THE NEED FOR INTEGRATION OF MODERN E-METHODS IN STUDYING OF THE SUBJECT MUSICAL EDUCATION IN R. MACEDONIA

Abstract

The emergence of internet, mobile phones and other communication technologies at the beginning of 1990's drastically reflected on all segments of everyday life. Such dependence upon technological revolution imposed the need for transformation of the education in Europe and beyond. With that aim, the new information - communication technologies (ICT) in parallel with the old are applied for extension of the traditional academic curriculum. These technologies have the opportunity not only to influence, but also to fully reconstruct the system of education. In that way are also changed the competencies of educators themselves, who have to be trained in order to use the new technological tools. This implies interdisciplinary connecting of several scientific fields by redefining of the didactic -methodological approaches. Since the year of 2000, R. Macedonia is afflicted by the Lisbon strategy with the reforms in the field of education through the expert training and operations with the use of ICT. The goal is to come to closer terms with the European quality and practice of e - learning supported by the new technological achievements. This initiative is also being implemented in the primary education by introducing of the project e-School through digital educational software, for example Tool Kid in individual teaching subjects. In this computer program the subject of musical education is applied by topics Listening to music, Basics of music literacy, Singing and Children’s creativity. The introduction of the computer in the primary education opens the need of changing the teaching program at the faculties that produce pedagogical teaching staff. It imposes mandatory study of the information - communication technologies with the use of different software and hardware applicable in the instructional contents provided by the subject of Musical education.

Key words: Musical education, ICT, modern e-methods, ToolKid

Introduction

Information and communication technologies (ICT) through the wireless Internet (Wi-Fi), cellular phones and other communication technologies in the early 90's dramatically affected all segments of the modern life. This results in daily multiplying of new categories that expand the acronym ICT and enable essentialy for computers and network to expand human capabilities to unprecedented proportions.

These technologies quickly affected the education and became one of the priority actions that initiated a major educational reforms worldwide. Initiation, introduction and penetration of ICT have become the largest mission in the education policy because of this paradigm shift in teaching methodology. In that way, learning and education (e-learning) have become impossible to think of without a computer, web pages, virtual opportunities (VLE) and digital collaboration. Many educational contents already exist, in the form of text, image, animation and so on, that are transmitted over the Internet, intranet / extranet, audio or video recordings, satellite TV and CD ROM. Thus, the possibilities of ICT increasingly transcend the boundary of formal and informal education of which the most specific
example is music. With just one click of the computer, regardless of the degree of musical prior knowledge and creativity, all practical and theoretical components of music can be used, such as playing instruments, composing, reproduction and promotion of individual creation etc.

Such dependence on the technological revolution imposed the need for certification and verification of the quality of ICT education. Exercises and courses have become extremely important in the promotion of e-skills and competences that are followed by professional advices on IT communities, like CEPIS.

R. of Macedonia by acquiring the candidate status for membership in the European Union assumed responsibility for the adjustment of the totality of social relations (legislation, economic system, educational system, judicial system, etc.) in order to live in the big community with other nations in Europe. Also, R. Macedonia has adopted all decisions regarding the inclusion of the country in European policies of education and research, and thus adopting its own educational and research system to these policies, as well as active involvement in programs of the European Union. Since 2000, in line with the Lisbon strategy, reforms in the field of vocational training and working with the application of ICT are implemented. The aim is harmonization with European quality and practice of e-learning supported by new technological advancements that have already been implemented as obligatory with 20% - of representation in the overall teaching.

Of the complexity of this phenomenon, we decided to show the need for coordinating the academic curriculum with normative - program and methodical - didactic contents in primary education by integrating e-learning methods in music. The target group are students of primary school teaching in Turkish language at the Pedagogical Faculty in Skopje, St. Kliment Ohridski. From the e-methods, in the function of studying music, we will focus on synchronized activities using the Web pages through wireless Internet.

1. **New horizons in the study of music**

New information and communication technologies, in parallel with the old, are applied for extension of the traditional academic music curriculums. These technologies in music have the opportunity not only to influence but to completely reconstruct the previous system in terms of developing and shaping the modern musical education. In that way the programs are changed, and the competencies of educators too, who have to be trained in the application of new technological tools. It involves interdisciplinary connecting of more scientific fields by redefining the didactic-methodical approaches and curriculum changes that increase the pressure on teachers. Hence the question arises how is the future teacher supposed to deal with these terms of the music technology and implementation of technology in music?
The potential of “new” music education opens up opportunities for use of technological applications, websites and online conditions (open learning environments) as aids for teachers (Ojala 2006: 15). Although they offer new versions of tools and goals, the technology is useless without adequate opportunity to be applied. However, ICT in music education does not mean replacement of playing and studying the instrument with a computer or machine, but it means development, research and promotion of new e-methods and an enrichment of musical education which, if proven constructive, will become part of a wider musical culture. ICT can also be considered in relation to the adequacy of the current curriculum of the program in schools considering how these new ways of communication have changed and will change the whole music scene and its cultural processes (Salavuo & Ojala 2006).

Overall, the ICT in music can be accessed from various aspects: pedagogical, educational (observing the effects of education), or the technological aspect in attempt to develop pedagogical benefit, practice and effective solutions in musical education (teaching and learning music). First, the salient technological applications can be viewed as assistance and support in training of musical instruments. Examples for that are: a) teaching through video and b) supporting programs or other similar interactive music softwares. Second, technology enables creative activities, such as: children's composition projects and b) multi-medial projects (barrier-breaking projects where a voice landscape is formed based on a picture). The third point is the use of networked learning in diverse projects. The fourth possibility is the use of multimedia materials in musical education (WWW and CD-ROM). The fifth point of view would be the musical technology integration, e - methods in the curriculum and national standards.

Music technology develops in tandem with development of the media and communication technology (Kupiainen 2008; Pohjola 2009): 60’s /audio visual education / TV, film, newspapers, mass communications; 70’s / mass media communication / TV, mass media; 80’s /communication education/video, audiovisual culture, film, music videos; 90’s /communication education/ information technology, network technology and digital technology; 2000’s/ multi modal media education / digital technologies, multi modality / Internet music creation.

New tools and changes in the way of expression also affect the concerns and preoccupations of educators (Kupiainen 2007: 22). We should be especially concerned about the correlation between school knowledge and the knowledge around us, because schools suffer from lack of knowledge and lack of cultural significance, so the boundary between formal and informal learning disappears (Suoranta 2003: 12). This is possible thanks to the internet websites that offer various educational methods of music education, such as: music history; music groups; composing, music production and marketing; accompaniment for songs; music theory and exercises for hearing; studying different instruments.
2. New horizons in the Republic of Macedonia

ICT is a growing aspect in the educational process of R. Macedonia by introducing the project *Computer for each child*. Analogously, in the area of musical education are made the first steps for modernization of traditional programs through the use of computers. First initiative for deploying digital content in primary education has been made by introducing the e-School project through digital educational softwares, such as ToolKid on certain subjects.

During the 2004, Development Bureau under the Ministry of Education and Science of Macedonia's distributed the first computer softwares to study the curricula in primary school. To this end, during 2005, the Bureau organized intensive training to master the skills of using ICT in teaching.

2.1. ICT opportunities or challenges?

For system normative coordination with new technological advancements, the ICT contents should be introduced in teaching at pedagogical faculties. Therefore, the competencies that the future teachers will gain will create conditions for implementing e-learning methods in teaching content. Of even greater importance is overcoming the barriers in implementation of instruction that educators face in practice. Barriers can mainly be classified into two categories: institutional and individual.

The first arise from lack of practical education due to shortening of the duration of the program for musical teaching subjects - from four to two semesters for musical instruments, and from four to two for the Basics of musical education in the methodology. To this we will add the fact that existing musical instruments on the faculty are not available to students for individual workouts. Also, most students do not possess musical instruments for practicing at home. All this raises the question about maintaining the continuity in playing the instrument because of the specificity of the matter itself as one of the basic needs in musical education. A special category that is further facing these barriers are part-time students, unemployed and those temporarily not in the primary profession. We generally observe the individual barriers to teaching in terms of pedagogical competencies, knowledge and skills, as well as operation with technical-technological devices. From the wide range, as the key ones, we would like to mention those that are manifested in the form of lack of confidence, aversion, negative attitude and unwillingness to accept something new. These barriers are particularly pronounced in individuals with weak musical predispositions and they represent secondary disabilities in overcoming certain musical components, such as musical intonation and rhythm. However, there are ways to overcome this situation, among them is the use of ICT and e-methods which would provide relief in the realization of a part of teaching.

3. E-methods online - virtuality or reality?
Environment in information / communication and technological conditions is not only the virtual part of education but it already is a reality. It is not enough to know just how the technology of information functions, but their value, reliability and ultimate functionality has to be processed too. That means that today and in future education should be directed to use the unlimited amounts of information at the time of need.

From these limitless opportunities that are multiplying daily, as mentioned, we have focused only on the use of Web pages through wireless Internet. The possibility of immediate and synchronized on-line fit in the existing curriculum provides this information to be used in the function of maintenance and reminder of the already acquired musical knowledge and skills. All this can contribute to improving self-confidence and to overcome the stress of uncertainty in the time of teaching, especially in terms of tone and rhythmic precision performance of the musical content. These options leave more space for teachers to concentrate on the teaching matter itself and learning of the said by the children.

Free access to web pages and easy availability to users are extenuating circumstances in the application of already acquired knowledge and additional motivation for their widespread application. This is confirmed by demonstration of the integration of e-methods realized in teaching of musical education at the Pedagogical Faculty "St. Kliment Ohridski" in Skopje with the group of Turkish language primary school teaching in the VI semester. The selection of web pages is done according to the content of the curriculum, guided by simple and easy access to them. Accordingly, the chosen web pages were from the areas of: the theoretical studying of the musical instruments, practical playing of keyboards, as well as the basis of musical theory. We can aspect the benefits of supplementing teaching with virtual musical content such as: additional means combined with the current way of education; opportunity for continuous exercise during and after education; facilitating personal development of teaching - precise intonation, reproducing of the musical content, creativity and developing of skills. Especially important is that implementation of these methods is expected to provoke the students' encouraging in the creativity and greater interest in the subject through ICT animation at the class. These educational contents offer interactive exercises (quiz, group discussions, case study etc.) that will substantially enrich and produce diversity in the curriculum.

4. Conclusion

The permanent improvement of computer hardware, software capabilities and internet make the music to be the leading area in the application and creations that can be achieved with the use of ICT. This is an observation of the situation and opening of new horizons of future perspectives in musical education. However, the process of studying the musical matter, especially playing the musical instruments, is still mostly dependant on the classical teaching no matter to what degree are these e-methods developed and to what extent implemented in education. But in these conditions, taking into account economic, social and other factors globally, using proven and synchronized online educational programs are the
most optimal solutions to achieve continuity in the maintenance of acquired knowledge and expanding the musical horizons in teaching.

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