E- Learning as a Strategy for Enhancing Access to Music Education*

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Introduction

E-learning is variously defined as a type of education where the medium of instruction is computer technology or delivery of learning, training or educational programmes by electronic means (Wikipedia). In another definition, e-Learning is described as internet-based hybrid learning or distance learning (Wikipedia). A final and concise description of e-Learning is the use of technology in learning in a much broader sense than computer-based training or computer aided instruction, and also in a much broader scale than online learning or online education (Wikipedia). This last description implies more than the technology used, referring to the actual learning that takes place using these systems.

The dramatic global changes taking place technologically are presenting the educational sector with promising opportunities. The World Declaration on Higher Education (WDHE) for the 21st Century in its preamble notes that there is an increased demand for, and greater diversification in, higher education. In developing countries, access to education is limited, with less than 5% of students in tertiary education, compared to the world average of 16% (Prakash 2003, as reported in Gunga and Ricketts 2007). According to the same author, demand, especially in Africa, exceeds the ability to deliver; hence a significant portion of the population is locked out of education. A considerable proportion of this category goes to India, Europe and the United States of America in search of education. Through e-Learning, quality education, provided by knowledgeable personnel, becomes accessible to many, and the costs of higher education are also reduced in the process. In this regard, e-Learning comes across as more beneficial than the traditional set-up.

Additionally, adoption of e-Learning results in the reduction of environmental impact, through less travel and paper usage in preparation of teaching resources and assignments. Important to note is the fact that emphasis is now increasingly placed on the *process* rather than the content of education. This paradigm shift has been occasioned by an explosion of knowledge, and rapid innovations in technology. In this regard, e-Learning is central to the educational sector.In education, the rise of virtual and corporate universities that offer competition to conventional tertiary institutions provides an opportunity for what Mason (2003) as reported in Gunga and Ricketts (2007) calls borderless education that crosses the boundaries of both time and space. Such an educational environment has given rise to a redefined setting for learning and teaching, thus changing the future principles, practices, policies and the underlying issues related to knowledge acquisition that define the value, worth, meaning and delivery of educational services.

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The Concept of e-Learning in the Context of Music Education

Music education involves training and pedagogy in music. It comprises both the theory and practice of music, and how these two aspects interact to enhance the practice of music as a discipline. Although the theoretical aspect comprises a smaller proportion of the discipline, the successful interaction between theory and practice is vital to the understanding of music, and, arguably, results in better performance of the art of music. Both theoretical and practical facets are therefore important and complementary to music education. Music departments at all levels of education worldwide are generally considerably small for a number of reasons. First, much of vocal and instrumental tuition is skill-based, geared towards developing proficiency in performance. Since students acquire playing or singing skills at different paces, there is need for personal attention in teaching. Secondly, the idea of giftedness or talent as being important to the decision to study music tends to give some 'exclusivity' to the discipline, thereby locking out many potential learners. Additionally, the more pragmatic reason regarding the expenses involved in equipping music rooms, and, in some instances, the requirement that students purchase their own instruments, further reduces potential customers.

Within Kenya, as in many other countries, access to music education is limited, with a considerable number of students interested in furthering their education locked out of the system. Most institutions offering music programmes have often found it difficult to extend their courses outside the walls of their respective campuses due to the impracticability of transporting available resources for use outside of campus. However, it is increasingly evident that there is a need for extension of music training to the many interested people who do not have opportunities to study the discipline at university level. Distance and open learning both come to mind as solutions to this challenge.The above situation compels service providers to explore possibilities of conducting music instruction through the internet as a way of reaching more people. This paper posits that e-Learning provides an effective solution to problems of access.

The Scope of the Paper

In this paper, the authors demonstrate the potential of e-Learning to increase learning opportunities in music education. Possibilities of expansion of music education through e-Learning modules are explored. The paper also highlights some challenges that already impede the effective adoption of e-learning in music education. Finally, actual applications of e-learning to music education already in place at Kenyatta University Music department are demonstrated, and further possibilities discussed as a way of enhancing the existing approaches to e-music education. The key sectors of the e-Learning industry have been identified as content, technologies and services.

Content

E-lessons are generally designed to guide students through information or help them perform in specific tasks. Two distinct types of e-content have been identified, namely information-based and performance-based content. The former communicates information to the student, while the latter involves the building of a procedural skill in which the student is expected to increase proficiency. Both types of content are applicable to music education. The theory of music is information-based, and includes such aspects as history of music, ethnomusicology, the psychology and sociology of music, among many others. The application of e-Learning to information-based content would greatly enhance instruction in this area, and provide a forum for students to interact widely with their peers and lecturers.

The practical aspect of music forms the core aspect of the discipline, since music is essentially a performing art. The application of e-Learning to this aspect of music is hence very important, yet is also the more challenging of the two types of content. It is for this reason that, in Kenyatta University, music education has as yet not been included in the list of disciplines catered for in the Open Learning programme. This paper goes into considerable detail to explore the application of e-Learning in disseminating performance-based information in music education. It includes some practical demonstrations by the Department of Music and dance of Kenyatta University, of how e-Learning can be applied to performance-based instruction.

Technologies

Developments in internet, and multimedia technologies are the two key enablers of e-Learning. According to Rosenberg (2000), successful e-Learning depends on building a strategy that optimises the technology within an organisational culture that is ready and willing to use it. Various technologies, which are constantly improving, have been developed to facilitate e-Learning. Technologies that have been selected for discussion in this paper include Virtual Classrooms, blogs and wiki.

The increasingly popular trend in e-Learning, particularly in higher education, is the creation of Virtual Learning Environments (VLEs), sometimes in combination with a Management Information System (MIS) to create a Managed Learning Environment in which all aspects of a course are handled through a consistent user interface standard throughout the institution. Virtual education refers to instruction in a learning environment where teacher and student are separated by time or space, or both, and the teacher provides course content through course management applications, the internet, multimedia resources and videoconferencing among other technologies. A virtual classroom is therefore a learning environment created in the virtual space. It improves access to advanced educational experiences by allowing learners and lecturers to participate in remote learning communities using personal computers. The quality and effectiveness of education is the process improved through the support of a collaborative learning process. The authors demonstrate the possibilities of expanding access to music education by the use of pre-recorded lessons in practicals, which can be imported to remote areas for use by learners.

A blog, which is a contraction of the term 'web log', is a website, normally maintained by an individual, with regular entries of commentary, descriptions of events, or other materials such as graphics or video. Many blogs contain commentary or news on a particular subject. Others function as more personal online diaries. This paper explores the use of the 'blog concept' in music education, particularly as a means of interaction between learners and lecturers. Such uses are demonstrated within the presentation.

A wiki is a page or collection of web pages designed to enable anyone who accesses it to contribute or modify content using a simplified mark-up language. The collaborative encyclopaedia, known as wikipedia, is one of the best known wikis. Wiki software is a type of collaborative software that runs a wiki system. It allows web pages to be created and edited using a common web browser.

Services

While it has been noted that technology will not totally replace great teachers (Rosenberg, 2000), e-Learning is an important development in education today. A combination of traditional, face-to face instruction with e-learning has resulted in a concept known as **blended learning**, which is widely used. This paper explores the use of blended learning in music education.

The other service discussed is distance learning, where instruction is 'imported' across distance through the use of technology. Related to this is open learning, which is already in use at Kenyatta University, although it has not yet been applied to music instruction. These services are explored in this paper for the purpose of proposing greater collaborative exchanges between music departments in diverse institutions of higher learning.

Opportunities and Challenges of Content Delivery in Music Education through E-learning

Opportunities

E-learning creates various opportunities that could enhance the blending of computer-based strategies with classroom situations as well as with modes of delivery that could take teaching and learning services out of the campus walls. With reference to music education, existing opportunities for various modes of delivery include blended learning, distance/open learning, virtual learning and collaborative music activities. Some of these are highlighted below.

Currently in Kenyatta University, teaching departments have incorporated e-learning as an instructional strategy. At the Department of Music and Dance, blended learning has been employed for the last 8 years through integrating computer-based activities with classroom lectures particularly in the areas of computer-aided composition, transcription and notation of music. Since the formulation of a policy on e-learning by the University, the Department of music has fully recognised the advantages of e-Learning for content delivery. Consequently, teaching staff in the Department have embraced e-Learning both for information-based and performance-based content delivery.

There is also an increasing realisation of the need to create Virtual Learning Environments to cater for distance and open-learning services both within the Department of Music and Dance, and within the entire School of Visual and Performing Arts, where the Department of Music and Dance is housed. This would provide an opportunity for those unable to access on-campus facilities to obtain some or all of their music education from remote teaching sites through the internet. These services would benefit both Kenyans and the international community.

Wide access to the internet provides students with opportunities to work from home, thus enabling them to complete a course of study while interacting with course facilitators online. Similarly, lecturers can interact with their students while away from campus attending conferences or other pressing duties.

Through e-Learning, collaborations with other music departments around the globe are strengthened, and new ones are made possible. Through engagement in discussion forums, blogs, wiki and online collaborative activities, endless possibilities for sharing knowledge are created. Such collaborative approaches encourage formation of discussion groups involving students from diverse institutions interacting with each other. Collaborations between lecturers also provide opportunities for intercultural research activities, where faculty from different countries and continents conduct research within their localities, thereby producing rich findings representative of their different cultural and economic settings.

Challenges

While many opportunities for expansion exist, the adaptation and implementation of e-learning courses creates certain challenges that may have remarkable impact its processes. With regard to implementation of e-learning courses in music education, the following are some of the challenges that have been noted:

1 Reluctance to move away from fixed traditional approaches used over the years. Resistance to change causes people to shy away from e-Learning since it differs fundamentally from such approaches;
2 Experience in the use of computers, computer ownership and efficient time management also determine the rate of adaptation and implementation of e-Learning approaches;
3 Technological shyness. The need for requisite technical skills among instructors or lecturers is necessary for the realisation of effective results following the dissemination of e-content. Staff working with students online must be able to understand the content as well as be at least reasonably or highly trained in the use of computer and the internet.
4 Proper implementation of e-Learning presupposes availability of individual computers and the necessary software for the students. This is because e-Learning frequently requires hands-on activities, whether one is participating in asynchronous or synchronous activities. Insurance of music as a practical subject requires some special software for use in notation and transcription. There is therefore a need for a wide spectrum of relevant computer or internet-based resources;
5 Time is also an essential factor in developing e-content. In contrast to traditional lesson preparation, the amount of time required to develop and implement e-content may at times be prohibitive to its utilisation. Since e-content is expected to be handled within the same time frame as conventional face to face instruction, there is need for careful time management if one is to cover the required level of course content;
6 The lack of proper or constant internet connectivity and the speed of the internet, brought about by inadequate facilities and slow dial-up speed respectively, also poses a challenge to proper implementation, more so in some rural areas. This may hamper the relay of distance learning courses;
7 Despite all the merits of e-Learning, there is a danger that students may rarely attend face-to-face, on-campus classes, resorting to purely online study. This possibility is highlighted in the Sloan Report on Music Education by Hebert (2007), which reveals that students generally appear to be at least as satisfied with their online classes as they are with traditional ones.

The Way Forward

Online education is rapidly increasing. In 2006, the number of students in the United States alone participating in it was estimated at over 3.5 million. Here at Kenyatta University, over 300 courses are currently uploaded on the moodle platform. In the Deparment of Music and Dance, about 26 courses are available online. This is an indication of how seriously e-Learning is considered in leading higher institutions worldwide. It is fast becoming a universal educational trend that must be adopted by all institutions of higher learning, especially those aspiring to attain world class status, such as Kenyatta University.

There is also an increasing realisation of the need to create virtual learning environments to cater for distance and open-learning services both within the Department of Music and Dance, and within the entire School of Visual and Performing Arts, where the Department of Music and Dance is housed. This would provide an opportunity for those unable to access on-campus facilities to obtain some or all of their music education from remote teaching sites through the internet. These services would benefit both Kenyans and the international community.

For the success of e–Learning, there should be cooperation between the technical personnel, the content developers and the implementers.

As the e-Learning pioneer Bernard Luskin argues, in order to demystify e-Learning and make it an enjoyable educational process, the 'e' should be interpreted as 'exacting, energetic, enthusiastic and educational' in addition to electronic. He points out that the broader interpretation allows for 21st century approaches and brings learning and media psychology into the equation. Institutions of learning should view e-Learning based on Luskin's perspective, as this would rapidly increase its popularity as a mode of delivery.

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