INTRODUCTION
According to the survey and statistical information for higher education (HE) in Iran, more than 1.6 million people took part in the Iranian national HE entrance examination in 2002 (Statistics of Higher Education in Iran, Institute of Research and Planning of Iran, 2001). Also, data show that 177,665 people were registered at HE institutions in the period 2000-2001 with a growth of 8.8% compared with the previous period. In the same period (2000-2001), a total of 46,747 educational instructors were employed at HE institutions in Iran with a growth of 2.65% compared with the previous period. From statistical data, the number of students at HE institutions rose from 67,268 in the period of 1949-1950 to 733,527 in the period of 2000-2001 which indicates an average annual growth of 7.75%. The 70 or so universities and HE institutions in Iran are incapable of accommodating the great number of demanding students wishing to pursue higher education in Iran.

The roots of Internet/Web-based education go back to distance-based learning where participating learners receive learning materials (e.g., books, audio/video tapes, CDs, etc.) to pursue an educational/training course. E-learning may be defined as education that is delivered or learning that is conducted using Web techniques. Technologies and extensive activities have been focused on improving the flexibility, durability, efficiency, quality and various other aspects of e-learning around the globe.

Many articles articulate the advantages and disadvantages of e-learning; however, among the advantages gained from e-learning one may refer to the considerable contribution to not only the promotion of higher education by advocating opportunities, but also decreasing the burden of extensive academic and administrative tasks performed by traditional HE institutions.

Unfortunately, like most Web innovations, the views towards e-learning have been focused solely on financial gains rather than the emphasis on all aspects of educational/learning qualities. Numerous e-learning programs have been launched around the globe in recent years. Few programs focus on the flexibility, durability, efficiency, quality and various other aspects of e-learning. Instead, some offer high quality Internet/Web technologies such as high quality video-conferencing requiring high bandwidth, while others go to the extent to offer fancy high class learning contents. Many programs use the existing learning portals such as WebCT or Blackboard; still others use open source e-learning systems which are freely available on the Internet to provide Web-based learning.

What we must bear in mind is that education/learning differs considerably from simply shopping on the Internet. Prior to launching
an e-learning initiative, careful attention must be placed on drafting and adopting strategies, policies and methodologies considering various social, technological, organizational and educational issues and minimize possible short or long term drawbacks and failures.

E-LEARNING AND ASSOCIATED ISSUES IN IRAN

With the explosion of information technology around the globe during recent years, e-learning, in particular, has received a great deal of attention in Iran. There has been numerous national conferences, seminars and workshops in addition to the establishment of various working groups. A number of universities, educational institutions and vocational training organizations have already launched e-learning programs or are in the process of establishing one. Among them Amir Kabir University (http://www.aku.ac.ir), Shiraz University (http://www.shirazu.ac.ir), Iran University of Science and Technology (http://www.iust.ac.ir), Isfahan University (http://ww.ui.ac.ir), Sharif University (http://www.sharif.ac.ir) and Hadith Sciences College (http://www.hadith.ac.ir) have already registered students for their e-learning programs. There are also various projects underway to establish e-learning, among them, Open University (http://www.azad.ac.ir), Payam Noor University (http://www.pnu.ac.ir) and Tarbiat Modarres University (http://www.modares.ac.ir).

Most programs are based on a content-centric e-learning model where the e-learning program is based on a system which provides various functionalities and tools such as registration, access to collaboration tools (chat, forum, e-mail, etc.) and access to content. Such e-learning programs are just an access point to content, while the content itself may be dispersed across all of the system (disregarding the importance of sharable content object reference model (SCORM) (http://www.adlnet.org) — sharable content) and learning is guided by the teacher’s coordination using various collaboration tools (e.g., announcements and responses to students’ queries by sending e-mails).

In general, there may be different approaches towards e-learning implementations. One approach is based on content centrality (complementary system to current live education). Another approach may be based on a learning-centric model where the focus is placed on performance and learning-oriented information through various control options embedded in the system (e.g., using SCORM). The learning-centric models move beyond providing a complimentary content-based system to the actual educational program offered by an organization. Learner progress against specified curriculum or personal development plans can be tracked and managed while behavior and content are controlled based on learner’s information, learning progress and history and the learner’s role. It is hoped that attention is placed upon adopting alternative approaches where learning itself is managed and guided using the technology by complying with various standards and specifications provided by advanced distributed learning (ADL) (http://www.adlnet.org), IMS (http://www.imsglobal.org), IEEE learning technology standard committee (LTSC) (http://ieeeltsc.org) such as SCORM, Simple Sequencing, Learning Design and LOM (Learning Object Metadata). Such approaches may free the teachers from extensive interactions with the e-learning environment throughout the learning program allowing them to indulge in more research activities while providing learners with various adaptive or dynamic features to move towards their learning objectives.

Another drawback of e-learning programs in Iran is the lack of suitable quality assurance inspection in addition to appropriate guidelines on the learning programs as well as the content quality and delivery mechanisms.

Although the financial and economical aspects of e-learning are essential factors in providing returns on investments and to assist enhancing the quality using additional resources, unfortunately, e-learning is being transformed into e-business in a gradual manner, disrespecting the profits towards improved services, not only in Iran, but also throughout the globe.
Much care must be placed upon the quality and delivery methodologies of the learning content. An example of an organization working on such issues is the Carnegie-Mellon University (http://www.lsal.cmu.edu). Appropriate use of technology, in particular, collaboration tools (chat, forum, whiteboard, audio/video conferencing and virtual classrooms), should be taken into consideration. Most importantly, strategies and policies have to be given the highest consideration.

The government of Iran strongly encourages the use of information technology, in particular, e-learning, and a great deal of grant money and financial aid has already been invested towards such schemes. On the other hand, despite some weaknesses, the network infrastructure has been rapidly developed throughout Iran and the number of Internet users has climbed to remarkable figures in recent years. Furthermore, fair computing hardware prices have enabled a large proportion of people to own personal computers in both urban and rural areas of Iran.

The importance of standards is being recognized and more organizations are beginning to comply with standards while at the same time sensing the needs to establish domestic guidelines on e-learning based on social and cultural requirements.

Despite inadequate governmental supervision and appropriate guidelines, numerous projects are currently underway throughout Iran, considering the exploitation of e-learning in pre-university education, higher education, vocational training and company-based training. It is hoped that the country’s investments are spent under better defined procedures, guidelines and supervision to avoid disasters such as the United Kingdom Electronic University (UKEU) project, resulting in a nearly US$100 million failure (http://www.vnunet.com/com-

CONCLUSION

In this article, some overview on e-learning in Iran was discussed. Several e-learning programs have already been started in Iran. However, whether such a program, in addition to many similar programs around the globe, have been or are being successful in delivering efficient learning/education are not clearly known unless appropriate studies are conducted to analyze and evaluate the effectiveness of actual learning on the learners. Such evaluations may involve the considerations of numerous factors such as psychological, educational, technological, cultural and social issues. The focus of attention of this short article was therefore placed upon presenting brief discussions on approaches towards e-learning and models which may enable increased efficiency and quality for learning via the Internet.

It is hoped that further attention is being placed on the flexibility, durability, efficiency, quality and various other aspects of e-learning instead of gaining financial advantages or merely trying to claim satisfaction of establishing e-learning without careful considerations of suitable strategies, policies and methodologies required towards launching appropriate e-learning programs. The prospect of e-learning in Iran looks promising as the majority of people, in particular, in the higher education sector, feel the demand to embark on Web-based education, not only to fulfill the increasing number of students wishing to pursue higher education, but also to benefit from the many advantages gained from information technologies.
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