Original Article
Impact of electronic platform webinars on digital media education

Fateme Saremi Mofrad [*1], Sara Sheykhi [2]

1. Educator of Department of Electrical and Computer Engineering, Faculty of, Technical and Vocational University(TVU), Iran. Khorramabad Girls'
2. Educator of Department of Electrical and Computer Engineering, Faculty of, Khorramabad Girls 'Technical and Vocational University(TVU), Iran.

Abstract
The aim of this study was to determine the capabilities of the electronic platform of webinars in digital media education in the educational system. The present study is a quasi-experimental study using the sampling method census. The statistical population includes 60 associate degree students in the Department of Electrical and Computer Engineering, Khorramabad Boys and Girls Technical and Vocational University, who participated in a digital media training seminar in the second semester of the academic year 2020-2021. The duration of the seminar was 240 minutes. In this online seminar, 30 students had a personal computer system. All students were fully acquainted with the method of e-learning. Students who had a personal computer system installed InDesign software at the same time as the instructor. Then, they learned the complete InDesign software training according to the InDesign software training topics, and then the instructor taught digital media. At the end of the seminar, the instructor gave the same task to all the students and the students who had a personal computer system at the time of the seminar were asked to send the homework to the instructor's e-mail. According to the review of assignments sent by students to the teacher, among students who had a personal computer system, the level of access to educational objectives in 80% of cases was complete, 15% moderate and 5% poor. The content adequacy of educational materials was mentioned in 85% of cases as complete, 10% as moderate and 5% as poor.

Introduction
Learning is a process of knowledge transfer in which many theories have been proposed, learning has different levels and styles and various factors are effective in improving the quality of learning. The learning process takes place in several ways according to the existing conditions, including the face-to-face method and the virtual method, or a combination of both, but each of these learning methods has its advantages and disadvantages. Web based seminar is a combination of the words web and seminar and means online seminar; Just like a seminar, it has an organizing team, one or more speakers, and people who are present as attendees or participants. When a webinar is held, one person is the presenter and the rest of the people online see him or her at the same time and can at the end, comment and ask their questions. Just like a real seminar. The webinar is a very useful method for users who are unable to attend meetings due to distance, geographical constraints and especially corona constraints. The move towards new approaches in higher education has required many universities around the world to use e-learning technology in their courses. In the Iranian higher education system, the implementation of virtual university education officially began in 2001 with the efforts of both the public and private sectors. The point to consider is that the contrast between the traditional method of education and the virtual education method has changed the educational outcomes in learners (Allen, Odriskol, Simpson,

2013). The new culture of learning can't easily find its place without the presence of the teacher, and as a result, the new environment of teaching and learning is associated with challenges. Virtual education is a kind of western educational technology that is based on values such as being person-centered, independent learning, self-directed and active. Of course, every society uses this type of learning in accordance with its specific social and cultural conditions (Levy, 2006). For developing countries, the experience and understanding of e-learning in the education system is a complex real, virtual, global, local, traditional and modern experience, and in this context, the form and type of individual-social relations have changed and power relations, hierarchy between The teacher / student, the realization of individuality, the expansion of classroom walls, and generally new relationships are formed. Similarly, the application of this technology in Eastern and developing societies such as our country, Iran, which has different socio-cultural values, makes users' perceptions of this type of learning different. The question that can be examined is what changes in the introduction of virtual education in the Iranian higher education system, which is a system with its own indigenous-national requirements, have brought about the foundations of education. Virtual education refers to all forms of teaching-learning that are implemented and supported electronically. This method of education aims to build knowledge related to personal experience. Information and communication technologies, whether networked or non-networked, are considered to be the main means of facilitating e-learning (Tavangarian, Lipold, Knowling, 2004). The move towards this new method in higher education has led to a large number of Universities around the world are increasingly using it to offer courses. However, many experts believe that virtual education has not been able to achieve all the basic goals of education such as the development of creative thinking, commitment and responsibility, scientific risk-taking and such cases (Dreyfus, 2010). The study of theoretical foundations shows that cyberspace, despite expanding the information field of users, is not very successful in developing academic skills such as "creativity" (Dreyfuss, 2010). Creativity means using mental abilities to create a new idea or concept. In this regard, the ability to cultivate or create a new idea or thought is important. Creativity is directly related to the imagination or the ability of mental imagery, which is used to find new ways to do things better (Mohammadi, 2005). On the other hand, in educational environments as well as in the process of effective university education, efforts are made to actively build knowledge about the content of the course by learners (Ramsden, 1996). The construction of knowledge by the individual and the use of new methods in understanding and solving problems are manifestations of creative thinking in individuals. It seems that fostering creative thinking is one of the functions of the educational system as well as education at the university level. Because effective education has a special place in universities, the double focus on developing academic skills such as creativity is not unexpected. Numerous experts have pointed out the shortcomings of e-learning. Dreyfus, a contemporary professor of philosophy and Internet critic, believes that e-learning can't guarantee learners the emergence of creative ideas, the quality of information, users' mastery of all facts, and the possibility of living meaningfully. According to him, students realize that being in class, being with a teacher, and being with other students in the classroom is something that makes them feel connected to the class so that they do not want to lose that feeling. Attending class is such a positive experience that most students take the trouble to come to class in bad weather and attend class (Dreyfus, 2010). On the other hand, the most important factor in the formation of creative thinking in learners is risk-taking and the design and application of new ideas in the learning process, which of course is very rare in the virtual education environment (Dreyfus, 2010). If the potential for risk in the learning process is significant, when the learning process in the classroom is between teacher and student, both parties take risks and come up with innovative ideas and test them. This danger does not exist in the virtual education space, when the two parties do not interact with each other. In the face-to-face learning environment, the student accepts the risk that he or she may be summoned to gauge his or her knowledge, and the teacher accepts that he or she may be asked a question that he or

she cannot answer. This feature does not exist in the virtual education space (Dreyfus, 2010). According to Dreyfus, the teacher in the virtual classroom can never know if the students in the class are attracted to the lesson or not. The teacher can never understand the extent of the student's involvement in the lesson and estimate and guide his / her emerging and creative ideas. Therefore, it seems that the educational and training effects of the virtual university should be considered with some consideration (Dreyfuss, 2010). Various studies have been conducted to examine the challenges of e-learning in universities. A study by Keller et al., Comparing the concerns of virtual professors at universities in Argentina and Sweden, showed that Argentine professors, compared to Swedish professors, considered student communication and active student participation to be an important motivating factor. Problems such as lack of creativity and new ideas, lack of knowledge about technology, lack of motivational factors and lack of organizational culture were also obstacles to the educational experience of professors in virtual universities (Keller, Lind, Hrastinski, 2009). On the other hand, Stodel's study on the main issues of e-university education showed five main areas that are neglected in this type of education: lack of in-depth online conversations, lack of improvised and creative ideas, lack of understanding of others and understanding of On the other hand, lack of knowledge of others and, ultimately, lack of learning and role modeling for behavior and learning (Stoddel, Thompson, McDonald, 2006). On the other hand, the findings of Conceicao's research on the experiences of professors in e-learning also showed that the experience of online education brought a new academic relationship for the activities of professors and students. Virtual education has differentiated the length and depth of participation in lesson presentation. Professors compensated for the lack of face-to-face communication with strategies such as immediate feedback, differentiating between managerial and personal interactions, and face-to-face communication with students on a regular schedule (Consicao, 2006). Joy's study found that the virtual classroom system is an "improvised culture" that requires more time and work. Communication should be very clear as it may lead to misunderstandings. For professors, it is very difficult to enliven the learning environment and develop new solutions to problems in cyberspace. Identifying students' learning styles is another important problem in e-learning. Cyberspace is not a place to show off and requires skills such as love of work, adaptation, good listening skills, good feedback and good thinking about students' opinions. According to teachers, the biggest shortcoming of e-learning is the lack of "student personal experience of communicating with the teacher" (Joey, 2004). Coppola research also showed that the change in the role of the teacher in asynchronous virtual environments has occurred in three formats: cognitive, emotional and managerial. Cognitive role (mental processes of learning, information storage and thinking) had become more complex. Emotional role (influencing the relationship between students, teacher, classroom atmosphere) led teachers to find new tools to express their feelings and establish a more intimate relationship with students. The managerial role (classroom and classroom management) required teachers to pay more attention to detail, to consider more structure and order, and to have extra oversight of the student (Coppola, Hiltz, Router, 2001). Overall, a review of the above principles suggests that e-learning in universities has led to the evolution of the "education structure" and has raised some new concerns in the process of educating students in cyberspace. Now, according to the issues raised, the main purpose of this study is the impact of electronic platform capabilities of webinars on digital media education.

Method
The present study is a quasi-experimental study and the statistical population includes 60 students (associate degree of electrical department of Khorramabad boys technical and vocational university and associate degree of computer department (technical and vocational university of Khorramabad girls) who participated in the digital media training seminar in the second semester. They had participated in the academic year 2020-2021.The duration of the seminar was 240

minutes. 60 students participated in this online seminar, of which 30 (20 female students and 10 male students) had a personal computer system. There was a census and all students were fully acquainted with the e-learning method Before any intervention, students were taught the skill of installing a program to start a digital media training seminar, and students who had a personal computer system acted at the same time as the instructor. They installed the InDesign software, then learned the complete InDesign software training according to the InDesign software training topics, and then the instructor taught digital media. To the end The seminar was attended and then at the end of the seminar, the problems were solved and the students asked their questions to the relevant instructor and the instructor, according to the training given to the students during the relevant period, gave the same task to all students and students. Who had a personal computer system at the time of the seminar was asked to send the assignments to the instructor's e-mail.

Results

In the present study, 60 students with a mean age of 22.1 ± 1.90 and a range of 19-24 years were present. 58.33% of students were female and 41.67% were male students. According to the survey, 50% of the students participating in the seminar had a personal computer at home, the availability of a personal computer played a significant role in promoting student learning, and the other 50% attended the seminar using a smartphone. According to the review of assignments sent by students to the teacher, among students who had a personal computer system, the level of access to educational objectives in 80% of cases was complete, 15% moderate and 5% poor. The content adequacy of educational materials was mentioned in 85% of cases as complete, 10% as moderate and 5% as poor.
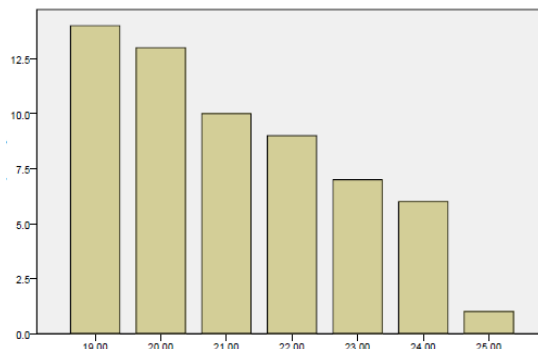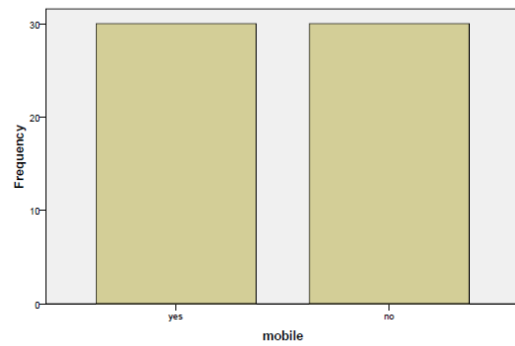

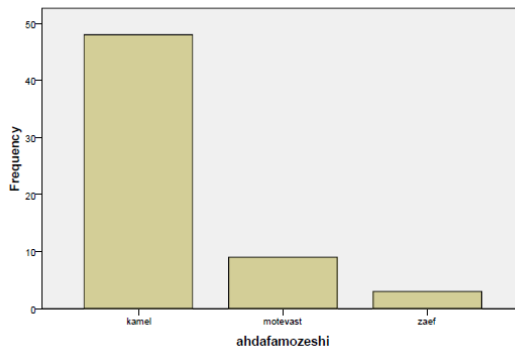**chart 1**. Frequency of participants according to age
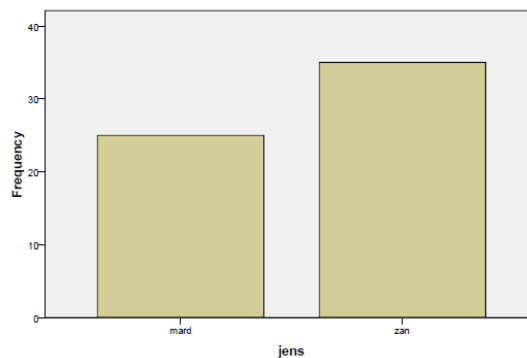
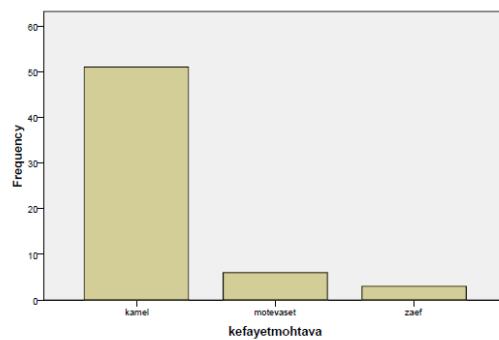**chart 2.** Frequency of participants by gender
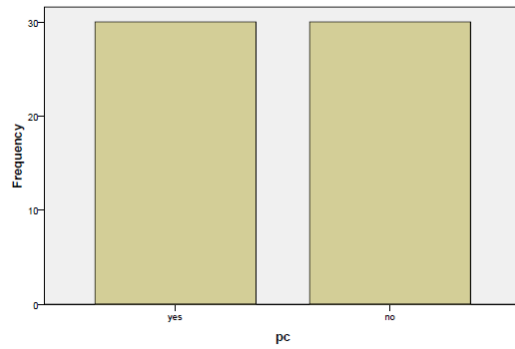
chart 3. Frequency of participants in terms of personal computer access

chart 4. Frequency of participants in terms of access to smartphones

chart 5. Frequency of participants in terms of access to access to educational goals

chart 6. Frequency of participants in terms of access, access to content adequacy

Table 1. Access to educational goals

Educational goals	Frequency	Percent
Full	48	80
medium	9	15
Weak	3	5
Total	60	100

Discussion

Creating diversity in presenting conceptual content in a virtual way, reviewing the presentation method and adding special effects, especially in conceptual topics, can be useful to improve the achievement of educational goals. The results of the present study, considering the assignments sent by the students to the teacher, showed that among the students who had a personal computer system, the level of access to educational goals in 80% of cases was complete, 15% moderate and 5% poor. The content adequacy of the educational materials was mentioned in 85% of the cases as complete, 10% as moderate and 5% as poor. In the study of Joe and Wang, who examined the effect of virtual reality environments on learning performance in technical skills, the results showed that students use virtual reality-based learning environment as an effective method in the aspects of "machine operation, selection of process parameters" And process planning were considered (Chang, Li, Wang, 2010). By examining the effect of virtual reality learning environment on students 'cognitive and language development, Chen found that virtual learning environment with unique immersion and ease of use features, along with helping to understand students' language cognition (Chen, 2016). Moghaddasi et al. Examined the role of learning models, approaches and theories in the design and production of educational software based on virtual reality techniques in nursing education and systematic review. The results showed the use of simulation models and learning theories to guide the design. And the production of these softwares seems to be necessary towards learning based on professional competence (Moghadasi, Rabiee, Nazemi, 2016). Lotfi et al. Examined the effect of virtual and real reality training with and without audio information limitation on learning forehand table tennis skills. Lotfi, Mohammadzadeh, Sohrabi, 1396). Hossein Khani and his colleagues examined the use of virtual reality technology and a hepatic robot to educate blind students. The results show the usefulness of the virtual environment as a means of educational assistance for the blind in terms of cost and time of learning (Hosseinkhani, Arbabtefti, Paygan, 2015). It seems that the production of distance educational media is better than the method of film production and with video chat facilities. Access to personal computer and computer skills also play an effective role in facilitating student performance for distance education, which is in Schrider's study. And Diashvili also emphasizes the positive effect of computer skills. Of course, in comparing the level of proficiency and access to computers in Germany with Iran, extreme caution should be considered. Enables remote method. Despite the relative satisfaction with the attractiveness of the virtual system, high satisfaction was observed in the survey to create an advanced digital media training course. Learning virtual education requires more time, concentration and practice, but its continuation leads to effective, continuous and enjoyable learning. Therefore, in order to accelerate and facilitate the stability of this educational method, it is possible to provide incentive scores, special points to the top students selected in this method, and to provide facilities such as computer loans. It is suggested that teacher training courses in the field of distance education planning, working methods in debugging classes, evaluation and academic achievement, and providing a computer and Internet familiarity unit and a virtual education site to students be anticipated and implemented. The computer centers of the faculties should be equipped according to the number of students and their software and hardware issues should be resolved. Also, the

provision of facilities for access to a personal computer should be done by providing a long-term student loan after graduation to purchase a laptop and a smart phone. New students entering computer education service centers with student discounts should be introduced and as a medium-term solution, ICDL certificates should be announced as a prerequisite for entering the university. In addition, adding computer questions to university entrance exams and high school courses and even guidance to keep up with the daily needs of young people can play an effective role in the formation of creative and new educational systems, including e-learning.

Conclusions and suggestions

In today's world where information is updated day by day and the speed of its production is reduced to a blink of an eye, the transfer of information from one person to another is the goal of training in vain; Therefore, the purpose of training to retrieve this knowledge has changed according to each individual. Due to the computer facilities available in universities and the level of mastery and ability of students to work with computers, virtual education can't be used as the dominant method at the university level. However, the continuation and promotion of computer access in the whole society and computer use training in the basic education of the country can be an effective help to lay the groundwork for the use of this educational method. Virtual education as a relatively emerging method seriously pursues this goal. doing. Although this type of education and the use of modern media such as the Internet and computers have created golden opportunities for people, but the existence of obstacles and problems in it is impossible. The movement to make the most of e-learning has begun around the world, and it is becoming more and more widespread. The main reason for this is the many benefits of traditional education, including the ability to generalize and the higher costs of this type of education, which accounts for only half of the cost of traditional education. On the other hand, the large number of people who can use these trainings 24 hours a day, 7 days a week and the lack of alternatives for this, especially for training a large number of teachers in the country has placed many requirements on education officials.The issue of virtual schools, despite its short life, has found a good place in the structure of education around the world. Given this, almost everyone is at the beginning of this path and the distances in this path are not so great, and therefore, with a planned and determined effort, we can be among the pioneers of this great movement; Therefore, it is necessary to start moving in this direction as soon as possible. Procrastination in this work is only the loss of many opportunities that lie ahead for the Ministry of Higher Education. The reason for not moving (weakness of the country's communication and telecommunication network) is: Removing telecommunication and hardware restrictions is one of the priorities of telecommunication programs and all these obstacles will be removed in the near future. On the other hand, people all over the country are currently using the Internet and their number is increasing rapidly. The creation of hardware and network infrastructure must be done in parallel, so that they can be used in the least amount of time, and it is necessary for the two to move and expand in parallel. The results of the present study showed that creating diversity in providing educational seminars in a virtual way, reviewing the presentation method, to improve the achievement of goals and improve the quality of virtual education can be useful. Personal computer access and computer skills, as well as high-speed Internet access, can play an effective role in facilitating student performance for distance learning. Comprehensive and higher quality educational goals can be achieved.

References

[1] Allan HT, O'Driscoll M, Simpson V, Shawa J. Teachers' Views of Using E-Learning for NonTraditional Students in Higher Education. Nurse Education Today. 2013;33(9):1068-1073.

[2] Levy P. The Impact of Technology in Cyber Culture. Minneapolis: University of Minnesota Press [Internet]. 2006 [cited 2013 April 12]. Available from: https://circle.ubc.ca/bitstream/handle/2429/1333/WikiRevolutionCATaC2006.pdf?sequence.

[3] Tavangarian D, Leypold ME, Nölting K, Röser M, Voigt D. Is E-learning the Solution for Individual Learning? Electronic Journal of E-learning. 2004;2(2):273-280.

[4] Dreyfus H. About the Internet: A Philosophical Look at the Internet. Farsinezhad A, trans. Tehran: Saghi Publications; 2010. p. 20-85. [In Persian]

[5] Mohammadi N. Creativity and Initiation: Its Definition, Concepts and Management. Hamshahri Magazine. 2005;13(3730):10. [In Persian]

[6] Ramsden P. Learning to Teach in Higher Education. London: Routledge; 1996.

[7] Keller Ch, Lindh J, Hrastinski S, Casanovas I, Fernandez G. The Impact of National Culture on Elearning Implementation: A Comparative Study of an Argentinean and a Swedish University. Educational Media International. 2009;46(1):67-80.

[8] Stodel EJ, Thompson TL, MacDonald CJ. Learners' Perspectives on What is Missing from Online Learning: Interpretations through the Community of Inquiry Framework. International Review of Research in Open and Distance Learning. 2006;7(3):1-24.

[9] Conceicao SCO. Faculty Lived Experiences in the Online Environment. Adult Education Quarterly. 2006;57(26):26-45.

[10] Joy D. Instructors Transitioning to Online Education [PhD Thesis]. USA: ProQuest Information and Learning Company; 2004 [cited 2012 Feb 9]. Available from: http://scholar.lib.vt.edu/theses/available/etd-09232004 172606/unrestricted/Dissertationfinal3.pdf.

[11] Coppola NW, Hiltz SR, Rotter N. Becoming a Virtual Professor: Pedagogical Roles and ALN [Internet]. 2001 [cited 2010 April 24]. Available from: http://www.hicss.hawaii.edu/HICSS_34/PDFs/CLALN01.pdf.

[12] Chang, C. W., Lee, J. H., Wang, C. Y., & Chen, G. D. (2010). Improving the authentic learning experience by integrating robots into the mixed-reality environment. Computers & Education, 55(4), 1572-1578.

[13] Chen, Y. L. (2016). The effects of virtual reality learning environment on student cognitive and linguistic development. The Asia-Pacific Education Researcher, 25(4), 637-646.

[14] Moghaddasi, H., Rabii, R. Nazemi, I.; Bigdeli Sh. & Ebrahimpour Sadeghiani, Hasan. (2016). Role Of Models, Approaches And Learning Theories In The Design And Production Of Educational Software Based On Virtual Reality Techniques And Simulation In Nursing Education: A Systematic Review. J Urmia Nurs Midwifery Fac, 14 (4), 300-312. [persion]

[15] Lotfi, M., Mohammadzadeh, H. & Sohrabi, M. (2017). The Effect of Virtual Reality Practice with and without the Limitation of Voice Information on the Learning of Foreland Tennis Skill on the Table. Journal of Motor Behavior, 28, 91-110. [persion]

[16] Hosseinkhani, S. Arbabtafti, M. R. & Payegan, Gh. (2015). Using virtual reality technology and a hepatic robot to teach blind students. Journal of Educational Technology, 36, 272-265.