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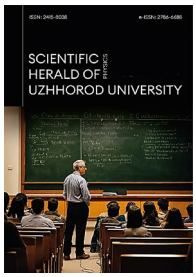

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Use of pedagogical technologies in language teaching

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Abstract

Relevance. The relevance of the research is conditioned by the fact that the problem of education quality has always been in the foreground of interest of both scientific workers and pedagogical practitioners, and today in Uzbekistan and all over the world, the quality of education is considered as the most important factor for achieving sustainable development of the country, ensuring its technological, economic, informational and moral security.

Purpose. In this regard, this article is aimed at studying pedagogical technologies in language teaching in educational institutions, which are necessary for the implementation of interpersonal interaction and communication in the process of intercultural communication.

Methodology. The leading methods of research of this problem are the methods of analysis, classification, induction and deduction, generalization and comparison of approaches, which will help to identify and highlight the main traditional and innovative pedagogical technologies in education and pedagogy.

Results. The article reveals the importance of competence development through the use of advanced pedagogical methods in foreign language classes; shows the peculiarities of using innovative approaches in teaching English and German as a second foreign language in higher education; reveals problem-oriented learning and adaptive technologies; demonstrates the factors and methods of using pedagogical technologies in the learning process; shows the implementation of competence-based and personal-activity approach with the implementation of the pedagogical technologies in the learning process.

Conclusions. The materials of the article are of practical and theoretical value for pedagogy, linguistics and teaching methodology, where the discussion of improving the effectiveness of education and language learning is important.

Keywords: linguistics; learning process; innovation; problem-oriented approach; moral security.

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Introduction

In the field of education, one of the essential directions is the development and implementation of pedagogical methods that meet the requirements of modernity. Modern society is rapidly becoming technologized, which expands human capabilities and leads to changes in norms and values. This process gave rise to the development of the Internet, marking the beginning of a new evolution called informatization. Many modern pedagogical methods are now widely used in education, such as collaborative learning, project methodology and the use of Internet resources. There is also considerable potential in online learning that is worth considering. Pedagogical technologies present an excellent opportunity not only for teaching subjects, but also for developing students' communicative competences, which is an important process in higher education. The relevance of the article is that pedagogical technologies are the main engine of the educational process. The use of pedagogical technologies empowers the teacher and saves time. It enables the teacher to manage lessons effectively, be proactive and determine the content of teaching. They are closely related to the effectiveness of different strategies, the frequency with which learners use the strategies in real-life settings, and the impact of such instruction on various aspects of language development.

F.R. Norboeva [1] believes that teaching with technology includes three main components: content, pedagogy and technology, and the interaction between them. The use of advanced pedagogical technologies together with modern information technologies provides students with great opportunities for creativity and cooperation. Reforming and improving the country's continuing education system, supported by government policy, promotes the introduction of advanced pedagogical and information technologies, which increases the effectiveness of education [2; 3]. Pedagogical technologies are widely used in education at all levels. Today, pedagogical technologies represent the intelligent design of ways to achieve optimal pedagogical function in the learning environment. They include a variety of methods and tools, from traditional to modern, which allow stimulating students' creativity and intellectual development [4].

Much attention of researchers and teachers is now being paid to self-regulated second language learning, as this approach has been shown to be effective in learning. To support such learning, R. Zhang & D. Zou [5] examined previous studies on teachers' strategies and roles in developing self-regulated learners. The results showed that the most commonly researched strategies were metacognitive strategies. Three main modes of teacher support were identified: classroom instruction, guidance in authentic contexts, and a combined approach of instruction and guidance. The use of self-regulated strategies in language learning was found to be effective in both academic aspects and affective aspects (self-efficacy, motivation and attitudes towards learning). Specific strategies such as metacognitive, cognitive, motivational and behavioural strategies were found to be useful for different aspects of language development [6; 7]. Based on the findings, the interactions between learners, strategies, learning tasks and learning environment in language learning are revealed, which provides opportunities for further research.

M. Kuts [8] believes that the purpose of extracurricular foreign language work is to create a natural language environment in which the student gets an opportunity for intercultural authentic communication. To achieve this result, there are many approaches, methods and organizational forms in pedagogical experience. In particular, it is worth paying attention to the technological approach, which is of great value because it allows achieving an acceptable level of learning quality. In the aspect of the organizational form of students' academic work, various technologies are noted: organization of independent work on foreign language, electives, special courses, training courses, club work and distance learning.

M.R. Salaberry [9] argues that the pedagogical advantages of different technologies are closely related to four main issues: increasing technological complexity and increasing pedagogical effectiveness; the technical characteristics of new technologies for pedagogical purposes; the integration of technologies into the curriculum; and the aspect of human and material resources' efficiency. By delving into these issues, the scholar endeavours to provide a comprehensive assessment of the role of technology in language education, showing its true impact and potential in improving language teaching and learning.

F.A. Abdurazaqov *et al*. [10] pointed out that modern pedagogical technologies provide lesson convenience, which allows students to master learning materials, constantly monitor their progress and make corrections when necessary. Also, technologies related to speech, words, sounds, concepts, forms and visual representations of learning take the second place after the methods of teaching and knowledge acquisition through pedagogical technologies. These methods are becoming more and more important and significant in the educational process.

M. Ernazarova & E. Zhabborova [11] analysed the aspect of using computer presentations in the educational process, which allowed highlighting such advantages: increasing the degree of student motivation; the possibility of effective use of extensive visual material; accelerating the pace of the lesson; active involvement of students in independent learning, which is of particular importance for the development of their general educational competences; development of the ability to formulate oral statements.

The aim of the article is to investigate pedagogical technologies in language teaching in educational institutions and to show the most effective methods. The main objectives were the following issues: to analyse the development of skills through the application of advanced pedagogical methods in foreign language classes; to identify the peculiarities of using innovative approaches and concepts of group learning; to present the aspects of adaptive technologies and the application of pedagogical technologies in the learning process.

Materials and Methods

The following methods were used in the research process: method of analysis; method of comparison; method of generalization; abstraction; induction; method of

classification; graphical methods of information presentation (diagram).

In the theoretical part of the research, with the help of the method of analysis was carried out theoretical collection and description of already available approaches in pedagogy and teaching methodology regarding the problem of development of pedagogical technologies and their influence on the development of personality; considered their main components, types, and ways of manifestation in the educational space; studied information data of books, dissertations, articles, monographs, conferences, where the features of innovative technologies in education are deeply and comprehensively disclosed. The induction method was used in the study to exemplify different methods and technologies that are actively used in universities and schools for language learning. The method itself helped in collecting research data and analysing them. It also identified common elements of teaching approaches and the use of techniques, which allowed general conclusions to be drawn. This method influenced the identification of commonalities in the effectiveness and remediation of the learning process.

The method of abstraction was used in identifying common patterns and trends inherent in a variety of pedagogical technologies. It was used to highlight the essential characteristics describing language teaching innovations and methodologies. The advantages and limitations of each pedagogical technology were explored, highlighting common trends in how these factors affect the effectiveness of language teaching. Also, the abstraction method was used to show the key aspects and summarize data about the different pedagogical methods and technologies used in language teaching. The method of synthesis was used to summarize the pedagogical advantages of different technologies and relate them to the main issues. In addition, the factors that influence the successful use of pedagogical technologies in language teaching were uncovered. Conclusions were drawn on how pedagogical technologies can be effectively integrated in language teaching, considering the key aspects, advantages, and limitations; the data obtained in writing the paper was systematized; its contribution to pedagogy, linguistics, and philology was identified. In addition, using various theoretical methods, the data obtained during the work were elaborated; theoretical and practical conclusions and results of the study were substantiated.

The base of the study was the universities of Uzbekistan (Tashkent State Pedagogical University named after Nizami, Tashkent State University of Oriental Studies). The sample consisted of 893 students of philological and polylingual directions. The study was random, one-stage cross-sectional. The frequency of technology and methodology use was assessed using standardized questionnaires and questionnaires. For the practical part, the comparison method was used to give brief overviews of pedagogical technologies, how they can be more effective in certain situations, what aspects can be improved, and what approaches can be used to optimize language learning. Based on the comparison, three levels of pedagogical technologies were compared, and their main features were shown. Through the method, a comparable analysis of studies and approaches aimed at a more detailed study of the problem of pedagogical technologies in universities and schools was presented.

In the practical part of the study, a questionnaire survey was used regarding students' attitudes towards innovative technologies and their perception of pedagogical technologies. Also, their influence on the learning and performance of students who learnt new things with the use of pedagogical technologies was revealed. As a result of the study, the most frequently used technology was diagnosed, its characteristics were identified and the results of the questionnaire were shown. The interpretation of the results was outlined, taking into account the set goals and objectives of the study, and the effectiveness of pedagogical technologies in the context of language learning was evaluated.

Results

Pedagogical technologies and their characteristics

Pedagogical technology is an organized system and a structured approach that includes all aspects of personal, instrumental and methodological influence to achieve educational goals. It ensures the construction of the learning process with guaranteed achievement of the goal. It is a consistent and systematically presented set of instructions, activities, and operations based on modelling, diagnostics of effectiveness and correction of the learning process.

Pedagogical technologies can be divided into two main groups: instrumental technologies and software technologies. Instrumental technologies are universal tools that have not been specifically developed for educational purposes, but can be applied in the learning and teaching process. These technologies are widespread and have a long-standing research and practice base. When teachers adopt and integrate these instrumental technologies into their work, they become pedagogical technologies that become useful for learning and teaching. However, not all teachers are inclined to use tool technologies, especially if they see them as additional means to enhance traditional lectures. The structure of pedagogical technology includes related elements: conceptual framework, content, and process components.

On the other hand, teachers who follow a constructivist approach to teaching are more likely to integrate instrumental technologies into their practice because such technologies promote creative and critical thinking in students. To successfully integrate instrumental technologies into the educational process, it is important to begin by identifying learning objectives that require the active use of creative skills rather than simply the mechanical assimilation of information. Learning objectives should encourage teachers to see the value and significance of using technology. Supporting and facilitating the creation of learning communities among teachers, as well as teaching them the skills and knowledge that support the use of technology, play an important role in this process. This approach will help provide teachers not only with the necessary content knowledge, but also with the emotional drive to use tool-based technology [12; 13].

The main purpose of instructional technology is to create an effective educational process for learning in a mass education setting. Due to the diversity of learning

objectives, content elements and individual learner characteristics, it becomes difficult to achieve a unified method of learning at the highest level. Pedagogical technology is a way of successfully solving didactic tasks and achieving the set goals in education. It is also worth noting that despite the relationship between pedagogical technology and learning technology, they have their differences. Pedagogical technology covers all aspects of the educational process and is a comprehensive system, while learning technology focuses on methods of teaching specific subjects, based on modern didactic requirements. It is worth highlighting the general classification of pedagogical technologies [8]:

1. Industry macrotechnologies are specially designed learning packages for world-class language learning. These technologies include educational books for students, workbooks, methodological manuals for teachers, and audiovisual material. Sectoral macrotechnologies are oriented towards achieving the general goals of foreign language learning and forming a holistic foreign language culture of students.

2. Modular-local technologies are aimed at solving specific tasks of organizing students' foreign-language communicative activity outside class time. These technologies include such forms as training and elective classes. Project technologies, quests and case-study are mentioned here, which allow organizing students' foreign language communicative activity outside of class time in individual or group form.

3. Microtechnologies are aimed at solving specific, narrow tasks of foreign-language communication within the didactic cell of the educational process. Here it is possible to distinguish game technologies, group work company, test technologies, interactive technologies and technologies of critical thinking development.

Pedagogical technologies are divided into three levels: general pedagogical, special (pedagogical sciences) and small technologies. General pedagogical determines the goals of education, the content of education, the means used and learning algorithms for all participants of the educational process. Special (pedagogical sciences) technologies include various directions: empirical (through the senses); cognitive (expanding the scope of knowledge about the world around us); heuristic (learning with the help of guiding questions); creative (development of purposeful creative thinking); integrative (revealing the inseparable interdependence of different pieces of information to form a general conclusion); adaptive (adapts the learning process to achieve the expected result, taking into account the peculiarities of students); inversion (study of information). Directions of general pedagogical technologies include [14]:

1. Pedagogical technologies based on activation and acceleration of student activity.
2. Pedagogical technologies based on effective management and organization of the educational process.
3. Developing educational technologies.
4. Natural science pedagogical technologies.
5. Didactic improvement and revision of educational and material pedagogical technologies on the basis of the development and improvement of the pedagogical process.

Pedagogical technologies aimed at the development of the student's personality.

Results of research on the importance of modern pedagogical technologies, methods, and approaches in language learning

Using the pedagogical technology of multilevel education, today it is possible to create conditions that will allow each student to actively participate in the educational process, taking into account his/her individual characteristics and level of development. This technology is necessary in professional education, where a teacher faces students with different aptitudes, interests, needs, motivations, temperament, as well as mental and memory abilities [15]. During the study, questionnaires with these types of questions were used in higher education institutions:

1. What types of pedagogical technologies, in your opinion, are most effectively used in your HEI?
2. What advantages do you see in the use of modern educational technologies in teaching?
3. Your experience with online platforms or educational resources to support the learning process?
4. How often do teachers at your university use interactive methods in the teaching process?
5. What challenges do you see in integrating pedagogical technologies into teaching?
6. What is your assessment of the effectiveness of using technologies for individualization of students' learning?
7. What pedagogical technologies have helped you successfully meet the challenges of distance learning (if any)?
8. What changes in student behaviour and engagement do you observe when using interactive teaching methods?
9. What additional teaching resources or tools have you found useful to support teaching with technology?
10. What is your opinion on the importance of teacher training for the effective use of pedagogical technologies?

It has been found that pedagogical technology can improve the quality of education through differentiated testing and change students' attitudes towards the discipline. For example, the results of the study show that the majority of students rate their use as very effective (65%). According to students, subjects such as English and German become more interesting and useful for their future professional activities. Also, respondents indicated, pedagogical technologies helped them to successfully master knowledge during distance learning and gain new skills. 45% are sure that teachers are obliged to use pedagogical technologies in every lesson. It was also analysed the difficulties of implementation of technologies, which are based on insufficient understanding of their capabilities, the presence of knowledge deficit in teaching and methodological work. According to the latest data, about 85% of teachers regularly introduce interactive methods in their lectures and practical classes. This may include the use of group discussions, case studies, multimedia materials, interactive tasks and technologies such as webinars and online voting. This approach enhances student learning, encourages active participation in the learning process and develops critical thinking skills.

Students also most often mentioned the use of adaptive learning technology, which is a type of multi-level learning where the student and his/her activities, as well as personal qualities, take centre stage. Learning is seen as a process of

forming learning skills, which is achieved through active independent activity of students, such as reading additional material, performing various exercises and practical lessons. Applying this technology, the lesson is organized in three stages: explanation of the material, individual work of the teacher with students against the background of their independent activity in the group and independent work of students. This technology teaches students to work independently, creative thinking and creativity, and also creates the necessary emotional atmosphere [16]. Adaptive technology implies flexible organization of the training session, taking into account the level of students' learning. Therefore, the duration and sequence of training stages can vary depending on specific groups and their needs. The main advantage of adaptive learning technology is that the teacher works with students individually on three levels of adaptive tasks that require different degrees of activity and creativity. The use of professionally oriented materials, such as cognitive readings, video materials and the study of terms in English, contributes to deeper learning of the material [17; 18].

It is also worth mentioning problem-based learning, where students can work individually or in groups, exploring complex and insufficiently structured problems related to real life [19]. Here, educators play the role of leaders, helping students to shape information rather than just passing it on. In recent decades, educators have demonstrated that such technology can be effective and useful in developing cognitive and emotional learning skills [20]. The most frequently used pedagogical technology was the concept of collaborative learning, which is built on the idea of active interaction and cooperation between students in the learning process. Most of the respondents mentioned exactly its features and characteristics (73%). This methodology emphasizes the importance of students' collaborative participation in learning where they work together on tasks, projects or learning assignments. The main aspects of this concept include:

1. Collaboration: students work in teams or groups to share knowledge, experiences, and ideas. Instead of an individualized approach, the emphasis is on supporting and teaching each other.
2. Active learning: students are actively involved in the learning process. They discuss, share their thoughts and solutions, and explore materials together, which fosters deeper understanding.
3. Collaborative problem-solving: having cooperation and interaction between students. This stimulates creative thinking and develops communication skills.
4. Knowledge sharing: students share their knowledge and viewpoints, which promotes deeper learning.
5. Development of social skills: cooperation promotes communication skills, conflict resolution, effective group interaction, and the ability to work in a team.
6. Engaging with a variety of viewpoints: broadening students' understanding and their development of critical thinking.

The effectiveness of the implementation of pedagogical technologies for language learning depends on various factors, in particular the teacher's readiness to use these technologies, a systematic approach to the organization of learning and its motivational support. As a result, insufficient use of technologies in language education or their ineffective integration into the educational environment can negatively affect the effectiveness of learning. At the same time, the use of technology can help in presenting complex materials, concretizing learning, and creating an educational environment appropriate to individual differences among students. During the questionnaire survey, different types of organization and management of cognitive activity in the educational process were found:

1. Structural and logical technologies: are built on the definition of didactic tasks, the choice of the method of their solution, the diagnosis of the obtained results.
2. Integrative technologies: are didactic methods that combine different subject knowledge and skills, different types of activities at the level of pedagogical courses, educational topics, tasks and other forms of learning organization.
3. Game technologies: the basis is a game form of interaction between the teacher and children. It influences the formation of skills to solve problems on the basis of deliberate choice of alternative options in the aspect of a certain plot. It includes role-playing games, imitations, and theatre performances.
4. Computer technologies: manifested in didactic systems of computer-based learning. Information, training, developmental, controlling and other training programmes are used here.
5. Dialogue technologies: aimed at creating a communicative environment and expanding the space of cooperation at the subject-subject level.
6. Training technologies: are a system of activities aimed at working out clear algorithms of cognitive skills and ways of solving problems in the learning process. This includes tests, psychological questionnaires, trainings on solving managerial problems.

The frequency of using pedagogical technologies in higher education institutions is shown in the diagram. The data were obtained in the course of a survey (questionnaire) of university students of philological directions (Figure 1).

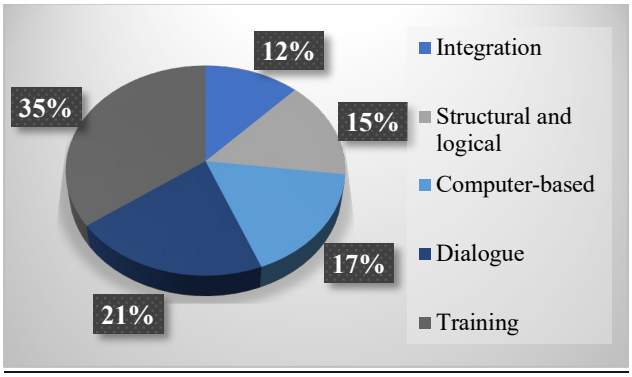

Figure 1. Pedagogical technologies and frequency of their use

The study revealed that the common features of pedagogical technologies are systematic (80%), procedural (75%), design-oriented (46%) and effective (55%). In addition, it was demonstrated that the most popular forms of teaching are group classes, which account for 80% of classes. It is also worth noting the significant impact of

distance learning, which increased during the COronaVIrus Disease 2019 (COVID-19) pandemic. New political strategies during the pandemic, changes in pedagogy, and the expansion of online, distance, and home-based education have become an integral part of the political and economic competition [21]. In Uzbekistan, at least 25 per cent of students are enrolled in distance education. Therefore, it is necessary to expand the possibilities of distance learning on an educational scale, ensuring its reliability and sustainability, as well as to implement digitalization of education, taking into account the needs of children with special educational needs. The following measures can be taken to achieve these goals: increasing the availability of technical means for families and teachers to use information technology, improving the quality of communication and supporting the development of digital learning materials.

Methodological requirements for the introduction of pedagogical technologies

An important advantage of all new pedagogical approaches in education is the ability to vary lessons, to increase students' motivation to learn English, to stimulate their critical thinking, and to provide opportunities to test their knowledge through a game format. The introduction of new technologies requires teachers to develop a new pedagogical approach to help overcome learning difficulties [22; 23]. During the study, frequent use of methods related to the development of critical thinking was found. These strategies allowed the formation of communicative competence and promoted active learning activities. When analysing the lessons using new pedagogical methods, it was diagnosed that the process of English language teaching can be viewed from a new perspective, focusing on the psychological mechanisms of personality formation. When considering the basic methodological requirements for designing pedagogical technologies in language learning contexts, the following aspects are relevant [24]:

1. Conceptuality, which implies a conceptual framework including philosophical, psychological, didactic and socio-pedagogical justification for achieving educational goals.
2. Systemic, which includes certain goals, clear processuality, interconnection and integrity.
3. Manageability, which implies the definition of goals, planning, phasing and feedback.
4. Integrity, which implies the presence of all mandatory elements.
5. Innovativeness, which includes the latest achievements of pedagogical science and practice.
6. Reproducibility, which means algorithmic, transparent, accessible and structured.
7. Efficiency, which includes effectiveness, optimality, and guarantee of achieving a certain standard of learning.
8. Competitiveness in the current environment.

As a result, it is worth noting that different approaches to understanding the essence of pedagogical technology are reduced to several common aspects: the possibility of implementing a certain pedagogical system; connection with social transformations and new pedagogical thinking and science; psychological justification and instruction of the learning process; principles and ways of optimizing the educational space.

Discussion

Language teaching is aimed at developing a civilized personality capable of self-analysis and systematization of new knowledge. The process of modernization of the educational system is unthinkable without the use of innovative methods. That is why it is important for teachers to familiarize themselves with advanced approaches and be able to combine them, achieving significant progress in education. Modern pedagogical technologies and innovations are becoming an integral part of the educational process, with many organizations moving to a new level of using multimedia capabilities for information exchange [25-27]. At the heart of their use should be the building of verbal skills and the development of social flexibility. The key to the success of every lesson is the correct organization of learning, which is based on creative collaboration between teacher and student. Only in such an environment can students freely develop their thinking skills and strengthen their will.

Q. Ma *et al*. [28] were engaged in the study of corpus-based language pedagogy, which is related to the application of corpus technology in English classroom teaching. In the study, university English teachers used a case study approach to integrate corpus technology into authentic classroom teaching. The study details how the teachers designed and implemented the programme to meet the needs of their students. The results show that the design of corpus-based language instruction involves five components of teachers' knowledge and practice: English language knowledge, corpus technology knowledge, pedagogical knowledge, contextual knowledge, and training and practice. Teachers' learning and practice are integral to their development in this area. Both teachers chose similar and different ways of developing this technology, resulting in a relatively high level of development after considerable training and practice. This paper has not examined corpus technology, but has suggested techniques to enhance learning. Also interesting and important are the five components of knowledge and skills that are needed to implement corpus technology in the educational process: knowledge of English, knowledge of corpus technology, pedagogical knowledge, contextual knowledge and learning and practice. This reflects the multifaceted approach and includes both linguistic and pedagogical competencies. Interestingly, the teachers in this study applied different methods and approaches to the development of corpus technology, which emphasizes the flexibility of the approach and the possibility of adapting it to the specific context and needs of the classroom.

R. Kubota [29] investigated language diversity, hybridity and plurilingualism in teaching English as a second language, which is expressed in the concepts of translingualism and plurilingualism. It was noted by the author of the robot that critical engagement with plurilingual approaches should be directed towards transformation, understanding of language, but also towards overcoming structural barriers and linguistic ideologies concerning issues of race, class, nationality, and other social identities. A critical investigation of both the potentialities and risks of plurilingualism, with a focus on

the use of an additional language in writing, was also presented. Gaps between plurilingual ideals and real-life challenges, paradoxes between practices and norms of language in reality and the ideological relationship with liberal and neoliberal multiculturalism were shown. These findings provide an opportunity to look at pedagogical technologies from the perspective of language ideologies and barriers. The study points to the importance of critical engagement in learning, aiming not only at the acquisition of language skills but also at a deeper understanding and overcoming of structural barriers and linguistic ideologies related to social identities. Particular attention is paid to the tensions between ideals and reality, as well as the connection with multiculturalism. The data only support a forward-looking perspective on the role of pedagogical technologies in the context of linguistic and sociocultural ideologies.

R.J. Blake [30] analyses the use of distance learning in the context of language learning processes, taking into account recent advances and research results in the field of computer-assisted instruction. Furthermore, in addition to reviewing different distance learning models and technological applications, issues related to distance learning research and teacher training for this new learning environment have been considered. As a result, one of the key topics for discussion today is the notion of interactivity, which was discussed in detail in the context of pedagogical technologies and social aspects of computing technologies. Also, distance learning was mentioned in the study of learning in higher education institutions in Kazakhstan.

M. Reichelt [31] paid attention to the study of relationships between different pedagogical methods (e.g., systematic grammar instruction) or types of assigned tasks (e.g., descriptive or narrative writing) and the creation of text or letters. Research topics included detailed grammar instruction, use of computer technology, a variety of types of writing tasks, instruction in writing strategies, and instruction in the writing process. This article showed the lack of a commonly accepted understanding of the purposes of written expression in a foreign language and pointed out the design flaws in most existing studies. Such findings add to the evidence on the types of organization and cognitive management in the educational process. It is worth reiterating that research into the relationships between pedagogical methods and types of text production tasks is an important area of research. It allows a better understanding of which teaching approaches are effective in stimulating and developing writing skills in a foreign language. Analysing different methods and tasks may lead to the identification of better approaches to teaching writing.

P.P. Gao *et al*. [12] divided pedagogical approaches into two groups: instrumental and software approaches. Instrumental approaches, the most widely used, have a rich history and are well studied. They are universal methods and tools that are not specifically adapted for educational purposes. When teachers integrate them into the classroom, they become pedagogical tools that facilitate learning and teaching. Instrumental approaches are more widely used in the context of student-centred learning, as they foster creative and critical thinking. Programmatic approaches are pre-designed with specific learning materials and a programme of study. They manage the learning process using artificial intelligence or software algorithms, leaving less freedom for teacher intervention. Despite the hope that they will provide a personalized learning experience, the lack of interpersonal interaction can lead to a lack of engagement and resistance from learners. This article also discussed instrumental technologies and their importance in foreign language learning. These are the ones that can become pedagogical tools when integrated into the learning process and promote creative and critical thinking in learners. It is worth noting that it is not always the lack of interpersonal interaction in programme approaches that can lead to a lack of engagement and resistance on the part of learners.

D.Sh. Dzhabbarova *et al*. [32] studied pedagogical technologies that are effective in learning a foreign language. The project method is a way of learning oriented to personal development. It combines creative, research, and information approaches. The main thing is the form of research project, which allows students to actively participate in the learning process. It also provides the teacher with an opportunity for informal interaction with students, who communicate more openly when engaged in interesting tasks [33; 34]. This method helps to establish trust, facilitates communication based on a friendly disposition. The concept of collaborative learning has also been highlighted by scholars. Its main types are Student team learning (STL). Here, special attention is paid to group goals and success of the whole group, which is possible only through individual work of each team member in constant interaction with other students. Here, student-teams-achievement divisions (STAD) and teams-games-tournament (TGT) are important approaches. This paper also highlighted the importance of the concept of collaborative learning and showed its effectiveness during learning.

M.N. Gömleksi˙z [35] compared the effects of the Jigsaw method and the traditional teacher-centred teaching method on improving vocabulary and active-passive proficiency in English as a foreign language. The Jigsaw co-teaching model is a format in which small groups of students interact with each other to teach each other the subject. The study included 66 students who were divided randomly into experimental and control groups. The results of the study revealed statistically significant differences in favour of the experimental group in the areas of vocabulary improvement and active-passive English language acquisition. The results of analysing the students' attitudes also indicated a positive effect of the cooperative learning experience on engineering students' attitudes towards learning English, as well as more effective interaction between students. These methods are important in the context of work research and may open up research perspectives on other technologies. It is worth agreeing that the positive effects of collaborative learning experiences on students' attitudes towards learning English may have long-term positive effects. It may encourage students to become more involved, motivated and interested in the subject. This study opens perspectives for further research on pedagogy and the application of new technologies in the educational process. The open question of what other innovative methods can have a positive impact on foreign language learning may inspire

more in-depth research and the development of new teaching approaches.

The development of information technology is bringing changes in the field of education. The shift from mere knowledge acquisition to skill development is becoming more and more relevant. A new set of competencies including creativity, cooperation, and research activities becomes key. It is pedagogical technologies that contribute to this process, where the teacher plays an important role. It is also worth mentioning innovative technologies that should create a more innovative and learner-centred education system. It is important to say that software technologies should be designed with teacher interaction in mind and encourage active research-based learning. Ultimately, despite the digital nature of information, education remains firmly tied to human relationships and engagement.

Conclusions

Thus, it is worth concluding that pedagogical technologies function in various aspects of modern pedagogical science and practice. In the modern world, they play a crucial role in the process of language learning. In light of the rapidly changing educational paradigm and rapidly evolving technologies, the use of modern pedagogical techniques becomes an integral part of successful foreign language learning. Pedagogical technology encompasses four key dimensions: scientific, process-action, process-descriptive and composite. In the context of the scientific dimension, pedagogical technology is considered as a new area of pedagogical knowledge that studies pedagogical methods and approaches. The procedural-action dimension defines it as a real educational process based on a certain methodology to achieve predetermined goals. Within the framework of the procedural-descriptive dimension, pedagogical technology is considered as a model of the educational process developed according to the technological approach.

In this study, methodological requirements and criteria of technologicity in the development of pedagogical technology were proposed, and their classification was described. Also, the concept of cooperative learning, corpus-based language teaching and the frequency of using pedagogical technology in higher education institutions of Uzbekistan were shown. In education, important are competence and personal-activity approaches, which are built on the active use of interactive teaching methods. It is the use of pedagogical technologies that helps to stimulate the development of personality and intellect, active participation in cognitive processes and formation of key competences required by future professionals. The most widespread pedagogical strategy was the idea of cooperative learning, based on the principle of active interaction and cooperation between students in the learning process. The main characteristics of this approach were highlighted by the majority of respondents (73%). This approach emphasizes the importance of students' joint participation in the learning process, where they jointly solve problems, develop projects and perform learning tasks. The most popular is structural-logical technologies in education, which are based on systematization and organization of the educational process with the help of logical principles and structural elements.

This article indicates that educational technologies are manifested in close cooperation with teachers. Teachers play a key role in the successful implementation of these methods, and most of them regularly introduce interactive approaches in their classes. However, despite the positive aspects, adapting new technologies also comes with challenges, such as lack of understanding and knowledge about the capabilities of technology, as well as a deficit in teaching and learning training. It is also worth noting that with the advent of artificial intelligence in personalized learning, new categories of technologies have emerged that are significantly different from the previous ones. Educational technologies have also been categorized, and their main features have been highlighted. It is educational technologies that include pedagogical technologies used in teaching and learning activities, as well as operational technologies used in the management activities of teachers. In general, the results of the study indicate that pedagogical technologies, especially interactive methods, play an important role in the modern educational environment, contributing to more effective learning, skills development and positive perception of the learning process.

In the process of the research, new questions and problems have arisen that need to be solved. Problems for further work can be: the study of teaching methods in philological education; the use of competence and personal-activity approaches in teaching. These articles can be relevant for pedagogical research in the issues of language teaching methodology.

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Conflict of Interest

None.

References

[1] Norboeva FR. The role of modern pedagogical technologies in the education system. *Sci Educ Today*. 2020;6-2(53):51–2.

[2] Suchanek M, Szmelter-Jarosz A. Car enthusiasm during the second and fourth waves of COVID-19 pandemic. *Hum Soc Sci Commun*. 2023;10(1):593.

[3] Aizstrauta D, Ginters E. Introducing integrated acceptance and sustainability assessment of technologies: A model based on system dynamics simulation. *Lect Not Bus Inf Process*. 2013;145:23-30.

[4] Buil R, Piera MA, Ginters E. Multi-agent system simulation for urban policy design: Open space land use change problem. *Int J Model Simulat Sci Comput.* 2016;7(2):1642002.

[5] Zhang R, Zou D. Self-regulated second language learning: A review of types and benefits of strategies, modes of teacher support, and pedagogical implications. *Comput Assist Lang Learn.* 2022:1–38. DOI: 10.1080/09588221.2022.2055081.
[6] Przybyłowski A, Suchanek M, Miszewski P. COVID-19 Pandemic Impact on a Global Liner Shipping Company Employee Work Digitalization. *TransNav.* 2022;16(4):759-765.
[7] Kerimkhulle S, Obrosova N, Shananin A, Tokhmetov A. Young Duality for Variational Inequalities and Nonparametric Method of Demand Analysis in Input–Output Models with Inputs Substitution: Application for Kazakhstan Economy. *Mathem.* 2023;11(19):4216.
[8] Kuts, M. 2016. Pedagogical technologies of organization of extracurricular work of foreign language students. In: Proceedings of the 1st International Scientific and Practical Conference "Fundamental and Applied Research: Modern Scientific and Practical Solutions and Approaches"; 2016 October 27-28; Baku – Uzhhorod – Drohobych. Uzhgorod: Posvit. P. 164-166.
[9] Salaberry MR. The use of technology for second language learning and teaching: A retrospective. *Mod Lang J.* 2001;85:39–56.
[10] Abdurazaqov FA, Odinaboboev FBU, Donaeva NN. Types of pedagogical technologies that correspond to the specifics of moral and aesthetic education and teaching of students. *Eur Scholar J.* 2022;3(3):68–74.
[11] Ernazarova M, Zhabborova E. Pedagogical technologies in Russian language lessons. *Soc Innov.* 2022;4:251–6.
[12] Gao PP, Nagel A, Biedermann H. Categorization of educational technologies as related to pedagogical practices. *IntechOpen*. 2020. DOI: 10.5772/intechopen.88629.
[13] Messina A, Crescimanno C, Cuccì G, Caraci F, Signorelli MS. Cell Adhesion Molecules in the Pathogenesis of Schizophrenia. *Fol Med.* 2023;65(5):707-712.
[14] Norbosheva MA. Analysis of kid's psychological development through national games. *Web Sci Int Sci Res J.* 2021;2(12):72–5.
[15] Vyas A. Multi-level education and capacity building framework for technology adaptation. *Int Arch Photogramm Remote Sens Spatial Inf Sci*. 2020;XLIII-B5-2020:23–7.
[16] Burbules NC, Fan G, Repp P. Five trends of education and technology in a sustainable future. *Geogr Sustain*. 2020;1(2):93–7. DOI: 10.1016/j.geosus.2020.05.001.
[17] Messina A, Caraci F, Aguglia E, Signorelli MS. Catatonia-like behavior and immune activation: a crosstalk between psychopathology and pathology in schizophrenia. *Ann Gen Psych.* 2023;22(1):39.
[18] Jawabreh O, Qader AA, Salah J, Al Mashrafi K, AL Fahmawee EAD, Ali BJA. Fractional Calculus Analysis of Tourism Mathematical Model. *Prog Fract Different Appl*. 2023;9:1-11.
[19] Fidan M, Tuncel M. Integrating augmented reality into problem-based learning: The effects on learning achievement and attitude in physics education. *Comput Educ*. 2019;142:103635.
[20] Seibert SA. Problem-based learning: A strategy to foster generation Z's critical thinking and perseverance. *Teach Learn Nurs*. 2021;16(1):85–8. DOI: 10.1016/j.teln.2020.09.002.
[21] Williamson B, Eynon R, Potter J. Pandemic politics, pedagogies and practices: Digital technologies and distance education during the coronavirus emergency. *Learn Media Technol*. 2020;45(2):107–14.
[22] Spytska L. Anxiety and depressive personality disorders in the modern world. *Acta Psych.* 2024;246:104285.
[23] Kerimkhulle S, Aitkozha Z, Saliyeva A, Kerimkulov Z, Adalbek A, Taberkhan R. Agriculture, Hunting, Forestry, and Fishing Industry of Kazakhstan Economy: Input-Output Analysis. *Lect Not Networks Syst.* 2023;596:786-797.
[24] Johnson KE. The sociocultural turn and its challenges for second language teacher education. *TESOL Q*. 2012;40(1):235–57.
[25] Pavlenko A, Koshlak H. Design of processes of thermal bloating of silicates. *Metall Min Ind.* 2015;7(1):118-122.
[26] Spytska L. Narcissistic Trauma Main Characteristics and Life Impact. *J Nerv Ment Dis.* 2024;212(5):255-260.
[27] Salah JY. Properties of the modified caputo's derivative operator for certain analytic functions. *Int J Pure Appl Mathem.* 2016;109(3):665-671.
[28] Ma Q, Yuan RE, Cheung LME, Yang J. Teacher paths for developing corpus-based language pedagogy: A case study. *Comput Assist Lang Learn*. 2022;37(3):461–92. DOI: 10.1080/09588221.2022.2040537.
[29] Lau SMC, Viegen SV, editors. Plurilingual Pedagogies. Cham: Springer; 2020. Kubota R, Promoting and problematizing multi/plural approaches in language pedagogy; p. 303-321. DOI: 10.1007/978-3-030-36983-5_14.
[30] Blake RJ. The use of technology for second language distance learning. *Mod Lang J.* 2009;93(s1):822–35.
[31] Reichelt M. A critical review of foreign language writing research on pedagogical approaches. *Mod Lang J.* 2001;85(4):578–98. DOI: 10.1111/0026-7902.00127.
[32] Dzhabbarova DSh, Mirzaeva MR, Samadova SA. The use of pedagogical technologies in the study of a foreign language. *Sci Thought Electron Period.* 2014;10:6–11.
[33] Piskunov VG, Goryk AV, Cherednikov VN. Modeling of transverse shears of piecewise homogeneous composite bars using an iterative process with account of tangential loads. 1. Construction of a model. *Mech Compos Mater.* 2000;36(4):287-296.

[34] Makhazhanova U, Kerimkhulle S, Mukhanova A, Bayegizova A, Aitkozha Z, Mukhiyadin A, Tassuov B, Saliyeva A, Taberkhan R, Azieva G. The Evaluation of Creditworthiness of Trade and Enterprises of Service Using the Method Based on Fuzzy Logic. *Appl Sci (Switz).* 2022;12(22):11515.

[35] Gömleksi˙z MN. Effectiveness of cooperative learning (jigsaw II) method in teaching English as a foreign language to engineering students (case of Firat University, Turkey). *Eur J Eng Educ*. 2007;32(5):613–25. DOI: 10.1080/03043790701433343.

Використання педагогічних технологій у викладанні іноземних мов

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Анотація

Актуальність. Актуальність дослідження зумовлена тим, що проблема якості освіти завжди була в центрі уваги як науковців, так і педагогів-практиків, і сьогодні в Узбекистані та в усьому світі якість освіти розглядається як найважливіший чинник досягнення сталого розвитку країни, забезпечення її технологічної, економічної, інформаційної та моральної безпеки.

Мета. У зв'язку з цим метою даної статті є дослідження педагогічних технологій викладання іноземних мов у навчальних закладах, необхідних для здійснення міжособистісної взаємодії та спілкування в процесі міжкультурної комунікації.

Методологія. Провідними методами дослідження даної проблеми є методи аналізу, класифікації, індукції та дедукції, узагальнення та порівняння підходів, які допоможуть виявити та виокремити основні традиційні та інноваційні педагогічні технології в освіті та педагогіці.

Результати. У статті розкрито важливість розвитку компетентностей через використання передових педагогічних методів на заняттях з іноземної мови; показано особливості використання інноваційних підходів у викладанні англійської та німецької мов як другої іноземної у вищій школі; розкрито проблемно-орієнтоване навчання та адаптивні технології; продемонстровано чинники та методи використання педагогічних технологій у навчальному процесі; показано реалізацію компетентнісного та особистісно-діяльнісного підходу при впровадженні педагогічних технологій у навчальний процес.

Висновки. Матеріали статті мають практичну і теоретичну цінність для педагогіки, лінгвістики та методики викладання, де актуальним є обговорення питань підвищення ефективності освіти та вивчення мов.

Ключові слова: лінгвістика; навчальний процес; інновації; проблемно-орієнтований підхід; моральна безпека.