

on whose behalf students will perform a song, ways to convey emotions through gestures and facial expressions during performance, working with the audience through gaze, body movements. It is important to note that the audience's demands on the artist are growing, so it is necessary in further research to analyze techniques and exercises aimed at combining choreography with vocals on stage.

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## **THE ROLE OF ARTIFICIAL INTELLIGENCE IN MUSIC LESSONS**

Artificial intelligence is rapidly permeating all areas of our lives, including education. One of the most exciting and promising areas is music education. AI technologies have the potential to significantly transform the approach to music instruction, providing new tools for students and teachers. In this article, we will explore the various roles AI can play in music lessons and its impact on the learning process. One of the most significant advantages of AI in music education is the ability to personalize the learning process. Each student has unique abilities, interests, and learning pace. AI can analyze data about each student, such as skill level, genre preferences, and learning speed. Based on this information, AI can tailor the curriculum, suggesting assignments and exercises tailored to individual needs.

For example, if a student is struggling with a particular instrumental technique, AI can suggest additional exercises to practice it. This allows each student to receive support in the areas where they need it most, significantly improving learning effectiveness. Moreover, such personalization can help create deeper and more meaningful connections between students and music, which in turn can increase motivation for learning.

**The purpose** of this article is to justify the use of artificial intelligence in the modern educational process (using a music lesson as an example).

**The main part.** Furthermore, AI can track student progress over time and adjust the curriculum based on their achievements. This not only makes the learning process more dynamic but also allows students to see their achievements, which boosts their confidence and drive for further development. AI can also act as a virtual mentor, providing instant feedback on student performances. Using sound recognition technologies and audio analysis, AI can evaluate student performance based on several criteria: accuracy, intonation, rhythm, and other aspects. This approach allows students to more quickly identify their weaknesses and work on them.

For example, if AI detects that a student frequently makes rhythmic errors, it can suggest specific exercises to improve them. This ability to receive real-time feedback makes the learning process more interactive and effective. Students can record their lessons and analyze them with AI, allowing them to better understand their mistakes and find ways to correct them. Furthermore, such a feedback system can be integrated into distance learning platforms, making it accessible to a wider range of students. Students can receive recommendations for improving their performances anytime and anywhere, significantly expanding their learning opportunities.

Creating original musical works is an important part of music education. AI can help students develop their creativity by suggesting ideas for melodies, chords, and arrangements. Programs have already been developed that use AI algorithms to generate musical compositions based on specified parameters.

Students can experiment with different styles and genres, drawing inspiration from AI. This not only develops their musical skills but also helps them develop their own personal style. Furthermore, such tools can be useful for composers and arrangers, allowing them to discover new ideas and approaches to music creation. For example, students can use AI to generate new melodies based on their favorite pieces or styles. This can help them understand the structure of a composition and learn to create their own pieces. Furthermore, using AI in music creation can reduce barriers for aspiring composers, allowing them to focus on the creative process.

Music theory is an important component of music education. AI can be used to create interactive music theory lessons that make learning more engaging and accessible. For example, with AI-powered games and quizzes, students can learn notes, chords, and musical forms in an interactive format. These approaches help students better grasp theoretical concepts, as they can apply their knowledge in a game-like format. Furthermore, AI can adapt the difficulty of assignments based on the student's progress, making learning more effective. Students can take quizzes and receive instant results, allowing them to quickly identify and improve their weaknesses.

It's also important to note that using AI in music theory instruction can

foster critical thinking in students. They will learn not only to memorize facts and rules but also to apply them in practice by analyzing musical pieces and creating their own compositions. Another interesting role for AI in music education is the ability to act as a virtual accompanist. Students can play along with AI, which will adapt to their performance, creating an ensemble effect even in the absence of other musicians. This is especially useful for those learning to play an instrument and want to develop their skills in a group setting.

This is especially important for beginning musicians who may experience anxiety about performing in front of an audience. Furthermore, the ability to play with AI can be particularly useful for students studying solo performance or composition. They can experiment with different accompaniment styles and find the most suitable for their compositions. AI can also assist students in analyzing musical works. Using data processing algorithms, AI can identify structures, harmonies, and stylistic features of various compositions. This allows students to gain a deeper understanding of music and develop analytical skills.

For example, students can use AI to study works by famous composers, analyzing their style and techniques. This not only deepens their understanding of music but also helps develop critical thinking and analytical skills. Students can explore various aspects of composition: from melody to harmony and rhythm.

Furthermore, this approach can be useful when preparing for exams or competitions. Students will gain a deeper understanding of the works they perform or analyze, helping them better prepare for performances. Modern technology makes it easy to access a vast library of educational materials, video tutorials, and audio recordings. AI can help organize these resources and provide students with the most relevant materials based on their needs and interests. With AI, students can find relevant lessons on specific topics or musical styles, greatly simplifying the information search process and making learning more flexible. For example, if a student wants to learn jazz improvisation or baroque composition, AI can suggest relevant resources.

Artificial intelligence (AI) was proposed by John McCarthy in 1956 at a summer school in the Dartmouth Mathematics Department. Artificial intelligence is the science of creating intelligent machines. Since then, this definition has been applied both to intelligent machines and to the science and technology of their creation [1, p. 203]. Since its inception, AI has undergone an entire evolutionary era: from relatively simple reactive machines based on elementary algorithms to the level of self-aware artificial intelligence that previously existed only in science fiction. It is important to note that the introduction of AI should not be perceived as a threat to teachers. On the contrary, it can become a powerful tool to support their work. Teachers will be able to use data on their students' academic performance to create more effective teaching methods and individual development plans.

Recently, in pedagogical science, both in general and special education, there has been a growing interest in the study of individual creativity [2, p. 15].

According to the author, the development of the creative potential of the younger generation is most effectively achieved through music lessons, since the potential of musical art, by combining various types of creative activities, is capable of maximally developing and stimulating the creative thinking of students. Musical art is an integral part of human spiritual life. Music is a direct source of the harmonious development of the student's personality. The main objectives of music education include the following:

- developing students as individuals capable of independent creative activity, activity, and initiative;
- creating conditions for the harmonious development of students;
- developing in students a desire to master new things, self-knowledge, self-expression, and active participation.

Through music, the student's personality better understands themselves and the world around them, becomes aware of and feels what is happening, activates associative thinking and the desire to learn new things, which, in turn, contributes to self-development, as well as strengthening a sincere interest in knowledge and education. The products of AI activity, by influencing musical thinking, aesthetic taste, preferences and cultural level of a person, open up new possibilities for improving the forms and methods of teaching, the content of music education and the specifics of professional training in music performance also contribute to the renewal of library collections and the organization of cultural leisure.

Given the significant contribution of musical art to the development and improvement of individual life skills in modern times, research into the use of artificial intelligence technologies in music education for the comprehensive development of students and the development of their creative skills determines the relevance of this research topic. First, let's consider the emergence and application of artificial intelligence technologies in education.

Based on the classification proposed by Naveen Joshi, it can be said that humanity is currently in a transitional stage from narrow artificial intelligence to general artificial intelligence. The second type of AI differs from the first in that it is capable of independent thought and action, similar to humans. Such systems are still under development – fortunately or perhaps unfortunately.

The rapid development of artificial intelligence has led to significant changes in many areas, including education. In a rapidly changing world, the traditional, single-line approach to learning is gradually losing its relevance. Students' learning styles, abilities, and aptitudes vary. In this regard, AI-based educational technologies are capable of adapting teaching methods and content to the individual strengths, weaknesses, and preferences of each student, meeting their personal educational needs. Currently, artificial intelligence is actively used in education as a tool for performing various functions. Let's consider the main advantages of using artificial intelligence (AI) in education.

1. AI acts as a teacher's assistant, significantly facilitating and automating their work. It can evaluate student work, assign grades, etc. This frees up time for teachers to conduct research and collaborate with students.

2. The use of AI in the educational process allows for the analysis of all student actions in order to personalize their educational path and customize individual parameters when learning new material. It provides teachers with the opportunity to study scientific materials from researchers from different countries, and students with the opportunity to gain knowledge remotely. This contributes to expanding access to education for all social groups. Despite the obvious advantages, the use of artificial intelligence for educational purposes also has a number of disadvantages. The main ones are:

- the high cost of implementing AI technologies in education and the difficulties in ensuring the functioning of such systems;

- a shortage of specialists capable of developing and implementing AI in educational processes;

- over time, there is a risk of reducing creative thinking in students who resort to using AI too frequently. Excessive use of AI may lead to people becoming incapable of thinking independently and invest their own intellectual effort in their work.

The positive effects of using digital technologies, including artificial intelligence, in music education include:

- diversity in the presentation of educational materials in music lessons;
- promoting the development of students' individual cognitive abilities;
- impact on the development of communication skills, socialization, and creativity. For example, in music lessons, a teacher can use chatbots that provide advice on learning musical instruments or conduct mini-lessons.

Furthermore, the popular neural network ChatGPT can be used to prepare subject instructions, develop lessons, and search for music-related programs. One way to use AI in music lessons is to create personalized learning programs. Using machine learning algorithms, AI can analyze the individual needs of each student and offer unique assignments and lessons tailored to their skill level and musical preferences. This contributes to the more effective development of students' creative skills and increases their motivation to study.

Another way AI technologies are being used in music lessons is to create innovative tools for creativity and performance. For example, computer vision and sound processing technologies make it possible to create virtual instruments that respond to student movements and generate corresponding sounds. This makes learning to play musical instruments engaging, interactive, and fun. Furthermore, artificial intelligence can be used to analyze musical works and assist with composition. Modern algorithms for musical pattern recognition allow AI to analyze the structure of pieces and suggest new ideas for developing musical themes.

AI technologies can be used in music lessons for the following functions:

- musical creation and improvisation. AI can help students compose their

own musical works by suggesting templates or even creating music based on specified parameters.

– music theory teaching. AI can automatically test students' theoretical knowledge of musical literacy. This can be done through interactive assignments or exercises.

– tutoring for students with special educational needs. AI helps develop adapted programs for children with special needs. For example, AI tools can be used to develop musical skills for children with hearing or motor impairments, tailored to their individual needs. The use of AI technologies in educational institutions offers great potential for developing students' musical skills and creativity. Music lessons based on innovative teaching methods not only help them better understand music but also develop skills in creativity, composition, and musical analysis. This opens up new opportunities for students who plan to pursue a career in the arts.

**Conclusion.** It's important to remember that the use of technology artificial intelligence in music lessons should not replace human interaction and the emotional connection between teacher and student. While AI can be an effective tool in education, it cannot completely replace the role of the teacher and mentor. It should remain an auxiliary tool that helps teachers achieve the holistic development of students and makes the learning process more productive and engaging. The use of artificial intelligence in music lessons is a promising area of modern music education. By combining traditional teaching methods with innovative technologies, teachers can create more effective and engaging lessons, opening new horizons for the development of students' musical abilities.

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### **SACRED MUSIC OF BELARUS AND CHINA**

Sacred music serves as a significant carrier of religious culture, regional culture, artistic creation, and human beliefs. It is a core medium that embodies religious thoughts, ritual practices, and national sentiments. It is one of the important topics in cross-cultural research in musicology and also reflects a nation's cultural psychology and historical memory like a mirror.

Under the influence of the globalized cultural context, comparative studies on sacred music across regions and cultures have become an important topic