

Hanoi, July 13, 2026

NEW CONTRIBUTIONS OF THE THESIS

Candidate's full name: Luong Minh Tan

Cohort 7 (2022 - 2025) - Specialization in Theory and Methods of Music Teaching.

Code: 9140111

Topic: *Application of Information Technology in Teaching Music Education Students at the National University of Arts Education*

Scientific supervisor: Assoc. Prof. Dr. Nguyen Thi To Mai

Training institution: National University of Arts Education

New contributions of the thesis:

1. In theory

- To systematize and supplement the theoretical basis on the application of information technology in teaching for university-level music teacher training in the context of digital transformation, clarifying the concepts, characteristics, roles, components, and factors influencing the application of information technology in teaching for students majoring in Music Education.

- Propose a five-level framework for the application of information technology in teaching, ranging from supporting traditional teaching to digital transformation in teaching, suitable for the specific characteristics of music teacher training in Vietnam. This framework can be used as a basis for evaluating the level of information technology application in teaching activities of training institutions.

- Develop a process for applying information technology in teaching for Music Education students, tailored to the characteristics of each course group,

combining the use of specialized software, digital learning materials, and practical music activities.

2. In practical terms

- To conduct a relatively comprehensive survey, analysis, and evaluation of the current state of information technology application in teaching among lecturers and students in the Music Education major at the National University of Arts Education; and to conduct an additional survey of general music teachers to clarify the practical requirements for training digital skills for music education students.

- Proposing a system of measures to apply information technology in teaching for Music Education students in a way that develops professional competencies, including: applying specialized software in teaching; building a digital music learning resource database; adjusting the content of the specialized Informatics course; and innovating teaching methods to promote student engagement combined with digital tools and artificial intelligence.

- To experiment with building and utilizing a music education database on the TechMusic website platform to support teaching, learning, and self-study; thereby demonstrating the ability to create digital learning materials suitable for music teacher training conditions in Vietnam.

The results of the pedagogical experiment demonstrate the feasibility of the proposed measures, contributing to enhancing students' information technology application skills, improving learning efficiency, and meeting the requirements of educational reform in the context of digital transformation.

The research findings of this thesis are not only significant for music education training at the National University of Arts Education but can also be used as a reference and applied to other music teacher training institutions and similar training programs in the process of digital transformation in education.

Doctoral Supervisor

Doctoral student

Assoc. Prof. Dr. Nguyen Thi To Mai

Luong Minh Tan