

Feasibility Study of the Use of Information and Communication Technology in Secondary Schools: A Case Study of Iran; City Lamerd

Dr. Seyed Ahmad Hashemi¹, Ali AliMoradpour²

¹Department of education, Lamerd Branch, Islamic Azad University, Iran

²M.A, Student Education and Human Resources Development, Islamic Azad University (IAU), Lamerd, Iran.

ABSTRACT

The aim of this study was to investigate the feasibility of the use of information and communication technology in secondary schools Lamerd city in the 2013-2014 school year. But Ray descriptive survey research method study population included all administrators, principals and teachers in secondary schools, both girls and boys Lamerd city with 369 people, the sample size of 191 patients was determined according to Morgan the sample was selected using simple random sampling. Data collection tool was a questionnaire. Data were analyzed using binomial tests. The results showed that the use of information and communication technology in high school education Lamerd city in terms of infrastructure, hardware, software, human resources specializing laws and regulations and collateralizing finance and support for does not exist.

Keywords: feasibility, ICT, school, secondary school.

Introduction

With the growth of globalization and the increasing development of information technology and communications, all aspects of human life are faced with rapid changes. Education is also strongly influenced by these developments as an educational institution is located (Hashemi, 2013).

Initial efforts to develop information technology in education systems have been conducted in the twentieth century (Nickel, 2005). New technologies including communication equipment, computers, internet, software, etc., information and communication technology is named and because of his ability to interchange, processing, storage, high-speed data to human life has changed miraculously and methods of education, business and the economy has changed and has introduced new concepts (Pelgram and Anderson, 2002) The outcome of this effort is the development of approaches to distance education, correspondence education was. All school systems are faced with a new information technology that has deepened its capabilities in the past. Development of new information technologies has the potential to reshape how they are learning in the universities and colleges (Poehlen, 2000). The most successful approach in the context of the integrated approach means that new technologies in the classroom and should be used in conjunction with other training methods. With this new approach to traditional assumptions about the relationship between space and time apart was learning (Hashemi, 2013).

Hashemi, (2011) believes that the development of information and communication technologies in various fields, especially education and learn the importance of using new methods and practices in this area will require and conventional conceptions of the learning process challenging. The result of these innovations needs to redesign education programs to schools, traditional web-based learning requires. In this context, what is evident is the need to identify the challenges facing the development of information technology that is critical programs and measures to be adopted. On this basis, and considering the impact of ICT on education; Looking for a feasibility study into the use of ICT in education is Lamerd city. Research has been done in this area including:

Taghvai and Akbari (2010) in a study entitled "Application of ICT in education and Research University" showed that the respondents' use of information technology in different educational levels and most of the faculty are using technology. Afzal Khani et al (2010) in a research entitled "Feasibility Study for the establishment of virtual education in secondary schools in Semnan province" began. The results showed that the establishment of virtual education in secondary school education in Semnan province in terms of infrastructure hardware, there is.

In terms of infrastructure software at moderate to high and the electronic

content and virtual courses and specialized staff and the culture there is moderate possibility of learning in terms of financial resources and support needed there. Salehi et al (2011) in their study that examines the feasibility of developing new technologies of information and communication technology education approaches in primary schools began. The results showed the status of computer facilities for school administration is desirable. Information and communication technology skills of teachers are not in good condition, but the interest and high motivation for using technology in education are higher. Hosseini (2011) in a study entitled "Feasibility of e-learning in vocational centers in Kurdistan province of administrators and teachers' pay. The results of these tests showed significant differences between the vocational and technical centers and vocational centers also possible to use traditional and new fixtures there. Skills of students and educators in the use of traditional means of learning are more about the new electronic devices.

These centers need to be able to receive funding higher All workshops are fully electronic. Centers, as well as the equipment needed to deliver e-learning was at a low level. Cocos and Preston 1 (2000), in a study entitled "Evaluation of the motivation of teachers to use ICT in 2000 did" they concluded that ICT increases motivation, interest, confidence, and independence of mind to teachers and students generally, teachers have a positive attitude to the use of computers in education and it is considered effective in improving the presentation. Oliver 2 (2002), in their survey entitled "Factors Affecting started learning computers by teachers' association found that teachers in using ICT for teaching computer courses trained the teachers to use ICT for teaching computer courses have seen a significant difference there. The result shows that factors other than knowledge and technical skills involved in successful teachers in integrating technology. Research entitled "Application of ICT and the Internet among faculty members at public universities in Jordan by Aldokhan 3 (2007) was done." The aim of this study is the use of ICT and the Internet with respect to variables and the use of these tools in teaching and scholarly activities. The results showed that significant differences in the use of ICT and the Internet are based on academic rank. However, no significant differences in the use of ICT and the Internet on the basis of sex are men's faculty of ICT and the Internet more.

Research Questions

1. there it is possible to use information and communication technology in secondary schools in terms of hardware Lamerd city?
2. there it is possible to use information and communication technologies in software Lamerd city schools?

3. there it is possible to use information and communication technologies in terms of human resources specializing in city schools Lamerd?
4. there it is possible to use information and communication technologies in terms of rules and regulations in city schools Lamerd?
5. there it is possible to use information and communication technologies in terms of financial resources and support in secondary schools Lamerd city?
6. there it is possible to use information and communication technology in high school culture Lamerd city?

Materials and Methods

The research method was descriptive-survey. The study included all managers and assistants and teachers (male and female) Lamerd city schools have been involved in academic year 2013-2014.

The total number of managers and assistants and teachers working in these schools was 369 students.

Using Morgan's sample consisted of 191 patients, respectively, and was selected by simple random sampling. Data from the questionnaire consisted of 34 questions were used 6, Question 1 of 6 questions related to hardware infrastructure, Question 2 of 6 questions related to infrastructure software, questions related to 5 q3 human expert, question 4, 5 questions on etiquette,

Items	Statistics	Very low	Low	average	High	Very much
The possibility of having broadband Internet	Frequency	34	37	67	36	17
	Percent	17.8	19.4	35.1	18.8	8.9
Providing computer network at school	Frequency	39	39	57	34	22
	Percent	20.4	20.4	29.8	17.8	11.5
Allows a PC to the appropriate number	Frequency	44	45	55	29	18
	Percent	23.0	23.6	28.8	15.2	9.4
Providing computer at school site	Frequency	40	45	57	31	18
	Percent	20.9	23.6	29.8	16.2	9.4
Ability to use computers in the classroom	Frequency	45	37	58	30	21
	Percent	23.6	19.4	30.4	15.7	11.0
Take advantage of the Internet in the classroom	Frequency	89	47	36	13	6
	Percent	46.6	24.6	18.8	6.8	3.1
Total	Frequency	48.5	41.6	55	28.8	17
		25.38	21.83	28.78	15.08	8.88
		47.21		23.96		

question 5 consists of 5 questions on funding and support and question 6

question 6 is related to culture. Reliability coefficient using Cronbach 0.939 obtained. To analyze the data, binomial test was used.

Results

Question 1: there it is possible to use information and communication technology in secondary schools in terms of hardware Lamerd city?

The results of Table 1 shows that 145 of the 75.99% of the sample allows the use of information technology and communications hardware level is too low and the low and intermediate and 46, the 23.96 percent have evaluated high and very high. They may therefore be determined by the use of information and communication technology in secondary schools in the city Lamerd hardware does not exist.

Question 2: there it is possible to use information and communication technologies in software Lamerd city schools?

Items	Statistics	Very low	Low	average	High	Very much
Possibility of the presence of electronic and multimedia software courses	Frequency	44	62	58	21	6
	Percent	23	32/5	30/4	11	3/1
Unable to create database software updated and appropriate subject	Frequency	44	60	57	23	7
	Percent	23	31/4	29/8	12	3/7
Possibility of security software in the school system	Frequency	46	55	46	35	9
	Percent	24/1	28/8	24/1	18/3	4/7
To install new software on existing systems	Frequency	21	43	71	37	19
	Percent	11	22/5	37/2	19/4	9/9
Take advantage of new software	Frequency	21	46	69	40	15
	Percent	11	24/1	36/1	20/9	7/9
Ability to inform parents of school children	Frequency	44	35	44	43	25
	Percent	23	18/3	23	22/5	13/1
Total	Frequency	36/6	50/1	57/5	33/1	13/5
		19/1	26/2	30/1	17/3	7
		22/6			23/96	

The results of Table 2 shows that 144 of the 75.4% of the sample allows the use of information technology and communications the software level is too low and the low and intermediate and 47, the 24.3percent have evaluated high and very high. They may therefore be determined by the use of information and communication technology in secondary schools in the city Lamerd software does not exist.

Question 3: there it is possible to use information and communication technologies in terms of human resources specializing in city schools Lamerd?

Items	Statistics	Very low	Low	average	High	Very much
Teachers are familiar with the production of electronic content	Frequency	26	54	68	35	8
	Percent	13/6	28/3	35/6	18/3	4/2
Teachers are familiar with ICT	Frequency	10	46	80	43	12
	Percent	5/2	24/1	41/9	22/5	6/3
Interested and motivated teachers in the use of information technology	Frequency	9	46	72	42	22
	Percent	4/7	24/1	37/7	22	11/5
Personnel are familiar with ICT	Frequency	10	46	81	45	9
	Percent	5/2	24/1	42/4	23/6	4/7
Are responsible for all computer time at school	Frequency	77	46	30	29	9
	Percent	40/3	24/1	15/7	15/2	4/7
Total	Frequency	26/4	47/6	55/1	38/8	12
		13/8	24/9	34/6	20/3	6/2
		19/3			13/2	

The results of Table 3 shows that 140 of the 73.3% of the sample allows the use of information technology and communication in terms of human resources and expertise to very low, low, 55 with the 34.6% moderate and 51 with the 26.5 percent have evaluated high and very high. They may therefore be determined by the use of information and communication technologies in terms of human resources specializing in Lamerd city high schools in do not exist.

Question 4: there it is possible to use information and communication technologies in terms of rules and regulations in the city schools Lamerd?

Items	Statistics	Very low	Low	average	High	Very much
Possible credit for military pay and Technical Support	Frequency	28	47	76	29	11
	Percent	14/7	24/6	39/8	15/2	5/8
Possibility of credit to purchase materials and equipment technology	Frequency	8	56	66	42	19
	Percent	4/2	29/3	34/6	22	9/9
Possibility of credit to purchase high-speed lines	Frequency	27	50	83	26	5
	Percent	14/1	26/2	43/5	13/6	2/6
Possible credit for the purchase of software technology	Frequency	34	64	66	21	6
	Percent	17/8	33/5	34/6	11	3/1
Possible credit for students and teachers	Frequency	40	48	75	24	4
	Percent	20/9	25/1	39/3	12/6	2/1
Provides students with	Frequency	27/4	53	61/2	28/4	9

computer and internet at home	Percent	28	47	76	29	11
Total	Frequency	14/7	24/6	39/8	15/2	5/8
		14/34	27/74	38/36	14/88	4/7
		21/04			5/01	

The results of Table 4 shows that 154 of the 80.44% of the sample allows the use of information technology and communication in terms of human resources and expertise to very low, low, 55 with the 38/36% moderate and 37 with the 21.04 percent have evaluated high and very high. They may therefore be determined by the use of information and communication technologies in terms of rules and regulations in Lamerd city high schools in do not exist.

Question 5: there it is possible to use information and communication technologies in terms of financial resources and support in secondary schools Lamerd city?

Items	Statistics	Very low	Low	average	High	Very much
Possible credit for military pay and Technical Support	Frequency	91	63	23	10	4
	Percent	47/6	33	12	5/2	2/1
Possibility of credit to purchase materials and equipment technology	Frequency	83	62	32	10	4
	Percent	43/5	32/5	16/8	5/2	2/1
Possibility of credit to purchase high-speed lines	Frequency	72	53	46	15	5
	Percent	37/7	27/7	24/1	7/9	2/6
Possible credit for the purchase of software technology	Frequency	75	57	42	13	4
	Percent	39/3	29/8	22	6/8	2/1
Possible credit for students and teachers	Frequency	81	65	31	10	4
	Percent	42/4	34	16/2	5/2	2/1
Provides students with computer and internet at home	Frequency	48	49	58	32	4
	Percent	25/1	25/7	30/4	16/8	2/1
Total	Frequency	75	58/16	38/66	45	4/16
		39/26	30/45	20/25	2/1	7
		34/85			5/01	

The results of Table 5 shows that 172 out of the 89.96% of the sample allows the use of information technology and communication in terms of funding and support for very low, low, 39 out of the 20.25% moderate and 19 with the 10.03 percent have evaluated high and very high. They may therefore be determined by the use of information and communication technologies in terms of financial resources and support in secondary schools city Lamerd are absent.

Question 6: there it is possible to use information and communication technology in high school culture Lamerd city?

Items	Statistics	Very low	Low	average	High	Very much
Possible credit for military pay and Technical Support	Frequency	28	58	70	29	6
	Percent	14/7	30/4	36/6	15/2	3/1
Possibility of credit to purchase materials and equipment technology	Frequency	14	38	75	49	15
	Percent	7/3	19/9	39/3	25/7	7/9
Possibility of credit to purchase high-speed lines	Frequency	16	34	80	46	15
	Percent	8/4	17/8	41/9	24/1	7/9
Possible credit for the purchase of software technology	Frequency	65	71	37	15	3
	Percent	34	37/2	19/4	7/9	1/6
Possible credit for students and teachers	Frequency	23	43	79	31	15
	Percent	12	22/5	41/4	16/2	7/9
Provides students with computer and internet at home	Frequency	46	65	51	21	8
	Percent	24/1	34	26/7	11	4/2
Total	Frequency	32	51/5	65/33	31/83	10/33
		16/75	29/96	34/21	16/68	5/43
		23/35			5/01	

The results of Table 6 shows that 84 of the 23.35% of the sample allows the use of information and communication technologies in culture to very low and low 34.21, 65% of the average and 22 in the high and very high 11.5 percent have evaluated. They may therefore be determined by the use of information and communication technology in high school culture Lamerd city does not exist.

Discussion and conclusions

The development of information technology has caused a fundamental change in human societies in different areas of human life. Any kind of change in various fields, including the field of education, consequences follows suit their purpose and function. Application and development of information technology is no exception. The most serious challenge to foster information technology in educational systems is guidance, educational changes during the transition from traditionalism to modernism in science education. Had to deal with change, you

must change the opportunities and threats that we know and have identified barriers to change and seek to remove barriers to solve and the strategy for achieving the objective of which is the educational system, personal and social development is our choice.

Feasibility study aimed at using ICT in schools was Lamerd city. The results showed that the ability of using information and communication technology in high school education Lamerd city in terms of infrastructure, hardware software, human resource specialists, rules and regulations, funding and support, and the culture. The results of the sort the results by Afzal Khani et al (2010), akbar and Taghvai (2010), Salehi and colleagues (2011), Cocos and Preston (2000), Oliver (2002) and Aldvkhan (2007) had similar.

References

- Anderson. S. (2006). The evaluation of higher education in chin: A storied experiences of internet usage by student and faculty. Available from: <http://www.Proquest.com>.
- Hashemi, said Ahmad & Abbasi, Abolfazl. (2013). Investigation of the Development Obstacles of the Informational Literacy of Faculty Members in Region 1 Universities, Iran, European Online Journal Of Natural And Social Sciences, VOL.2(3),2013-ISI-Listed
- Hashemi, said Ahmad. (2011). Quality Creation in Educational Systems Based on the Information Communication Technology (ICT), International Conference Management (ICM 2011), Penang, Malaysia, 2011
- Hashemi, said Ahmad & Abbasi, Abolfazl . (2013). Development of Human Sources Competence is the Necessity of Organizational Processes Development. Shiraz journal of system management, special Issue(0),2013,ISC.
- Nicolle, P. S. (2005). Technology adoption into teaching and learning by mainstream university faculty: A mixed methodology study revealing the “how, when, why, and why not.” Retrieved July 18, 2008, from ProQuest Digital Dissertations database. (AAT 3184089)
- Pelgrum W.I. and Anderson R. E. (2002). ICT and the emerging paradigm for life long learning international association for the evaluation of educational achievement ,designed and desktop published by Monique Kole of Twenteocto enchase the Netherlands,p20.
- Rother, C. (2005). Is technology changing how you teach? Technological Horizons in Education Journal, 33 (3), 34-36.

- Virginio, C.Cellario, M.porta, M.(2004). Perspectives and challenges in e-learning: towards natural interaction paradigms. *Journal of Visual Languages and Computing* , pp. 2-13.
- Poehlen, G. W. (2000). University and information technologies for instructional programs: issues and potential impacts, technology analysis and strategic management, (3), pp:283-290.