Interactive Teaching Methods as a Means of Developing Creative Activity of Instrumentalist Students in the Context of Distance Learning

Abstract. The relevance of the problem is conditioned by the need to adapt musical art to the conditions of distance education. The paper highlights the main approaches to the implementation of interactive teaching methods for instrumentalist students as an effective means of developing creative activity in the context of distance education. In the context of a pandemic, learning is being transformed into a virtual environment, in particular, a remote way of conducting training sessions. This feature requires a separate pedagogical approach to the development of skills in mastering musical instruments. Therefore, the education process needs to be updated and modernised. The purpose of the study was to determine the methods of interactive teaching of instrumentalist students. Theoretical and methodological approaches to the use of interactive teaching methods are substantiated, in particular, the essence of interactive learning is determined, the features of distance learning are determined, and methods for studying the creative activity of instrumentalist students are highlighted. The concepts of interactivity and creativity are revealed. The features of distance learning are analysed, in particular, effective educational technologies and teaching methods are determined, and cloud technologies are identified as the most effective. The method of determining creativity was used to investigate the creativeness of instrumentalist students. The study results became the basis for the effective implementation of interactive learning methods in the process of organising distance learning with instrumentalist students. The practical significance lies in the identification of the most effective interactive methods of development of creativity and the conclusion of appropriate exercises. The expediency of using interactive methods based on the study by researchers as the most effective in the process of distance learning is also substantiated

Keywords: information society, educational technologies, professional competence, educational efficiency, post-industrial world

INTRODUCTION

At the present stage of social development, information and communication technologies are actively developing, which determines the features of the development of various fields of activity. The information society requires special approaches to the implementation of educational activities, which is important in the context of the introduction of innovative technologies, since it is necessary to acquire knowledge in the field of education and the use of innovative technologies. The educational process requires modernisation in accordance with the requirements of modern technological achievements. At the same time, an important role in the process of educational activity is played by an individual capable of self-realisation. Therefore, personality-oriented, interactive technologies are effective educational technologies. A developed person can use the achievements of humanity and at the same time, such a person generates new ideas and implements them in life, which contributes to further inventions, and therefore, is a condition for constant progress. Thus, the main task of personal development is to obtain knowledge and skills in the educational process that form the competencies of the individual. An important factor in effective education is the choice of appropriate technologies.
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It is important to obtain higher education, where students acquire knowledge in the context of theoretical knowledge of facts and their practical assimilation. Students should gain knowledge and, at the same time, apply it through mental work. Interactive and innovative teaching methods are used for this purpose. Interactive teaching methods involve the organisation of cognitive activity in the context of achieving specific goals and objectives that are designed in advance. An important factor in the effective application of interactive methods is to create conditions for the student to achieve success in completing tasks. That is, students should feel their intellectual ability when getting results in achieving the goal. Interactive methods contribute to the implementation of tasks and create an opportunity for testing various options for solving educational problems. Thus, the student has the opportunity to show creative activity.

Interactive methods involve involving students in discussions, lectures using a multimedia presentation, and mini-research. A common interactive method is "brainstorming", where the student can make various suggestions that may be correct. The methods of questionnaires, blitz surveys, and solving various situations are also effective. Such methods contribute to creative reconsideration of tasks. In the context of distance education, the method of teaching is quite relevant – the method of critical thinking. Thus, interactive teaching methods are the most effective for the development of creative activity among instrumentalist students, since such methods encourage the active participation of the student in the acquisition of new knowledge and skills, students show their own initiative, which reveals their abilities. A. Bessarab, O. Mitchuk studied social networks as a phenomenon of the information society [1; 2]. I. Bondar, A. Humenchuk investigated the conceptual and innovative approaches of higher educational institutions to the model of training a successful specialist [3]. S.M. Vdovych studied modern educational technologies of the language training of future service specialists [4]. Creativity is especially important for instrumentalist students. Musical art involves creating a musical product in the process of integrating various aspects. Musically creative involves the creation of a high-quality "product" that has artistic imagery and transforms reality in an artistic and figurative form. The student's creative activity is also manifested in the development and translation of foreign musical works. Students consistently assimilate a piece of music, analyse it, highlight artistic details, and then reproduce it. Creative activity is the main aspect in the process of creating a composition.

The purpose of the study is to investigate the effectiveness of interactive methods for developing creative activity of instrumentalist students in the context of distance education. The purpose has identified the relevant tasks:

1. To analyse the theoretical and methodological foundations of using interactive methods in the process of distance education.
2. To determine the features of the development of the creative activity of instrumentalist students.
3. To investigate the effectiveness of interactive methods in the process of distance education.

MATERIALS AND METHODS

The activity of instrumentalist students in the course of educational activities will be useful when effective methods and technologies are identified. The teacher selects the most optimal methods for listening to students, which determine the student's musical abilities, then selects effective teaching methods that contribute to the development of individual perception and reproduction of the melody and harmonious interpretation of the song.

The study is based on the approaches of scientists who have investigated the main conceptual provisions of this problem. The method of analysis and synthesis was applied to define the concept of interactivity in the context of distance education to develop creative activity [5]. Thus, the study analysed the conclusions of researchers regarding the feasibility of using interactive methods in the process of distance education. Observation and description methods were used to determine the educational activity of instrumentalist students using the interactive learning method.

In the course of the study, distance classes were conducted using interactive methods, where students' musical activities were organised. Students created compositions for different seasons based on computer modelling [6]. Computer technologies were used for them, with the help of which they created their compositions in a special piano programme. The melodies were different, some students tried to apply musical notes, and some randomly composed sounds. Interactive methods were used during the lesson. Next, it was analysed to what extent interactive methods affected the level of creative activity.

The level of creative activity was determined by the method of determining creativity [7]. The survey was conducted with students of the Department of musical and instrumental education in the number of 100 people. The methodology involved determining creative abilities based on a survey. The subject received three words in an unknown sound. The task for the subject is to name as many phrases as possible with a combination of these three words [8]. Pre-processing determined the level of creative activity. When processing the methodology of creativity development as interpreted by N.E. Skulish [7], the parameter of personal creative activity development (CAD), level of verbal creativity (VCL), level of non-verbal creativity (NCL); level of creativity potential (CPL) were found

In the course of the study, students were taught remotely using interactive exercises. Classes were held in a ZOOM conference, during which students gathered as a group. The lesson began with the exercise “Acquaintance”, in which students introduced themselves using the phrase “My name is ... today I can create a composition called ...”. Then the teacher voices a new topic. Definitions from the topic are learned using the “brainstorming” method [9]. The teacher asks about a particular concept, and students offer answers. In the course of sentences, the teacher records the correct
sentences on the “blackboard”. Situational analysis is also used, students listen to a piece of music and analyse it according to a certain scheme.

The main components of the creative activity of the instrumentalist student, and the main approaches to the development of creative activity based on the theoretical analysis of scientific and methodological literature, were identified. To determine the effectiveness of interactive learning in the process of distance learning, the method of analysing interactive exercises was used, which is advisable to use in order to develop creative activity. The study of the level of creativity was carried out according to the method of determining creativity [7]. The survey was conducted with students of the Department of musical and instrumental education in the number of 100 people. The sample was formed according to the “Snowball” method. 5 students of the department were involved, and they invited their fellow students. The questions of the methodology were created in Google Forms, and the link was sent to students' emails. The methodology involved determining creative abilities based on a survey. The subject received three words in an unknown sound. The task for the subject is to name as many phrases as possible with a combination of these three words [8]. A number of methods and techniques were used for the study, which determined its results.

RESULTS

As a result of interactive learning, in particular, when creating a musical composition in the process of distance education, students develop intellectual independence, creative search, social and communicative competence [10]. Nowadays, interactive learning has proven its importance and necessity at all levels of the educational system. Its implementation contributes to the creation of additional opportunities for updating the content of training, methods of teaching disciplines and the dissemination of knowledge based on modern multimedia technologies [11]. Interactive learning provides an opportunity to diversify the learning process, which is also a factor in increasing interest in the discipline and motivation. Thus, the introduction of interactive lectures and practical classes in the process of creating a musical composition is a promising area of study, their use improves the quality of education due to such advantages as efficiency, flexibility, and modularity, which meets the requirements of the modern concept of higher education. The introduction of interactive teaching methods in the educational process allows for diversifying classes, creating comfortable conditions for learning, which is the basis for the development of motivation to activate the pedagogical process and makes this model desirable for both students and teachers, and most importantly, develops creative activity.

Creativity in music is the ability to create a composition that is unique [12]. To create such a composition, it is necessary to apply natural abilities, skills, professional competence and social experience, imagination and emotionally high spirits. Creative activity determines the professional activity of an instrumentalist student, since the creation of a musical composition requires a creative approach, originality and non-repeatability of the idea of the work [13]. Creative activity is manifested in the focus on the use of intellectual abilities in the creation of a composition, which determines the content aspect of combining interests and needs to achieve the aesthetic feature of a musical work. Creative activity has corresponding structural elements, namely, a motivational component, cognitive and operational, emotional and volitional, and evaluative [14]. Thus, the creative activity of instrumentalist students has three stages of creating a composition: the emergence of an idea, the presentation of a plan for the implementation of a creative idea, and the implementation of a creative idea in the form of a musical composition. Thus, instrumentalist students realise their creative idea in the process of educational activities.

The modern world requires new approaches to education. Thus, new achievements in the innovation and information space determine new approaches to educational activities, in particular, in the context of distance education. Distance education involves the interaction of a teacher and a student with the direct use of the Internet [6]. Such interaction is already interactive, since the student is involved in learning using online platforms, cloud technologies, and other features of the Internet network. Based on the theoretical analysis, it is determined that internet technologies are used quite intensively in the information society. The Internet overcomes geographical barriers, which saves time. In the course of the study, it was determined that distance learning is a set of the following activities:

- provision of educational material to the student;
- monitoring student progress;
- consultation of student;
- interactive collaboration between teacher and student;
- ability to quickly add new information to the course and correct errors.

The main criteria for using interactive methods are to increase the effectiveness of training in conditions of constant search for the right solutions through the choice of the most effective options [15]. In addition, one of the components of interactive learning is the performance of tasks in a group, in a collective discussion and debate. A survey was conducted before and after distance learning using interactive methods. The survey results were shown in diagrams (Figs. 1, 2).
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According to the results of a survey of instrumentalist students based on the method of measuring creativity [7] before conducting a distance lesson using interactive methods, low indicators were observed for all criteria for the formation of creative abilities of younger schoolchildren. Thus, according to all indicators, the low level of creative abilities of students prevails. The next step of the study was to determine the level of creativity of students after conducting a lesson using interactive methods.

![Figure 1. Indicators of the survey on the method of creativity for conducting interactive distance learning](image)

*Source:* developed by the author

*Note:* the chart columns show the number of people with high, average, and low scores for each of the parameters, respectively

According to the survey results, after conducting a distance lesson with interactive methods, it was determined that students' creative abilities significantly improved in all indicators. Interactive methods of musical composition when practising with students contribute to the development of creativity and creative activity. Distance learning is an alternative to the educational process in the context of information post-industrial development.

**DISCUSSION**

The success of a student's activity is directly related to motivation. Motivational orientation is defined as a person's readiness to learn, master professional activities, which plays a particularly significant role in the future practical competence of an instrumentalist student. Over the past decades, there has been dissatisfaction with the training of future specialists in higher educational institutions. The main reason for the lack of practical skills of students is considered to be a decrease in their motivation due to the deepening of "instrumentalism", "technicalism" in the thinking of teachers, a decrease in interest in the student's personality [16]. L. Vasylenko [16] argues that it is teachers who need to develop students' ability to activate their positive and international experience of obtaining knowledge, see the meaning of life in educational work, and maintain a high level of motivation. The teacher analysed the theoretical foundations of the motivation factor in the context of academic performance and determined that motivation encourages creative problem-solving.
The study of data gave grounds to determine the factors of motivation for achieving the goal. For example, the development of positive motivation of students to perform work is influenced by many factors. G. Vatamanyuk [17] identifies the following: a flexible system of organisation of the educational process, a clearly defined range of tasks and possible ways and means of their implementation, productive cooperation between the teacher and students and in a group of students among themselves, teacher control and self-control, the student's ability to self-evaluation. An important place among the main positive motives in the cognitive independence of students is occupied by students' interest in the future profession, the desire to meet the high level of requirements that society puts forward for modern specialists. Therefore, the main motivating factor in organising the educational process should be the focus on using professionally oriented material and gaining personal experience.

An effective approach to improving professional competence is the use of interactive methods. Interactive learning is a dialogue process in which the teacher and student interact. In contrast to one-way communication in a linear education system, multilateral communication in the context of distance education implies the activity of each subject of the educational process, and not just the teacher, parity, and the absence of repressive management and mentoring measures [18]. This is a higher school strategy, the goal of which is the intellectual autonomy of the student with developed social competence. It is necessary to consider the main aspects of creating and implementing interactive learning in the educational process, which is used at the Department of musical and instrumental education. Training provides an opportunity for pedagogical influence, which encourages students to be mentally active, to show a creative, research approach, and search for new ideas for solving various problems of educational and research activities. H. Padalka defines the main purpose of conducting an interactive lecture and practical lesson in the process of distance education as not only communicating information, but also actively assimilating it by students [19]. The requirements for this form of training are a two-way flow of information or dialogicity, the innovative nature of the information that is presented, and the preparation of students for lectures; constant interactivity, that is, overcoming the one-sidedness of the information flow through pedagogical methods and teaching technologies [20]. The latter include an interpretive dialogue of creating internal motivation for future joint work, providing psychological comfort, and preparing for active search and acquisition of new knowledge.

Therefore, it is better for the teacher to "communicate rather than talk" with the audience during an interactive lesson, which contributes to the creation of a dialogue form of learning. An important factor for a modern teacher is "provoking a smile". Thus, D. Allessie et al. [21] argue that humour promotes a comfortable environment for critical thinking during distance learning. To improve the effectiveness of training, a teacher should attach importance to the final stage – these are answers to control questions and solutions to creative tasks aimed at independence and creative search, where the teacher acts as an organiser, consultant, and adviser. It can be argued that in comparison with other methods, interactive ones are focused on greater interaction of students not only with the teacher, but also with each other, on the dominance of student activity in the learning process [22]. It is advisable to assume that the dominant role of the teacher gives way to the activity of students, and the task of the teacher is to create conditions for their initiative. It regulates the educational process and deals with its general organisation, defining the educational direction (prepares the necessary tasks in advance, formulates questions or topics for discussion in groups), controlling the time and order of implementation of the planned work plan, providing consultations, explaining complex deadlines, helping in case of serious difficulties.

As a result, it was proved that if interactive methods are used in the process of distance learning, it is possible to achieve a significant increase in the effectiveness of the educational process by purposefully activating thinking, when the student is forced to be active throughout the lesson, show independence, creativity in performing tasks. The study suggests that the introduction of a number of interactive techniques when conducting distance learning with instrumentalist students activates individual or group work of students. For example, instead of asking a question and asking the first person to raise their hand, a teacher can offer to discuss an opinion with a neighbour, and only then give the opportunity to answer the question to the person who wants to, thus allowing all students to participate in the discussion of the question asked.

Thus, in the course of the study, it was proved that motivation is the most effective factor of creative approach in solving educational goals, which, in turn, is the main factor of successful education.

CONCLUSIONS

A study was conducted to determine the effectiveness of interactive teaching methods in the process of conducting distance learning with instrumentalist students. The main theoretical foundations of using educational technology of interactive methods for the development of creative activity are analysed.

Based on the conclusions of researchers on the importance of distance education in the context of the development of innovative technologies, it is determined that interactive technologies most effectively form creative problem solving, and therefore, contribute to increasing the level of creative activity among instrumentalist students. It is determined that interactivity promotes creativity. A study was conducted on the development of creative abilities in instrumentalist students based on the method of measuring creativity, which determines the level of creative activity, and compared the indicators of creative abilities in instrumentalist students before and after classes.

Based on the study results, it can be argued that interactive methods have significantly higher indicators
of creative abilities in organising musical activities. A form of training using information and communication technologies that provide interactive interaction between teachers and students is the essence of distance learning. Modern life is being transformed into a digital environment, so there is a need to have knowledge and skills in using information and communication capabilities. Interactive teaching methods stimulate the satisfaction of the student's interests, which contributes to the increase of their self-esteem, encourages the improvement of self-organisation, and most importantly, determines the creative approach to solving problems, which is important for instrumentalist students in the conditions of modern education. This approach increases the professional competence of future specialists in their practical activities.

Summarising the above, it can be argued that interactive methods contribute to the development of the effectiveness of creative activities of instrumentalist students in the context of distance learning.

In the future, the authors will consider in more detail the specific methods of interactive learning and the features of their interaction during the training of instrumentalist students, determine the most effective individual methods and their combination, introducing them into the educational process and increasing the sample of the experiment.

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Інтерактивні методи навчання як засіб розвитку творчої активності студентів-інструменталістів в умовах дистанційного навчання

Анотація. Актуальність проблеми полягає в потребі адаптувати музичне мистецтво до умов дистанційної освіти. Стаття висвітлює основні підходи щодо реалізації інтерактивних методів навчання студентів-інструменталістів як ефективний засіб розвитку творчої активності в умовах дистанційного навчання. В умовах пандемії навчання трансформується у віртуальне середовище, зокрема дистанційний спосіб проведення навчальних занять. Така особливість вимагає окремого педагогічного підходу до формування умінь володіння музичними інструментами. Тому процес освіти потребує оновлення та модернізації. Метою дослідження було визначити методи інтерактивного навчання студентів-інструменталістів. Обґрунтовано теоретико-методологічні підходи щодо використання інтерактивних методів навчання, зокрема визнано сутність інтерактивного навчання, визначено особливості проведення дистанційного навчання та виокремлено методи дослідження творчої активності студентів-інструменталістів. Розкрито поняття інтерактивності та творчості. Проаналізовано особливості дистанційного навчання, зокрема визначено ефективні освітні технології, методи навчання, визначені хмарні технології як найбільш ефективні. За метою дослідження творчості та креативності студентів-інструменталістів була використана методика визначення творчості. Результати дослідження стали підставою для ефективного впровадження методів інтерактивного навчання в процесі організації дистанційних занять зі студентами-інструменталістами. Практична значущість полягає у виокремленні найбільш ефективних інтерактивних методів формування творчості та укладення відповідних вправ. Також обґрунтовано доцільність використання інтерактивних методів на основі наукових розвідок дослідників як найбільш ефективних у процесі дистанційного навчання

Ключові слова: інформаційне суспільство, освітні технології, професійна компетентність, ефективність освіти, постіндустріальний світ

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