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Virtual Platforms in the Service of Postgraduate Education: A Perspective from Turkey

Kerem Kılıçer[a] & Ahmet Naci Çoklar[b]

Abstract

This study was designed as a survey to evaluate the present virtual post graduate education applications in Turkey by examining sample applications throughout the world. Within the framework of this study, the post graduate education, the problems encountered during this education and the possible virtual post graduate education applications as solutions for these problems were investigated. Additionally, virtual postgraduate education applications being conducted in Turkey were examined taking into consideration the sample applications of virtual platforms such as LMS, virtual reality and video conference used in virtual postgraduate education applications and various virtual education applications as virtual certificate programs, virtual courses and virtual universities in the world. Secondly, the present virtual postgraduate education applications in Turkey were tabulated. Finally, as a result of this study, it was obtained that in Turkey, the present virtual postgraduate education applications are merely at the master degree and limited to the business field. Besides, it was observed that there is not any application sample at doctoral level yet. In this context, it could be suggested that a national formation to ensure the national unity and participation containing various fields should be founded instead of virtual postgraduate education applications conducted by different universities.

Key Words: Online Post-Graduate Education, Virtual Platforms, Online Master's Degree

Sanal Platformların Lisansüstü Eğitimde Kullanımı: Türkiye Perspektifi

Özet

Bu çalışma dünyadaki sanal lisansüstü uygulamaları örneklerinin incelenerek Türkiye'deki mevcut sanal lisansüstü uygulamalarının değerlendirilebilmesini amaçlayan bir tarama çalışmasıdır. Araştırma kapsamında öncelikle lisansüstü eğitim, lisansüstü eğitimde yaşanan sorunlar ve bu sorunlara çözüm olabilecek olası sanal lisansüstü eğitim uygulamaları incelenmiştir. Ayrıca Türkiye'de yürütülmekte olan sanal lisansüstü eğitim uygulamaları; dünyadaki örnek sanal eğitim uygulamaları (öğrenme yönetim sistemleri, sanal gerçeklik ve video konferans) ve sanal eğitimin farklı hizmetleri (sanal sertifika programları, sanal ders ve sanal üniversite) gibi diğer sanal platform örnekleri göz önünde bulundurularak incelenmiştir. Daha sonra Türkiye'deki mevcut sanal lisansüstü eğitim uygulamaları bir tablo halinde

[a] Arş.Gör., Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü, Eskişehir.
[b] Arş.Gör., Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü, Eskişehir.

özetlenmiştir. Araştırmanın sonucu olarak Türkiye'deki mevcut sanal lisansüstü eğitim uygulamalarının yalnızca yüksek lisans düzeyinde olduğu ve işletme alanıyla sınırlı kaldığı görülmüştür. Ayrıca doktora düzeyinde ise henüz sanal lisansüstü eğitim uygulaması olmadığı görülmüştür. Bu bağlamda farklı üniversitelerin ayrı ayrı yürüttüğü sanal lisansüstü eğitim uygulamaları yerine ulusal birliği ve katılımı sağlayarak farklı alanları kapsayacak ulusal bir yapılanmanın gerçekleştirilmesi önerilmiştir.

Anahtar Kelimeler: Çevrimiçi Lisansüstü Eğitim, Sanal Platformlar, Çevrimiçi Yüksek Lisans

1. Introduction

Nowadays, reaching information is quite significant; however, a very short time after you obtain the information you need, it becomes out of date. Therefore, it is the responsibility of individuals to keep up with the recent changes in the world. Certainly, it is the duty of a teacher to learn the new educational technologies and transfer them into his or her teaching environment. Likewise, the director of a company should follow up the recent technologies and modernize or restructure his or her company. Furthermore, in order to provide patients with better alternatives for treatment, a doctor has to know the newly-introduced treatment methods. Therefore, Individuals will only be approved by the society if they trace the information, which will enable them to develop their skills and to improve their qualifications. In this respect, post-graduate education has an important place in helping individuals develop themselves and obtain advanced information in relation to their fields or their needs.

Through this study, by taking into account the post-graduate education, the problems encountered during post-graduate education, it was emphasized that the virtual post graduate education applications supported with internet technologies which have become common recently could be the possible solutions for these problems. Within this context, the virtual post graduate education in Turkey was investigated and different applications from the world were exemplified. Thus, it was aimed to evaluate Turkey's situation.

2. Post-Graduate Education In Turkey And The Problems Experienced In Post-Graduate Education

Post-graduate Education can be defined as the education given to students with bachelor's degree (B.A.) to provide them with the opportunity to

become specialized in the area they want by taking education either at the level of master's degree (M.A.) or at the level of doctor's degree (PhD). Post-graduate Education is defined by Varış (1972:27) as a series of activities that aim at training academic instructors and scientists who will contribute to the field through research and meet the needs of the society. Varış (1972:27) further states that Post-graduate education is an educational program that graduate students (B.A.) attend for post-graduate education (for M.A. or PhD). In Turkey, post-graduate education has two phases such as Master's Degree (M.A.) and Doctor's Degree (Ph.D.). The goal of M.A. is to provide the basis for Ph.D. as well as to provide personal development. On the other hand, besides its benefits for personal development, Ph.D. is required for an academic carrier at a university. Moreover, in order to start M.A., students are to have a Bachelor's Degree (B.A). As for Ph.D., either a Bachelor's Degree or a Master's Degree is required.

When the goals of post-graduate education are examined, it is seen that it aims at training the man-force that has advanced information about the field as well as training scientists. The problems that individuals experience in post-graduate education in Turkey fall into two categories as the problems related to the teaching-learning process and other general problems. Regarding the problems experienced in the process of teaching and learning, it could be stated that students are not trained as creative and critical thinkers and that the educational programs applied do not always match with the goal of establishing an information society. Research findings report that higher education does not provide students with high-quality education and with better environments for teaching; that higher education does not help students develop self-confidence so that they can use the current information and skills necessary for a contemporary society; and that students' can not establish effective communication (Karakütük, 2002; Baytekin, 1999). Other general problems experienced in relation to post-graduate education are those which occur independent of individuals. These problems hinder the process of post-graduate education and mainly result from lack of time, financial issues, administrative issues, lack of post-graduate education in the living-place and from lack of faculty instructors who will give the post-graduate courses and who will act as a supervisor during the thesis-process.

Today, especially the present satellite systems have made the internet an environment for "global" communication. As a result of this, the internet now at

homes as well as in work-places has become quite suitable for distance learning services. The reason for this suitability lies in the fact that the internet makes it possible to establish simultaneous communication. Moreover, such benefits of the internet as rapid transfer and easy-update of information also contribute to the rapid spread of virtual platforms.

3. Virtual Education And Virtual Platforms

New technologies that remove the borders in the global world have changed the life in many respects. In this regard, the latest of all the changes and renovations is virtual education which has occurred as a result of the new world. Virtual education is a system in which there are more alternatives for interactive education given to students without any limitation on time and place. Applications of virtual education provide students with an environment which enables them to carry out their studies in terms of place, time and fastness (Al-Ayyoub, 2004). In virtual education, students take part in the teaching-learning process and take responsibility for their own learning (Franco, 2004). Moreover, since interaction is one of the basic elements of learning, students are encouraged to solve problems rather than taking the materials provided. Such an interaction not only helps to give information to students but also increases the quality of learning through learner-learner interaction, learner-material interaction and through learner-teacher interaction (Harada, Kiyoshi, & Naohiti, 1999).

In virtual education environments, instructional activities are carried out in virtual classes. In these virtual classes, students connect to an electronic environment, and students and teachers meet via the internet and form virtual education groups. Joining these virtual education groups, a certain number of participants come together for communication and discussions (Karasar, 1999). Virtual classes found in the body of virtual universities are established with the use of different technologies. Today's virtual classes are mostly established with the help of learning management system (LMS), virtual reality and video conference technologies.

LMS (Learning Management System)

One of the inevitable parts of virtual education applications commonly used thanks to the spread of the internet is the Learning Management System. This system is a set of hypermedia-based tools that make it possible for students to choose and register to the courses in e-learning applications as well as make

it possible to present the contents, to carry out evaluation and assessment and to keep and report information about the users (Şengür, 2006). Furthermore, with the help of these systems, the development and performance of students throughout educational activities can be observed (Rapuano & Zoino, 2006). WebCT and Moodle can be given as an example for LMS systems commonly used for virtual e-class applications in Turkey.

Virtual Reality:

Although there are a number of technologies used for establishing interactive virtual education environments, among the most effective and recent of these technologies are virtual reality applications. Virtual gatherings formed through cooperation based on virtual reality help individuals – physically away from each other - to establish communication and share their experiences. Thanks to the platform used, multiple network users in different places can interact with each other and share the same virtual environment (Roussos, Johnson, & Leigh, 1997). With virtual reality, virtual campus environments can be established, which not only makes real-time communication and interaction possible in the campus but also help reach educational materials. While the application in the Faculty of Architecture in Sydney University is a good example for virtual campus application, there is no such application in Turkey, yet.

Video Conference:

The developing internet technologies have caused the transfer of information to increase at a significant rate and have also resulted in the use of these technologies even in mobile phones. Thanks to these technological developments, video-transfer of information is now easier and more functional. Therefore, video-conference systems are used for the preparation of functional virtual class environments. With the help of such a system, individuals geographically away from each other can establish interactive communication and share information. In this way, people are provided with an education system at their homes or in their work-places. Moreover, with the introduction of today's 3G technologies, people can connect to virtual environments through video-conference technologies in their mobile phones whenever and wherever they want. This makes it possible for students to benefit from virtual environments in their free times.

4. Virtual Education Applications And Current Situation

Virtual education applications are executed in various phases of education in different ways. Virtual education in post-graduate education can be given to students with the use of new post-graduate education programs, or it can be given to students with the enrichment of the present post-graduate education programs through virtual platforms. In Turkey, there are different methods for virtual education applications such as virtual certificate programs and virtual courses.

Virtual Certificate Programs and Virtual Courses

Internet-Based Certificate Programs (e-certificate) are educational programs which are completely executed by educational institutions on the internet such as in-service training, foreign language courses and computer courses (Şeniş, Mutlu, & Çetinöz, 1999). E-certificate programs are organized for those who have graduated from a university and will start business life; who are currently university students and wish to develop their professional skills; who want to have profession without graduation from a university; who want to keep their knowledge updated; and for those who want to develop themselves (Mutlu, Özöğüt Erorta, Kayabaş, & Kip, 2007). E-certificate programs are organized in more special areas and are shorter in terms of their duration when compared to virtual universities or to the applications of online post-graduate educational programs. Those who have completed their education are not given a diploma but a certificate regarding the field of education they have taken. In Turkey, there are many e-certificate applications organized either by public and private institutions that give e-certificate services or by the cooperation between these institutions.

E-certificate programs could be organized in the body of a university as well as be organized through an international platform established with the support of several institutions. Open Distance Inter-University Synergies Between Europe (ODISEAME) originated in Spain and supported by several universities in Turkey is a good example for such e-certificate programs. This program includes courses of different areas in different universities. Those who have taken and achieved these courses are given an internationally-approved certificate. However, various problems are experienced since most of such certificates are credited in post-graduate education.

ITCP (Information Technologies Certificate Program) organized by METU (Middle East Technical University) on internet basis in 1998 with 90 participants can be given as an example for such e-certificate programs in Turkey. Among other applications are the certificate programs organized in the areas of Computer Programming and Information Management by the cooperation of Sakarya University with MNE (Ministry of National Education) Educational Technologies General Directorship. Moreover, many private institutions can also organize internet-based certificate programs. Hundreds of certificate programs are organized in seven education categories from information technologies to personal development found in Enocta Education Catalogue. These programs are intended for individuals working, or wishing to work, in institutions and are executed in the education platform of Enocta Academy by the company of Enocta founded in 2000 (Enocta, 2007). However, these certificate programs are limited in number and mostly aim at the industry of information technologies. Furthermore, in these certificate programs, students are supposed to take the formal exams only in one center (Mutlu, Özöğüt Erorta, Kayabaş, & Kip, 2007). As the most recently-organized certificate program, Anadolu University started a certificate program of Turkish Language Education as an e-certificate service for students from foreign countries in the fall term of 2007-2008. There is no research on the credited e-certificate programs organized in post-graduate education in Turkey. Therefore, it is seen that e-certificate programs are not used adequately to solve the problems experienced in post-graduate education.

Virtual Universities

Virtual universities refer to the internet-based execution of a B.A., M.A. or PhD program (Şeniş, Mutlu, & Çetinöz, 1999). Virtual university "…is an information network which is not dependent on only a single institution; whose quality is determined by various assurance and accreditation institution; and whose education services the participants can take whenever and wherever they want" (İğci, 2005). Virtual universities are not the rivals of traditional universities but an internet-based organization that aims at giving educational serviced to all interested people, especially to those who can not take any education services due to various reasons. People can benefit from the courses at virtual universities in different ways. For instance, some people take only the courses they need; some take the courses they are interested in; some aim at

completing their university education that they have not been able to finish before; and some other people take education from field experts teaching at different universities. In this way, virtual universities are educational institutions that provide serviced both for their own students and for other communities. Virtual universities not only give e-learning services but also provide other electronic services such as registration, counseling, student affairs, library, and student-instructor communication. These virtual universities could be an application of only one institution as well as of a consortium of more than one institution. With the help of the developing technology, the applications of video-conference and virtual reality used in virtual universities can now gather students and help to form the spirit of a virtual community (Karasar, 1999).

In the world, there are a great number of virtual university applications that are executed on internet basis. Those who finish these virtual programs or universities are given the same certificate or diploma as those who graduate from an institution of higher education (Şeniş, Mutlu, & Çetinöz, 1999). Most virtual universities organize various programs from a pre-bachelor degree to the degree of PhD. For example, the universities in Phoenix and Athabasca are the two biggest virtual universities in America and Canada. Phonix University had approximately 174.000 students in 134 campuses in 2003. Moreover, Athabasca University is supported by the Canadian Government for the purpose of enabling all people to benefit from these educational opportunities (Kim & Shin, 2003). Open University founded in England in 1960 is one of the universities that most successfully gives distance-learning services in the world. Open to all people, the university has about 180.000 students (30.000 of them are post-graduate students) and is supported by a number of communities (OU, 2007). Unext Cardean Internet University is a good example of a consortium established by several universities. Post-graduate programs are the most popular in online higher education. The reason for this popularity is that many people who want to attend these programs do already have a job or who can not attend a traditional education institution for another reason (Ersoy & Acartürk, 2006). Another example is California Virtual University in USA. This university was founded in 1997 and aims at giving good-quality education to all Americans and other people in the world, and especially to the Californian people. The university is a virtual campus established by the cooperation of several universities, so it comprises both private and public universities. In this

university, the students can take the popular courses from distant campuses and attend certificate programs (Karasar, 1999). Now, the students take 6787 virtual courses in all fields from more than 150 universities. Established in USA in 1984, National Technology University is another consortium that gives education in a wide range of areas from engineering to technical education, from business administration to system engineering. Today, this consortium is supported by all the universities in America. The courses in this university are given either on online basis or through CD-ROMs, DVDs, and videocassettes. Moreover, students are also provided with online counseling services (NTU, 2007).

There is no virtual university in Turkey that executes all its graduate or post-graduate programs on online basis. However, Ahmet Yesevi University established by the partnership between Turkmenistan and Turkey has been giving graduate and post-graduate education in many countries including Turkey since 2002 although the university does not physically have a campus in Turkey. Ahmet Yesevi University has online Master's Degree (Online-MA) that cover various areas such as Computer Engineering, Management-Information Systems, Business Administration and Education Management. These applications are accredited by the Council of Higher Education in Turkey, and the equivalence of the courses and diplomas given in Turkey are officially approved.

As another example for such applications, the universities in Turkey have online Master's Degree (Online-MA) as well. All of the courses in these programs are given on internet basis. These Online-MA programs are accredited and approved by the Council of Higher Education. Students graduating from these programs receive a post-graduation degree, which is approved by all institutions. Today, the Council of Higher Education encourages universities to open online-MA programs in order to provide all people with equal opportunities for education.

Table 1. ***Online Master's Degree Programs in Turkey (Online-MA)***

Institutions Giving Online-MA	*Target Population*	*Program*	*Cost*
Istanbul Bilgi University	Academicians and private sector representatives	Personal and professional development	9.700$
Middle East Technical University	Academicians and private sector representatives	Information Technologies and Systems	250 $ per credit
Anadolu University, State University of New York and Empire State Collage	Academicians and private sector representatives	Business Administration	Per credit, Anadolu University125$ Others 400$
Sakarya University	Academicians and private sector representatives	Business Administration, Production and Service Systems Management	2.500 – 3.850 $
Universities of Maltepe, Galatasaray, Istanbul, Ege, Yıldız Technical University, Gazi, and Marmara	Academicians and private sector representatives	Business Administration	5.600$
Gazi University	Academicians and private sector representatives	Information Systems Master's program without thesis	Waiting for official approval

As can be seen in Table 1, only online Master's Degree programs are executed and Online-MA programs is executed by universities generally are Masters Degrees in Business Administration in Turkey. There are six universities that execute online MA programs. The first of these programs was started by Istanbul Bilgi University. The Online-MA program of Business Administration in Istanbul Bilgi University is especially intended for the personal and professional development of those working for the private sector. The cost of the program is about 9.700$ for students. Following this program, in 1998, for academicians and private sector representatives, ODTU started its Online-MA program of Information Technologies and Systems in the body of Internet-based Asynchronous Education. This program costs students 250$ per

credit. Another Online-MA program is the Business Administration e-MBA program organized by the partnership of State University of New York, Empire State Collage and Anadolu University. Students in this program take courses from instructors at three different universities. The courses are priced per credit as well. One other program is one that includes education on Business Administration and on Production and Service Systems executed by Sakarya University. The cost programs ranges from 2.500 to 3.850$. Another university, Maltepe University, gives education on Business Administration as an Online-MA program. In this program, students take courses from instructors teaching at seven different universities (the universities of Maltepe, Galatasaray, Istanbul, Ege, Yıldız Technical University, Gazi and Marmara). Students pay 5.600$ to attend this program. Lastly, Gazi University has received approval form the Council of Higher Education for its Online-MA program, which is Master's Program without Thesis for Information Systems and is waiting for the decision of the senate to start the program. Besides these six Online-MA programs in Turkey, there are other Online-MA programs that are in the foundation process. Moreover, in Turkey, there are agents of foreign universities such as Brayer State University and City of London College and accept students to their Online-MA programs.

When the Online-MA programs opened in Turkey are examined, they are mostly executed for the representatives of the private sector, and there are no virtual education programs executed for other fields. In other words, the programs opened in the scope of Online-MA mostly cover education on Business Administration (e-MBA) and on Information and Communication Technologies. At the moment, there are not any programs regarding Education, Law, Science or Art. Furthermore, it is seen that the cost of post-graduate education given in a virtual environment is quite high. This situation creates unequal opportunities for education. For this reason, academicians and other individuals wishing to develop themselves in their own fields tend to take education in other different fields. In today's world of life-long learning, there are no Online-MA programs especially to help teachers with their professional development as an in-service training. In order to fill this gap, Online-MA programs should also be started for teachers.

5. Conclusion And Suggestions

Due to the developing technology, it is of great significance to apply the most recent virtual platforms for distance learning in educational services. As the speed of transmitting information increases especially for technologies, the use of such systems as video-conference even at home will increase the importance of virtual platforms and applications. Virtual platforms also play in important role in solving all the problems experienced in post-graduate education services. Odabaşı & Odabaşı (2007) describe virtual platforms as "shortening the distance," which removes the big differences and barriers among countries, regions and universities; which fills the present gaps; which increasingly equals the conditions; and which makes it possible to give rapid, cheap and effective education "independent of geography" or "independent of place." Besides their advantages in giving internet-based education, organizing certificate programs and in executing graduate programs, virtual platforms will help to establish country-wide cooperation through a virtual university. With the help of a virtual platform in Turkey in which universities will be global players, an important step will be taken in keeping up with the global evolution.

In order to increase the rate of attendance in higher education in Turkey, to provide equal opportunities for education, to remove the limitations to education like in the global world, and most importantly, in order to help produce information and technologies without being dependent on foreign countries, there is a need for a virtual university to be established with the help of universities experienced in this issue. For this purpose, especially the there institutions in Turkey, the Ministry of National Education, Turkish Science and Technology Research Institution and the Council of Higher Education, should immediately execute a project together with other universities and institutions in order to establish a "Turkish Virtual University." With this virtual university to be established in Turkey, the content of current post-graduate programs could be enriched; online virtual post-graduate programs regarding the up-to-date issues; and/or virtual courses for personal and professional development could be given to all people who want to be informed about any subject and develop themselves. Moreover, this virtual university will also meet the educational needs of those who can not find time for post-graduate education due to their business life; those who do not have any post-graduate education program in their living-places; and of those who can not travel due to their health problems

or physical disabilities. In this way, all people who can not physically attend a university owing to a specific reason will have an opportunity to take education, which will ensure social justice.

Although the Council of Higher Education approves and encourages online courses and online programs with the "Regulations on Computer-Network-Based Higher Education among Universities," there are not any studies on the standardization of these courses and programs, yet. There is no board to inspect these courses and programs. All universities execute these programs in their own bodies independent of each other. Today, there is a need for a global attempt to clear away the thought in Turkey that virtual education is the simple transmission of course materials into the internet environment. In addition, virtual platforms contribute to students' post-graduate education by giving them the opportunity to take courses from the universities they want.

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