The Evaluation of Psychological Criteria in the Design and Production of E-learning Course Wares

Mahtab Feyz Dihour[1]., Faramarz Malekian[2*]

[1,2] Department of Educational Technology, College of Humanities, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran.

ABSTRACT

E-Learning Courseware Design and production requires extensive and continued research. One of important aspects of this issue is psychological characteristics of e-learning course wares. The method used in this study is a descriptive survey. This survey is practical and methodological is exploration in the category. The study sample included students in the Master of Educational Sciences (educational technology subfield), Islamic Azad University of Kermanshah. The instrument used in this study is a questionnaire. For sampling, Proportional stratified sampling method was used. To evaluate the validity of the study, content validity and to determine the reliability of the questionnaire, Cronbach's alpha was used. The reliability of the questionnaire, was estimated 0.84. The results shows that Psychological features in the design and production of E-Learning Courseware should be considered more than average (5/3 of 5). The results of the questionnaire show that according to the priorities of empathy participation, feedback and reinforcement, repetition and practice the use of different senses, creativity and self-explanatory, change, rest house, encourage self-learning, remedial teaching, group dynamics, and the incentives of interest Islamic Azad University of Kermanshah views graduate students are given more importance.

KEYWORDS: e-learning courseware, psychological characteristics, design and production.

INTRODUCTION

Long book, the main source of information in education was considered. The rapid progress of information and communication, in recent years has caused a lot of different aspects of human life, has undergone fundamental changes, and one of the most important area is education. Students and teachers, in terms of flexibility, the development of the teaching-learning process (Razidas, 2004). Education in every country, very basic and important role in fostering creativity, so be sure the education system, the education of individuals, who are capable of creative problem solving unforeseen issues (Torrance, 1994) whatever learning support, and facilitate the training of the (Spector, 2000). In the course of production and design, software for electronic use of psychological criteria, including creativity and innovation, motivation and interest, the learned Linking previously, with new learning and individual differences, if considered, students are trained to solve problems, not like those caused by the inability to deal with the problem, the problem is eliminated. (Beghetto, 2009). A measure of psychological, problem solving and creativity, and deal with the real issue at the heart of their learning. In compliance with the criteria of psychological, E-Learning Courseware Design and production, and creative problem solving and dealing with the real issue at the heart of our learning. Using the theoretical foundations of psychology and educational psychology course in the design and production of educational software, it came (Rudi et al., 2003). The students and teachers in terms of flexibility, the development of teaching and learning process is (Razidas, 2004). Today's multimedia in teaching and learning is used, because on the one hand to attract learners, and the other with a variety of features that provide for teaching, learning guarantees (Razavi, 2007). Ahmedpoor (2008) in their study, which showed creativity by teaching training programs are on the rise. Also Liu (quoting Asadi, 2010), in their review of the impact of cross-media - Booklet on creative thinking, get creative group compared with the control group, has been rising. To help improve students' learning motivation, and their participation in the activities of teaching and learning, effective multimedia atmospheres (Razavi, 2007). If people have an understanding of how to use technology effectively reach millions of dollars dedicated to the development of educational technology wasted (Emam Jome, 2002). Educational technology, as the most important tool is the capital method, is used to empower communities, and

---

* **Corresponding Author:** Faramarz Malekian, Department of Educational Technology, College of Humanities, Kermanshah Branch, Islamic Azad University, Kermanshah, Iran.
E-mail: faramarz.malekian45@iauksh.ac.ir

causing major changes in education is considered, and a unique opportunity for developing countries lag compensation (Maleki, 2001). (Amoli, 2005), a model of behavior to build and reinforce attitudes, and success achieved in the educational aspects. Such as lack of training space, individual differences, massive amounts of data in recent years, considerable interest and efficiency, the use of e-learning courseware has caused. Due to the different goals and approaches, the use of criteria, different views on the classification of them, has created an e-learning (Holden, 2004; Harris, 2002). A new generation of authoring tools, e-learning courseware emerged in which, specifically to produce content for e-learning were designed. Hence, the set of criteria and indicators based on the selection of this courseware has always been of primary concern to researchers in the field (Holden, 2004; Harris, 2002). Identify and apply psychological criteria in the design and production of e-learning courseware, to increase understanding and facilitate teaching and learning, and helps learners. The term "authoring tool" may be associated with advanced software used by professional writers, it seems, while the efficiency of the authoring tool, the e-learning courseware, pre-writing and processing of words (Holden , 2004; Harris, 2002). Use of psychological measures, in e-learning courseware authoring, manufacturers in the use of a wide range of media to produce professional educational content, interactive, helping them attract visitors. To help improve students' learning motivation, and their participation in the activities of the various areas of multimedia teaching and learning, is effective (Razavi, 2007). Software Development and provision of e-learning courseware, according to its popularity for students, due to the diverse and multi-media space that can be effective in improving students' learning motivation. Now, with the speed and quality of education should be much higher than in the past. If the e-learning courseware, students designed and manufactured according to the psychological characteristics, outcomes, many will follow. The psychology of learning, individual differences, the need to organize the training process based on the needs, interests, speed and comprehensive capabilities is considered.

Technology can be seen in all aspects of human life, and certainly the teaching of this subject is no exception. Educational technology as the most important tools, methods and capital that, for enabling education in the last century, used and causing major changes in education (Maleki, 2001). The use of psychological criteria, the author of the e-learning courseware, manufacturers in the use of a wide range of media to produce professional educational content, interactive and allure, assists. E-Learning Courseware, can be considered as a linear path that must be followed by a comprehensive, in order to accommodate the different needs of learners and personalization features, used in education (Carchiolo et al., 2003; Siadati and Taghiyareh, 2006). Some authoring tools, including criteria is psychological. If e-learning courseware is designed and produced by students According to psychological characteristics, outcomes, many will follow. In educational psychology, individual differences need to organize the learning process, based on the needs, interests, speed and ability to provide learners. E-learning courseware, using psychological principles to learners the possibility that, by determining the educational content, and create a more active learners have different performance. Training courseware design and production, according to the learner's cognitive criterion allows you to new forms of knowledge, and at different levels according to previous studies, the receiving application. Due to the different goals and approaches, the use of criteria, different views, in the category of E-Learning Courseware, has created (Holden, 2004; Harris, 2002). Learning through E-Learning Courseware, the way in which individual learning, independent learning and self-reliant. "One way to achieve effective learning, choosing and implementing appropriate measures, in the medium of teaching." (Holden Westfall, 2008), the E-Learning Courseware, and the use of computers in the classroom, can be regarded as a stimulus for learning (Ghaffari, 2003). If psychological measures, as a logical strategy, consider the broad-based approach rather than subject-centered teaching and learning can be applied to software, the opportunity will be inclusive of interest, creativity and their various abilities will flourish. In fact, a measure of psychological knowledge and its application in e-learning courseware, can meet the needs of all types of learners from strong to weak, met in an effective manner. Psychological factors that can be discovered by some of the great psychologists, e-learning tools to be effective in improving the quality of education, as the interest and motivation, and repeat the exercise, the leisure, the feedback and reinforcement, the empathy and collaboration, the different senses, the use of group dynamics, stimulating the self-learning, fostering creativity and self-explanatory principle, the principle of compensatory education, are of higher value, until a few years ago people to learn, requires time and places were limited and specific, but now with the advancement of technology, this restriction is gone, and everyone would be able to learn anything at any place and time. "In light of this new system, the training which, called e-learning. "(Horton,

2006) Design and manufacture of electronic courseware, appropriate psychological characteristics and inclusive education, and tailored to their interests, learning style and level of their knowledge, hard work and is highly specialized, large-scale studies are needed. "In light of this new system, the training takes place, called e-learning. "(Horton, 2006). E-learning, ever since the beginning of creation, growth and development to speed back up, and continue to evolve to be increasing day by day. " (Jamshidi Moghadam, 2010). For e-learning courseware, "consistent with the needs of learners" is required to be based on learners psychological standards, be prepared. E-learning is a dynamic, fully updated content at any time, the best sources are available, and these experts are fully qualified (Farhadi, 1383). Due to the different goals of education, the use of criteria, different views on the category they are in e-learning. (Holden, 2004; Meris, 2002). E-learning is probably one of the most commonly used terms associated with the term educational technology, has entered the field of education (Noori, 2002). As many educational centers, through E-Learning Courseware, this training has been part of its long-term plans, and investments are doing on this issue. Among the programs and tools associated with this type of training, the importance of authoring tools and standards, because of the key role it plays in the production of educational content, an interminable dispute. "This means the beginning of time, training, based computers have existed, and in the early 90s, mainly to produce multimedia training, were used (Holden, 2004; Harris, 2002) to determine the criteria and indicators based on the selection of this courseware is always The main concern of the researchers in this field (Holden, 2004; Harris, 2002), e-learning has been from the beginning of creation, growth and development, quickly passed, and the day-to-day evolution and development of the be added (Jamshidi Moghadam, 2010) .education electronic, network resources for those who rely on Internet technology, uses, and also work with the network, enabling them to learn to do so (Jamshidi Moghadam, 2010), e-learning courseware, equipment capabilities, which, for a variety of teaching and learning issues, as teaching aids, are used. These lessons are a rich source software to replace other means of education, and the To achieve the goal of education should be used. Such as lack of training space, individual differences, the sheer volume of information, time and location constraints, needs and interests of the people, causing increased production of e-learning courseware is. If e-learning courseware is based on the design and manufacture of psychological Criteria be a valuable aid in the process of teaching and learning, for best results, both economically and in terms of human resources, and provides cost. This research is important in the sense that, if the E-Learning Courseware, based on psychological criteria, and the characteristics and interests of individuals, without regard to the limitations of time and place, the more efficient, she added. Increase productivity through enriched learning environment for e-learning shows. Therefore, the present study, the characteristics of e-Learning Courseware, from the psychological studies.

Research Objectives
The main objective of this research
Psychological evaluation criteria in the design and production of e-learning courseware

Secondary objectives of the study
1. Benchmarking interest and motivation, design and production of e-learning courseware
2. Benchmarking repetition and practice, design and production of e-learning courseware
3. Benchmarking change, rest and leisure, to design and produce e-Learning Courseware
4. Benchmarking feedback and reinforcement, the design and production of e-learning Courseware
5. Benchmarking communion and participation in the design and production of e-learning courseware
6-benchmarking of different senses, in the design and production of e-learning Courseware
7. Benchmarking encourage self-learning, e-learning courseware design nd production
8-benchmarking of group dynamics in the design and production of e-learning courseware
9. foster creativity and self-explanatory benchmarking, design and production of e-learning Courseware
10-benchmarking new teaching compensatory education, e-learning software in the design and production course

Research Questions
1. What criteria repetition and practice, in the design of e-learning courseware production f, is involved?

2. The extent to measure interest in and motivation, design and production software e-learning course, plays a role?

3. What criteria change, probably ester and recreation, in the design and production of e-learning courseware, is involved?

4. How to strengthen criteria and feedback on the design and production of e-learning Courseware, is involved?

5. To what extent is a measure of empathy and involvement in the design and production of e-learning courseware, is involved?

6. What criteria are used in various senses, e-learning software in the design and manufacture of course, plays a role?

7. Do the criteria encourage self-learning, e-learning software in the design and manufacture of course, plays a role?

8. To what extent measures of group dynamics in the design and production of e-learning Courseware, is involved?

9. To what extent measures of creativity and self-explanatory, e-learning software in the design and manufacture of course, plays a role?

10. To what extent have compensatory measure teaching new training, e-learning software in the design and manufacture of course, plays a role?

RESEARCH METHODS

This descriptive study was to survey the dermal tissue (quantitative and qualitative) is. The population of 105 students from the Master's degree in Educational Technology, Islamic Azad University of Kermanshah, who at 2014 years. The sample size in this study, 105 patients were included. The sampling method was selected. . To describe data, the mean and standard deviation, and statistical methods to analyze data, - value- t-test was used, and the data processing requirements, the score using the software program spss (version 18), is performed.

Research Tools

Questionnaire: Since the theme of this study, there was not a standard questionnaire, the questionnaire was used, and the data from interviews, questionnaires and Latin sources, and theoretical research assistance out. To answer the research questions of the study provide a questionnaire was used. Sample questionnaire is attached in the Appendix. The questionnaire is intended to respond to each item of the Likert rating scale, was developed by six degrees, for each value is numeric order. For the validity of the questionnaire, the professors and experts to be used, and in case of questions, the questions are clear and understandable, and whether these questions, it is appropriate for the research question, and it is measured, and the amendment to the survey, were applied at a jump. This is due to the use of expert judgment, no statistical methods to determine the validity of content there. Instead of determining the validity of a test substance, the judgment of the experts on this issue, the question of how representative the questionnaire, or content areas are used. However, the judge of the validity of the content, they are not definitive and final validation tests are of different levels, and experts in their judgment, they do not agree with (Seif, 2002, pp. 381-380). To evaluate the reliability of the questionnaire was calculated using Cronbach, and 0/84 reliability of the questionnaire have been met.

Findings

Table 1(descriptive data (mean, standard deviation, and frequency), it displays the variables of interest.

Table 1: Table of mean and standard deviation

The most	Least	Standard deviation	Average	Count	Criteria
6	1	1.525	4.22	105	Repetition and practice
6	1	1.582	3.84	105	Interest and motivation
6	1	1.517	4.12	105	Change, rest and recreation
6	1	1.429	4.23	105	Feedback and reinforcement
6	1	1.405	4.41	105	Communion and participation
6	1	1.441	4.22	105	The use of different senses

6	1	1.512	4.04	105	Encourage self-learning
6	1	1.567	3.92	105	The use of group dynamics
6	1	1.532	4.19	105	Creativity and self-explanatory
6	1	1.450	3.95	105	Remedial teaching, learning new

Referring to Table 1, it can be said, the average of all values higher than 5.3, the obtained result suggests that the above criteria are involved in the design and manufacture of E-Learning Courseware. And they can be, respectively, significance was arranged as follows.

Inferential statistics

Question 1: Is a measure of repetition and practice in design and production software e-learning course, plays a role?

Table 2: Table variable t test for repeated measures, and practice in the design and manufacture of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
1.01	0.42	0.719	0.000	4.831	104	Repetition and practice

Table 2 shows the results of that test with a significance level of 0.000, which, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 5/3 of the average variable), is rejected. The resulting interval for the mean difference equal to (1/01 and 0/42) that, since this interval is greater than zero, the result is confirmed. Our other words, it can be deduced that the average scale scores and exercise is equal to 3/5, but is larger than 3/5.

Question 2: Is a measure of interest and motivation in designing and producing e-learning Courseware, is involved?

Table 3: Table variable t test to measure interest in and motivation, design and production of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
0.64	0.03	0.338	0.031	2.190	104	Interest and motivation

The results of Table 3 shows that significant levels of 0/031 test that, because of the error test, 0/05 is smaller, so the null hypothesis (the average of the variable with 3/5) will be rejected. The resulting interval for the mean difference equal to (0/64 and 0/03) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, the mean measure of interest and motivation, is equal to 3/5 rather than 3/5.

Question 3: Is a measure of the change, rest and recreation in the design, and production application of e-learning course, plays a role?

Table 4: Table variable t test to measure change, rest and recreation in the design and manufacture of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
0.92	0.33	0.624	0.000	4.213	104	Change, rest and recreation

The results of Table 4 shows that, test the significance level of 0.000, which, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable) will be rejected. The resulting interval for the mean difference equal to (0/92 and 0/33) is that because this interval is greater than zero, the result is confirmed. The other hand, can be concluded that the benchmark scores, Leisure equal to 3/5, it is larger than 3/5.

Question 4: Is a measure of feedback and reinforcement in the e-learning software design and manufacture of course, plays a role?

Table 5: Table variable t test to measure feedback, and reinforcement in the design and manufacture of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
1.01	0.45	0.729	0.000	5.223	104	Feedback and reinforcement

Table 5 shows the results of that test with a significance level of 0.000, which, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable), is rejected. The resulting interval for the mean difference equal to (1/01 and 0/45) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, the mean measure of feedback and reinforcement, is equal to 3/5 rather than 3/5.

Question 5: Is a measure of empathy and involvement in the design and production of e-learning Courseware, is involved?

Table 6: Table variable t test to measure empathy and participation in the design and manufacture of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
1.18	0.64	0.910	0.000	6.632	104	Communion and participation

The results of Table 6 shows that, test the significance level of 0.000, which, because of the error test, 0/05 is smaller, so the null hypothesis (the average of the variable with 3/5), was rejected. The resulting interval for the mean difference equal to (1/18 and 0/64) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, the mean measure of empathy and engagement, is equal to 3/5 rather than 3/5.

Question 6: Are the criteria used in various senses, in the design e-learning software and manufacture of course, plays a role?

Table 7: Table variable t test, used to measure various the senses in the design and manufacture of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
1.00	0.44	0.719	0.000	5.113	104	The use of different senses

The results of Table 7 shows that the significance level of the test is equal to 0.000, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable) will be rejected. The resulting interval for the mean difference equal to (1/00 and 0/44) that, since this interval is greater than zero, the result is confirmed. Our other words, it can be deduced that the average standard scores using different senses, is equal to 3/5 rather than 3/5.

Question 7: Is a measure to encourage self-learning, in the design e-learning software and manufacture of course, plays a role?

Table 8: Table variable t test to measure encourages self-learning, e-learning software in the design and production course

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
0.83	0.25	0.538	0.000	3.646	104	Encourage self-learning

The results of Table 8 shows that the significance level of the test is equal to 0.000, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 5/3 of the average variable) will be rejected. The resulting interval for the mean difference equal to (0/83 and 0/25) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that the benchmark scores to encourage self-learning, is equal to 3/5 rather than 3/5.

Question 8: Is a measure of group dynamics in design and production software e-learning course, plays a role?

Table 9: A table variable t test, to measure the use of group dynamics in the design and manufacture of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
0.73	0.12	0.424	0.007	2.771	104	The use of group dynamics

The results of Table 9 shows that a significant level of 0/007 test that, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 5/3 of the average variable) will be rejected. The resulting interval for the mean difference equal to (0/73 and 0/12) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that the use of group dynamics benchmark scores, but greater than 3/5 is equal to 3/5.

Question 9: Is a measure of creativity and self-explanatory in the design e-learning software and manufacture of course, plays a role?

Table 10: Table variable t test, to measure creativity and self-explanatory, in the design and manufacture of E-Learning Courseware

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
0.99	0.39	0.690	0.000	4.617	104	Creativity and self-explanatory

Table 10 shows the results of that test with a significance level of 0.000, which, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 5/3 of the average variable) will be rejected. The resulting interval for the mean difference equal to (0/99 and 0/39) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, the mean measure of creativity and self-explanatory, but greater than 3/5 is equal to 3/5.

Question 10: Is a measure of compensatory teaching new training in the design e-learning software and manufacture of course, plays a role?

Table 11: Table variable t test, to test new teaching compensatory education, e-learning software in the design and production course

Upper bound	Lower bound	The mean difference	Significant level	T-statistics	Count	Criterion
0.73	0.17	0.452	0.000	3.196	104	Compensatory education teaching new

The results of Table 11 shows that a significant level of 0/002 test that, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 5/3 of the average variable), is rejected. The interval for the mean differences are obtained, equal to (0/73 and 0/17) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, compensatory education teaching new benchmark scores equal to 3/5, it is larger than 3/5.

DISCUSSION AND CONCLUSION

The study, entitled "Study of psychological factors in the design and production of e-learning Courseware", a descriptive survey method, intertwined (qualitative and quantitative) was implemented.

In this study, the number of the sample is small, and the sampling is used. Overall results indicate the effectiveness of measures on E-Learning Courseware Design and production, as the average score of all measures is higher than 3/5. In this study, 10 hypotheses stated. The results of the hypotheses, a summary of the test variable t, as follows: (1) to examine the hypothesis of this study, titled "Do not repeat the standard practice in the design and manufacture of E-Learning Courseware plays" results Table 2 shows a significant level of 0.000 test that, because of the error test, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable) rejected be. The resulting interval for the mean difference equal to (1/01 and 0/42) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, the mean measure of repetition and practice, equal to 3/5, it is larger than 3/5, (0/00 = P and 4/831 = t). In hypothesis 2 study entitled "Is the design criteria of interest and motivation, and E-Learning Courseware production plays", the results in Table 3 show, the level of significance test is equal to 0/031, as The test error rate, 0/05 is smaller, thus the null hypothesis (equal to 3/5 of the average variable) will be rejected. The interval for the mean differences are obtained, equal to (0/64 and 0/03) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, the mean measure of interest and motivation, equal to 3/5, but 3/5 is larger than (0/031 = P and 2/190 = t). In Hypothesis 3 study, titled "Do not measure change, rest and recreation in the design and manufacture of E-Learning Courseware, plays" The results of Table (4) shows a significant level test is equal to 0.000 Because of the experimental error, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable) will be rejected. The resulting interval for the mean difference equal to (0/92 and 0/33) that, since this interval is greater than zero, the result is confirmed. In other words, it can be concluded that, the benchmark scores, Leisure, equal to 3/5, it is larger than 3/5, (0/00 = P and 4/213 = t). The study hypothesis (4) study entitled "Does the criterion of feedback, and strengthen the design and production of e-learning Courseware, plays" The Table (5) shows, the level of significance of the test is 0.000, as The test error rate, 0/05 is smaller, thus the null hypothesis (equal to 5/3 of the average variable) will be rejected. The resulting interval for the mean difference equal to (1/01 and 0/45), which, as the interval is greater than zero, the result is confirmed. Formally Other possible concluded that, feedback and reinforcement criterion scores equal to 3/5, it is larger than 3/5, (0/00 = P and 5/223 = t). In this hypothesis, No. 5, entitled "Is empathy and participation criteria, is involved in the design and production of e-learning Courseware", the results of Table 6 shows, the level of significance test is equal to 0.000, as The test error rate, 0/05 is smaller, thus the null hypothesis (equal to 3/5 of the average variable) will be rejected. The interval obtained for the mean differences, equal to (1/18 and 0/64) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, the mean measure of empathy and engagement, is equal to 3/5 rather than 3/5, (0/00 = P and 6/632 = t). In this hypothesis, No. 6, entitled "Are the criteria used in various senses, is involved in the design and manufacture of E-Learning Courseware", the results of Table 7 shows, the level of significance test is equal to 0.000, Because of the experimental error, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable) will be rejected. The resulting interval for the mean difference equal to (1/00 and 0/44) that, since this interval is greater than zero, the result is confirmed. Our other words, it can be deduced that the average standard scores using different senses, equal to 3/5, it is larger than 3/5, (0/00 = P and 5/113 = t). In this hypothesis, No. 7, entitled "Do Self-learning criteria are encouraged to design and produce e-Learning Courseware, plays", the results of Table 8 shows, the level of significance test is equal to 0.000, Because of the experimental error, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable) will be rejected. The resulting interval for the mean difference equal to (0/83 and 0/25) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that, to encourage Self-learningbenchmark scores, but greater than 3/5 is equal to 3/5, (0/00 = P and 3/646 = t). In examining this hypothesis 8, titled "Are the criteria of group dynamics involved in the design and production of e-learning Courseware", the results of Table 9 shows, the level of significance test is equal to 0/007, Because of the experimental error, 0/05 is smaller, so the null hypothesis (equal to 3/5 of the average variable) will be rejected. The interval obtained for the mean differences, equal to (0/73 and 0/12) that, since this interval is greater than zero, the result is confirmed. The other hand, can be concluded that the use of group dynamics benchmark scores, but greater than 3/5 is equal to 3/5, (0/007= P and 2/771 = t). In this hypothesis, No. 9, entitled "Are the criteria of creativity and self-explanatory, is involved in the design and production of e-learning Courseware", the results in Table 10 show a significant level of 0.000, which is equivalent to the test, as The test error rate, 0/05 is smaller, thus the null hypothesis (equal to 3/5 of the average variable) will be rejected. The interval for the mean differences are

obtained, equal to (0/99 and 0/39) that, since this interval is greater than zero, the result is confirmed. In other words, it can be concluded that, the mean measure of creativity and Auto Regression, equal to 5/3, it is larger than 3/5, (0/00 = P and 4/617 = t). In this hypothesis, No. 10, entitled "Is teaching remedial measures, and new learning is involved in the design and production of e-learning Courseware", the results of Table (11) shows a significant level test is equal to 0/002 Because of the experimental error, 0/05 is smaller, so the null hypothesis (the average of the variable of interest, with 3/5) will be rejected. The resulting interval for the mean difference equal to (0/73 and 0/17) that, since this interval is greater than zero, the result is confirmed. Our other words, it can be deduced that the average scores for teaching remedial measures, and new learning is equal to 3/5, but is larger than 3/5, (0/002 = P and 3/196 = t). In this study, the criteria of repetition and practice, interest and motivation, change Rest and recreation, feedback and reinforcement, empathy and collaboration, using different senses, Self-learning encourage the use of group dynamics, creativity and self-explanatory, and the standard of teaching compensation and new learning, e-learning software in the design and manufacture of course, from the perspective of graduate students, Kermanshah University of Science and Research, examined and studied. The results of the study, the efficacy of the method as approved. Although theoretical work, this result supports. Comparison of the results with the experimental foundations of domestic and foreign research results, the following can be confirmed by the results of the present study considered: Instructional Design is a very long history. Great thinkers such as Aristotle, Socrates and Plato, the cognitive basis of learning and memory, attention, which later, in the thirteenth century St. Thomas Aconias, philosopher then expanded attention. Various theories of learning a map, and recommend training plan. But in terms of instructional design are discussed, mainly a link between the findings of the various sciences, such as psychology, learning and communication, e-learning is to develop a program. Trying to make, the science and psychology of learning in an educational setting new link is established. All courses, followed by the educational content to change and gain the skills, knowledge and attitudes are inclusive (Mick, 2001), believes that "the most important functions of teaching, motivation to learn." To achieve this purpose, consider the psychological principles, and laws of learning in e-Learning Courseware Design and production, and thus motivate learning, learners guarantees. So pay attention to the most important psychological principles in the design and production of e-learning Courseware, an important measure in the course of the program. Instructional design, with features Pervasive formed at an early stage. Then another development, instructional design, as training programs, was obtained. Research on the training program, which was first proposed by Skinner, a landmark in the history of instructional design, it is. System approach, rooted in the military and trade, in the decade (1950 AD) emerged, and on educational technology and instructional design, the effect was dramatic. In 1962, Robert Glaser, the term "education system" used. (Chen, 2008), he suggested that the objective should be written in a way that is measurable and reflect the behavior of the learner. At the end of the decade (1960), the influence of extreme behavior in instructional design, dwindling away, and a new wave of cognitivist, the researchers took shape. Thus, issues such as vision, cognition, memory, mental processes and mental schemas were proposed (Marquis, 2008). As late as 1970, the use of instructional design was typical of the majority of its designers, educational psychology, media specialist, expert or trained manpower read. With the advent of new technology, such as computers and expand it at this time, organizations need to use appropriate methods to train their staff felt fast. Thus, the requirements of the new era has led to the design of educational and work more perfect day to be more efficient.

REFERENCES

Ahmadpoor Dariani, Mahmood. (2008). The entrepreneurial opportunities - airline passenger services in the Islamic Republic of Iran "H". Entrepreneurship Development Journal, 14 (Scientific-Research) (20 pages - from 7 to 26).

Amoli Bahaoddin. (2005). Experimental Evaluation of Virtual Learning Virtual School City of Rey, based on predetermined objectives, MS Thesis, Tehran Allameh Tabatabai University.

Asadi, Jawanshir. (2010). The relationship between emotional intelligence and burnout, MS Thesis, University of Allameh Tabatabai.

Beghetto, R. A. (2009). Does creativity have a place in classroom discussions?

Carchiolo, V., A. Longheu, M. Malgeri& G. Mangioni (2003); "Course Personalization in E-learning Environment"; Proceedings of the 3rd IEEEInternational Conference on Advanced Learning Technologies(ICALT'03).

Chen, Y. (2008).Compromised late-stage motion processing in schizophrenia. Biological Psychiatry, 55, 834-841.

Emamjome, Ali Asghar. (2002). Check the compatibility of e-learning programs in mathematics, Kajeh. Nasiroddin. Toosi University of Technology, instructional design, approaches based on principles of behaviorism, cognitivism and the orientation. MS Thesis, Tehran Allameh Tabatabai University.

Farhadi, Robabeh(2004). Features expert in knowledge management systems. Journal of Information Science, No. 4, pp. 144-129.

Ghaffari, Mohammad Reza. (2003). Design and familiarity with the materials and learning resource centers. Tehran: the side, p.132.

Harris, J. (2002); "An Introduction to Authoring Tools"; ASTD's LearningCircuits Online Magazine.

Holden, G. (2004); "Instructional Design: Choosing the Proper AuthoringTool"; Intercom Online Magazine.

Holden.jolly., Westfall,Philip(2008). An Instructional media selection guide for distance learning.chairmenemeriti ,United States distance learning association.available in:http://www.eric.edu.gov.

Horton, W. (2006). E-learning by design. USA: Pfeiffer.

Jamshidi Moghadam, Afzalosadat. (2010). The nature of creativity and its breeding practices. Mashhad: Qods Press.

Maleki, Hasan (2001), integrated approach to curriculum, Tehran, parents and educators.

Marquis, E. (2008). Home, School, and Playroom: Training grounds for adult genderroles.Sex Roles, 26, 129-147.

Nouri, S. (2002); "Section 6: Islamic Republic of Iran"; Report of the APOSeminar on Multimedia for Productivity Promotion and Enhancement(With Special Focus on e-Learning).

Prospective teachers' response preferences. Thinking Skills and Creativity, 2(1), 1-

9.

Razidas,, A. (2004). Comparative effects of play on creative thinking: Theimmediate influence of art, drama and playground experiences on children.Docrtoral dissertation, University of southern Mississippi.

Rizvi, Seyed Abbas (2007). "Topics in Modern Educational Technology", University of Ahvaz press.

Rudi, R., Crewther, S. G., &Crewther, D. P. (2003). A rolefor the 'magnocellular advantage' in visual impairments inneurodevelopmental and psychiatric disorders. Neuroscience andBiobehavioral Reviews, 31, 363-376.

Seif Ali Akbar. (2002). Measurement and evaluation of training. Tehran: publication period.

Siadati, molodi and Taghiyareh, Fattaneh (2006). E-learning: an alternative or supplement to traditional education. Proceedings of the International Conference on e-Learning, Zanjan, pp. 19-1.

Spector,M. (2000).Toward a philosophy of Instruction. Educational technology.Vol 3, NO3.

Torrance, P. Creative talents and skills. Translator Hassan Qasemzadeh. (1994). Tehran: New World Publications.

Torrance, E. P. (1975). Preschool creativity, in K.O.paget and B.A braken, The psychological assessment of preschool children, 5, 509-519.