

The Role of Farhangian University in the Development of New Educational Technologies

Hussein Khaleghi

Member, Farhangian University, Shahid Beheshti Campus, Zanjan, Iran

E-mail: akhaleghy@gmail.com

Yahya Bayat

Member, Farhangian University, Al Zahra Campus, Zanjan, Iran

Farzaneh A. Verdi

Member, Farhangian University, Al Zahra Campus, Zanjan, Iran

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Abstract

In the knowledge and virtual era, knowledge-based development in developed and developing countries is growing. Since the education, research, and technology are the main elements of development, a written plan for the areas of science, research, and technology is required. This article tried to explain the importance of developing a developmental systematic program at the Farhangian university in the field of new educational technologies.

Key words: Technology, New educational technologies, Teacher training university.

Introduction

Planning is often considered as the equivalent of foresight. It is defined as a set of actions written for a better future. In today's complex and advanced environment, we need effective futuristic programs. New technologies can be used as an engine of growth and development in different educational sectors. Therefore, the development of new technologies plays a key role in educational programs. The experiences of developed countries show that technology and innovation science has been the main center of educational developments in those countries. In these countries, educational development programs have been often based on science, technology, and new technologies. (Azra, Aghazadeh, Esfahani, 2001)

The new technologies are an essential factor in the formation of new social and cultural contexts. New contexts require new educational environments and new educational methods. Educational professionals should design the learning experiences according to this situation. Now the question is: how can the teachers use these technologies for learning and designing educational opportunities for students? This paper explains the role of teacher training university in training of efficient teachers familiar with new technologies.

Problem Statement

Educational Technology is a collection of teaching and learning science in a class's real-world and usage of tools and techniques have been developed to support this application (Zoofen, 2011). Silverman has presented two concepts for educational technology:

- 1 - Educational technology relies both on the methods and tools.
- 2 - Educational technology is a structure that focuses on the analyzing educational issues, production and selection of evaluation tools, and means of production in terms of achieving the desired educational outcomes. (Zoofen, 2011)

One of the best promises of educational technology is that it helps us to find a way into the minds of students. Recent improvements in the quality of software and hardware allow the teachers to develop students' potential abilities.

Maness and Olson reviewed the researches about technological and schools developments and concluded that the technology can:

- Stimulates the teachers and engage the students in more complex tasks and subjects.
- Support the teachers to express the information rather than distributing them.
- Encourage the students to work harder.
- Add the cultural values to school's work. (Zoofen, 2011)

Teachers in technology-rich environments are undergoing enormous changes and developments. It seems that technology interact with our business, lifestyles, jobs, health, security and defend, culture, and teaching and learning methods. Outstanding advances in technology (technology shocks) shook our individual and social existence and sometimes even are threatening it. New technologies such as internet, intranet, ICT, digital multimedia and etc can influence and transform the education process.

With various and advanced information and communication technologies, today, the rapid communication and rapid exchange of information have been possible. Individuals can receive the latest information about every field in every time and every place. Undoubtedly, the greatest impact of information and communication technologies has been on the educational environments. Using ICT in education has led the education environment toward virtualization. This allows the communication between individuals get possible through the computer. As long as the nature of work and business in technologies is changing, the method of teaching is changing, too. Because individuals learn in different methods, a few principles should be considered:

- Teaching should be based on individual learning; because there is no specific method for teaching all individuals and we should not consider all of individuals in the same level.
- Training should be based on achieving a specific goal; evolutionary method should be used for planning it.
- The latest technologies should be used to make efficient the plans and achieve better results. (Aghazadeh, 2011)

Within a short time, ICT has changed enormously the individuals' lifestyle. Learning is one area that has accounted for a major share of these changes. The information and communication

technologies are very important in learning cycle. In the traditional approach of learning, individuals needed to continuously read and write and communication was almost one-way. But in the using of information and communication technology in learning, basic skills and further skills in using information and communication technologies are needed.

Development of information and communication technology has altered how, what, who, where, when, and why the learning process is accomplished. The internet, intranet, and all forms of wireless communication have removed the barriers of time and place. As a means of communication, internet has made possible the relationship between teacher and learner. Most of the learning models are for classroom or home and they have four steps:

Different places:

1-Telephony, video conferencing, network forums

2 - Exchange mail

Similar places:

3 - classroom teaching, discussion groups, tutoring at home

4 - bulletin boards, meetings

In this case, the first and fourth models are done concurrently and the second and third models are done asynchronously.

As the Internet and other communications networks enter in our daily life, it is necessary that the members of these networks be trained at early age, such that they consider themselves as a network citizen. A national citizen can be a teacher, a student, parent, or anyone else who tries to learn through community-based networks.

Effective use of technology in today's world requires that students accept new roles in the learning process. Students should be the searchers of information, so they can judge and evaluate the value of the extensive data available on the Internet. In such circumstances, the role of teacher changes from knowledge transferor to learning process facilitator. Every teacher should be able to help students work in cooperative groups to do effective activities. The following six principles are the challenges in the education of young people:

1 - The student as the information seeker, guider and evaluator

2 - The student as a scholar, critic, analyst, and selector of appropriate technology and information

3 – The student as the producer of knowledge using new technologies and resources

4 - The student as effective messengers using multiple technologies and media

5 – The student as an educational technology

6 – The student as a responsible citizen in the era of technology

Teachers should help the students acquire self-confidence, necessary skills, and data management strategies, so they can successfully use technology and communication tools in their daily lives and work environment. (Soleymani, Ameneh, 2003).

The vision of teacher training university

The purposes of teacher training university are:

Providing, training, and empowering the human resources of Education Ministry, pioneer in education, research, production, and dissemination of knowledge needed in education, excellence in education and professional training based competency, enabling the use of new educational and training technologies in the mission, based on the criteria of Islamic system, enabling the prosperity of nature and talents, etc. (Statute of teacher training University, 2012).

The mission of the University

- Training of capable, competent, and evolutionary educational and training administrators, based on the principles of Islamic teachings and native requirements.
- Empowerment and promotion of educational, cultural, and skills knowledge through short-term training after obtaining permission from the competent authorities.
- Improvement of students and teachers' abilities to develop interdisciplinary teaching skills.
- Conducting studies and applied research and producing the knowledge needed by the Department of Education
- Publishing magazine, scientific books, pamphlets, and producing software and computer programs relevant to the aims of university, according to relevant regulations

The role of teacher training university in the development of educational technologies

Fundamental revolution and sustainable development in any society depends on the changing of education system. The main center of revolution and development in the education system is to improve the quality of teachers' work. Scientific policymaking by researchers is required for advances in science and technology and without it we cannot keep pace with the modern developments. Today, the use of new technology requires scientific progress and research. Teacher training university should take basic steps by research management policymaking for developing new technologies.

Conclusion

According to the discussions in this paper, teacher training university should consider some principles, based on the goals:

Principle 1: one of the new approaches in education of developed societies is creative thinking. Student should think, experience, and build to develop his/her self-confidence and creativity, and learn directly. Teacher training university should extend these approaches.

Principle 2: other issue of the future world is universal education; given the limitless expansion of the media such as the Internet, it is an undeniable fact. Teacher training university should have written programs and mechanisms necessary to educate students in the field of globalization.

Principle 3: producing and providing technologies in accordance with the needs of society.

Principle 4: equipping the university to new technologies

Principle 5: improving the comprehensive research system of university

Principle 6: increasing the scientific production of university

Principle 7: creating new fields based on the knowledge age (educating Technology & Computers experts)

Principle 8: creating a dynamic and creative learning environment and educating teachers, researchers and entrepreneurs faithful to the Islamic Revolution

- Principle 9: increased use of modern methods of teaching
- Principle 10: equipping groups and classes to educational equipments
- Principle 11: identifying and recruiting top and elite students
- Principle 12: holding conferences and seminars in the field of new technologies
- Principle 13: making possible the access of students, faculty and staff to the Information Technology
- Principle 14: equipping the university to new technologies in education, research, and administrative processes and using IT in education, research, administrative, and financial process
- Principle 15: developing and strengthening the University's Virtual Learning Center
- Principle 16: creating, developing and strengthening the entrepreneurship centers and technology parks in the university
- Principle 17: publishing software, books, and works of art on an international scale
- Principle 18: participation of faculty members in national and international IT seminars and conferences
- Principle 19: establishing Applied Research Office in the field of new technologies on campus
- Principle 20: using workshop method
- Principle 21: using teaching assistant
- Principle 22: taking advantage of e-learning methods
- Principle 23: usage of courses' teaching profile by faculty members
- Principle 24: teaching computer, internet, and new technologies to professors and Faculty members
- Principle 25: establishing a network for electronic education
- Principle 26: considering the experiences of other countries and using these experiences in the field of educational new technologies.
- Principle 27: establishing intelligent university on the campus
- Principle 28: establishing specialized teams for providing electronic contents
- Principle 29: using appropriate teaching methods and motivating in accordance with knowledge age
- Principle 30: booting Learning Management Systems (LMS) and learning content management system (LCMS)

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