Evaluation of University Virtual Education in Underlying Grounded Theory

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ABSTRACT

E-learning development in Iran plays a key role in growth and improvement in near future. The aim of this study was to identifying the factors of the underlying E-learning under a model in Iranian University. Present study was conducted in-depth interviews with experts in the subject area. Snowball sampling method and 24 qualitative interviews were conducted in order to test findings of research. The results of encryption in were analyzed in three ways: open, axial and selective. The results of this research includes five general areas was confounding conditions. These areas include: social challenges, economic challenges, organizational challenges, political challenges, the challenges of pedagogical and educational challenges under the general categories were named with the name of the macro environment. According to the research, executive strategies has been offered, which could be a key guide for virtual educational in relation with successful implementation of this type of education and the consequences of it.

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1.   INTRODUCTION

By considering the changes and dynamics of the environment that exists in the present day, the managing of today's organizations has been very complicated, and the solutions that used to manage organizations in the past, have lost its efficiency. We are witnessing new ideas to confront this issue in the field of management. The necessary implementation of such ideas is that organizations carry out fundamental changes in their management practices and their traditional education so that they can always embrace new ideas for adapting to changes. Transformation is a necessary condition for the survival of today's leading organizations. Challenges and environmental unparalleled changes in the late last century and in the early part of the century, besides having many changes in business and industrial organizations, so that it has led that universities also experience one of the most unparalleled and the most continuous changes. With the growing trend of the world towards the multilateral advancement and high utilization of information technology, the need for new technologies and the with emergence of over-industry societies, it feels a need for a new educational system that responds to the needs of this era. The great advances in information and communication technologies have been led to increasing changes in human societies and in its following in organizations that the domain of these changes has led to a kind of transformation in the educational structure of universities and higher education institutions and the causes of emergence of institutions, universities and institutions with new teaching and learning systems has been provided. The importance and necessity of planning and restructuring is necessary according to the conducted studies in the country due to the lack of a comprehensive system in virtual universities and the many weaknesses that has existed in the organizational and strategic dimensions of these educational centers.

The Farjami (2015) in his research reached the following results: Documentation has the greatest effect and family's effect on the student's viewpoint has the least effect and role on the culture of education.

Also Saboori et al. (2011) concluded in their research that virtual education managers have evaluated the problems of university virtual education in the technical, legal, organizational and financial components in high extent, while have evaluated the problems of virtual education in cultural, cognitive, executive, and educational components in average extent. There are many topics that are considered as challenges facing universities at postgraduate levels. The five most important categories of these challenges are: learning methods and cultural challenges, e- training challenges, technical issues training challenges, and time management challenges.

The role of electronic educational multimedia and its effect on the development amount of reading skills. The role of reading skills and the success key in teaching, learning and the facing issues is essential for students in educational environment. Technical challenges related to problems such as bugs, speed, errors, functions, and features that are either not working properly or are not working according to the needs of academics. Conducted evaluations by the researcher suggest that the development and survival of virtual universities, in addition to the infrastructural and budgetary factors, are dependent on their organizational and managerial issues. The management and leadership way in the virtual university play an important role in optimal implementation of the programs and realizing the goals of the virtual university and practitioners and custodians in the creation of virtual universities. Therefore, this research, while identifying the interfering conditions on virtual education and determining its areas, showed that managers and policymakers are suitable in the field of e-training to consider these mentioned categories in composing their programming.

About the organizational challenges, Kian (2014), Bagheri Majd et al. (2013), Nourian Farr and Nasseri (2015), state in their research that virtual learning environments as a new paradigm, have been created obvious changes in the activity of universities and educational centers. Today, this paradigm is used as a modern and original tool in providing educational materials to learners. Also Shoja et al. (2015) stated in their research; in the modern era, using virtual management in the education sector can be a way to advance optimal management activities in terms of time and cost. In this type of management, which utilizes most of the management component, new features such as using of computer networking in management, using of online tools, etc. can be used. Five main objectives for e- training, including overcoming the geographical, cultural, economic, individual and educational limitations. It seems that increasing the view of managers and policymakers in the field of e- training should be changed according to the nature of traditional and virtual universities and new tools in organizing and creating network structures with new definitions of monitoring, evaluation processes and human resource utilization for new virtual organizations should be composed and approved.

About the component of the political challenges, it can be noted that Kian (2014), Farghizadeh and Kashi (2013) expressed the lack of codified policy and planning, private sector entry and inadequate government support from virtual education regarding policy making in the field of higher virtual education as the most important political challenges. In the conducted evaluation by the researcher, codified and approved planning in line with the current structures of the universities of the country have not been composed to the proper extent that meet the needs. Unfortunately, codified planning is also unavailable from the bottom to the higher (university to the relevant ministry). Therefore, it is emphasized while strengthening the virtual teaching office in the Ministry of Science, Research and Technology, and its promotion at least to the level of management to be created more favorable context for solving problems.

However, passing from the traditional management approach at the verbal universities to enter the management with the approach of electronic universities and identifying the distinguishing aspects of these two can be a new issue that has not been considered much. The importance of virtual universities is now considered to be one of the top centers for providing educational services according to this issue that the advancement of each society depends on the progress of the universities of that society. Therefore, identification of the role of intervening factors on the virtual education of university in Iran and providing patterns have been addressed in this research.

2. METHODOLOGY

The research method in this article is qualitative. The first phase of the research was conducted in a library and evaluated to description and analysis of the research related to the model of university virtual education. In the second phase, deep semi-structured interviews with knowledgeable elites were used to find the factors and challenges of universities and virtual centers. The statistical population of the research consisted of all scholars from three fields of science, executive and research. These individuals included faculty members, experts and scholars of the field of virtual education and some virtual education managers in several universities, including (Payame Noor, Imam Reza, Khaje Nasir al-Din Tousi and Ferdowsi Mashhad), which had valuable management

and implementation histories and experiences according to their backgrounds. Two sampling method of targeted and snowball methods were used in order to select a sample at this stage. The sampling continued until the researcher concluded that the new information was the same as the repetition of the previous information (theoretical saturation), and no other new conceptual information requiring a new code or expansion of existing code, would not be obtained. 24 qualitative interviews were conducted from the elite group at the end.

Qualitative researchers in the field of humanities and behavior sciences believe that theories that can be modified over time, the words such as acceptance, transmissibility and confirmation should be used instead of the word validity and reliability. Hence, methods have been proposed to increase the acceptability of qualitative research: multiple data sources, multiple analysts, multiple methods. it was tried to consider all these cases in this research. Transmissibility: Transmissibility of the research results indicates the generalizability of the obtained results to other similar groups and environments. Although this is beyond qualitative researcher's abilities, but this part of research validity can be supplied by extracting and providing the maximum data (to the possible extent), it is tried to perform this recommendation with several reviewing of interviews and maximum extraction and non-repetitive of contents in this research. Confirmation: Confirmation of qualitative research results are verified when other researchers can clearly follow the research path and conducted actions by the researcher.

Most studies introduce a paradigm coding pattern for analyzing data from Grounded theory, which leads this pattern creation in basis of systematic coding process involving three phases of open, axial, and selective. In an open coding, researcher evaluates the naming of concepts with an open mind. In the next step, which is called axial coding, the process of assigning code to concepts existing in the data is completely out of the open form and takes the selective form. The third step involves selective coding. At this stage, the researcher evaluates to develop a theory about the relationship between the obtained categories in the coding pattern. In fact, this stage is the process of integrating and improving the theory. Finally, summarization, categorization and conclusion of findings were addressed by using the basic data-processing analysis of data.

3.   RESULTS AND DISCUSSION

In analyzing data, some cases were considered as intervening conditions, which can have effect on the strategic and axial phenomenon (the pattern of university virtual education in the country) in general and with facilitating and restrictive roles. The obtained results of open and axial coding about the intervening conditions have been expressed in the below table.

As it can be seen, the obtained findings from the intervening conditions included eight general areas in this research. These areas include: social, economic, cultural, organizational, political, pedagogical, educational and technological challenges that generally category were named by the macro-environment. Also, macro - environment generally can be rooted in terms of university virtual education pattern in relation to the category of intervening conditions and based on the facilitating and restrictive roles of them. About the component of social challenges, Farahani (2015) states in his research that in our age knowledge and technology have traced together and one of them cannot be easily obtained without the other one. Cyberspace gives enormous and interesting resources and facilities to its users in the field of science and knowledge and with features such as timelessness and have no place and interactivity and so on gives many other capabilities to its users in the field of education and training.

Also Mirzaei et al (2012) and Fathi Vajargah et al. (2015) state in their research; At present, following the advancement of electronic technologies, human has been sought to reduce the scientific gap of societies, to eliminate borders, to shrink the environment and to increase its power of control over the environment. Malek Mohammadi Faradenbeh et al. (2014) have evaluated the existing challenges facing electronic education in third world countries in their research. These challenges include cultural and moral challenges, social challenges, infrastructure challenges, and economic challenges. According to Rootskoskinini et al. (2007), virtual education and learning, meeting the national and international needs of economic, political, geographical, and demographic situations in order to create better conditions for lifelong learning as well as to encourage of higher education for development and application of virtual education and learning, providing the proper conditions are seemed necessary.

Therefore, it can be concluded that electronic teaching can include wide range of the society and create new and equal social opportunities in the country and provide the field of social justice more. Informing the target community before entering the field of e-training can reduce of public concern due to weakness in other

infrastructure. About the economic challenges of Bagherian (2014), Masoumi Boland et al (2015), Malek Mohammadi Faradenbeh et al (2014), Fathi Vajargah et al (2015) and Graph and Moosa (2008) state that if we consider that many virtual education institutions have lack a faculty and physical environment to provide training, costs reduction will be more tangible. Also possibility of easy and quick communicate with several people around the world and free exchange of votes and beliefs and the level of foreign language learning skills promotion (especially the common language in the Internet, English language), especially for the learners of our country who are usually in trouble with language, have significant importance.

Table 1. Results of Axial and Selective Coding

General intervention conditions		
Axial	**Concept (selective)**	**Category**
Explosion of information Getting into problems of knowledge management due to excessive spread Explosion growth of scientific knowledge and the widening gap between developed and developing countries	**Social challenges**	**Massive environment**
Change the nature of the labor market and occupation The use of a virtual organization in order to supply goods and ... compared to traditional organizations Reducing government budget to supply financial resources to meet increasing demands for higher education	**Economic challenges**	
The negative attitude of decision makers to virtual educations Organizational Culture of universities of the Country The lack of social-cultural programs in virtual universities	**Cultural challenges**	
The desire for change in the organization Managing teams and virtual organizations Lack of technical and communication skills of the virtual team and lack of benefit from the team advantages	**Organizational challenges**	
Lack of existing policy and codified planning Private section entry Inadequate government supports from virtual educations	**Political challenges**	
Cultures and different styles of Iranian students' learning (reliance on reservations) Lack of attraction of learners in the competitive market due to unsuccessful implementation Lack of familiarity, lack of experience and lack of faculty skills with the nature of virtual lessons (self-directed content of the course by inclusive)	**Pedagogical challenges**	
Transferring the traditional space of training to virtual space Lack of attraction learners in the competitive market due to lack of virtual training in the country Not having a virtual proper training model Lack of content of lesson material Modern teaching methods	**Educational challenges**	
Technology-based universities and modern technology Resistance against technological changes Lack of familiarity, lack of experience and lack of training for faculty members in the field of new technologies	**Technological challenges**	

So, it can be said in today's competitive world, reducing resources on the one hand and increasing the needs on the other hand cause to find more importance about economic issues for both organizations and customers. Organizations are trying to provide better services with reducing costs and increasing the quality, and service receivers also tend to get proper services with low cost. Therefore, performing e- training courses in a desirable way is a good answer to the problem. About the cultural challenges; Kian (2014), Fathi Vajargah et al (2015), Malek Mohammadi Faradenbeh et al (2014), Kazemi and Ghafari (2011) state that most professors believe that do not have enough time and skill to compose and evaluate e- training materials, and also proper culture has not been accomplished in this regard. Ultimately, professors not only need to learn how to use e- training materials, but also it is essential to realize their new role in e- training with more cognition and with new innovations.

About the challenges of pedagogical Bagheri Majd et al (2013), Fathi et al (2015), Malek Mohammadi faradonbeh et al (2014), and Ross (2001) stated in their research that in our country, requirements' ranges and challenges of e-training from traditional perspectives changes to create culture, communication and hardware infrastructures, official and public official policy makings, composing laws and creating legal infrastructure in the country's education system, creating e-training management systems, preparing production of electronic content basis based on international standards of contents production and privatization of electronic content Indigenous production have broadness.

About the educational challenges, Kian (2014), Fathi Vajargah et al (2015), Malek Mohammadi Faradenbeh et al (1393), and Ross (2001) acquired these results in this research that showed the challenges of virtual education at the university in the three main axes of education, creativity, and power relations. In the virtual environment, due to the lack of face-to-face interaction and the student's modeling of the professor and others, training ground is not prepared. The virtual student will not be faced with observation possibility of the teacher's daily reactions and the modeling of his moral and educational style. The focus of training on learning and the lack of attention to higher levels of education have weakened the creativity development possibility, virtual education has led to a more democratic relationship between professor-student and student-student, but still relations with the university and the relationship between professors at the minimum level has been maintained. The educational system is very important and serious for learning, because students learn the text during this process. The problem of improving the quality of education and the time of instructors is created by several factors:

1. The contradiction between the increasing requirements for the teacher training process and the result and the reduction of professional credibility in the social and economic situation

2. The contradiction between the growing needs for teacher's professional training as culture bearers and the current state of education of future teachers, due to a lack of clear understanding by educational goals;

3. Lack of stability between the level of teacher training in higher education institutions and needs of education challenge are referred to educational needs that enable academics to learn the features of e- training and its proper functioning.

It can be stated about the technological challenges that emerging technologies in the field of communication and information have been greatly affected the society. These effects show itself especially in educational systems and its new dimensions (e- training). Rezaei (2016), in his research, evaluated the readiness of Farhangian University in implementation of e-training, as well as identifying the important factors in implementing of this important issue, as well as identifying the challenges of its implementation and specified that among these factors, technical and content factors and human resources have the greatest effect on the proper implementation of e-training at universities, and if these factors are not properly implemented, are posed as serious challenge for universities.

4.   CONCLUSION

The aim of this study was to identifying the factors of the underlying E-learning under a model in Iranian University. Improving the performance of the virtual university requires systematic management actions to increase the level of learning by establishing appropriate and effective coordination and communication between the elements and components of the virtual organization and how to integrate the activities of each component with the technological capabilities. In addition, according to the researcher, according to similarities and differences in virtual universities, factors such as the ability of managers of virtual organization in identifying experts in inside and outside the organization, team building, ability to build teamwork, interaction within the strengthened organization, the ability to establish interactions in outside the organization, attention to the demands

of the audience and their needs, the ability to define processes and designing the control and monitoring processes on them and the ability to identify the existing and required capacities and potential of the virtual organization in society to reduce costs and so on is one of the things that can be effective in improving and creating a virtual university. Our human society is now experiencing a major transformation. This transformation is not limited to different technology and tools, but the fundamental concepts means from working concept to teaching and learning concepts have been undergone fundamental changes. In recent decades, the development of the Internet network has been created an education method based on the network means e- training education.

The Internet with high penetration coefficient capability, is suitable for transferring quality and cost-effective education. This new way of education systems by computer can play a significant role in transferring education to large groups of the community and respond to the needs of global working market that is changing constantly and prepare individuals for the competitive environment of a modern global economy in a way that can evaluate to acquire the needed knowledge in a lifelong education process. Along with these developments, educational structures in the world are converting from previous professor-based method to the new inclusive method. That teacher converts to an instructor and facilitator and an encouragement for a comprehensive learning environment and helps to evaluate the solution preparation, analysis and solving the problem through knowledge that acquired by guiding of instructor to them.

In spite of these fundamental changes, the development of effective methods of distance education has not moved beyond the rapid growth of technology, and there is a significant gap between the ideal educational system and the current education system, which in its turn requires more attention to the subject of engineering of education and the development of optimal methods for transferring e-training and because the cultural and technological features and specific conditions of educational system of each country influences the proper e-training model for the educational system of that country, we must also act to develop the e-training educational management and lessons according to the native conditions of our country's educational system. At the end of this research, as the last word and the statement of the general conclusions and future approaches, more than anything else, on the culture of introducing the great achievements of virtual education, using and acceptance of the methods and virtual great education ways and the use of virtual teaching tools in the context of the programs of academic lessons by professors which undoubtedly play the most effective and most important role of education, is emphasized again. The proposed suggested solutions in this study if considered by officials in the form of long-term policy-making with high executive priorities, can open a new chapter in this regard and to be a key with fundamental changes in current attitudes and the transformation of infrastructures and applying the appropriate policies and to be an important step in developing the use of virtual education and aligning with the massive global movement in technology way and promotion the quality of education.

REFERENCES

Bagheri Majd, R., Sayed Abbaszadeh, M., Mehr Alizadeh, Y., S& hahi, S. (2013), Study and Design of Pedagogical Readiness Model in Virtual VET System.

Bagherian, A. (2014), A Study of the Challenges of Academic e- training in Iran Case Study: Virtual Education of IT Engineering at the University of Science and Technology.

Farahani, Z. (2015), Study of Educational Interactions in Cyberspace, 2nd Conference on New Research in Science and Technology, electronically, The Science Center of the Sky.

Farghizadeh, N., & Kashi, A. (2013), The study of virtual teaching methods and tools in order to improve the quality of education from the viewpoints of the faculty members of Azad University of Khodabandeh.

Farjami, M. (2015), The role of culture in education as virtual education, international conference on management, culture and economic development, Mashhad, Rayand Research Institute.

Fathi Vaharkhah, C., Khorasani, A., Roshani, H. and Baneh, A. (2015), The implementation of the curriculum for e- training and its challenges (subject to thesis), the second national conference on sustainable development in education and psychology, social and cultural studies, Tehran, Islamic Studies and Research Center Soroush Hekmat Mortazavi, Higher Education Institute of Mehr Arvand, Center for sustainable development solutions.

Kian, M. (2014), The challenges of virtual education: The narrative of what is not taught in the virtual university, Journal of Academic e- training (Media), 5 (3).

Malek Mohammadi Faradenbeh, M., Shirvani, Z., Khalozadeh Mobarakeh, S. and Malek Mohammadi, M. (2014), Challenges of e- training Implementation in Developing Countries, Second International Conference on Challenges and Solutions Management, Shiraz, Conference Center of Contemporary Journalism.

Masoumi Boland, Z., Rajaee, Z. and Imanfar, A. (2015). Feasibility Study on Designing and Implementing Virtual Education in Social Security Organization of Khorasan Razavi, First International Accounting Conference, Management and Economics Audit, Isfahan, Conference Secretariat.

Mirzaei Samarin, A., Soltani, M. and Badirzadeh, A. (2012), Challenges and Sociocultural Consequences in e- training and Learning in Virtual Environments, Fourth Conference on Electrical and Electronic Engineering, Gonabad, Gonabad Islamic Azad University.

Nourian Far, A. and Naseri, S. K. (2015), Impact of virtual learning environments on enhancing learner learning, Third National Symposium on Tomorrow's School, Chalous, Sala Faculty of Engineering, Chalous Unit.

Rezaei, B, (2016), E- training at Farhangian University, identifying its implementation factors and challenges, 2nd National Conference on Physical Education, Isfahan, Farhangian University, Isfahan University.

Ross, A (2001), Risks and Opportunities of Virtual Learning: The Experience of UOC, Online: www.uoc.es/Web/eng/index.html

Saboori, S., Sabaghian, Z. and Cyrus Fathi, V. (2011), A Study of the Challenges and Challenges of Virtual Education in Universities of Tehran in terms of Virtual Education Managers, 6th National Conference and 3rd International Conference on Electronic Learning and Learning, Tehran, Tehran University of Technology Electronic Education.

Shoja, R., Mohammaddadi, A. H. and Dehrooye, M. H. (2015), Obstacles to Using New Technologies in Virtual Management, International Conference on Management, Culture and Economic Development, Mashhad, Rayand Research Institute.