The effect of multimedia and e-learning on the quality of teaching of faculty members of Islamic Azad University of Mazandaran province

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Abstract

Purpose: This study was conducted to effect of multimedia applications and e-learning on the quality of teaching of faculty members of Islamic Azad University of Mazandaran province. **Methodology:** The population of the study was all 1532 faculty members of Islamic Azad University of Mazandaran. which 210 persons were randomly selected from by category random sampling method based on Kerjeci &Morgan table. The measurement tool included researcher made questionnaire in two parts of Multimedia programs and e-learning with 38 questions and 40 questions of teaching quality. Face and content validity of the tool was confirmed by experts and its reliability was calculated 0/93 using Cronbach's alpha coefficient. Frequency, mean indicators and standard deviation reports were studied to analyze data in descriptive statistics. The central limit theorem and Smirnov & Kolmogorov test with z approximation were used to determine the appropriate statistical methods in the inferential section and parametric methods were used for data analysis. One-sample t-test was used to achieve the objectives of the research in studding the status of indicators and also independent t-test and ANOVA were used in intra group's comparisons. Because of the researcher made survey instrument, in addition to the calculation of Cronbach's alpha, exploratory and confirmatory analysis was done based on the defined components. **Findings:** Pearson correlation test was used to examine the relationship between the study variables, as well as Bivariate linear regression analysis was performed in order to study the sixth question of the research. SPSS 22 software and LISREL 8.5 were used for data analysis. The results showed that: the quality of teaching and its components, and multimedia programs and e-learning and its components in Islamic Azad University units are at a higher level than average. **Discussion:** And all Pearson correlation values between independent variables of e-learning and its components and multimedia programs and the quality of teaching dependent variables and its dimentions is significant and direction of these relationships is positive.

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1. Introduction

The twenty-first century is a century of wisdom and knowledge, a century in which societies are moving towards Knowledge Oriented goals, the century of the turn of the industrial community to the information Society-Learning is one of those human achievements that has revolutionized our world. In fact, e-learning as one of the emerging remote learning generations has expanded rapidly in most educational systems (haji ahmadi,2012). E-learning is a revolutionary technology that has already influenced on learning in higher education. Thus, in recent decades traditional learning approaches have undergone major changes with the advent of modern technologies such as multimedia, mass media and telecommunications. Multimedia programming and e-learning will certainly change all forms of learning and teaching in the 21st century (Zarei Zavaraki & jafar khani,2009).

Although the impact of multimedia and e-learning programs on traditional educational institutions has been very small. In fact, it only strengthens existing measures and practices. But we need to know as we learn more about these technologies and their potential capabilities, multimedia programs and e-learning also will have a more effective impact on our view of the quality of teaching and learning. Given that e-learning has the potential to change the nature of teaching and learning activities. In fact, this phenomenon has caused us to identify some of the shortcomings in higher education, such as extensive and prolonged speeches and at the same time we have found solutions to their elimination. Also one of the important advantages of multimedia is the interaction in which students are active participants in virtual events and may have the effects of their chosen behavior (Molnár & Benedek, 2015).

2. literature Review

In twenty-first century, it is called multimedia environment, technological advancement has led to a great boost in the use of this approach in learning and teaching environments. (Leow & Neo, 2014). Researches has shown that multimedia-based education can help students to understand and memorize lessons (Norouzi & et al, 2011). Multimedia also has this potential to increase the interest of the learners. (Zandi & Hatami, 2013). By providing appropriate learning opportunities, Multimedia invites users to engage in interaction (Moradi & Zarei, 2014). Also Multimedia is a combination of multimedia, including text, image, sound, photo, video, and dynamic display (Barat Dastjerdi, 2015).

The quality of teaching plays an essential role in the quality of students' learning and the knowledge and skills learned by students has an irrefutable relationship with their learning quality (Jafari & etal, 2012). Also, teaching, designing and developing e-learning courses requires the development of professors (Mohammadzadeh Nasrabadi & colleagues, 2014). Therefore, good teaching in the university depends on the relationship between student learning of specific content and the quality of teaching that content by the professor. (koushi & Soltani, 2015). Research on the quality of teaching at the university is one of the most important issues that, on the one hand, provides appropriate feedback for analyzing educational issues, basic decision making and strategic planning for the higher education officials and on the other hand Instructors will be able to improve their teaching practices by improving their teaching and learning methods and practices, knowing how well their quality of teaching will be. Teachers' quality of teaching is one of the significant factors that should be considered as part of academic goals that are considered to be the desired learning quality and in higher education institutions improving the effective learning opportunities for students are essentially defined. (Pak Mehr & etal, 2011) The more meaningful and organized is

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the faculty members' teaching, the students will be more successful. Students who receive teaching with high quality always have a deeper level of learning. In fact, the task of teaching is to facilitate students' learning. Improving the quality of education in universities is an important issue that has been emphasized in recent years (Javadi & Arab Bafrani, 2014). Also, the increasing need of people for high-quality education and high-tech environments based on modern technologies to enhance learning process, has led the experts to devise new methods for teaching that are both economical and with high quality, and can be used simultaneously to educate a large number of learners (Rezaei Rad & Mohammadi, 2012). As well as quality of Teaching-learning dimensions include: The faculty member's proficiency in teaching content, lesson plan (Nami, 2011), teaching skills, classroom management, guidance and counseling of Student, learning assessment of student learning performance (Bazargan, 2010) Teacher's Communication Skills with Student (Nami,2011), Observing ethical issues in teaching (Safari, 2009).

Lehtonen & etal (2016) were conducted the study about creative teaching within the framework of teacher education. they concentrate on the use of drama in education can be seen as an alternative to traditional teacher-led and scripted schooling and an answer to the challenges of our current postmodern knowledge culture, which aims at deeper conceptual understanding by preparing students to be more creative and create multimodal knowledge. As well as, Hamiti & etal (2015) were conducted the study about the impact of computer components in enhancing the quality of teaching and learning process in universities and they concentrate on Research, presentation, communication, collaboration, problem solving, challenges and creativity, are all already under the influence of computers and current technologies that represent a very important component of our daily lives. Also, Durisova &et al (2015) were conducted the study about assessment of higher education teaching outcomes (Quality of higher education) and they concentrate on evaluation is a complex process, which is attributed a certain value according to certain criteria and standards. The assessment of higher education teaching outcomes is focused on the student's progress in learning, skills and attitudes. Also, Moravec & etal (2015) were conducted the study about the influence of using e-learning tools on the results of students at the tests. The research confirmed that the provision of the e-learning tool for students has got positive influence on their results at progress test.

Zare & etal (2015) conducted a study on the effect of the use of educational multimedia on the rate of learning and retention in physiology course, and concluded that it was much higher in students who are trained in a multimedia way than those who trained with traditional methods. Therefore, considering the educational multimedia effect on student learning and memory, it seems that the use of this method is useful in medical science universities. Also, Nami &et al. (2014) investigated the relationship between the use of faculty members of information technology and their teaching quality. This research was carried out at the Psychology, Education Sciences and Social Sciences colleges of Tehran University. The results have showed that the faculty members of Psychology and Educational Sciences and the Faculty of Social Sciences are in a relatively desirable level in terms of the amount of information technology use in the teaching / learning process and in a desirable level in terms of the quality of learning, and there is a positive and meaningful relationship between the rate of the use of information technology by the faculty members and the quality of their teaching.Also,Fareghzadeh & Kashi (2015) have conducted a research entitled "The Study of the methods and tools of virtual education in order to improve the quality of education from the viewpoint of faculty members of Azad University". The results showed that there is a significant positive relationship between the various tools and methods of using virtual education and improving the quality of education. As a general result, the implementation and application of virtual teaching methods and tools along with the teaching process can help the professors to

improve the quality of teaching as an effective tool. As well as, Eslami &colleagues (2015) have conducted a study titled "The Relationship between Students' Use of Information and Communication Technology (ICT) and their Academic Performance in Social and behavioral Sciences Schools". The results have shown that the students have moderate use of the means of information and communication technology and there is a positive and significant relationship between some of the components of information and communication technology and academic performance.

One of the areas where information technology has been infiltrated in recent years is the area of education and learning. Today, the introduction of new communication technologies into the teaching fields, has changed the nature of the learning process and academic learning and resulted to creating new learning environments and the newest learning method. (Akbari Burang & et al., 2012). E-learning mainly refers to a kind of training using the Internet based on various computer and web technologies, such as CD-ROM, wireless communication technologies, cell phones, Internet-based space, and video conferencing (Joe Lee & Lee, 2015, p. 212). Also with the limited capacity of classrooms in academic institutions and the heavy cost of building new ones, e-learning is an attractive option (Benta & et al, 2015).

The dimensions and the main components of the quality of e-learning in higher education are: management and support, Technology, pedagogical factors and instructional design, content, assessment and evaluation, interaction, human resources expert. (Mahdiun & et al., 2011). Also Eight dimensions in the model provided by H. Khan Badral. There are as follows:1) Educational dimension 2) Technical dimension 3) Communication plan 4) Evaluation dimension 5) Management dimension 6) Support dimension 7) Organizational dimension 8) Ethical dimension (Bidarian & et al., 2011).

The application of information and communication technology can independently transform the opportunities for achieving the objectives of educational programs (Moradi & Zarei,2014). Also, using of multimedia in educational settings has many advantages, including: using multiple senses for learning, exercising more to achieve mastery levels, facilitating student participation, helping students to connect the concepts, repeating lessons for the user if desired, flexible programming for the needs of learners, engaging and interacting with the user, providing a friendly learning environment. Considering that one of the most effective components of the system of academic education is the faculty members and their professional performance and functions are most evident in his methods of teaching (Farmahini Farahani & Ziaeian Alipour, 2012).

Thus, the role of faculty members in this kind of training from providing information to motivational management, supporting students and helping them to understand the content and the need for network connectivity for learning is changing, so that they guarantee the quality of E-learning. (Akbari Burang &et al., 2012, p. 76) As the twentieth century was the century of productivity, the 21st century is a century of quality (Fathi Vajargah & etal, 2011). The concept of quality in higher education has become increasingly an issue of importance for institutions, as well as for public policy and education. (Prisacariu, 2015). Therefore, the most important factor in the realization of educational goals in higher education is the teaching quality of teachers. Most of the research suggests components for teaching quality from the students' perspective. In a few cases this has been discussed. Therefore, this study seeks to find the influence of multimedia programs and e-learning on teaching quality from the viewpoint of experienced faculty members in Islamic Azad University. In this research, we intend to examine the impact of multimedia and e-learning programs on the quality of teaching of the faculty member of Islamic Azad University of Mazandaran province.

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The overall aim of this study was to investigate the effect of multimedia and e-learning programs on teaching quality of faculty members of Mazandaran province Islamic Azad University. Whose questions include:

1-What are the dimensions of teaching quality in units of Islamic Azad University of Mazandaran?

2- What is the multimedia programs in the Islamic Azad University of Mazandaran?

3- What are the components of e- learning in units of Islamic Azad University of Mazandaran?

4. What is the effect of multimedia programs on the quality of teaching units of Mazandaran Islamic Azad University?

5. What is the effect of e-learning on the quality of teaching the units of Islamic Azad University of Mazandaran?

6- What are the effects of multimedia and e-learning programs on teaching quality of Islamic Azad University of Mazandaran?

3. Method

The present research is applied in terms of purpose and from the descriptive nature point of view was of correlation type and the data were collected from the field. The statistical population of this study are the faculty members of the Islamic Azad University of Mazandaran province, with the number of 1532 faculty members in 14 cities of Mazandaran Province. Also according to the sample size calculated using sample size determination chart of kerjeci and Morgan, 210 people were selected as the statistical sample.

Table 1-The number of population and the sample

Cluster	Population	Very large	Large	medium	small	total
C[1]	Sari	Qaemshahr	Noor	Joybar	Neka	5
P[2]	104	180	44	13	9	350
R[3]	62/4	107	27	8	5/4	209/8
S[4]	62	107	27	8	6	210

This research is a field and library research based on data gathering. A researcher-made questionnaire was used to collect data. In order to achieve the validity, the content and face validity of the tool was approved by the advisor and counseling professors and several experts. Also, the researcher has used Cronbach's alpha coefficient test to measure instrument reliability. In this method, the questionnaire was given to a group of 25 individuals in Babol Azad university branch unit and the scores were calculated using SPSS software. These values are statistically significant and validated. Cronbach's alpha values are based on a sample of 25 in each questionnaire and their dimensions are higher than 0.7.

4. Findings

Descriptive statistics and inferential statistics have been used for data analysis which in descriptive section frequency percent report, mean indicators and standard deviation were surveyed. In order to determine the appropriate statistical method in the inferential part based on the central limit theorem and the Kolmogorov-Smirnov test with z approximation, parametric methods were used

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[1] - City

[2] - Population

[3] - Ratio

[4] - Sample

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to analyze the data. In line with the research objectives, in the section on the status of indicators, one-sample t-test was used and independent t-test and variance analysis were used for the comparison of the groups. Because of the researcher-made instrument, in addition to the calculation of the Cronbach's alpha, exploratory and confirmatory analysis was done based on the defined components. Pearson correlation test was used to investigate the relationship between the variables in the research. Also, in order to investigate the sixth question, two-variable linear regression analysis was performed. 22 SPSS and LISREL 8.5 software were used to analyze data.

To answer the first question, we first define the hypothesis zero and one as follows: **Hypothesis Zero:** The quality of teaching and its components in the Islamic Azad University units is moderate. **Hypothesis one:** The status of the quality of teaching and its components in Islamic Azad University units is at a level higher than average. Because the hypothesis of the normalized data was accepted, to study the above mentioned hypothesis, a single-sample T-test was used with a mean criteria value.

Table 2. Single sample T-test results in the first question

Variable	Test criteria	T Statistics	Degrees of freedom	Probability value
L.P[1]	15	28/752	209	0/000
C.M[2]	15	20/981	209	0/000
T.P[3]	15	27/529	209	0/000
T.E[4]	15	20/324	209	0/000
P.R[5]	15	26/084	209	0/000
P.P[6]	18	20/346	209	0/000
T.S[7]	15	25/999	209	0/000
O.M[8]	12	30/042	209	0/000
T.Q[9]	120	34/762	209	0/000

The results of Table 2 shows that at the error level of 0.05, the quality of teaching and all its components are more than average, because their probability values are less than 0.05. The

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[1] - Lesson Plan
[2] - class management
[3] - Teaching process
[4] - Teaching evaluation
[5] - Professional responsibility
[6] - Professional participation
[7] - Teaching skills
[8] - Observance of morality
[9] - Teaching quality

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observed average values of the table 2 are greater than the values of the criterion. Therefore, the hypothesis zero for all aspects of electronic learning and its total score is rejected and assumption one to be confirmed. That is, it can be claimed that the status of the quality of teaching and all its components in Islamic Azad University units is above the average.

To respond the second question, we first define the hypothesis zero and one. **Hypothesis Zero:** The Multimedia programs status in Azad university units of Mazandaran province is in level higher than average. **Hypothesis 1:** The Multimedia programs status in Azad university units of Mazandaran province is in average level. Because the hypothesis of normalized data from the table is accepted, for the purpose of examining the above hypothesis, a single-sample t-test with a criteria value is used.

Table 3. T-test results of a single sample in the second question

Variable	Test criteria	T Statistics	Degrees of freedom	Probability value
M.A[1]	18	22/245	209	0/000

The results of Table3 shows that at the error level of 0.05, e-learning and all of its components are more than average, because their probability values are less than 0.05. The observed average values of the table are greater than the values of the criterion in the multimedia programs variable. Therefore, the hypothesis zero for all multimedia programs is rejected and hypothesis one to be confirmed. That is, it can be claimed that the status of multimedia programs and its components in Islamic Azad University units is above the average.

To study the third question, we first define the hypothesis zero and one. **Hypothesis Zero:** The status of e- learning and its components in the Islamic Azad University units is moderate. **Hypothesis 1:** The status of e- learning and its components in Islamic Azad University units is above the average level. Because the hypothesis of normalized data from the table is accepted, for the purpose of examining the above hypothesis, a single-sample t-test with a mean value is used.

Table 4. Single sample T-test results in the third question of the research

Variable	Test criteria	T Statistics	Degrees of freedom	Probability value
M.S[2]	9	14/399	209	0/001
T[3]	15	13/701	209	0/001
P.F&E.D[4]	15	18/363	209	0/001
C[5]	15	25/552	209	0/001
M.E[6]	15	14/134	209	0/001
E[7]	15	16/448	209	0/001

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[1] - Multimedia applications
[2] - Management and support
[3] - Technology
[4] - Pedagogical factors and educational design
[5] - Content
[6] - Measurement and evaluation
[7] - Engagement

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S.H.P[1]	12	14/405	209	0/001
E.L[2]	96	22/839	209	0/001

The results of Table 4 shows that at the error level of 0.05, e-learning and all of its components are more than average, because their probability values are less than 0.05. The observed average values of the table are greater than the values of the criterion. Therefore, the zero assumption for all aspects of electronic learning and its total score is rejected and assumption one to be confirmed. That is, it can be claimed that the status of e-learning and its components in Islamic Azad University units is above the average.

To study the fourth question, we first define the hypothesis zero and one. **Hypothesis Zero:** Multimedia programs do not affect the quality of teaching units of the Mazandaran province. **Hypothesis 1:** Multimedia programs affects teaching quality of university units in Mazandaran province. Pearson correlation test was used to investigate the above question, due to the normal distribution of data from the table. And considering that the independent variable in this study is a variable and there are several dependent variables (teaching quality and its components) and simple linear regression results are consistent with Pearson correlation test and its aim is not to present the regression model and because it measures the impact, therefore Pearson correlation test is used to determine the intensity and the direction of the effect and the relationship between variables.

Table 5. The study of the impact of multimedia programs on teaching quality

	Indicator	Lesson plan	Class management	Teaching process	Teaching evaluation	Professional Responsibility	Professional participation	Teaching skill	ethics	Teaching quality
I.V:M.A[3]	R	0/457	0/366	/330 0	/390 0	0/278	0/390	0/317	0/255	0/499
	R2	0/209	0/134	0/109	0/152	0/077	0/152	0/101	0/065	0/249
	P	0/000	0/000	/000 0	/000 0	0/000	0/000	0/000	0/000	0/000

The analysis of Table 5 shows that at the error level of 0.05 of the probability values are less than 0.05. All Pearson correlation values between the independent variable of e-learning and its components with the dependent variable of teaching quality and its components are significant. The direction of these connections is positive. The association of the multimedia program with teaching quality was   0/499.Other links are also given in the table.

In order to examine the fifth question, we first define the hypothesis zero and one. **Hypothesis Zero:** E-learning does not affect the quality of teaching units of the Universities of Mazandaran province. **Hypothesis one:** E-learning has impacts on the quality of teaching units of the Universities of Mazandaran province. The Pearson correlation test is used to study the hypothesis with respect to the normal distribution of data.

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1 - specialized human power
2 - E-learning
3 - independent variable : Multimedia applications

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Table 6. The study of the impact of multimedia programs on teaching quality

I.V[1]	Indicator	The quality of teaching and its components								
		Lesson plan	Class management	Teaching process	Teaching evaluative	Professional Responsibility	Professional Participation	Teaching skills	ethics	Teaching quality
M&S[2]	R	0/407	0/354	0/220	0/208	0/307	0/378	0/202	0/284	0/419
	R2	0/166	0/126	0/048	0/043	0/094	0/143	0/041	0/081	0/175
	P	0/000	0/000	0/001	0/002	0/000	0/000	0/003	0/000	0/000
T[3]	R	0/260	0/299	0/320	0/342	0/348	0/339	0/243	0/270	0/433
	R2	0/068	0/090	0/102	0/117	0/121	0/115	0/059	0/073	0/187
	P	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000
P.F&E.D[4]	R	0/349	0/405	0/286	0/252	0/264	0/339	0/210	0/418	0/442
	R2	0/122	0/164	0/082	0/063	0/070	0/115	0/044	0/175	0/195
	P	0/000	0/000	0/000	0/000	0/000	0/000	0/002	0/000	0/000
C[5]	R	0/312	0/327	0/334	0/369	0/319	0/360	0/277	0/408	0/477
	R2	0/097	0/107	0/111	0/136	0/102	0/130	0/077	0/167	0/228
	P	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000
M&E[6]	R	0/285	0/363	0/220	0/298	0/244	0/353	0/224	0/357	0/416
	R2	0/081	0/132	0/048	0/089	0/060	0/124	0/050	0/127	0/173
	P	0/000	0/000	0/001	0/000	0/000	0/000	0/001	0/000	0/000
I[7]	R	0/383	0/435	0/333	0/396	0/329	0/385	0/297	0/392	0/524
	R2	0/147	0/189	0/111	0/157	0/108	0/149	0/088	0/154	0/274
	P	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000
S.H.P[8]	R	0/333	0/369	0/338	0/460	0/332	0/406	0/265	0/356	0/511
	R2	0/111	0/136	0/114	0/211	0/110	0/165	0/070	0/127	0/261
	P	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000
E.L[9]	R	0/455	0/504	0/404	0/459	0/420	0/503	0/339	0/491	0/634
	R2	0/207	0/254	0/163	0/211	0/176	0/253	0/115	0/241	0/402
	P	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000

The analysis of Table 6 shows that at the error level of 0.05 of the probability values are less than 0.05. All Pearson correlation values between the independent variable of e- learning and its components with the dependent variable of teaching quality and its components are significant. The direction of these connections is positive.

Review of the six **question:** How do multimedia and e-learning programs affect the quality of teaching university?

In order to examine the six question, **Hypothesis Zero:** There is no simultaneous communication between multimedia programs and e-learning with the quality of teaching of university units. **Hypothesis 1:** There is a simultaneous communication between multimedia programs and e-

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1 - Independent variable
2 - Management and support
3 - technology
4 - Pedagogical factors and educational design
5 - content
6 - Measurement and evaluation
7 - interaction
8 - specialized human power
9 - e-learning

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learning with the quality of teaching of university units. Two variables linear regression has been used to study the above mentioned hypothesis with regard to the normal distribution of data.

Table 7. The results of regression analysis of the sixth question of the research

	Changes 'source	Ss	df	Ms	F	P
W.S[1]					76/896	0/000
	Regression	25174/276	2	12587/138		
	Error	33883/705	207	163/689		
	Total	59057/981	209			
Q[2]					30/108	0/000
	Regression	10769/555	2	5384/777		
	Error	18779/362	105	178/851		
	Total	29548/917	107			
S[3]					24/065	0/000
	Regression	8803/414	2	4401/707		
	Error	10791/828	59	182/912		
	Total	19595/242	61			
N[4]					7/559	0/003
	Regression	1361/231	2	680/615		
	Error	2070/923	23	90/040		
	Total	3432/154	25			
J[5]					502/5	0/055
	Regression	10/65401	2	5/32750		
	Error	459/221	5	91/844		
	Total	69/87541	7			
N[6]					3/142	0/184
	Regression	872/384	2	436/192		
	Error	416/449	3	138/816		
	Total	1288/833	5			

Regarding the results of the analysis of variance of regression in Table 7, it was observed that in the general survey, the probability level, such as the F statistics with degrees of freedom (207 and 2), is less than 0.05. Therefore, the assumption of the linear model is accepted in general terms, and the fitted linear model can be obtained for data. In other words, in the linear model, at least one of the predictor variables remains in the model. In the study of the separation of units, it was also observed that in some units, at least one model factor has been fitted.

31.4% of the respondents were female and 68.6% were male. 38.1% are under 40 years old and 42.9% are between 40 and 50 years old and 19% are 51 years and older. 38.6% had a teaching experience of 6 to 10 years and the average service record for respondents was 11.88 years. 43.8%

1 - Whole sample
2 -qaemshahr
3 -sari
4 -noor
5 -joybar
6 -neka

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have worked in the Humanities Department, 20.5% in the Faculty of Basic Sciences and 31.0% in the Engineering Department and 4.3% in the Faculty of Medical Sciences.

5. Discussion

Question one: The findings of the first question has showed that the quality of teaching and its components in Islamic Azad University units are above the average. This finding is based on the results of the research conducted by Nami &et al. (2015), Fareghzadeh and Kashi (2015), Hamiti &et al. (2015), Durisova & et al (2015), which in their research they have reached to these results that considering the amount of information technology used in teaching and learning process, faculty members were at the desirable level and in terms of teaching quality they were in the relatively desirable level. There is a positive and significant relationship between the amount of faculty members' use of information technology and their teaching quality, as well as tools and Various methods of using virtual education have a significant positive relationship with the promotion of quality of education and researches, presentation, communication, collaboration, Problem solving, challenges and creativity, all currently affected by the impact of computers and current technologies, which represents a crucial component of our daily lives. The assessment of the results of teaching in higher education is focused on the student's progress in learning the skills and attitudes.

Question Two: The findings of the second question have shown that the status of multimedia programs in Islamic Azad University units is above the average. This finding is consistent with the results of the researches of Zare &et al. (2015), which in their research concluded that students who are trained in a multimedia way are more than traditionally trained students and using this educational method were beneficial in medical science universities and had positive and desirable impacts.

Question Three: Findings of the third question have showed that the status of e- learning and its components in Islamic Azad University units is higher than average. This finding is consistent with the findings of Nami& et al. (2015), Fareghzadeh and Kashi (2015), eslami and colleagues (2015), Moravec & et al. (2015), which, in their research, they have reached to these results that the faculty members of psychology and Educational science and social sciences faculty are at the desirable level in terms of the level of use of information technology in the teaching-learning process. There is a positive and significant relationship between the use information technology of faculty members and their teaching quality, and there is a significant positive relationship between the various tools and methods of using virtual education and improving the quality of teaching. Also, the students' use of information and communication technology with their academic performance in social and behavioral sciences University of Tehran .The results showed that students have moderate use of information and communication technology and there is a positive and significant relationship between some components of information and communication technology and academic performance and the provision of e- learning tools for students had a positive impact on the results of the test progress.

Question Four: Findings of the fourth questionnaire have showed that there is a significant and positive relationship between the independent variable of multimedia programs and the dependent variable of teaching quality and its components. This finding is consistent with the results of the researches of Nami &et al. (2015), Fareghzadeh and Kashi (2015), Lehtonen & et al (2016), Hamiti &et al. (2015) who in them researches, they have reached to these results that the faculty members of the School of Psychology and Educational science and social sciences are at the desirable level in terms of the level of use of information technology in the teaching-learning

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process and in terms of teaching quality. There is a positive and significant relationship between the use of information technology of faculty members and their teaching quality. There is a significant positive relationship between the various tools and methods of using virtual education and improving the quality of teaching. As a general result, the implementation and use of virtual teaching methods and tools along with the teaching process can serve as an effective tool for teachers to improve the quality of instruction, and the use of the presentation in education can be used as an alternative to the traditional teacher guide and is a response to the challenges of our current post-modern culture of our knowledge, which aims to provide a deeper understanding of the preparation of more creative students and the creation of several models of knowledge. And the researches, presentation, communication, collaboration, problem solving, challenges, and creativity are all currently affected by the impact of computers and current technologies,which represent   a   crucial   component   of   our   daily   lives.

Question five: Findings of the fifth question have showed that there is a meaningful and positive relationship between the independent variable of e-learning and its components with dependent variable of teaching quality and its components. This finding is consistent with the results of Nami &et al. (2015), eslami &et al. (2015), Hamiti &et al. (2015), Moravak &et al. (2015), which, in their researches, they have reached to these results that the faculty members of psychology and science Educational and Social Sciences faculty are in the desirable level regarding the amount of information technology use in teaching-learning process and there is a positive and significant relationship between the use of information technology and their teaching quality. And students have moderately used ICT and there is a positive and significant relationship between some of the components of information technology and communication and academic performance, and researches, presentation, communication, collaboration, problem solving, challenges, and creativity, all currently affected by the impact of computers and current technologies, which represents a very significant component of our daily lives and providing e-learning tools for students has had a positive impact on the results of the test progress.

Question six: The finding of the sixth question has showed that in the general survey, the probability level of F statistic with degrees of freedom (2.07 and 2) is less than 0.05, therefore, the assumption of the linear model is generally accepted, and the fitted linear model was attributed to data. In other words, in the linear model, at least one of the predictor variables remains in the model. Since there has not been a research similar to the recent research to evaluate simultaneously the correlation between multimedia and e-learning variables and teaching quality, therefore no comparison was added.

Today, the human perspective goes beyond mere teaching in the classroom, and pays attention to new approaches and trends emerging from the findings of education, psychology, sociology, and management in the field of teaching and learning. These approaches make the faculty more aware of their teaching and role, and, by employing them, improve the quality of learning and the student's overall growth (samie romdashti,2009). Effective teaching quality requires clear goals and logical challenges for learners(mohamadi khanghahi & hussin zadeh,2015). Higher education institutions, therefore, face the challenge of attracting more students with less funding. On the other hand, the rapid development and spread of technology in education has become remarkable. In the present day, the use of educational aids is no longer for fun and whimsy, but at the same time it is an unavoidable necessity. However, if a master of technology does not use it in his work, his work will not be satisfactory, and educational technology can make education richer, because human beings have evolved with a rhetorical instrument. That is why, in order to get rid of traditional classes and change in the educational system, it is important to pay attention to the science of educational technology. Higher education teachers are trying to evaluate the impact of

technology on their teaching and use technology that can be managed to achieve better learning outcomes. The combination of multimedia production and classroom training has a lot of excitement. Classes vary in terms of media production. But the professor can make the most use of the available facilities with careful planning. The method of group learning in education is a well-known method for managing multimedia production. Multimedia results in effective and profound learning by utilizing more senses(razavi,2012). Research results emphasize the use of multimedia in teaching and learning situations. Using multimedia software in a variety of ways can facilitate the teaching and learning process. Therefore, the emergence of widespread communication networks, such as the Internet, along with advanced tools and educational facilities, transforms educational methods, and also e-learning is one of the most important learning environments in information age. Therefore, efforts and experiences related to this type of learning have been widely considered throughout the world and in Iran.

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