Phenomenology of Scientific Board's Views about Electronic Learning

Ghassem Abedi[1], Farideh Rostami[2], Rezaali Mohammadpor[1], Abdolazim Nejatizadeh[3], Tasnim Eghbal Eftekhaari[4], Hamid Reza Miri[4], Nasrin Tayyari[5], Ali Alizadeh[5*]

[1]Health sciences research center, Faculty of health, Mazandaran University of Medical Sciences, Sari, Iran.
[2]Health sciences research center, Mazandaran University of Medical Sciences, Sari, Iran
[3]Research &Technology Department, Hormozgan University of Medical Sciences, Bandar-e-Abbas, Iran
[4]Trauma &Emergency Medicine Research Center, Hormozgan University of Medical Sciences, Bandar-e-Abbas, Iran
[5] Educaion Department, Hormozgan University of Medical Sciences, Bandar-e-Abbas, Iran
*Corresponding author: Ali Alizadeh, PhD
Depasrtment of Education, Hormozgan Unievrsity of Medical Sciences; Tel: 3335013
Email: alizadeh266@gmail.com

Abstract: Increased availability of appropriate software and hardware has built a new horizon in educational institutions in order to facilitate electronic learning, especially the development of global web net. Importance of this problem in medical sciences which is associated with human life is twice. Hence the aim of this study was phenomenology of scientific board's views about electronic learning in Mazandaran University of Medical Sciences.In this descriptive study 40 scientific board members of Mazandaran University of Medical Sciences were enrolled. The method was based on goal and information was collected on basis of deep and semi-structured personal interview, and encoded and analyzed with Smith method. The results were grouped in 5 clusters and 15 groups. The main extracted cluster included: information, public facilities, availability, organization, language and comment evaluation. According to some advantages of electronic learning, there is no doubt about necessity of electronic learning. But the most concern in using electronic learning is expressed in aspect of information and public facilities, availability and comment evaluation that prompt lack of tendency and affinity of scientific boards in using this method, mentioning that adaption of some existing processes in world and using other countries experiences in achieving the most comprehensive model in university from Educational Development Center is unavailable. (*Abstract truncated at 212 words*).

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Introduction:

Electronic learning (e-learning) adoption of information technology tools in human education and training has created the possibility of learning anything in each field, for anyone, anywhere (Taran, 2006). E-learning is presentation of education and educational program by electronic equipment. E-learning implements computer or other electronic devices in several methods for providing education or educational material that is mandatory for important evolutions in continual medical education. Continuing medical education is an important part of education, has global availability and opportunity to perform flexibile educational designs (Duplaga, Zielinski, Ingram, 2004). Physical educational and learning areas designed as university and class walls will no longer be necessary and it will be possible to access the science learning and teaching in anywhere in this world. Those universities which are not planning a prospective vision will be deferred in this way. It seems that medical universities have no choice except to pay importance to electronic learning in order to accomplish success in comparison with other universities in the world, to educate a wide range of students and also fulfill new needs (Ghanbari, Askari, Taheri, 2010).

Today's world is a world of information and knowledge; and information is based on the development and progress of any society. Since the nature of higher education is the exchange of information and knowledge, it's reasonable to assume that changes in information technology, colleges and universities will change, and this seems to be unavoidable that these changes will lead to a re-definition of the roles, needs and expectations of students and changes in performance and structure of the universities (DellaCorte, La Mura, Petrino, 2005).The first and essential goal of electronic learning especially in Iran could be expressed like, "*extension and creation in capability of education in our country with aid of information technology and communication and response to comprehensive need*

for more quality and flexibility, leading to a better education with less cost"(Safavi, Bavaghar, Ghafari, 2006). In Iran learning experience is limited. The first conventional virtual electronic university in Iran is opened by Shiraz University and it began to accept students practically in 2003. And now about 800 students are studying in four fields consisting of Masters of Science in electronic commerce, Bachelors of Science in controlling and correction of utilities, functional electronics and law. The first electronic students in country were graduated from Shiraz University in winter of 2009(Safavi, bavaghar, Ghafari, 2005).

Presently, also other universities practice in this field in Iran. Then, many problems and questions may arise this field in worldwide are also highlighted in Iran and it is needed to explore these fields more deeply. On the other hand, because this issue is novel in the world and especially in Iran, there is need for re-assessment of the science from a perspective that is especially provided by e-learning services in medical sciences in concepts of recognizing fields, substructures and properties (Daraghi, ghazi, 2007). Functional experience in research field confirmed that there are still many refined obstacles for qualitative studies. Expression of the view from people applying this method could be effective in recognition of this issue and its understanding. In this situation, using descriptive methods in study would be more useful. Nowadays using descriptive method for assigning and assessment of the subjects which have not been recognized and present obstacles could provide valuable information in association with preferences and concepts of person about desired papers. Phenomenology is a descriptive method that studies or discusses people's experiences, concepts and feelings. Research on the numbers of scientific boards can detect from perspective or aspects of this group about the experiences in using electronic methods and show that how could creating a bridge to fill the existing space between their experiences and their needs. Keeping this view and behaviors in mind provides a possibility to address the actual issue. It should be a searched concept and factors effecting use of in vivo e-learning in this group should be sought. In Iran behavioral perceptions and viewpoints of scientific board members also could be a base for researchers and politics for effective designing of programs to utilize the electronic learning in enormous community.

Keeping that background in mind, these experiences are important for medical education; aim of this research in specialized e-learning in Mazandaran University of Medical Sciences is to evaluate the phenomenology of scientific board members' view. It is hoped that results of this research obtained from using this e-learning method would be effective as well as efficient for a detailed careful planning to keep responsible managers aware.

Methods:

This descriptive study has been performed by modern descriptive phenomenology method. Descriptive phenomenology consists of a phenomenon that possibly defines a free pro-hypothesis that has not been confirmed, includes its assessment, analyzing and description. Phenomenology emphasizes on depth of experiences and increases our understanding about experiences consisting of three phases including direct understanding, analysis and description (VanMannen, 2006). Select value in statistical community has selected 30 males and 10 females based on aims and numbers of scientific boards in different colleges. In this descriptive study, required data was collected in one phase (40 interviews during 30 minutes individually). The main method for collecting data began by open semi-structured interview with a general question about the study for example, *"What do you general information do you think is necessary for e-learning and also as a professor how do you define the education?"*. All or recoded interviews plus non verbal message of participant noted by researcher during the interview such as tune, silence, laugh,… was noted immediately after finishing every session. From first to last interview participants were assured that all information will be confidential under any circumstances. Data were analyzed by using Smith method described as below:

1- The first encounter to text: reading and review a case.
2- Recognizing and marking the themes.
3- Listing and categorizing the items
4- Creating a table to summarize and finally
5- Combining the cases to obtain the final result.

To assure the accuracy of summarizing data, ideas from professors who had several descriptive researches, were used.

Results:

It is apparent from this research that five significant categories obtained from analyzing the information from scientific board members interview about e-learning were general information, availability, organization, language, evaluation of the content. Secondary issues were classified in sub-set of main issues and some of the participants' point of views which resulted defining the clusters and themes extracted clusters and themes are noted as following:

1. Information and general facilities

Themes of scientific board member's statement in this category, consists of: the aim and importance of the lesson and its comments requiring hardware

and software, internet speed and contacts and necessary guide for discussion and questions. These themes have been shown in many cases of interviews that we review some of the participants' view points on this topic:

"Educational Development Center (EDC) in university has not introduced this course so that we could know what is the aim of this method, what should be educated with this method, what should be commented, and finally how should be this lesson intellectually interact with other lessons. "

"As I know, hardware facilities and especially software are not provided enough that this educational method could be implemented. Overall it has been studied that whether all of students use these enough facilities in this field or not? We have no high speed internet connection in college. We usually cannot open an email and respond it. How we can perform this educational method in presence of these problems? It's necessary that this situation should be studied carefully and all of existing problems which may be an obstacle defined, then perhaps we could succeed."

"It is ensured that nowadays this method has developed in the world and maybe many countries have been using it, but in my opinion, a student is deprived from discussion in class and learning is just a theory more than being practical , especially for lessons in which we need to discuss and discussion involves the student to perform his role. Maybe this problem could be solved, but I have no information."

2. Availability

Another research's question is *"What is your opinion on availability of details in education with electronic methods?"* Statements such as: availability of related lesson by user or the rate of student's skill to utilize this way can be concluded from extracted themes, student's access to professor and dictionary for technical and hard terms are included in this category.

The most statements are quoted below:

"In my idea, student should be educated enough even in a lesson frame and the availability of texts and rate of necessary skill in this field should be evaluated. I don't know how student can communicate with his professor; whether the possibility has been provided for a particular time other than working hours for both the professor and the student? Who should perform this coordination? If student is confronted with a problem and technical terms in text, how does he solve his problem? In general, when the perception of the subject is different in students, then how can they standardize it?"

As about the possible obstacles, it has been considered that scientific board members were extremely stressed or concerned about the rate of students concept, availability of the text as the same and even better, proper and prompt response to unpredictable questions and this issue requires special notation and attention of managers in designing these courses.

3. Organization

This theme consists of two subsets: **a)** syllabus organization **b)**referring discipline and dissociations in syllabus and content

Syllabus organization: this category showed that there is extreme concern in scientific boards member for achievement of electronic learning about organizing the syllabus and content.

Professor Number 16 said about this…. **"***Who can recognize that if the syllabus is organized correctly or not? Can the student recognize the correlation among different parts of a comment? If it creates a problem, how could it be understood? Is the main outline detectable with a sub-set and is it separable? When we explain and analyze clearly the syllabus and contents in the class, and the student again has a major problem in understanding the topic then imagine what about he would feel about the e-learning method"*

Professor Number 23 declared: **"**In my opinion use of e-learning method is creating dissociation in contents and syllabus and learning is interrupted. In my opinion, for us who are practicing in medical education section, using possibility of this method it is limited, because teaching is medicine is not confined and limited to a set of formulas like engineering and context cannot be justified. In medical fields expressing the cause and effect between phenomenons is very important such as disease diagnosis, and this kind of expressing and discussion is limited in e-learning.

4. Language

In face to face education, language has an important and identifiable role in maintaining effective communication. Whereas coordination of context and contents of topic being taught with expression of gestures and other body movements in students is required in face to face learning.

This theme is categorized as:

a) The type and method of speech b) structured speech with appropriate grammar

Professor Number 36 said in the interview **"***I don't know how to communicate with the student using this method and encourage him/her to make enough effort in learning the topic. Because the e-learning is associated with speech text, in my opinion it is really hard to motivate and encourage the student to promote his educational skills in this method*".

According to Professor Number 7, *"Scientific language concept is very important. The tone of teacher voice is also important that wouldn't bore the students and encourage them"*.

Professor Number 24 says, **"***In my opinion, in a classroom the communication with the student is continuous, there is no need to state or express the contents and context regarding or observing the structural rules; but in this type of education method in my idea, it is necessary to observe and regard structural rules carefully because I think it is more formal. I don't think that all of colleagues have these necessary skills. I think that someone else should be used for speech and whether this person has scientific qualifications? And also convincing this person for the speech section of e-learning is also a bit difficult."*

5. Concept evaluation

Identifying category in this theme consists of

a) Concept evaluation b) Evaluation method

Method of testing and evaluation of the students effects on learning and their inspiration, enthusiasm and motivation on learning. In fact, not only the students would like to know why and to what extent they have learned but also the professor would like to be aware of their students' skills development, quality and quantity. On the other hand, evaluation is one of the most important educational management that content of evaluation and correct evaluating process provides a very useful information about designing and educational program performing.

Most professors have some ideas adressing this important issue. Some of the interviews on this topic are presented below:

Professor number 31 *"In my idea, examination and evaluation methods are not performed in this mehtod as they should be. I have a question and answer (Q&A) session in class. It seems that in this method it is impossible to have a Q&A. We should evaluate the students classically which seems to be unattractive"*.

Professor number 38 *"Online examinations are my favorite and in my opinion, if the professors are trained about online examination and obtained the necessary skills, this would be very good and it is welcomed"*.

Conclusion:

This research showed that the most people in board have no positive viewpoints on e-learning and this could have an important aspect in volunteering the e-learning by scientific board members. Vajargah and Azadmanesh also believed that one of effective factors on lesson planning in scientific board is their belief and view about e-learning (Vajargah, Azzadmanesh, 2007). Then to assign the view of students and professors on e-learning could be associated with proper designing and basic technology which could prevent the failure of e-learning design in performance of electronic functional learning (Moniee, 2004). An organization should be enable to ease and create positive view regarding information technology (IT) in order to create positive view on e-learning (Ho li, KhuoTsung Hseien, 2010). Findings showed that professors have been expressing their concern about having no necessary skills in using appropriate softwares, as both students and professors have some lack of IT skills. Tucker and et al., believed that educational staff of an organization should be educated completely on designing and implementing IT skills which is beneficial for successful performance in e-learning in that organization. Educational staff should have necessary experience and capability in creating e-learning program and use of multimedia programs (Tucker, Zaugg, Tom, 2002). In this way Muirhead believes that most of teachers who had no skill and enough awareness of computer would have been confronted by several problems (Muirhead, 2000). On one hand, this research showed that most of professors have not been assured of software and hardware facilities and have considered this deficit as a large barrier to follow and developing an e-learning course in the university. Another studies have showed that identifying strengths and weaknesses, threats and existing opportunities in that environment which is considered to perform e-learning, such as identifying lecturer's requirements, designing and efficacy of presented educational material, would be a guarantee for successful e-learning (Eslaminejad, Masood, Norzilah, 2010). In this research, most of the professors have declared the inability of board's designing, syllabus organization, and even educational and content of e-learning. Research units need e-learning education and obtaining necessary abilities in order to increase awareness about e-learning. Glava believes that university needs to increase work and functionality of teacher's education with different educational history in field of use of educational technologies, increase skill in teachers and availability of IT facilities for teaching staff. Using of e-learning by teachers, is creating this concept that novel technologies are enable to develop the whole learning and education practices (Glava, Glava, 2010). Finally, following steps are suggested in performance of e-learning; proper infrastructure for the use of new educational technology, performing educational workshops in order to increase the ability of using the novel and up to date technologies, continuing to create sustained learning in teacher, creation of appropriate infrastructure in universities and colleges, elimination of structural and administrative barriers, inspire and motivate the

students and teachers in using e-learning and ultimately encouraging designers to optimize e-learning based courses,

Finally, other studies designed to focus on other aspects of e-learning in universities and design appropriate models and the role of other variables affecting on operational process, which was also performed in this research, and helped to evaluate and understand the role of the present situation in education. Undoubtedly, understanding the facts, circumstances and existing prerequisites require the use of additional tools that could be found in other studies.

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