OPINION

by Prof. D.Sc. Georgi Velkov Kolev

for a dissertation on the topic:

"MUSIC AND PEDAGOGICAL TECHNOLOGY FOR CREATING AN ALGORITHMIC COMPOSITION"

of **Aleksandar Lyubomirov Baychev**

for the award of an educational and scientific degree "Doctor" in professional field 1.3.: Pedagogy of teaching in.... (Methodology of teaching music)

The materials and documents presented by Aleksandar Lyubomirov Baychev are in accordance with the Law for the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of the "Konstantin Preslavsky" University of Shumen.

The dissertation has a volume of 168 standard pages. Of these, 135 are main text exposition, 9 pages literature and 24 pages appendices. The bibliography includes a total of 156 sources, 99 of which are in Latin.

The work is structured in an introduction, four chapters, a conclusion, a list of references and an appendix that contains tables, diagrams and 87 student compositions created during the experimental training.

The doctoral student focuses on a topical issue for music education related to the application of information technology in music education - the use of specialized software for creating algorithmic music.

The introduction justifies the choice of the topic, the topicality and the practical significance of the researched problem.

In the first chapter a theoretical analysis of the contemporary literature on algorithmic composition is made. The essence, the main characteristics and the historical development of the algorithmic music are considered. The main ways to create an algorithmic composition are presented. Special attention is paid to

some methods for creating algorithmic music - L-systems, cell automation and fractal music.

At the end of the first chapter, summaries related to the algorithmic composition are made.

The second chapter presents the setting of the research, the organization and the methodology of the research. A characteristic of the music-pedagogical technology for creating an algorithmic composition from the point of view of its possibilities for application in the teaching of music students is made. The object, the subject, the goal, the tasks and the hypothesis of the present research are precisely and precisely formulated. The criteria and indicators for assessing the knowledge, skills and competencies (KSC) of students are presented.

The doctoral student develops scientifically based and practically applicable music- pedagogical technology for creating an algorithmic composition, designed for training students who do not have specialized musical training. This technology is in line with the State educational standard for general education in music and is aimed at building key competencies in students. The application of this technology provides an intensive learning process in which students master the knowledge, skills and competencies to work with a new type of software tools and create a musical composition.

In the third chapter, the doctoral student discusses the software tools, knowledge, skills and competencies required for the implementation of algorithmic composition. The methodical steps that students must follow when creating a musical composition are described in detail.

In the fourth chapter the results of the initial and final stage of the experimental training are revealed, analyzed and compared.

The presented data from the conducted experiment show that the applied methodology is working and gives its results. These results establish the effectiveness of the applied music- pedagogical technology, which determines the achievement of the goal and tasks and confirms the hypothesis of the present

dissertation. These achievements are the result of the training, which uses a new type of technology that is easy to learn and stimulates students to actively participate in the learning process. The reason for this statement is the change in the level of the studied students and the presence of positive, qualitative changes.

The developed dissertation presents an innovative technology for teaching students. Using this technology, students not only master KSC to create an algorithmic musical composition, but also improve their digital and cultural competence, as well as their skills for expression through music. According to the doctoral student, the use of modern technologies (mobile and cloud) stimulates students to actively participate in the learning process. Working with the generator is pleasant, entertaining and therefore fascinates students.

The conducted experimental training shows the existence of an effective music-pedagogical technology, which has theoretical and practical significance. Therefore, the doctoral student correctly presents at the end of the dissertation scientific contributions in two aspects - theoretical and practical.

The contribution of the greatest theoretical significance is the development of music- pedagogical technology, in which students acquire knowledge, skills and competencies to create an algorithmic composition and work with a new type of music software.

The practical significance is expressed in the application of music-pedagogical technology in music education, as a result of which students create a music product, acquire knowledge, skills and competencies in music, music art and modern technologies, gain subjective musical experience.

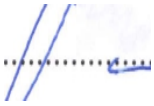
The abstract reliably presents the content of the dissertation, scientific results and contributions from the research.

Three publications of the doctoral student on the topic of the dissertation are presented. Summarizing what has been said so far, I believe that the dissertation is scientifically based, has a methodological and practical application. The topic

is up-to-date, innovative, in line with the latest trends in music education to provide modern and high-tech education. These contributions are convincingly presented and are important in the field of music pedagogy.

All of the above gives me grounds for a positive assessment of the work done and the dissertation and convincingly recommend to the esteemed jury to award Aleksandar Lyubomirov Baychev ons educational and scientific degree "Doctor" in professional field 1.3.: Pedagogy of teaching in.... (Methodology of teaching music).

20.04.2022 Opinion by:



(Prof. D.Sc. Georgi Kolev)