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# Foreign language communicative competence in the digital age: A methodology for students of various specialties

## Competencia comunicativa en lenguas extranjeras en la era digital: Una metodología para estudiantes de diversas especialidades


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### Abstract

This study analyzes the development of foreign language communicative competence in the context of digitalization. It highlights the importance of contextual learning and digital information technologies in



enhancing students' foreign language proficiency. The study identifies key structural components of communicative competence and explores the role of students' adaptation to new digital learning methods in higher education. A methodology for developing foreign language communicative competence in students of various specialties is proposed, detailing essential tasks, motivations, approaches, and factors for its successful implementation. The study employs a mixed-method approach, combining theoretical analysis, pedagogical observations, student and teacher surveys, and an experimental study involving 160 third-year students. The experiment was divided into an initial assessment and an intervention stage, where the proposed methodology was applied to the experimental group. Results indicate a statistically significant improvement in the experimental group, confirming the methodology's effectiveness. The findings emphasize the value of integrating smart technologies and digital tools in foreign language education. The study concludes that digitalization enhances the formation of foreign language communicative competence, offering insights for curriculum development and pedagogical strategies in higher education. Future research should explore virtual learning environments and advanced training for educators.

**Keywords:** foreign language communicative competence, digitalization, higher education, smart technologies, pedagogical innovation.

## Resumen

Este estudio analiza el desarrollo de la competencia comunicativa en lenguas extranjeras en el contexto de la digitalización. Se destaca la importancia del aprendizaje contextual y el uso de tecnologías de la información digitales para mejorar la competencia lingüística de los estudiantes. Además, se identifican los principales componentes estructurales de la competencia comunicativa y se examina el papel de la adaptación de los estudiantes a nuevos métodos de aprendizaje digital en la educación superior. Se propone una metodología para el desarrollo de la competencia comunicativa en lenguas extranjeras en estudiantes de diversas especialidades, detallando las tareas esenciales, motivaciones, enfoques y factores clave para su implementación efectiva. El estudio emplea un enfoque mixto, combinando análisis teórico, observaciones pedagógicas, encuestas a estudiantes y docentes, y un experimento con 160 estudiantes de tercer año. El experimento se dividió en una fase de diagnóstico inicial y una fase de intervención en la que se aplicó la metodología propuesta al grupo experimental. Los resultados muestran una mejora estadísticamente significativa en el grupo experimental, lo que confirma la efectividad de la metodología. Se concluye que la digitalización favorece la formación de la competencia comunicativa en lenguas extranjeras, proporcionando aportes para el desarrollo curricular y estrategias pedagógicas en la educación superior.

**Palabras clave:** competencia comunicativa en lengua extranjera, digitalización, educación superior, tecnologías inteligentes, innovación pedagógica.

## Introduction

The process of effective expansion of international cooperation in education and with companies in various industries and economies with different countries has been taking place in recent years. Radical changes are being implemented in the educational process of higher education, and approaches, methods, and content of studies at universities are being revised. For all graduates of higher education, issues of international communications are becoming relevant. The problem of effective interaction between representatives of various industries of different countries is gaining particular importance. Cooperation with foreign partners requires the development of professional skills in students and communication skills, the development of high-level competencies related to business professional communication in a foreign language.

To successfully solve the above problems, systematic work is required from the future modern specialist to improve and develop skills and abilities for communicative, practical, business communication in a foreign language, in-depth knowledge of the specialty, to conduct conversations on professional and general topics, the ability to work with original literature while continuing to develop language competence.

In the process of innovative development of the higher education system, one of the most important tasks of forming a multicultural linguistic personality of a future specialist is the study of a foreign language, which has become necessary in the work of many people in various spheres of their lives, to travel abroad to borrow advanced experience, to communicate in writing or orally in a foreign language.

The development of mass media and the growth of people's mobility have contributed to an increase in the need for knowledge of a foreign language.

The formation of foreign language competence is envisaged during the educational process, where the student, together with the teacher, is responsible for the ultimate goal of forming readiness for intercultural communication through a foreign language, acquires learning abilities where he is the main participant in the educational process and plans his process of self-education, self-development, self-improvement to acquire new relevant knowledge.

Under the guidance of an experienced teacher in modern conditions, the correctly chosen methodology for teaching a foreign language, the organization of educational work, clear planning of the educational process taking into account the needs of the student's professional and language training, his mobility, organization, willingness to work on improving skills and abilities and their further development will give a positive result for fluency in a foreign language (Kohut, 2022).

Therefore, we see that the formation of foreign language communicative competence of students in the conditions of digitalization is an urgent problem of today.

## Literature Review

Recently, in the conditions of digitalization, the formation of foreign language communicative competence of students in the field of higher professional education and highlighting the issue of defining professional competencies of the individual, methods of its formation are especially relevant.

S. Shandruk, & Yu. Arkushyna (2021) analyzed the content of the views of scientists on the definition of the concept of "competence" and showed the essence of the process of forming foreign language communicative competence in future specialists at non-linguistic faculties in higher pedagogical education institutions. As the basis of professional competence, they considered the history of the formation of the competency approach.

The research of V. Drozdova & K. Rudnitska (2021) highlights the content and structural components of foreign language communicative competence, which are fundamental to the development of general didactic principles for its formation.

H. Salashchenko (2019) reveals the features of the application of the project activity method to form foreign language communicative competence of students in the field of higher professional education. He devotes his research to implementing theoretical analysis of modern research and conducting a theoretical review of the specifics of the formation of foreign language competence in the process of student education.

The same problem is addressed in the study of I. Kohut (2022). A theoretical analysis of modern studies on the formation of foreign language competence in students of various specialties was carried out, taking into account the specifics of their future professional activity, and directions for developing general didactic principles for the formation of foreign language competence of subjects of study were identified. Based on the results of the generalization of the research results, the concept of foreign language communicative competence was analyzed; the goal of the formation of foreign language competence and the entire professional training of modern students in a foreign language was outlined, to carry out foreign language communication with native speakers of a foreign language, solving communicative tasks in the field of professional activity for the study of foreign experience. Contextual learning is presented as the basis for

the development of foreign language competence. Three basic forms of students' activity in contextual learning were identified: quasi-professional activity, academic-type educational activity, and educational-professional activity, which correspond to: imitation, social, and semiotic educational models.

The issue of forming foreign language communicative competence of students in the field of higher professional education is being paid attention to by scientists precisely in the conditions of digitalization.

N. Honcharenko-Zakrevska, & N. Diukanova (2022) presented a list of the most effective methods of increasing the level of communicative competence of students and forming foreign language communicative competence in them with wide access to open electronic resources, which is achieved through the use of innovative educational computer programs and is determined by the innovative format of education. They identified the advantages and features of digital learning, such as multimedia, flexibility, adaptability, personalization of learning in interaction, and cooperation with the teacher.

I. Hotsynets (2022) also considered the issue of forming foreign language communicative competence of applicants for the educational space of higher education in the conditions of digitalization of the education system, considered the issue of the expediency of introducing innovative technologies into the educational process, the search for optimal forms and methods of teaching a foreign language in universities. Recently, in the conditions of digitalization, the formation of foreign language communicative competence of students in the field of higher professional education and highlighting the issue of defining professional competencies of the individual, methods of its formation is especially relevant.

S. Shandruk, & Yu. Arkushyna (2021) analyzed the content of the views of scientists on the definition of the concept of "competence" and showed the essence of the process of forming foreign language communicative competence in future specialists at non-linguistic faculties in institutions of higher pedagogical education. As the foundations of professional competence, the history of the formation of a competency approach was considered. Research by V. Drozdova & K. Rudnitska (2021) highlights the content component and structural components of foreign language communicative competence, which are about the development of general didactic principles of its formation, fundamental. The features of the application of the project activity method to form foreign language communicative competence of students in the field of higher professional education are revealed. The feasibility of using Smart technologies and creating an effective educational space of higher education is presented. Attention is focused on technologies and methods used in innovative education, and their didactic characteristics are presented.

So, scientists consider the issue of forming foreign language communicative competence of applicants for the educational space of higher education in the conditions of digitalization of the education system, the issue of the expediency of introducing innovative technologies into the educational process, the search for optimal forms and methods of teaching a foreign language in universities. Recently, in the conditions of digitalization, the formation of foreign language communicative competence of students in the field of higher professional education and highlighting the issue of determining the professional competencies of the individual, methods of its formation are especially relevant. The content of the views of scientists on the definition of the concept of "competence" is analyzed and the essence of the process of forming foreign language communicative competence in future specialists as the basis of professional competence is shown, the expediency of using Smart technologies and creating an effective educational space of higher education in the conditions of digitalization is presented.

The purpose of the article is to verify the effectiveness of the developed methodology for forming foreign language communicative competence in students of various specialties in the conditions of digitalization.

## Methodology

Research methods:

- *Theoretical* – analysis of literature on the problem of forming foreign language communicative competence in students of various specialties in conditions of digitalization to clarify the theoretical and methodological approaches of the study and the main definitions of the study, substantiation of the developed methodology for forming foreign language communicative competence in students of various specialties in conditions of digitalization;
- *Empirical* – generalization of innovative experience of the developed methodology for forming foreign language communicative competence in students of various specialties in conditions of digitalization, personal pedagogical experience; pedagogical questionnaires, conversations with students, teachers to determine the state of formation of foreign language communicative competence in students of various specialties; to determine the effectiveness of innovative methods of teaching a foreign language – the method of hierarchy analysis; observation of the process of using the proposed methodology. Pedagogical experiment was the main empirical research method. Methods of mathematical statistics were used during data processing to verify the formulated hypothesis.

The experiment involved 160 third-year students of various majors.

The experiment consisted of two stages: ascertaining and forming. The main diagnostic methods were: individual interviews with students and teachers; observation; questionnaire method.

The purpose of the ascertaining stage of the experiment was to determine the initial level of foreign language communicative competence in students of various majors in the conditions of digitalization and to identify the influence of dominant motives that determine students' attitude to learning a foreign language, in particular, to the use of computer technologies in the learning process.

The results obtained at the ascertaining stage of the experiment showed the need to implement the author's methodology for the formation of foreign language communicative competence in students of various majors in the conditions of digitalization and to divide students into two groups for further research. Students were divided into EG and CG.

At the formative stage of the experiment, training was conducted using the author's methodology for the formation of foreign language communicative competence in students of various specialties in conditions of digitalization, in which 80 EG students participated.

To verify the effectiveness of the developed methodology for the formation of foreign language communicative competence in students of various specialties in conditions of digitalization in the CG and EG, a final questionnaire was conducted at the formative stage of the study.

Based on the data obtained, it can be concluded that the developed methodology for the formation of foreign language communicative competence in students of various specialties in conditions of digitalization is effective, as evidenced by the positive changes observed during the formative experiment in the EG. In the control group respondents, there were minor changes in the levels of the corresponding formation of foreign language communicative competence in students of various specialties in conditions of digitalization.

In the study, we used the procedure for checking the significance of the relationship developed by R. Fisher to reconcile the sample results with the proposed assumption regarding the possibility of discrepancies.

The effectiveness of the implementation of the author's methodology for the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization is proven

by determining the observed value of the student's t-test and comparing the results of the ascertaining and formative stages of the experiment.

With a reliability of  $\alpha=0.05$ , we assert that a statistically significant difference was identified between the mean values, confirming the hypothesis of the experimental study. This is due to mathematical and statistical analysis showing a significant increase in the number of respondents from various specialties with high and medium levels of foreign language communicative competence in the experimental group, contrasted with a decrease among those with low levels of competence.

Consequently, the developed methodology for enhancing foreign language communicative competence in students from different specialties in the context of digitalization has positively influenced the development of the professional competence of future specialists.

The conducted experiment validated the working hypothesis: enhancing the level of foreign language communicative competence in students from various specialties in a digital context supports positive dynamics in forming the professional competence of future specialists and can be achieved through the application of the developed methodology methodology.

## Results and Discussion

### The content of foreign language communicative competence.

As part of the professional competence of a specialist, our study considers foreign language communicative competence, which consists in the future specialist's possession of a foreign language at a functional level, which will allow the specialist to constantly improve himself and expand business contacts with foreign partners through professional communication with foreign colleagues. Therefore, the concept of "foreign language competence" is a type of communicative competence and a component of professional competence.

At the stage of professional training, the formation of foreign language competence of students is determined by the system of requirements for modern specialists in the labor market and is an important task of modern higher education didactics. Because it is foreign language communicative competence, based on the developed and acquired skills to acquire new experience, that is a condition for the professional successful growth of a specialist through the implementation of intercultural interaction with specialists from other countries and the study of the results of the activities of foreign specialists.

Part of the professional competence of students is defined as foreign language competence, which is understood as a set of professional and general cultural competencies necessary for solving professional tasks at the functional level while mastering a foreign language.

One of the goals of specialized foreign language training and the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization is to create conditions for the formation of readiness for mastering a future profession, the development of students' professional interests and educational and cognitive interests of students. In higher educational institutions, foreign language classes orient students of non-philological profiles to master the language within the framework of their chosen specialty as a means of communication. Therefore, it is logical that the assimilation of the content of a foreign language within the framework of a professionally oriented module is carried out, taking into account the profile of the higher education institution (Pérez & Heinsch, 2021).

The means of the discipline "Foreign Language" also form the skills of professional mobility of the future specialist. The student is immersed in a situation of professional activity when mastering professionally oriented content of training, which creates favorable conditions for additional motivation both for mastering the chosen specialty and for studying a foreign language.



Speaking about profile foreign language education, it should be emphasized that, on the other hand, when studying a foreign language, culture and language act in organic unity because mastering a foreign language means perfect mastery of a foreign culture. That is why a large amount of country-specific information about the country whose language is being studied is contained in the program of profile foreign language education and is professionally oriented and communicatively oriented.

Therefore, the main goal of teaching a foreign language is the formation of foreign language communicative competence in students of various specialties in conditions of digitalization. Considering the content of the definition of "foreign language communicative competence in students of various specialties" in the terminological field of modern scientific judgments, it is interpreted as a personal "ability of a specialist to solve a certain class of professional tasks using the knowledge obtained while studying a foreign language" (Stavytska, 2013).

### **Application of contextual learning for the development of foreign language communicative competence of students.**

To develop the foreign language communicative competence of students, it may be worth applying contextual learning, which takes into account the context of professional real activity in the process of forming language competencies in participants of the educational process.

Three basic forms of activity in contextual learning of students are distinguished:

- Quasi-professional activity;
- Academic-type educational activity;
- Educational-professional activity.

In contextual learning of students, the basic forms of activity correspond to: social, imitation, semiotic, and educational models. The sequential implementation of forms of activity and the implementation of these models lead to the complex and holistic formation of foreign language communicative competence in students through the use of various technologies and educational tools (Kohut, 2022).

### **Aspects of interaction and the main components of foreign language communicative competence of a future specialist.**

The success of communication primarily depends on the chosen styles and forms of communication, therefore, the formation of foreign language communicative competence should be aimed at mastering the following aspects of interaction by students:

- Within the framework of business contacts, language etiquette formulas, which are a component of professional language communication;
- Communicative genres, which are professionally defined for a specific specialty;
- The basics of rhetorical skills and knowledge;
- Skills to use terms in a business context;
- Patterns of determining the status-role characteristics of a partner;
- Rules for taking into account extralinguistic factors, which is an important parameter for planning communicative actions and assessing the communicative situation (personal qualities of a specialist and circumstances of communication).

We can see the main components of the foreign language communicative competence of the future specialist:

- *Linguistic (speech) component* – the student's ability to pronounce several grammatical phrases based on certain rules; the student's possession of a system of information about a foreign language at the lexical, phonetic, morphological, word-forming, stylistic, syntactic levels. The student possesses this component if he can use the language system in practice and has a clear idea of the language system. The level of skills and knowledge here depends on the level of language training;
- *Sociolinguistic component* – the student's ability, according to the situation, to transform and use language forms, places, relationships between communicants, etc., the formation of skills to use in adequate communication situations a unit of a foreign language, in combination with other words, the development of skills to correctly and competently use the mastered phonetic, grammatical, lexical material in oral and written forms in the process of learning a foreign language;
- *Social component* – the ability and desire to come into contact with other people; readiness and ability of the student to communicate; factors here are attitude towards other communicators, motives, needs, as well as self-esteem; ability of the student to quickly navigate in a social situation and manage it;
- *Socio-cultural component* contains knowledge of the socio-cultural context, the influence of the environment on the choice of language forms and assumes that the student knows the culture of native speakers and his own culture, differences and similarities between them, the ability in the socio-cultural context to use the resources of elements – social stereotypes, rules, customs, norms, etc.;
- *Reflective component* is characterized by the following aspects: mastery of joint activity skills; taking into account the features of various types of role behavior; objective assessment of one's contribution to solving collective tasks; independent organization of educational activities; mastery of skills in monitoring one's own activities; analysis of one's own achievements, behavior, character traits, physical and emotional state; compliance with norms of behavior in society, etc.; evaluation of one's activities from the perspective of aesthetic and moral values, legal norms, etc.;
- *Autolinguididactical component* – the student's ability to independently reflect, constantly improve language skills, and be able to assess one's own level of knowledge of a foreign language;
- *Pragmatic component* – the student's ability to master the entire complex of communicative behavior in a particular linguistic and cultural community;
- *Discursive component* – the student's ability to achieve coherence of individual statements, to understand others, the ability to evoke discourse, and to use and interpret the forms and meanings of words to create texts.

These components meet the goals of teaching students a foreign language and fully reflect the content of foreign language communicative competence, and the effectiveness and efficiency of the formation of foreign language communicative competence of a future specialist is determined by the level of formation of each of the above-analyzed components (Ovcharenko, 2016).

### **Digital information technologies in the formation of foreign language communicative competence of students.**

The most important structural components of foreign language communicative competence in the conditions of digitalization. Recently, in the conditions of digitalization, the formation of foreign language communicative competence of students in the field of higher professional education has become especially relevant.

Under modern conditions, digitalization is understood as a trend in the development of society, which is global and involves a comprehensive transformation of information into digital form in industry, economy, education, science, and other areas of human life.

One of the most sensitive to digitalization reform is the higher education system. The educational environment of a higher school includes in its content a set of digital technologies that enable higher education applicants to study at any time, taking into account a personally oriented approach and in any place, regardless of their localization (Knysh et al., 2024).



It is difficult to overestimate the importance of perfect command of a foreign language. Modern specialists of all industries must build a written and oral system of communication with colleagues, employees, and employers, which significantly increases their competitiveness in the global labor market within the global community.

Let us highlight the most important structural components (the level of development of which has quantitative dimensions) of foreign language communicative competence in the conditions of digitization:

- General, linguistic, professional, informational;
- Grammatical, lexical, phonetic, orthographic;
- Sociolinguistic, linguistic, regional studies;
- Pragmatic, strategic discursive (El Parlamento Europeo y el Consejo de la Unión Europea, 2006).

The formation of foreign language communicative competence of students in the conditions of digitalization is the final result of learning, which determines the readiness of a higher education graduate and his ability for professionally oriented foreign language communication in the process of professional activity.

Modern digital information technologies allow students to work with information independently, regardless of the starting level of foreign language proficiency (Topusov, 2017).

### **Advantages of using digital information technologies in the formation of foreign language communicative competence for students and teachers.**

Let us highlight the advantages of using digital information technologies in the formation of foreign language communicative competence of students:

- When perceiving educational material, the possibility of strengthening the factor of clarity;
- An individual approach taking into account the personal qualities, abilities of students, and the level and type of motivation for learning;
- Increasing students' motivation through an interactive process of creative interaction with the resource;
- Emotional satisfaction of the main contingent of students.

Let us highlight the advantages of using digital information technologies for teachers in the formation of foreign language communicative competence in students:

- The possibility, due to the availability of information, of using interdisciplinary forms of learning;
- Focusing educational technologies on creative moments of planning and implementing the educational process;
- Creating comfortable working conditions;
- The possibility of interaction in an integrated environment of teachers of different disciplines;
- The possibility of organizing active communication in a foreign language in specific typical situations;
- Access to authentic material.

With this approach, in the conditions of digitalization, the teacher performs an advisory function, directing the efforts of students to achieve the desired result.

### **Adaptation of students to new methods and forms of learning in the conditions of digitalization after entering higher education.**

Academic adaptation means the adaptation of recent entrants to the educational process at a higher education institution, the peculiarities of its organization, it is the psychological adaptation of students to a

new pedagogical system for them, to teaching methods, to the need to master a large amount of information and analyze methodological and scientific materials in a short time (Mytnyk et al., 2024).

In the conditions of digitalization, there is a growing need to improve and implement the resources of scientific and educational pedagogical activity, to develop cognitive-adaptive, innovative technologies, knowledge of which ensures high quality professional training of specialists in various specialties, enriching the content of professional disciplines with new technologies and ideas.

Supporting the process of adapting students to new methods and forms of learning in the conditions of digitalization after entering an innovative university cluster contributes to the formation of competencies, in particular, the formation of foreign language communicative competence, increasing their success, which is necessary for work in the professional sphere.

The use of digital information technologies accelerates the adaptation of students. Particularly effective are such technologies that include web quests, blogs, and podcasts. Participants in the educational process of higher education in the conditions of digitalization can create their own content and not only use ready-made Internet resources.

Also important are educational software in the conditions of digitalization, which include relevant databases, computer programs, electronic lectures, electronic textbooks designed for teaching, online directories, dictionaries, subject-oriented environments, educational and methodological complexes, generators of examples (situations), collections of tasks, computer illustrations and software and methodological complexes to support various types of classes (Bashkir, 2018).

Of particular importance in our context are educational computer programs, which are an essential adaptive tool for increasing the effectiveness of the formation of foreign language communicative competence of students. The principle of compiling educational computer programs is educational with rules, explanations, and samples of completed tasks. They may contain audio and video blocks, videos, slides, etc. (Bodnar, 2022).

It should be noted that the use of modern digital information technologies in the formation of foreign language communicative competence of students greatly facilitates the perception of new professional material.

If a text is simultaneously perceived by ear and displayed on the screen, the amount of knowledge that is remembered increases, the user's pronunciation and diction improve, and the person's vocabulary expands. After listening to the material, it is not difficult for a student to organize a discussion or compose a dialogue using emotional and personal content, which ensures optimal assimilation of information and the level of perception.

With this approach, students interact in a game setting, solve various situational tasks, reveal their creative potential, and distribute roles (Honcharenko-Zakrevska et al., 2022).

It is the work with computer educational programs that arouses interest in this type of tasks and a positive reaction among students.

### **Using innovative popular tools in learning foreign languages.**

The most popular tool of the digital information environment is the modular object-oriented learning dynamic environment – the Moodle education management system, which is widely used in higher education institutions (Khalid, 2019).

When studying foreign languages, the system provides the opportunity to use innovative tools: authentic audio and video applications, video lectures, electronic teaching and learning materials, glossaries, webinars, and the ability to add hyperlinks to reference materials in Internet resources.

The use of Moodle in the educational space of higher education allows you to form and develop students' communicative and linguistic skills, taking into account their abilities and personal characteristics.

In higher education institutions, test tasks are often used, which allow you to automatically assess the level of students' knowledge online.

The teacher has the opportunity to adjust the test deadlines and increase the number of attempts during monitoring activities, as well as to comment in writing on both the success of the test in the group as a whole and the results of specific students.

When working independently, test tasks with automatic verification are effective because they enable students to control their level of assimilation of the material in dynamics through the gradual passage of certain stages of the educational process (Shuliak et al., 2022).

When learning a foreign language, an effective tool of the educational process is a vocabulary trainer, a modern Internet trainer, which allows the teacher to use this program in the mode of controlling knowledge of phonetic, grammatical, lexical aspects of a foreign language and to repeat and consolidate the studied material in classroom work.

Electronic dictionaries, various search and reference systems, encyclopedias are information and communication tools that allow you to make the educational process interesting, speed up work with the text, independently compile glossaries based on the use of search and reference systems, which can be used on relevant topics during classes (Honcharenko-Zakrevska & Diukanova, 2022).

### **Introduction of Smart technologies in foreign language classes to form foreign language communicative competence in students of various specialties in conditions of digitalization.**

The main purpose of the development of educational systems is the concept of "Smart", which provides educational, electronic Internet content with technological operations, provides feedback from students and teachers and informatizes the exchange of knowledge between participants in the educational process of higher education.

The teacher, in conditions of digitalization, plays the role of coordinator and organizer of the educational process in the process of implementing Smart technologies in foreign language classes. Using educational content, the student and teacher are constantly in a linguistic authentic environment, searching for information, engaging in self-improvement and self-education, cooperating and communicating with other representatives of the educational community, etc.

The basis of the work of higher education institutions in conditions of digitalization should be the promotion and development of Smart education based on information and communication, innovative, sensory, mobile, and other technologies. In this case, the teacher's work is responsible and painstaking because the educational professional material must always be filled with relevant innovative content. It is necessary to constantly coordinate the work of students and provide them with qualified support.

New requirements for the training of future specialists are shaping the trends of the transition to Smart technologies. Creating conditions for higher education applicants to acquire skills and their own experience involves Smart approaches and not presenting "ready-made" knowledge to the student. The function of a teacher, according to the concept of Smart learning, is high-quality content navigation, and not the transmission of ready-made truths.

Today, many Smart technologies are used in the process of teaching a foreign language to form foreign language communicative competence in students of various specialties in the conditions of digitalization by teachers: Smart textbooks, interactive Smart Board, Smart projectors, social networks, websites, services, and Google tools (Hotsynets, 2022).

To form foreign language communicative competence in students of various specialties in the conditions of digitalization, we will propose the necessary tasks, motives, approaches, and factors for higher education institutions:

- Taking into account the specifics of the future professional activities of higher education applicants;
- In the context of a competency-based approach – developing the content of education in the subject;
- Identifying indicators and criteria for the development of foreign language communicative competence in higher education applicants;
- Determining the stages of studying thematic sections of the program during the training of higher education applicants;
- Determining the organizational and pedagogical conditions for the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization;
- Developing a comprehensive program for the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization, taking into account the complementary nature of modern scientific knowledge and interdisciplinary connections (Shandruk & Arkushyna, 2021).

The following motives contribute to the study of a foreign language in a higher education institution to form foreign language communicative competence in students of various specialties in the conditions of digitalization:

- *Linguistic-cognitive* – the desire of higher education students to learn speech phenomena;
- *Communicative* – determined in students in communication based on needs, ensuring the presence of communicative motivation, which consists in the desire to read special professional literature, to speak with native speakers in a foreign language, because in the native speech environment a foreign language has the status of an artificial means of communication;
- *Aesthetic* – associated with the awareness of personal significance and value for social development and with the highest feelings of a person;
- *Regional studies* – depend on the emotional interest of students and thematic orientation in the socio-domestic or professional sphere of communication.

In the process of studying a foreign language, the formation of foreign language communicative competence of students includes two approaches:

- A cognitive-activity approach that forms communicative skills in future specialists by creating situations in which higher education applicants have the opportunity to effectively form certain skills, master communicative-technological and communicative knowledge, and develop their own communicative professional qualities. The approach is based on the use of the following methods: methods of full and partial "immersion"; participation in international projects and programs of higher education applicants; modeling situations of everyday communication and business conversations; use of presentation educational and scientific activities, as a result of which the formation of foreign language communicative competence of students occurs; preparation of presentations in a foreign language related to future professional activities; holding discussions on a certain problem; situational and business games; use of innovative and interactive teaching methods – group work, discussions, brainstorming, etc.; participation in video and teleconferences; active use of modern training methods;
- A traditional approach, which, to form students' foreign language communicative competence, involves lecture and practical teaching of a foreign language and the formation of a system of basic knowledge in future specialists, which will serve as the basis for their further professional activities (Borovets,

2016), because the formation of foreign language competence consists in combining the skills of learning a foreign language with the content of the professional activity of the future specialist, which will contribute to the achievement of the key goal of training a higher education applicant – the formation of his own professional competence.

An integral quality of the personality is foreign language communicative competence because it is it that contributes to the adequate functioning of the individual in society and its adaptation in it, including the creative potential of the individual, certain values, and ways of communication. Provided that students possess a foreign language as a means of communication, the formation of foreign language communicative competence in future specialists occurs.

The priority factor that determines the content of the communicative process, its overall effectiveness, is the level of its formation. Therefore, the formation of foreign language communicative competence should include:

- The conscious position of students (communicatively competent), which will ensure their further professional development and self-improvement;
- Students acquire a basic system of skills, abilities, and knowledge necessary for effective foreign language communication in the process of professional activity (Shandruk & Arkushyna, 2021).

### **Results of experimental work on testing the methodology for the formation of foreign language communicative competence in students of various specialties in conditions of digitalization.**

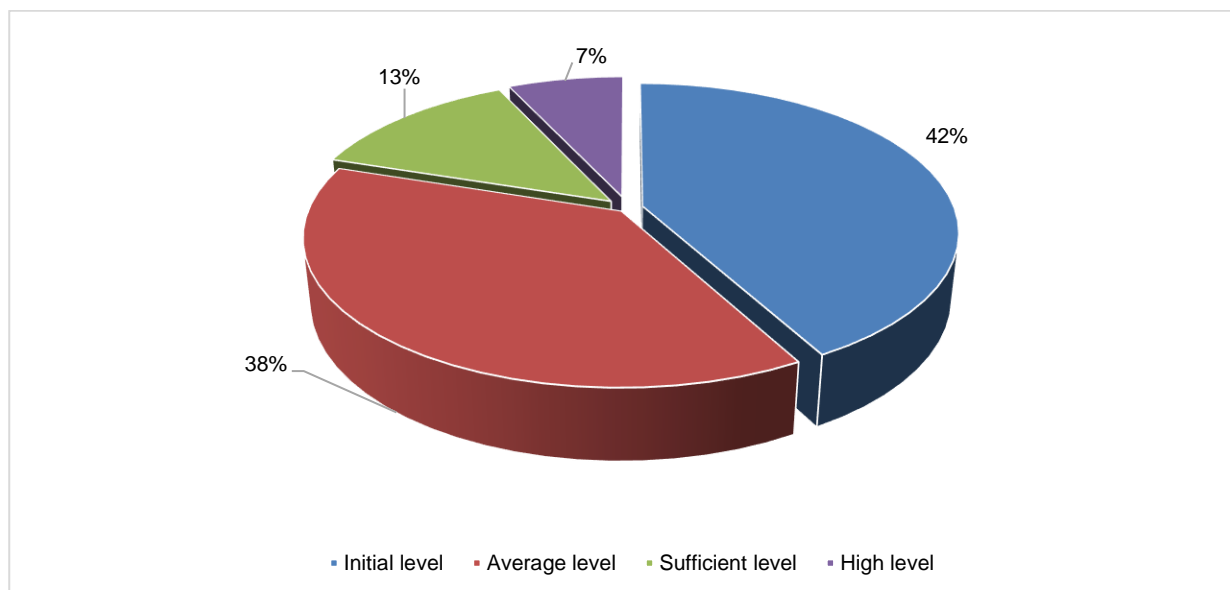
160 third-year students of various specialties participated in the experiment.

The experiment consisted of two stages: ascertaining and forming. The main diagnostic methods were: individual conversations with students and teachers; observation; questionnaire method.

The purpose of the ascertaining stage of the experiment was to determine the level of foreign language communicative competence in students of various specialties in conditions of digitalization and to identify the influence of dominant motives that determine students' attitudes towards learning a foreign language, in particular, to the use of computer technologies in the learning process.

According to the results of the initial questionnaire at the ascertaining stage of the experiment, the following results were obtained regarding the formation of foreign language communicative competence in students of various specialties in conditions of digitalization and readiness to use computer technologies for learning (Fig. 1):

- Initial level: – 42%;
- Average level: – 38%;
- Sufficient level: – 13%;
- High level: – 7%.



**Figure 1.** Distribution of Foreign Language Communicative Competence Levels.

It was found that students are not sufficiently prepared to use computer technologies in research and educational activities, do not use technical means in classes, have poor knowledge of software: web browser, programs for communication and data exchange, do not know enough about the resources of the electronic network for gaining knowledge and how to use computer technologies when solving practical exercises, are not confident enough in using them in practical and educational situations and independently mastering the functional characteristics of computer technologies and as a result, students of different specialties have unformed foreign language communicative competence in the conditions of digitalization. The results obtained at the ascertaining stage of the experiment showed the need to implement the author's methodology for the formation of foreign language communicative competence in students of different specialties in the conditions of digitalization and divide students into two groups for further research. Students were divided into EG and CG.

At the formative stage of the experiment, training was conducted using the author's methodology for the formation of foreign language communicative competence in students of various specialties in conditions of digitalization, in which 80 EG students participated.

Students were offered the use of contextual learning to develop foreign language communicative competence, the content of foreign language communicative competence was presented, and the main aspects of interaction and the main components of foreign language communicative competence of a future specialist were identified. The methodology included digital information technologies in the formation of foreign language communicative competence of students and helped to clarify the most important structural components of foreign language communicative competence in conditions of digitalization.

Students and teachers identified the advantages of using digital information technologies in the formation of foreign language communicative competence.

The use of innovative popular tools in learning a foreign language showed the need to implement Smart technologies in foreign language classes to form foreign language communicative competence in students of various specialties in conditions of digitalization. To form foreign language communicative competence in students of various specialties in conditions of digitalization, EG students were offered the necessary tasks, motives, approaches, and factors for high-quality implementation of the proposed methodology. CGs were engaged in standard methodology.

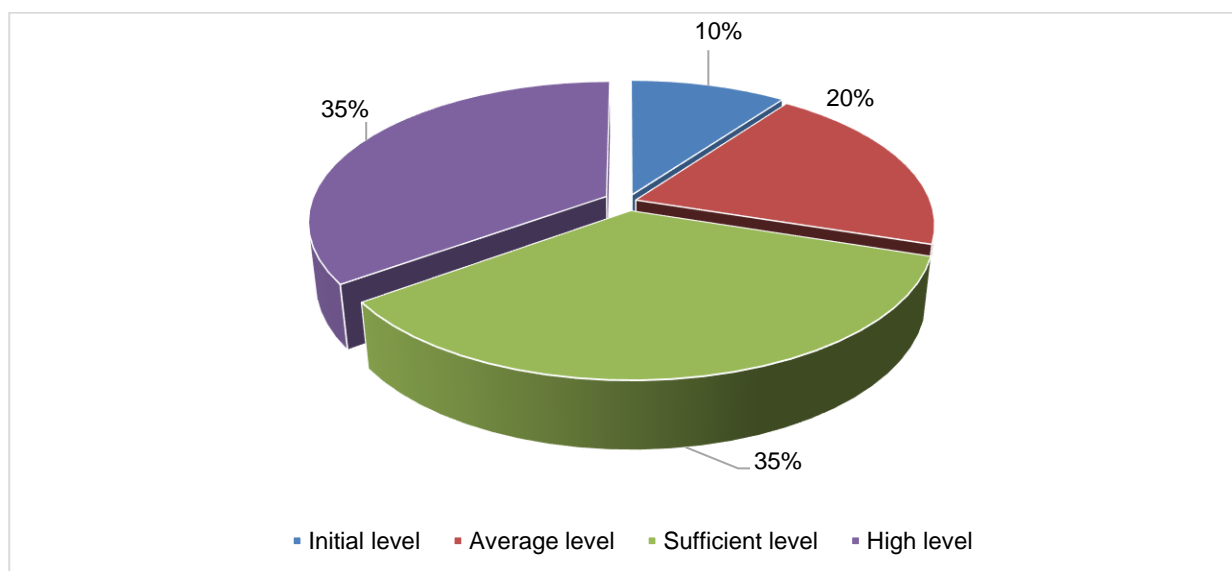


To verify the effectiveness of the developed methodology for the formation of foreign language communicative competence in students of various specialties in conditions of digitalization, a final questionnaire was conducted in CGs and EGs.

At the end of the experiment, we received the results of the final questionnaire, which proved that the effectiveness of the developed methodology is significant since we received positive dynamics of the research results.

After the formative stage of the experiment, the level distribution of EG students was as follows (Fig. 2):

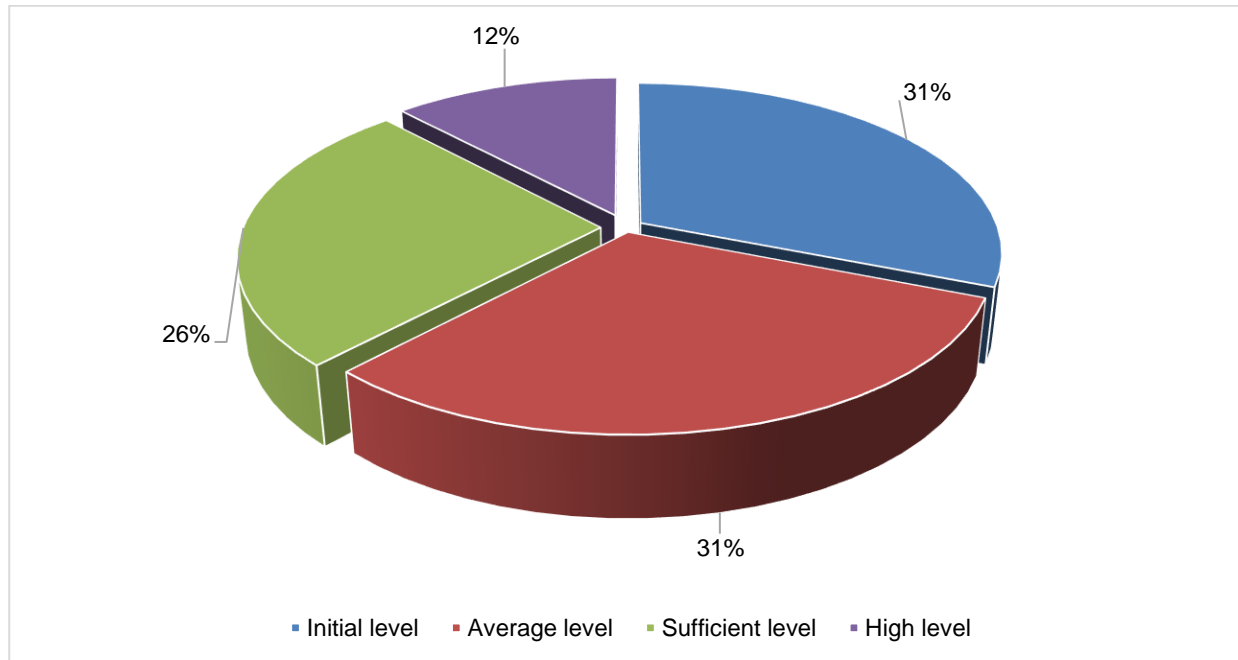
- Initial level – 10% of students (versus 42% at the beginning of the experiment);
- Average level – 20% (versus 38% at the beginning of the experiment);
- Sufficient level – 35% (versus 13% at the beginning of the experiment);
- High level – 35% (versus 7% at the beginning of the experiment).



**Figure 2.** Student Level Distribution After Experiment.

In the control group respondents, there were minor changes in the levels of the corresponding formation of foreign language communicative competence in students of various specialties in the conditions of digitalization (Fig. 3):

- Initial level – 31% of students (versus 42% at the beginning of the experiment);
- Average level – 31% (versus 38% at the beginning of the experiment);
- Sufficient level – 26% (versus 13% at the beginning of the experiment);
- High level – 12% (versus 7% at the beginning of the experiment), which indicates a significant effectiveness of the training of EC students.



**Figure 3.** Levels of Foreign Language Competence in Control Group.

Based on the data obtained, it can be concluded that the developed methodology for the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization is effective, as evidenced by the positive changes observed during the formative experiment.

In the study, we used the procedure for checking the significance of the connection developed by R. Fisher to reconcile the results of the sample with the proposed assumption regarding the possibility of discrepancies. The effectiveness of the implementation of the author's methodology for the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization was proven by determining the observed value of the Student's t-test and comparing the results of the ascertaining and formative stages of the experiment.

With a reliability of  $\alpha=0.05$ , we claim that a statistically significant difference between the mean values was found, which confirms the hypothesis of the experimental study, since mathematical and statistical processing confirmed that we observe a significant increase in the number of respondents of different specialties with high and medium levels of formation of foreign language communicative competence in the experimental group and their decrease with a low level of formation.

Therefore, the developed methodology for the formation of foreign language communicative competence in students of different specialties in the conditions of digitalization contributed to positive dynamics in the formation of professional competence of future specialists. The conducted experiment confirmed the working hypothesis: increasing the level of foreign language communicative competence in students of different specialties in the conditions of digitalization contributes to positive dynamics in the formation of professional competence of future specialists and can be achieved by applying the developed methodology.

## Conclusions

The content of foreign language communicative competence is analyzed. The importance of using contextual learning for the development of foreign language communicative competence of students, its interaction aspects, and main components are shown. Significant digital information technologies for the

formation of foreign language communicative competence of students are analyzed. The advantages of using digital information technologies in the formation of foreign language communicative competence for students and teachers are shown. The most important structural components of foreign language communicative competence in the conditions of digitalization are highlighted. The role of students' adaptation to new methods and forms of learning in the conditions of digitalization after entering higher education is revealed.

An essential factor is the introduction of Smart technologies in foreign language classes in order to form foreign language communicative competence in students of various specialties in the conditions of digitalization. To form foreign language communicative competence in students of different specialties in conditions of digitalization, a methodology for the formation of foreign language communicative competence in students of different specialties in conditions of digitalization has been proposed, which reveals the necessary tasks, motives, approaches, and factors for innovative work in higher education institutions.

An experiment was conducted. The results obtained at the ascertaining stage of the experiment showed the need to implement the author's methodology for the formation of foreign language communicative competence in students of different specialties in conditions of digitalization and to divide students into two groups for further research. Students were divided into EG and CG.

At the formative stage of the experiment, training was conducted using the author's methodology for the formation of foreign language communicative competence in students of different specialties in conditions of digitalization in EG.

Based on the data obtained, it can be concluded that the implementation of the developed methodology for the formation of foreign language communicative competence in students of different specialties in conditions of digitalization is effective, as evidenced by the positive changes observed during the formative experiment.

Thus, the developed methodology for the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization contributed to positive dynamics in the formation of professional competence of future specialists.

Further research is required to develop a virtual learning environment for higher education, effective methods and forms of using innovative technologies in the formation of foreign language communicative competence in students of various specialties in the conditions of digitalization and advanced training of teaching staff in implementing the specified problem.

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