

E-Learning in Type I Medical Universities of Iran

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Abstract

Background and purpose: Changes in medicine and medical education has yield to employment of new teaching methods and a shift to more student centered strategies in education. E-learning is one of these methods that can be used with greater flexibility and has the potential to enhance medical education. For our universities, using e-learning strategies in current curricula and continuous education is an inevitable issue and universities have begun their way in this era.

Methods: we reviewed the websites of 9 type 1 Iranian universities of medical sciences including Ahvaz (<http://ajums.ac.ir>), Iran (<http://www.iums.ac.ir>), Isfahan (<http://www.mui.ac.ir>), Kerman (<http://www.kmu.ac.ir>), Mashad (<http://www.mums.ac.ir>) Shahid Beheshti (<http://www.sbm.ac.ir>), Shiraz (<http://www.sums.ac.ir>), Tabriz (<http://www.tbzmed.ac.ir>) and Tehran (<http://www.tums.ac.ir>) universities of medical sciences.

We tried to access these sites twice per week for two weeks. Two of the authors performed the search within these sites separately as follows: the homepages' main menus were reviewed to find links to any kind of e-learning activity. This was done for the homepages of vice-chancellors of education too. Then if the site had a search option, the keywords of "e-learning", "blended learning" and "electronic learning" were searched both in English and Persian. Then existing e-learning activities were assessed according to formal site utilization, providing interactive content, registration option for students and faculties and tracking option for students' activities. The results of two authors were compared to reach a consensus.

Results: Among these 8 universities, there was just one straight link to distance learning office in Shiraz University of Medical Sciences' website and a link to online continuous medical education in Tehran University of Medical Sciences' website. Others had no link for an office or a kind of e-learning activity in their homepages.

Conclusion: We concluded from our search of Iranian medical universities that our universities have a long way toward deployment of effective e-learning in medical education and it seems that current efforts are performed individually, not as an organized activity. For establishment of successful e-learning systems, universities should pay more attention to this area, provide facilities and encourage qualitative implementation of e-learning in medical education.

Key words: E-LEARNING

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Introduction

Changes in medicine and medical education

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has yield to employment of new teaching methods and a shift to more student centered strategies in education. Distance learning in general and e-learning in particular is considered as a solution for new challenges.(1,2,3) E-learning can be used to provide adaptive learning and collaborative learning and transforms the role of the teacher

from disseminator to facilitator. Combining traditional face to face instruction with web-based learning, i.e. blended learning, is best suited for practice-based disciplines like medical sciences.

By looking at the recent publications we can see five types of applications in e-learning as a complement to traditional instruction:

- Simulations of physiological or biological process for teaching,
- Simulation of clinical cases,
- Virtual reality and virtual patient,
- Video and sound recording of lectures for distance and differed learning.(4)
- E-learning tools and platforms for storing and indexing resources. Within medical education, repositories or digital libraries have been established to manage access to e-learning materials.(4,5)

One of the best domains of medical education that could benefit greatly from e-learning is Continuous Medical Education (CME). CME providers can use the capabilities of the Web to bring greater opportunities for distance learning to rural and remote physicians(5,6,7,8,9).

For our universities, using e-learning strategies in current curricula and continuous education is an inevitable issue and universities have begun their way in this era.

Methods

To find out about e-learning efforts of universities of medical sciences of Iran, we reviewed the websites of 9 type I Iranian universities of medical sciences including Ahvaz (<http://ajums.ac.ir>), Iran (<http://www.iums.ac.ir>), Isfahan (<http://www.mui.ac.ir>), Kerman (<http://www.kmu.ac.ir>), Mashad (<http://www.mums.ac.ir>), ShahidBeheshti (<http://www.sbm.ac.ir>), Shiraz (<http://www.sums.ac.ir>), Tabriz (<http://www.tbzmed.ac.ir>) and Tehran (<http://www.tums.ac.ir>) universities of medical sciences.

We tried to access these sites twice per week for two weeks. Ahvaz University of Medical Sciences is changing its site so the site was not active. Two of the authors performed the search

within 8 remaining sites separately as follows: the homepages' main menus were reviewed to find links to any kind of e-learning activity. This was done for the homepages of vice-chancellors of education too. Then if the site had a search option, the keywords of "e-learning", "blended learning" and "electronic learning" were searched both in English and Persian. Then existing e-learning activities were assessed according to formal site utilization, providing interactive content, registration option for students and faculties and tracking option for students' activities. The results of two authors were compared to reach a consensus.

Results

The results were as follows:

1. Among these 8 universities, there was just one straight link to distance learning office in Shiraz University of Medical Sciences' website and a link to online continuous medical education in Tehran University of Medical Sciences' website. Others had no link for an office or a kind of e-learning activity in their homepages.

2. Efforts of type I Iranian universities of medical sciences, as revealed in their websites are listed below. It should be mentioned that as universities' sites were not informative in this area, there may be some activities that we could not find in our search.

- Continuous Medical Education (CME) provided by Tehran University of Medical Sciences (<http://cme.tums.ac.ir>): this site was providing medical staffs with a wide range of CME programs. There are 2 types of programs in this site: text-based interactive cases and audio/video clips synchronized by slide presentations. There were registration option and an archive of activities for each user.

- E-learning as a non-obligatory complement to traditional courses delivered by Tehran University of Medical Sciences (<http://www.tums.ac.ir/education>): volunteer faculty members could provide their courses as a complement to their traditional classroom in this site. There were student and faculty registration and students' activity tracking options.

- Web-based courses in dental education provided by Dental School of Shahid Beheshti University of Medical Sciences (<http://www.dent.sbmu.ac.ir/elearning.asp>): in this site the courses of occlusion of dentistry program were delivered for dental students. There was students' registration option.

- Distance office of Shiraz University of Medical Sciences (<http://dlc.sums.ac.ir/>) offered some series of slide presentations and radiology cases. The site was designed for providing scientific information on web and some of its links were active. We could not find any evidence neither for site's utilization for formal university classes, nor for student' registration and tracking. Eventually there are some projects performed by faculty members that aim to implement computer assisted learning in these universities, but as they are not designed in organizational level, there is no evidence for them in universities websites.

Discussion

We concluded from our search of Iranian medical universities that our universities have a long way toward deployment of effective e-learning in medical education and it seems that current efforts are performed individually, not as an organized activity. For establishment of successful e-learning systems, universities should pay more attention to this area, provide facilities and encourage qualitative implementation of e-learning in medical education.

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