

THE ROLE OF INFORMATION TECHNOLOGY IN THE IMPROVEMENT OF ACCOUNTING TEACHING QUALITY (CASE STUDY: ISLAMIC AZAD UNIVERSITY OF RASHT)

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ABSTRACT

This study aimed to investigate the role of information technology in teaching quality improvement of accounting in Islamic Azad University of Rasht. In terms of purpose, this descriptive-correlation study was an applied research which was based on library method, searching the electronic resources and field study. Data collection tool was a researcher-made questionnaire which was developed using Likert scale. The questionnaire was completed by undergraduate and graduate accounting students in 2013. The sample size was 100 which was calculated through Cochran formula. Pearson correlation test was used for data analysis and SPSS software was used for assessing the relationship between variables. The findings indicated that there was a significant relationship between information technology and providing students' scientific and specialized need, job performance improvement, job satisfaction, quick learning, facilitating education by professors, and individuals' position. Therefore, it was concluded that information technology had an effective role in improving the quality of accounting teaching.

Keywords: *Information Technology (IT), Teaching Quality, Accounting*

INTRODUCTION

Today, teaching quality and the effectiveness of educational systems is the main concern of the educational system and practitioners and decision makers of the development in each country (Salehi Amiri & Heidarizade, 2007). The growing demand for education and the need for maintaining the relationship between education and work, the shortage of skilled human resource in the workplace and too much budget which is spent on education necessitates a new affordable and high quality educational system. Using information technology (IT) in universities is one of the factors that can be effective in promoting and improving teaching quality. IT acts as a modern approach, in a supporting role of the educational system, improving the teaching quality, diversifying teaching methods, providing automatic continuous learning, shortening the education time, shortening the course of study, considering individual talents, individualizing education and coping with collective education problems (Esmaili Seighaldehyt et al, 2010).

IT development in effective educational system is not only an option but also an undeniable necessity it is considered as an important step in the educational system reforms (Aghakhani, 2009). The global development in IT expands learning opportunities and access to more educational resources in such a way that this is not possible with traditional tools.

In the information age, the society's need for accounting graduates will increasingly change. Future accountants' education that can adapt themselves to the IT-based environment is the responsibility of universities and educational centers; therefore, due to the development of IT in scientific communities, especially universities, examining its role in the education quality is remarkably important. This study attempts to investigate the role of IT in improving the quality of accounting teaching and its applicability in Islamic Azad University of Rasht. In continued, the research literature, method, data collection, and finally findings will be described.

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Theoretical framework

IT is a set of skills, tools and techniques that serves production, processing, distribution and dissemination of information i.e. IT is called a set of hardware and software that can be employed to optimize the production, reception, organization, processing and dissemination of information (Farhadi, 2003).

The concept of information technology with an emphasis on its role in teaching includes:

- Audiovisual media such as radio, etc;
- Professional learning tools such as C. B. T;
- Educations that are done via computer;
- Designs that are implemented using computer such as Codd; and
- Computers and computer systems that are used for educational and managerial presentations such as computer assisted instruction or C.A.I.

Therefore, IT generally refers to media components, computer tools, and the educational use of computer systems (Farhadi, 2003).

IT application in teaching quality improvement

Improving the quality of education is a critical issue. IT can enhance the education quality in several ways including through increasing the motivation and entering learners into the employment and facilitating the acquisition of basic skills. IT is also a transmitting tool that can enhance the initiative in an educational environment when it is used correctly (Karimi, 2006).

The role of IT in learning

The reason of IT application in learning is better and faster teaching. IT application in education creates a new kind of learning in such a way that learning isn't carried out face to face and it is expected that learning is possible in environments other than classroom, so that the information can be easily shared with other learners (Asnafi, & Hamidi, 2005) Internet as an educational tool is well established in many educational systems and its impact is considered as an educational tool and dynamic learning (Garland k.j, 1998) Scientific centers have easily access to the vast scientific resources, course items, and different people via internet and they also represent scientific and research information to others through websites created by students and professors (Newhouse P.C, Trinidad S . Et al, 2002)

The role of IT in education

IT teaching will be a success key of technical educations in the future world. IT application in teaching improves and enhances professors' ability in the classrooms and it teaches them how to increase students' learning power based on question and query and to insert effectively computer application in the curricula so that students are able to enhance their learning and knowledge a much as possible (Newhouse P.C, 2002)

IT application in the working environments

One of the most common reasons for applying IT in the classrooms is to better prepare the current generation of students for a working environment in which IT, particularly computers, internet and relevant technologies are increasingly prevalent; therefore, technological power or effective and efficient applicability of IT seems to be as a competitive tool in a globalizing labor market.

Research literature

Despite attempting to find literature that has been linked closely with the present study, the purpose has not been achieved. However, it seems that the following items can be attributed partly to this study.

Empirical studies conducted in other countries

In "factors that affect information technology adoption by teachers", Hyesung, (2004) revealed that IT application by teachers was directly influenced by IT usefulness and individual factors. Teachers'

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attitudes towards IT had a significant relationship with the use of IT. The simplicity of using IT had a significant relationship with the usefulness of IT. In addition, environmental conditions and computer skills had an effect on IT application by teachers (Hyesung, P, 2004)

Deryakulu et al (2010) carried out a study, “predictors of student’s academic achievement using ICT teaching method with different learning styles”. The main objective of this study was to predict students’ progress and success through ICT with different learning styles. Participants were 148 students from Ankara University. Statistical analysis indicated a positive relationship between academic achievement and ICT teaching method (Deryakulu et al, 2010)

In another study “benefits and barriers to implement computer use in Qatari elementary schools as perceived by female teachers, these results were obtained: according to respondents, the computer could be useful for both teachers and students. They were faced with a series of internal and external barriers to computer usage i.e. teachers needed more training in computer skills. Over half of teachers did not have access to computer sites and computer advantages for them were significantly more than students (Al-Ammari, J. A, 2004).

The results of another study to determine the factors affecting the adoption of internet by agriculture teachers in Canada revealed that teachers' attitudes towards internet and their perceptions of relative advantage, visibility, testability, and internet complexity had an effect on the adoption and use of internet in educational activities. In this study, teachers’ teaching experience was also recognized as an effective factor (Holecombe, M, 2000).

Empirical studies within the country

In a study “IT role in the effectiveness of knowledge-based organizations (case study: College of Agriculture and Natural Resources, Tehran University)” conducted by Yeganeh Madadi et al, results indicated that the necessity of using IT were important in cases such as scientific and specialized needs of knowledge workers, improved job performance, increased job satisfaction, managers’ support and influence in their decision-making process and the development of new forms of organizational structure. Using a paired t-test, the significant difference between ideal situation and current situation (need for IT and IT facilities) was measured which significant relationships were found between the independent variable and dependent variables (Madadi et al, 2010)

In a study “a comparative study of IT development in higher education systems around the world with an emphasis on Iran”, Rahmanpur (2009) found that from social-cultural dimension, the high ratio of students to computers, students’ poor searching morale, and teachers and students’ weaknesses in English were as major challenges. From human resource dimension, the inability of students and partly teachers on how to access the information in the databases was introduced a major challenge (Rahmanpur et al, 2009)

In another study, Zare Davijani (2009) investigated the effect of familiarity with ICT on academic achievement of psychology students of Islamic Azad University of Rudehen. The results were compared using t-student test in two independent groups and factor ANOVA. According to the results, it was found that gender didn’t play a role in academic achievement, whereas low and high familiarity with ICT had an impact on students’ academic achievement (Zare Davijani, 2009))

In their study, Soleimanpur et al (2010) confirmed the effect of ICT-based teaching method on the sustainable learning of the experimental science course of third grade secondary. It was also revealed that sustained learning in ICT-based teaching method was more than traditional teaching method (Soleimanpur et al, 2010) According to relevant studies, in this study, the role of IT in education quality improvement of accounting in Islamic Azad University of Rasht was investigated.

METHOD

In this study, three methods of documentary and library studies, searching through electronic sources and field studies are used for data collection. The population is composed of graduate and undergraduate accounting students of Islamic Azad University of Rasht. In this study, because of using all population’s

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views, data collection is performed through sampling; the sample size was 100 and 50 questionnaires were distributed among graduate students and 50 questionnaires were distributed among undergraduate students and they answered all of them and returned to the researcher.

Research hypotheses

Hypothesis is a scholarly speculation about solving a problem. Hypothesis can be defined as a logical relationship between two or more variables that is expressed as a testable statement [18]. According to this definition, the research hypotheses include:

H1 there is a significant relationship between IT and students’ scientific and specialized needs.

H2 there is a significant relationship between IT and job performance improvement.

H3 there is a significant relationship between IT and students’ job satisfaction.

H4 there is a significant relationship between IT and quick learning.

H5 there is a significant relationship between IT and facilitating teaching.

H6 there is a significant relationship between IT and individuals’ organizational positions.

Now, the question which arises in this regard is that what is the role of IT in improving the quality of accounting teaching? This study is sought to answer this question.

Tools and data analysis

The research tool is a questionnaire that includes 12 items that is developed by researcher using Likert scale ranger very low to very high. This questionnaire is adjusted according to the research objectives and the information needed to test research hypotheses. In this study, given the nature and objective of the study, content validity is measured through surveying experienced professors, experts, and students and reliability is also calculated through Cronbach's alpha test which is 0.852. The analysis of this study is performed in two parts: descriptive statistics and analytical or inferential statistics. Pearson correlation coefficient is used to examine the relationship between variables. The research data is analyzed using SPSS software. Given Pearson correlation which is used for hypotheses testing, at 99% confidence level, there is a significantly positive relationship between IT and independent variables i.e. the correlations are significant at 0.01 ($\alpha=0.01$).

7. Data analysis

7-1 analysis of descriptive variables

In this study, descriptive variables are analyzed as follows: the average age of students is 28 years, 56% of respondents are men and 44% women. The education level of the study sample is 50% graduate students, 30% senior undergraduate, and 20% junior undergraduate.

7-2 Analysis of hypotheses

Table 1- Correlation between IT and students’ scientific and specialized needs

		IT	Students’ scientific and specialized needs
Pearson correlation	IT	1	.838**
(2-tailed)			.000
Sample		98	98
Pearson correlation	Students’ scientific and specialized needs	.838**	1
(2-tailed)		.000	
Sample		98	100

** Correlation is significant at 0.01 (2-tailed)

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Table 2- Correlation between IT and job performance improvement

		IT	job performance improvement
Pearson correlation	IT	1	.704**
(2-tailed)			.000
Sample		98	98
Pearson correlation	job performance improvement	.704**	1
(2-tailed)		.000	
Sample		98	100

** Correlation is significant at 0.01 (2-tailed)

Table 3- Correlation between IT and students' job satisfaction

		IT	students' job satisfaction
Pearson correlation	IT	1	.650**
(2-tailed)			.000
Sample		98	98
Pearson correlation	students' job satisfaction	.650**	1
(2-tailed)		.000	
Sample		98	100

** Correlation is significant at 0.01 (2-tailed)

Table 4- Correlation between IT and quick learning

		IT	Quick learning
Pearson correlation	IT	1	.754**
(2-tailed)			.000
Sample		98	98
Pearson correlation	Quick learning	.754**	1
(2-tailed)		.000	
Sample		98	100

** Correlation is significant at 0.01 (2-tailed)

Table 5- Correlation between IT and facilitating teaching

		IT	Facilitating teaching
Pearson correlation	IT	1	.618**
(2-tailed)			.000
Sample		98	98
Pearson correlation	Facilitating teaching	.618**	1
(2-tailed)		.000	
Sample		98	100

** Correlation is significant at 0.01 (2-tailed)

Table 6- Correlation between IT and individuals' organizational position

		IT	Individuals' organizational position
Pearson correlation	IT	1	.600**
(2-tailed)			.000
Sample		98	98
Pearson correlation	Individuals' organizational position	.600**	1
(2-tailed)		.000	
Sample		98	100

** Correlation is significant at 0.01 (2-tailed)

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DISCUSSION AND CONCLUSION

Results of H1 testing

Since correlation coefficient between IT and students' scientific and specialized needs was 83.8%, it was concluded that there was a significantly direct relationship between IT and students' scientific and specialized needs and because it was less than +1, correlation was direct and incomplete.

Results of H2 testing

Given that correlation coefficient between IT and job performance improvement was 70.4%, it was concluded that there was a significantly direct relationship between IT and future accounting students' job performance improvement and since it was less than +1, correlation was direct and incomplete.

Results of H3 testing

Given that correlation coefficient between IT and future students' job satisfaction was 65%, it was concluded that there was a significantly direct relationship between IT and future students' job satisfaction and since it was less than +1, correlation was direct and incomplete.

Results of H4 testing

Given that correlation coefficient between IT and quick learning was 75.4%, it was concluded that there was a significantly direct relationship between IT and quick learning and since it was less than +1, correlation was direct and incomplete.

Results of H5 testing

Given that correlation coefficient between IT and facilitating teaching was 61.8%, it was concluded that there was a significantly direct relationship between IT and facilitating teaching and since it was less than +1, correlation was direct and incomplete.

Results of H6 testing

Given that correlation coefficient between IT and people's organizational position was 60%, it was concluded that there was a significantly direct relationship between IT and people's organizational position and since it was less than +1, correlation was direct and incomplete.

According to hypotheses testing, the correlation between variables and IT is shown in the following table from maximum to minimum respectively:

Table 6: The correlation between variables and IT

Rank	Variables	Correlation coefficient
1	Students' scientific and specialized needs	83.8%
2	Quick learning	75.4%
3	Job performance improvement	70.4%
4	Students' job satisfaction	65%
5	Facilitating teaching	61.8%
6	Organizational position	60%

Suggestions for future research

- Due to the importance of issue, it is recommended to conduct this study in other cities
- Investigation of problems and barriers to apply IT in universities
- Studying how IT entering into educational systems in several countries of the world at different periods of its utilization through a comparative study
- A comparative study of the world educational systems and changing their functions in the modern age

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