Creation of Multimedia Guides to the History of Music as a Means to form Professional Competence of Future Music Teachers

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Abstract. The article exposes an urgent problem of contemporary university education, specifically the one of designing of electronic manuals on artistic disciplines. It provides redefinitions of the terms nomenclature ("multimedia aids", "electronic manual") and the requirements for the modern multimedia aids of teaching. The authors present the electronic textbook "Russian Music: from Ancient Times to Early 20th Century", define pedagogical objectives determining the necessity to introduce the textbook to the study of the history of music. Consequently, the structure of the manual and various possibilities of its use in teaching music students of both pedagogical and professional specialties are being analyzed.

Keywords: multimedia textbook, history of music, Russian music.

Key terms: teaching process, ICT component, development, integration, standardization process

1 Introduction

The structure of professional competence, essential for future music teachers, has recently supplemented with such a component as informational competence. In Ukrainian educational studies of the last decades the idea was asserted that teacher's informational competence is a component of the teacher's general pedagogic culture, being one of the most important indicators of teaching skills and their compliance with international standards in higher education [1]. Use of information and communication technologies (ICT) in teaching practice proved their advantages over traditional methods, since the former are more efficient and correspond better to the principles of individualization and differentiation, intensification and effectiveness. A modern music teacher has to acquire skills of ICT use, provide multimedia aids on classes, create his own multimedia issues, maintain software programs for music education.

It must be mentioned that nowadays there is already a great number of multimedia products of educational and informative nature, among which the most interesting are the following:

- multimedia encyclopedias of general cultural character (World Artistic Culture, a software study book, aimed at supporting the same academic course for the 10th and 11th forms at the schools of Russian Federation; numerous multimedia encyclopedias dedicated to the masterpieces in different kinds of art, produced by private company New Media Generation in association with Cyril and Methodius Company); Sonata: World Culture in the Mirror of Music, created by L. Zalesskiy and the company Three Sisters; Encyclopedia of Theater, worked out by the electronic publishing house Cordis & Media; Encyclopedia of Foreign Classic Art, designed by the companies Interactive world and KOMINFO, as well as many other resources);
- multimedia projects aimed at learning music in different aspects: Music Class, a music trainer for children, designed by New Media Generation Company; electronic Piano School, created by S. Pridvorov; Music Trainer, worked out by V. Belobrov and Adept Company and IDDK; Music Flash Composer, providing the possibilities to improvise with timbers of several instruments, etc.;
- numerous special programs for music ear training, designed by foreign authors, which propose exercises aimed at discrimination of music intervals, chords, tonalities, and sequences of chords, rhythmic exercises, etc.: Ear Power, produced by the American company Fast & Soft; the program Earope, designed by the Danish company Cope Media; the program Auralia, issued by the Australian company Rising Software, as well as other software programs;
- encyclopedias of various musical instruments, which can be used in teaching music for different age groups: Terra Musicalis: Virtual Museum of Musical Instruments, designed by Hyper Method, presenting a unique collection of Saint Petersburg Museum; Encyclopedia of Musical Instruments, produced by company KorAx, which demonstrates various instruments, their structure, peculiarities of their acoustics;
- educational program Musical Art for primary and secondary school, created on the basis of the music curriculum of comprehensive school, so every lesson presents the corresponding topic from the curriculum, provides pictures, texts, animation, video and audio clips, pieces of music, songs, and their karaoke versions.

However such a variety of multimedia production which is useful for learning music at comprehensive school is not efficient for the professional training of music teachers. At the same time we have to mention that certain experience has already been gained concerning creation of software study aids in certain technical disciplines, foreign languages, informatics, etc. Theoretical consideration was given to the requirements to electronic educational editions. O. Krasovsky [2], V. Madzigon, V. Lapynsky [3], and other Ukrainian authors worked out a set of principles that determine structuring of such texts, and analyzed pedagogical aspects of designing and implementation of the electronic teaching aids.

The aim of the current paper is to present the textbook on the history of music as well as to analyze methodological approaches to its use in training future music teachers. The authors of the textbook are L. Gavrilova, Ph.D., and V. Sergiyenko, Doctor of Education. The textbook on the history of musical art *Russian Music: from*

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Ancient Times to the Early 20th Century was created as the basic studybook for the course *History of Russian Music*, obligatory for the students of Slavyansk state Pedagogical University (specialty 6.010102 – Primary Education, specialization: Music). The textbook can be used not only in the system of art education in pedagogical universities, but also in professional music education, since similar courses are offered in music schools and conservatories.



Fig. 1. The cover of the textbook.

The multimedia training product on the history of musical art *Russian Music: from Ancient Times to the Early 20th Century* is an electronic textbook which in contrast to the traditional printed editions contains visual and audio components. The textbook is meant to be used at university, so its structure and content follow the requirements for the design of electronic textbooks for high school [4, 5] and include:

- a management system, providing means of structuring the educational material, tests and feedback;
- methods that accelerate the learning process, such as hypertext and hypermedia;
- graphical tools that provide effective use of visual aids;
- test system that enables to control students' knowledge.

Textbook materials are presented on 2 discs: the first DVD-ROM contains the textbook itself and the second is a compilation of music for individual listening. We should also mention the hardware requirements needed to install the tutorial, which are as follows:

- Processor 1000Mhz (recommended 2000 Mhz);
- Memory: 512 Mb (1024 Mb);

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- Hard Disk 3 Gb of free memory;
- Operating system: WindowsXP, Vista (32/64) Windows 7(32/64-bit).

It is important to consider the structure of the textbook and the possibility of its use in training future music teachers.

Installation of the textbook is traditional: one should insert the CD into the CD drive then select "autorun.exe" in the menu, which will lead to a startup tutorial.

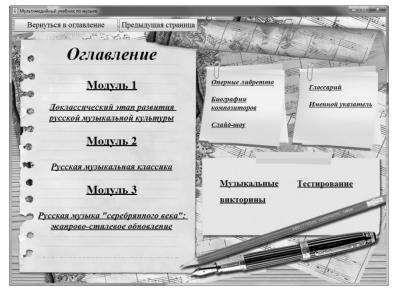


Fig. 2. Menu.

The course of the history of Russian music covers the period from ancient times to the early 20th century that is from the early Middle Ages to the so called Silver Age of music in Russian culture. The textbook is opening with the Menu and it is structured as follows:

- lecture (a text with hyperlinks to the glossary, index of names, biographies, opera librettos);
- multimedia slide show;
- glossary (dictionary of musical terms);
- index of names;
- opera librettos;
- biographies of composers;
- musical quiz in two variants that is aimed at controlling students' knowledge of certain compositions;
- tests in two variants.

Music for individual listening is presented on a separate mp.3 disk. Students are offered to listen to the following works by Russian composers:

 a sufficiently large collection of Russian sacred music (from ancient chants to the works by anonymous composers of Synodal School of the late 19th century, and the finest examples of sacred music of Sergei Rachmaninoff);

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- masterpieces of Russian chamber and vocal music;
- works of Russian musical theater: the most famous operas and ballets that are traditionally studied in the course of the history of Russian music (Glinka's Ruslan and Lyudmila, Ivan Susanin, Dargomyzhsky's Rusalka, Mussorgsky's Boris Godunov, Borodin's Prince Igor, Tchaikovsky's Eugene Onegin, Queen of Spades, Stravinsky's Petrushka and The Rite of Spring);
- the best examples of instrumental mysic of Russian composers (symphonic works by Glinka, Borodin, and Scriabin, Tchaikovsky's symphonies, Rachmaninoff's piano concertos, separate instrumental miniatures and cycles).

The Menu opens navigation to any section of the textbook. Lectures are set in the textbook according to the historical principle. Culturological material is divided into 3 modules and 7 units.

Module 1. Pre-classical stage of development of Russian music: from ancient times to the late 18th century).

Module 2. Russian classical music (from Glinka to Tchaikovsky).

Module 3. Russian music of *Silver Age:* genre and style transformations (Rachmaninoff, Stravinsky, Scriabin, and others).

Texts of lectures, modules and clusters were composed with the reference to modern printed books on the history of Russian music (I. Rapatsky *History of Russian Music: From Ancient Rus' to the Silver Age*, Moscow (2001) (In Russian). In addition we used other books (E. Orlova Lectures on the History of Russian Music, Moscow (1979) (In Russian); B. Asafiev Russian Music of 19th and 20th Centuries, Leningrad (1978) (In Russian); T. Levaya Russian Musical Culture of the Early 20th Century in the Context of Artistic Trends of the Era, Moscow (1991) (In Russian)), as well as multi-volume history of Russian Music edited by A. Kandinsky, and Y. Keldysh, Internet sources (such sites as mus-info.ru,classic-music.ru,belcanto.ru, etc.). Glossary that includes 262 items and Index of names including 335 items have interesting selection of concepts from theory of music, music history and general cultural context. Informative sections of the book are supplemented with the biographies of 25 Russian composers, and 11 of the most famous opera librettos.



Fig. 3. Pages from Glossary (Spiritual Verse), and Index (Anna Akhmatova).

Slide show serves as a multimedia application to every topic, including widely available photographic materials, reproductions of paintings, audio fragments of music compositions and video clips of operas, ballets, concerts.



Fig. 4. Pages of slide show.

Special attention is given to the system of means aimed at controlling students' knowledge of theory and musical compositions. Traditionally while studying the course of history of music, students are supposed to penetrate the world of music through listening to numerous pieces of music. The multimedia textbook provides students with an opportunity to listen to the set of compositions , and use quizzes to test their knowledge:

- to identify certain audio fragment, to name the author, the composition and the part the fragment was taken from (an act in opera, a part of symphony);
- to choose the right answer among the given variants.

Passing each stage of the quiz, students can examine the record of their answers, compare them with the right options and find out the level of their knowledge. In addition, the textbook contains an actual test at the end of each unit, students are offered two variants of closed test, so they have to choose one ore more correct answers.



Fig. 5. Musical Quiz and Test.

The introduction of electronic textbook to the process of studying the history of music contributes to the solution of the following educational objectives:

- to study Russian musical culture as a whole, which absorbed spiritual experience of the nation and reflected religious, philosophical, aesthetic and moral principles of certain historical periods;
- to learn the main styles and trends in the Russian music of the period from ancient times to Silver Age, to get knowledge of the origins and the main stages of the evolution of Russian culture;

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- to specify the features of different musical styles and trends in Russian music on the basis of certain compositions by the great Russian musicians;
- to develop feelings, emotions, imagination, and artistic abilities of students;
- to refine their artistic and aesthetic tastes, to bring up the need in personal assessment of values;
- to enlarge the scope of their thinking, to make them create the cultural space of their own.

The multimedia textbook on the history of music *History of Russian Music: from Ancient Times to the Early 20th Century* can be used in various spheres of higher education.

First, it can be used for lectures on the history of Russian music, when the lecturer's narration is followed by presentations of audio and video clips, photographs, reproductions of paintings, etc. Multimedia slide show can accompany the given facts of the composer's life and work, it can illustrate information about the features of the musical culture of certain age, exemplify specific traits of certain musical trend, etc. The lecturer has an opportunity to select the necessary information in accordance with the audience comprehension. The textbook can be used to introduce the new material as well as to fix and repeat the items already known to the students, it can be useful on practical classes, and at the stage of assessment of students' knowledge.

Students can work with the textbook in the classroom, the computers being provided, and independently as well. The textbook can be used:

- as a source of the following information: lectures, slides, audio and video clips, glossary. index of names, biographies of Russian composers;
- as a visual aid: the variety of multimedia components helps to get acquainted with the numerous masterpieces of art, sculpture, architecture, as well as to listen to the episodes of musical compositions, to watch the fragments of operas and ballets;
- to exercise in self-listening, and preparation to the quiz;
- to write papers and reports;
- to get ready for the practical classes;
- to reduce the gaps of knowledge in the history of Russian music;
- to estimate the level of knowledge.

The textbook can be used in a classroom with one computer and a projector, as well as in the computer lab.

Use of multimedia provides additional possibilities of presenting information on the history of music:

- the possibility to see the visual details of paintings, historical documents, old editions of music, etc.;
- the possibility to use hypertext and hypermedia links that simplifies the coordination of student's independent work;
- free navigation through the content, the direct access to the menu of the textbook.

The use of the multimedia textbook for the course History of Russian Music in Slavyansk State Pedagogical University allows to summarize the following:

 the use of multimedia aids based on simultaneous visual and auditory perception of the material, greatly increases the interest of students to the subject and study in general;

- students' independent work with the multimedia electronic textbook contributes to the development of cognitive abilities, stimulates the desire for self-improvement, awakens their imagination and creative thinking, enriches their professional potential;
- the use of ICT in the process of musical education determine the systemic study of phenomena of art and reality, sustains the correlation between different sciences and the sphere of art and culture.

All of this form the firm basis for development of professional competence of future music teachers and determine the way of becoming of a future musician, ready to face the challenges of the contemporary civilization.

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