Professionally oriented teaching is aimed at mastering not only linguistic but also communicative competence in the relevant professional field, which provides the future specialist with the ability to find professionally relevant information in foreign sources and a sufficient level of proficiency in the following types of speech activities.

2. Professional activity features of future specialists of 121 program subject area – Software Engineering

The analysis of the labour market needs for software engineering specialists revealed the need for high-level English language proficiency, including knowledge of specific terminology, the ability to read technical documentation and communicate effectively in the international environment. The professional activities of future specialists of 121 program subject area – Software Engineering cover a wide range of tasks and require thorough skills in computer science, algorithms and software system development. This speciality is aimed at training highly qualified software developers who are able to create, test, administer, maintain and improve software products for various fields. In Ukraine, IT specialists capable of developing and maintaining software are trained in both vocational pre-secondary education institutions (colleges and technical schools) and higher education institutions (universities, academies and institutes). This training takes place within the field of study 12 – Information Technology. In Ukraine, the prestige and profitability of a software development specialist's work is due to cooperation with foreign customers and colleagues, which requires knowledge of English *(Bakum, 2017)*.

Having analysed a number of scientific studies, we note that the main features of the professional activity of IT specialists are:

1. Software development. Students learn programming languages, methods of designing software system architecture and algorithms, which allows them to create high-quality software products for both mobile and desktop platforms *(Tereminko, 2016)*.

2. Systems analysis and design. Future IT professionals should have the skills to analyse system requirements, create technical documentation, design the architecture and structure of software systems.

3. Testing and administration. Specialists in this field must be able to test software products to ensure their reliability and security. This includes automated and manual testing, as well as code configuration, system and network administration.

4. Working with databases. Future specialists in this field work with various databases, which allows them to develop programmes with large amounts of information.

5. Project management. An important component is the ability to organise workflows, plan and monitor the implementation of software projects, which is essential for effective teamwork.

6. Software security. Specialists must know the basic principles of information security and have the skills to protect software from various threats.

7. Teamwork skills. The development of complex systems usually takes place in teams, so the ability to collaborate, communicate, and use modern tools for teamwork.

Conducting a comprehensive analysis of regulatory documents and scientific literature, researcher A. Kokarev *(Kokariev, 2016)* identified the key requirements for modern IT professionals. According to him, given the rapid development of the IT market, these specialists must demonstrate the ability to quickly master new technologies and implement them in their work. In addition, due to the interdisciplinary nature of modern IT projects, IT professionals are expected to understand related fields of knowledge. Another important competency is the ability to effectively collaborate with colleagues from other professions, as IT penetrates all areas of human activity.

According to the IEEE (Institute of Electrical and Electronics Engineers), an international standardisation organisation in the IT industry, software engineering (SE) is the application of a systematic, disciplinary, measurable approach to the development, use, maintenance and research of software (software), i.e. the application of SE principles.

3. Technologies for the implementation of pedagogical conditions for the formation of foreign language communicative competences

The digital transformation of society has led to dramatic changes in education. Innovative technologies are transforming traditional teaching methods, making them more interactive and accessible. Thanks to online platforms and various digital tools, learners can access knowledge anytime and anywhere. The COVID-19 pandemic and the war in Ukraine have become a catalyst for these changes, demonstrating that the proliferation of gadgets, the development of the Internet and the creation of specialised learning software have significantly expanded the opportunities for teachers and students to organise the educational process.

Foreign language communicative competence in the process of studying the discipline «Foreign Language» is not just an understanding of the language, but the ability to use it effectively in different situations. It involves the ability to express your thoughts clearly, engage in constructive dialogue, justify your point of view and adapt your speech to the interlocutor

and the context of communication. Mastery of communicative competence turns a student into an active participant in any communication. Today's world requires not only knowledge but also the ability to effectively apply it in practice, in particular in interaction with other people. Therefore, institutions of higher education are gradually shifting their focus from the simple transfer of information to the development of comprehensive competencies necessary for successful professional activity. The author gives his definition of the concept of foreign-language communicative competence (FCC) – as an integrative category that includes knowledge of grammatical structures, lexical stock and phonetic norms of a foreign language, the ability to use language in various social contexts, taking into account cultural characteristics and social norms, the ability to effectively organize one's speech to achieve communicative goals.

The purpose of modern foreign language teaching is to develop students' foreign language communicative competence, i.e. the ability to use the language in real life situations. The following methods and technologies are used to achieve this goal:

1. Communicative methods: aimed at developing speaking, listening, reading and writing skills in authentic situations.

2. Interactive technologies: make learning more interesting, personalised, adaptive and individualised by involving different channels of information perception.

3. Project-based learning: allows future IT professionals to apply their knowledge in practice and develop creativity.

4. Differentiated approach: taking into account the individual characteristics and needs of students, adapting materials and teaching methods to their level of knowledge and abilities *(Bakum, 2017)*.

5. Use of feedback: regularly providing constructive feedback helps students to understand their strengths and weaknesses and identify areas for further development.

Modern information technologies provide unlimited opportunities for learning foreign languages, allowing to combine theory with practice, develop computer skills, stimulate independence and creativity of the students of professional pre-higher education institutions, as well as increase their motivation to learn through interactive forms of presentation (Fig. 1, Fig. 2).

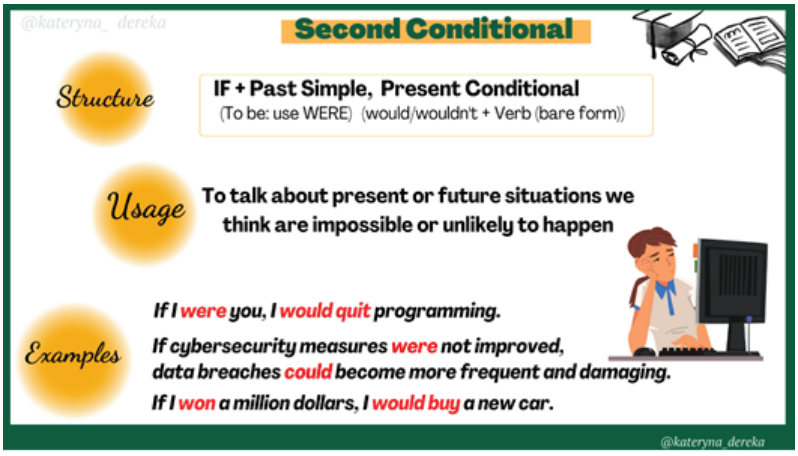

Fig. 1. Examples of presentations using the https://www.canva.com/ interactive platform

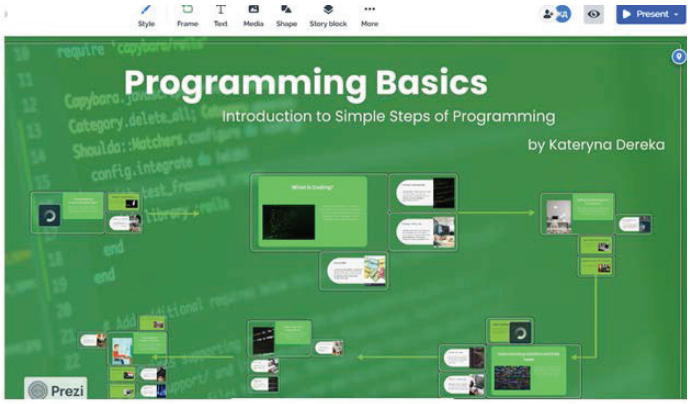

Fig. 2. An example of a presentation using the interactive platform Prezi.com, developed by K. Dereka

4. Pedagogical conditions of foreign language communicative competences

An in-depth analysis of scientific papers and practical experience confirms the relevance of the study of pedagogical conditions as a key factor that affects the effectiveness of the educational process and is an incentive for the personal growth of students. It is worth noting that interactive e-learning platforms, such as https://quizlet.com/, https://prezi.com/, https://quizizz.com/, offer unique opportunities for developing foreign language communicative competences skills. Thanks to them, students can not only listen to audio recordings on their own, work on vocabulary material, and actively interact by discussing the content with teachers and fellow students.

Summarising the above, it is worth noting that the creation of optimal pedagogical conditions is a key factor in the successful teaching of foreign languages in institutions of professional pre-higher education and the development of foreign language communicative competences in future specialists in 121 program subject area – Software Engineering *(Kurbanova, 2024)*.

An analytical review and generalisation of the essential characteristics of the above definitions, the results of a survey of students, the specifics of teaching the discipline «Foreign Language» in a higher education institution and our own pedagogical experience allowed us to identify a list of necessary pedagogical conditions for the formation of foreign language communicative competence of students in 12 field of study – Information Technology in institutions of professional pre-higher education:

1. The first pedagogical condition for the development of students of institutions of professional pre-higher education in 121 program subject area is to motivate future IT professionals to learn foreign languages.

2. The second pedagogical condition is the systematic use of digital interactive technologies as a means of developing foreign language communicative competence;

3. The third pedagogical condition is the creation of professionally oriented teaching and learning materials (ESP workbooks for each semester) for the foreign language training of future IT specialists in institutions of professional pre-higher education;

4. The fourth pedagogical condition is the readiness of foreign language teachers to use professionally oriented teaching and learning materials.

5. Conclusions

The rapid development of digital technologies is leading to the emergence of new learning tools that significantly affect the effectiveness of the educational process. Innovative technologies in education provide new opportunities for learning, making it more interactive and effective. Thanks to the introduction of modern information technologies in the process of learning foreign languages, we get many new opportunities for effective learning. This allows us to combine theory with practice, develop computer skills, stimulate students' independence and creativity, and increase their motivation through interactive forms of learning. In the course of the study, the author has identified the main pedagogical conditions for the development of foreign language communicative competence of students of higher education institutions. Namely, the formation of foreign language communicative competences of students for 121 program subject area is the formation of motivation in future IT specialists to learn foreign languages; systematic use of digital interactive technologies as a means of forming foreign language communicative competences; creation of professionally oriented educational and methodological support (in particular, workbooks in English for professional purposes for each semester) for foreign language training of future IT specialists of institutions of professional pre-higher education; readiness of foreign language teachers to use professionally oriented teaching and learning materials.

References

1. Bakum Z. P. (2017) Problemy standartyzatsii vyshchoi osvity v konteksti pidhotovky bakalavriv spetsialnosti 015.10. Profesiina osvita (Kompiuterni tekhnolohii) [Problems of standardization of higher education in the context of training bachelors of specialty 015.10 Vocational education (Computer Technology)]. Inzhenerni ta osvitni tekhnolohii: shchokvartalnyi naukovo-praktychnyi zhurnal. Vyp. 2 (18). [in Ukrainian]

2. Kokariev A. M. (2016) Formuvannia profesiino znachushchykh yakostei maibutnikh inzheneriv u protsesi fakhovoi pidhotovky v tekhnichnomu universyteti [Formation of professionally significant qualities of future engineers in the process of professional training at a technical university]. Visnyk Natsionalnoho aviatsiinoho universytetu. Ser. «Pedahohika. Psykholohiia». Vyp. 2(9). S. 77–82. [in Ukrainian]

3. Kurbanova O.S., Blinovska R.I., Dereka K.O. (2024) Znachennia krytychnykh navychok u formuvanni inshomovnoi kompetentnosti zdobuvachiv vyshchoi osvity[The importance of critical skills in the formation of foreign language competence of higher education students]. Innovatsiina pedahohika: naukovyi zhurnal. № 71(1). 176-179. URL: http://innovpedagogy.od.ua/archives/2024/71/part_1/36.pdf DOI: 10.32782/2663- 6085/2024/71.1.34[in Ukrainian]

4. Software Engineering 2014. (2015) Curriculum Guidelines for Undergraduate Degree Programs in Software Engineering. A Volume of the Computing Curricula Series 23 February 2015. Joint Task Force on Computing Curricula IEEE Computer Society, Association for Computing Machinery. IEEE Computer Society, Association for Computing Machinery. 134 p. URL: https://www.acm.org/binaries/ content/assets/education/se2014.pdf (Last accessed: 11.09.2024).[in English]

5. Oletskyi O. (2011) Profesiina pidhotovka maibutnikh IT-fakhivtsiv U NTUU «Kyivskyi politekhnichnyi instytut»: zahalnyi ohliad [Professional training of future IT specialists in NTUU "Kyiv Polytechnic Institute": a general review]. Visnyk. 101. [in Ukrainian]

6. Tereminko L. H. (2016) Formuvannia hotovnosti do profesiinoi mobilnosti maibutnikh fakhivtsiv v protsesi inshomovnoi pidhotovky [Formation of readiness for professional mobility of future specialists in the process of foreign language training]. Aktualni problemy vyshchoi profesiinoi osvity : materialy IV mizhn. nauk.-prakt. konf., m. Kyiv, S. 217–218. [in Ukrainian]