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The International Scientific Periodical Journal "Modern Technology and Innovative Technologies" has been published since 2017 and has gained considerable recognition among domestic and foreign researchers and scholars.

Periodicity of publication: Quarterly

The journal activity is driven by the following objectives:

- Broadcasting young researchers and scholars outcomes to wide scientific audience
- Fostering knowledge exchange in scientific community
- Promotion of the unification in scientific approach
- Creation of basis for innovation and new scientific approaches as well as discoveries in unknown domains

The journal purposefully acquaints the reader with the original research of authors in various fields of science, the best examples of scientific journalism.

Publications of the journal are intended for a wide readership - all those who love science. The materials published in the journal reflect current problems and affect the interests of the entire public.

Each article in the journal includes general information in English. The journal is registered in INDEXCOPERNICUS.

Sections of the Journal:

Library of Congress Classification Outline	Sections
Subclass TJ / TJI-1570	Mechanical engineering and machinery
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Subclass TN / TN1-997	Mining engineering. Metallurgy
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Subclass TS / TS1300-1865	Textile industries
Subclass TK / TK7800-8360	Electronics
Subclass T / T55.4-60.8	Industrial engineering. Management engineering
Subclass T / T351-385	Mechanical drawing. Engineering graphics
Subclass TA / TA1001-1280, Subclass TL / TL1-484, Subclass TE / TE1-450, Subclass TF / TF1-1620	Transportation engineering, Motor vehicles. Cycles, Highway engineering. Roads and pavements, Railroad engineering and operation
Subclass TH / TH1-9745	Building construction
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Articles should correspond to the thematic profile of the journal, meet international standards of scientific publications and be formalized in accordance with established rules. They should also be a presentation of the results of the original author's scientific research, be inscribed in the context of domestic and foreign research on this topic, reflect the author's ability to freely navigate in the existing bibliographic context on the problems involved and adequately apply the generally accepted methodology of setting and solving scientific problems.

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All tables and figures in the article should be numbered, have headings and links in the text. If the data is borrowed from another source, a bibliographic reference should be given to it in the form of a note.

The title of the article, the full names of authors, educational institutions (except the main text language) should be presented in English.

Articles should be accompanied by an annotation and key words in the language of the main text and must be in English. The abstract should be made in the form of a short text that reveals the purpose and objectives of the work, its structure and main findings. The abstract is an independent analytical text and should give an adequate idea of the research conducted without the need to refer to the article. Abstract in English (Abstract) should be written in a competent academic language.

The presence of UDC, BBK

Acceptance of the material for consideration is not a guarantee of its publication. Registered articles are reviewed by the editorial staff and, when formally and in substance, the requirements of the journal are sent to peer review, including through an open discussion using the web resource www.sworld.education

Only previously unpublished materials can be posted in the journal.

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The editors of the journal are aware of the fact that in the academic community there are quite widespread cases of violation of the ethics of the publication of scientific research. As the most notable and egregious, one can single out plagiarism, the posting of previously published materials, the misappropriation of the results of foreign scientific research, and falsification of data. We oppose such practices.

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**COMPLEX COORDINATION APPLICATION FOR INTERACTIVE
METHODS WHILE TEACHING FOREIGN LANGUAGES**
**ЗАСТОСУВАННЯ КОМПЛЕКСНОЇ ВЗАЄМОЇ ІНТЕРАКТИВНИХ МЕТОДІВ
НАВЧАННЯ ПРИ ВИКЛАДАННІ ІНОЗЕМНОЇ МОВИ**

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Abstract. The article examines interactive teaching methods, which are dialogical teaching methods based on the active interaction of the teacher with students. It is noted that interactive teaching methods are a form of organization of the educational and communicative activities through mutual communication and a dialogue of the teacher with students. The ability of interactive teaching methods to help to develop intellectual abilities of students, to think analytically, to form responsibility for tasks is proved. There have been identified specific functions including motivational, communicative, developmental, educational, and evaluative for reflection. The main interactive teaching methods including a large circle, carousel, Brownian motion, work in small groups, sparring partnership, decision tree, aquarium, brainstorming, case study, project method, cluster, cinquain, puzzle are studied. A modular version of interactive teaching methods consisting of separate stages is proposed for the use in the process of teaching foreign languages.

Keywords: interactive teaching methods, foreign language, higher education, interactive technologies, innovative teaching methods.

Introduction. The education system of our country is experiencing a turbulent period of reconsideration of the approaches to teaching foreign languages, which is caused by the needs for the financial, economic and social development. Despite the presence of a solid theoretical basis in the field of teaching foreign languages, graduates of technical, agrarian, financial and economic institutions are still experiencing difficulties in business communication facing the need to negotiate in a foreign language, communicate with foreign partners, and manage enterprise at the international level.

International cooperation of our state in the fields of economy, finance, politics, defense and culture has revealed the state's need for competent, mobile and competitive specialists. Joint production and trade enterprises, representative offices of foreign enterprises, educational and research projects demand competent, creative professionals who are able to achieve the objectives set on their own.

Labor market requires modernized higher education system, in particular, the one with the strengthened professional component. A special role is occupied by foreign languages, and nowadays foreign language competence is an essential skill of a successful specialist.

Rapid development of globalization of industrial and trade relationships has actualized the issue of training university students for future professional activities. Among the professional skills of specialists under the conditions of intensification of international cooperation, the skills of professional foreign language communication is becoming of great importance. Texts related to the profession are the sources of practical information and they facilitate the readiness of students for professional communication in a foreign language.



Application of interactive teaching methods enables to expand the scope of professional communication in a foreign language, which is achieved on the basis of professional texts, and it has become an objective necessity for the non-linguistic institution due to globalization of the modern society.

Interactive teaching methods are dialogic teaching methods based on the interaction with students. The teacher acts as a supporter, whose main task is to direct the process of exchange of information, namely, to identify different points of view, apply to the individual experience of each student, support the student's activity, combine the theory and practice, gain new experience by the students.

The essence and characteristics of interactive teaching methods are clarified in the scientific works by V.A. Sukhomlynskyi, M.I. Makhmutov, V.V. Davydov, Sh.A. Amonashvili, I.P. Podlasyi, V.F. Shatalov, L. Rean, E.N. Iliin, Y.K. Chabanskyi, I.Y. Lerner, V.V. Raievskyi, M.N. Skatkin and others.

These scientific papers identify a wide range of teaching methods, including interactive methods, their social and emotional aspects. However, they are represented as separate methodological techniques without consideration of the complex interaction during the learning process.

The main text. Modern tendencies of the development of education are directly connected with self-realization of the student as an individual. Innovative methods that motivate productive language activities are substituting traditional teaching methods. There is a need to use the methods that allow students to feel, think and announce problematic situations that may possibly arise in the future career, provide opportunities to interact with employees and find together the most relevant and productive professional solutions. Since the texts are the main sources of professional information, the meaningful aspect of communication is formed on their basis and the situations are modeled. Using information from the texts, the students choose one or another model and strategy of behavior [1, p. 23; 2, p. 46; 3, p. 32].

Interactive teaching methods are a form of organization of cognitive and communicative activities through mutual communication and the dialogue between the teacher and students. The main advantage of interactive learning is the constant interaction of teachers and students. Such communication allows everyone to take an active part in the educational process, freely express opinions and analyze conclusions, receive feedback not only from the teacher but also from classmates, facilitate the process of memorizing new information.

Specific organization of the educational process of assimilation of information with the help of interactive teaching methods allows students to receive more professionally oriented information, promotes formation of the ability to ask questions and be able to find answers.

Interactive teaching methods help to develop students' intellectual abilities, think analytically, form responsibility for their individual learning.

Organization of interactive learning is carried out at any stage of studying the topic. Different methods can be used depending on the content of the training material and level of the group competence.

Investigation of interactive methods allows us to identify their specific functions: motivational, communicative, developmental, educational, and evaluative



for reflection [4, p. 339; 5, p. 17; 6, p. 31; 7, p. 208].

The following interactive teaching methods are used to develop students' abilities for intercultural foreign language communication during the educational process:

- large circle;
- carousel;
- Brownian motion;
- work in small groups;
- sparring partnership;
- decision tree;
- aquarium;
- brainstorming;
- case study;
- project method;
- cluster;
- cinquain;
- puzzle [8, p. 549; 9, p. 182; 10, p. 77; 11, p. 18; 12, p. 88; 13, p. 445].

A large circle is a form of group interaction. The work takes place in several stages:

- students sit in a large circle. And at the first stage the task is formulated;
- each student writes down his version of the problem individually on his sheet of paper;
- then each student reads his propositions, the group listens silently (does not criticize) and votes on each item whether to include it in a mutual decision, which is recorded on the board during the conversation.

This technique is suitable in cases when it is possible to quickly identify the ways of solving the problem or the way directly aimed at solving the problem.

When using the carousel strategy, two circles are formed: internal and external. The students sit motionless in the outer circle, and in the inner circle the students change every minute. Thus, in a few minutes the students have time to discuss several topics, as well as listen to the theory of their classmates. This technology is based on the idea that several students act out the situation in a circle, while others observe and analyze their actions.

Brownian motion technology involves the movement of students around the audience to gather necessary information. Besides, the roles and tasks of students can be pre-assigned. Each participant receives a bypass letter with questions and tasks. At the end of the lesson, students should present their ideas on how to solve the problem and ways of their implementation. The teacher sets the task and corrects the answers.

One of the most popular interactive teaching methods is teamwork, since it provides opportunities for all students to participate in the classroom activities, practice skills of cooperation and interpersonal communication. In addition, this method develops the ability of students to actively listen, formulate their opinions, listen to the opinions of classmates, and tactfully correct interlocutors.

The main idea of sparring partnership is comprehensive preparation for the task. By the form of organization, sparring partnership is a kind of pair work, in which



students who perform the role of rivals, do the tasks according to a pre-defined algorithm offered by the teacher.

When using the decision tree method, students are divided into several groups with the same number. Each group is asked to discuss the task and make a note on their “tree”, and then the groups change the “trees” and add their ideas and opinions on the branches of the neighbors’ trees. This method is effective when considering a big topic or paragraph. It is advisable to form a tree at the beginning of the study of the topic, and in the course of work to adjust and supplement.

The aquarium method represents a dialogue when the students are asked to speak in front of the audience. A group of students act out the situation in a circle, and other classmates observe their actions and analyze the progress of the problem.

Brainstorming involves formation by the students of any number of proposals when solving the problem, and the opinion of each student is important. The answers are written on a piece of paper or on the board for joint review. Participants should know that they are not required to justify or explain the answers. Brainstorming is a simple method of formulating ideas on how to solve the problem. When all the ideas are voiced, the students analyze them, choose some of the most suitable ones and test them.

Application of the case study method is practiced when solving situational problems, which can be standard, critical or extreme. This method helps to activate the students, stimulate their activities and successfully solve the problems. The students analyze specific situations, suggest possible solutions and choose the best ones.

The project method involves uniting the students in small groups to solve practical problems. This analytical work enables to improve the skills of logical thinking, maximally reveals creative potential of students and stimulates them to further research.

A cluster is a card of tasks that allows students to think on any topic, provides opportunities for the assessment of their knowledge and ideas about the object being studied, and helps to develop the memory. The cluster is a graphical method of mastering the material that allows you to clearly describe the mental processes that occur when a person studies the topic.

Cinquain is a short unrhymed poem consisting of five lines. It synthesizes information and facts of the task in a concise statement that describes or reflects the task of the teacher. When compiling a cinquain, it is necessary to state the basic educational material or its idea in short expressions. Writing a cinquain is a creative activity that requires the author to be able to find the most essential elements in the information material, draw conclusions and summarize them. The ability to summarize information, present complex ideas, feelings and ideas in a few words is a necessary skill. It requires thoughtful reflection based on a comprehensive conceptual base. Under external simplicity of the form, cinquain is a fast and, at the same time, powerful tool for reflection, synthesis, generalization of the material studied. It teaches to use the concept meaningfully and to determine the attitude to the problem. According to the rules of poetry, traditional cinquain consists of five unrhymed lines:

The 1st line should contain a noun or pronoun, i.e. a given topic;



The 2nd line covers two adjectives that describe and characterize the object of discussion;

The 3rd line consists of three verbs related to the activity of the object;

The 4th line is a key phrase, a conclusion to the topic (can be a quote from a text or a proverb);

The 5th line is a summary word (usually a noun, synonym, or word-association to the topic) that defines the content of the object.

According to the puzzle method, the tasks are performed on the basis of the game. The material studied is partially recorded on separate cards. Each card should contain information before searching for the next card. The student must collect all the cards according to the task set by the teacher. This method promotes formation of attention, concentration, ability to collect and analyze the information obtained. The educational puzzle can be made with students at any stage of studying the material. It can be individual work or teamwork.

Therefore, the listed interactive teaching methods can be characterized by the following tasks:

- ✓ increase of the level of students' desire to learn;
- ✓ high-quality mastering of the educational material;
- ✓ individual search by the students of their own variants and versions for performing educational tasks;
- ✓ training of students for teamwork, respect for different points of view;
- ✓ formation of students' ability to defend their point of view based on specific facts.

During the educational process, interactive teaching methods listed are mainly used as separate methodological techniques without consideration of the complex interaction in the educational process. Thus, we can offer to use a modular version of interactive teaching methods consisting of separate stages in the process of teaching foreign languages.

Each stage should consist of a set of technologies, forms and methods of teaching that are based on the active interaction not only of the teacher with students, but also of the student with classmates. Combining of interactive methods in separate stages will contribute to the effective assimilation of the educational material, development of creative thinking and skills of communication in a foreign language in a group.

The first stage is introductory. At this stage there will take place an initial acquaintance of students with the sphere of the professional activity, generation of ideas. It is advisable to use such interactive methods as a large circle, carousel, brainstorming, and cinquain.

The second stage is systematization. At this stage, there will be a systematization of information received by the students in the field of their professional activities and the expansion of vocabulary. It is advisable to use such interactive methods as Brownian motion, work in small groups, aquarium, decision tree.

The third stage is professionally oriented. At this stage, the simulation of situations of future professional activity will take place. It is advisable to use such



interactive methods as sparring partnership, decision tree, case study, work in small groups, puzzle.

The fourth stage is analytical. At this stage, there will take place analysis and critical thinking of previously performed tasks with their subsequent adjustment. It is advisable to use such interactive methods as the project method, cluster, aquarium.

The fifth stage is resultative. At this stage, there will take place a visual and verbal display of the results of the processed material. It is advisable to use such interactive methods as case study, project method, and aquarium.

The sixth stage is generalizing. At this stage, the teacher will assess the training of students, and there will take place self-assessment of the level of acquired knowledge and skills of business communication in a foreign language. It is advisable to use such interactive methods as a large circle, sparring partnership.

Thus, this stage is final and emphasizes the fact that the successful outcome of any pedagogical activity is the student who is able to apply his knowledge in practice, feel confident outside the classroom, has a sufficient level of self-esteem and confidence in his knowledge.

Therefore, application of six stages of interactive teaching methods in the educational process includes methods, techniques, tools for developing, conducting and improving the teaching process that meet the following requirements:

- priority of characteristics, individual traits of character of students in the educational process with the subsequent control of the quality of mastering the material;
- cooperation of students with the teacher when planning and implementing all stages of the learning process (from setting the educational tasks to assessing the level of their achievement);
- active, creative, proactive participation of students in the process of obtaining the results expected;
- maximum proximity of the results of interactive learning to the sphere of practical activity of the future specialist;
- suitability of learning outcomes for practical implementation, development and improvement;
- development – together with the specific skills being studied;
- competences in the field of rationalization and innovation activity.

Conclusions and propositions. Interactive teaching methods are developmental in nature and related to future professional activities. The basis of interactive methods is the productive interaction of all subjects of the educational process, both teachers and students. It is the dialogue with the direct involvement of students in the educational process, which in its turn motivates them to engage in active mental and practical activities, since both the teacher and students should be active.

Interactive methods enable to carry out training with the emphasis on the students' attention, individual perception, personal potential, activation of the memory and critical thinking.

Mutual activities during the educational process encourage each participant to make a special individual contribution, promote the process of exchange of knowledge, ideas, and methods of activity. All this takes place in the atmosphere of



friendliness and mutual support, so that the students feel their success and intellectual abilities.

This makes the educational process productive and allows not only to acquire new knowledge and practical skills, but also to develop the cognitive activity itself.

Thus, interactive teaching methods are the strategies of training that require well-organized feedback of all participants of the educational process, with mutual exchange of information between them. Interactive training involves social interaction of subjects of the educational process with the exchange of information and development of students' capabilities.

Therefore, the main features of interactive methods of teaching foreign languages are as follows: active task performance, teamwork in the classroom, communicative and situational nature of educational activities. Imagination, attention, observation, logical and critical thinking, persistence, analytical thinking, efficiency, creativity will actively develop. Interactive teaching methods are promising in the educational process, as they define the dialogue between the teacher and students as the main type of communicative interaction with active feedback.

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Анотація: В статті відмічено, що система освіти нашої країни переживає бурхливий період переосмислення підходів до викладання іноземної мови. Це обумовлено потребами розвитку фінансової, економічної та соціальної сфери. Відмічено, що міжнародне співробітництво нашої держави в галузях економіки, фінансів, політики, оборони та культури виявило потребу держави в компетентних і конкурентоспроможних фахівцях. Сучасний ринок праці диктує необхідність модернізації системи вищої освіти, а саме посилення її професійної складової. Особливу роль тут грає іноземна мова, володіння якою являється неодмінним атрибутом успішного фахівця. Відмічено, що застосування інтерактивних методів навчання дозволяє розширити діапазон професійного спілкування іноземною мовою. Це здійснюється на основі текстів за фахом, та являється для немовного вузу об'єктивною необхідністю, обумовленою глобалізацією сучасного суспільства. На сьогоднішній день сучасні тенденції розвитку освіти напряму пов'язані з самореалізацією студента як особистості. Зазначена необхідність застосовування методів, які дозволяють студентам відчувати, продумати і промовити проблемні ситуації, можливі в його майбутній професійній діяльності, надати можливості взаємодіяти з працівниками і знаходити разом найбільш актуальне і продуктивне професійне рішення. Досліджено інтерактивні методи навчання, які являються діалоговими методами навчання, що ґрунтуються на активній взаємодії викладача зі студентами. Відмічено, що інтерактивні методи навчання являються формою організації навчальної і комунікативної діяльності шляхом двостороннього спілкування і діалогу викладача зі студентами. Доведено здатність інтерактивних методів навчання допомагати у розвиванні інтелектуальних здібностей у студентів, аналітично мислити, формувати відповідальність за виконання завдань. Виділено специфічні функції: мотиваційну, комунікативну, розвиваючу, виховну, оціночну для рефлексії. Досліджено основні інтерактивні методи навчання: велике коло; карусель; броунівський рух; робота в малих групах; спаринг-партнерство; дерево рішень; акваріум; мозковий штурм; кейс-метод; метод проєктів; кластер; сінквейн; пазл. Запропоновано до застосування в процесі викладання іноземної мови модульний варіант інтерактивних методів навчання, що складається з окремих етапів.

Ключові слова: інтерактивні методи навчання, іноземна мова, вища світа, інтерактивні технології, інноваційні методи навчання

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