The extent to which teachers of social curriculum at the intermediate stage possess e-learning skills

[1]Dr. Haider Tumma Jabbar Al-Shammari, [2]Yuonis Auda Armish Alsawafi

[12]Dhi Qar Education Directorate/ Nasiriyah Education Department, Ministry of Education
[1]Haideralshammari12@gmail.com, [2]Younis.alssafy11@gmail.com

Abstract: This research aimed at identifying the level of possessing e-learning skills by teachers of social curriculum at the intermediate stage. The researchers adopted the descriptive approach. The research sample consisted of (400) teachers of social curriculum at the intermediate school. The research tool was a questionnaire about (40) items distributed to three fields, namely, computer skills, skills of using the internet, and skills of managing the virtual classes. The results showed that the research sample had a high level of e-learning skills. Moreover, there were statistically significant differences in relation to the gender variable in favor of males, statistically significant differences in the experience variable in favor of teachers who had teaching experience ranging from 3 to 10 years, and statistically significant differences in the scientific qualification variable in favor of master's degree holders. The researchers proposed a number of recommendations and suggestions in the light of the research results.

1. Introduction

Research problem

The problem of this research lies in the ability of teachers of social curriculum to provide the best e-learning process under its spread in all educational institutions. The success of e-learning process requires the availability of a number of skills that help teachers to communicate information to learners and the employment of these skills in the e-learning process. This will positively enhance the success of learning process. Therefore, the problem of current research is summarized as follows:

- What are the e-learning skills of teachers of social curriculum at the intermediate stage?

Research Questions

The following sub-questions arise from the main question:

1.   To what extent do teachers of social curriculum at the intermediate stage possess e-learning skills?
2.   Are there statistically significant differences related to the extent to which teachers of social curriculum at the intermediate stage possess e-learning skills according to variables of gender, experience and scientific qualification?

Research Objectives

This research aims at identifying:

1.   The extent to which teachers of social curriculum at the intermediate stage possess e-learning skills.
2.   Differences in the level of practicing e-learning skills according to variables of gender, experience and scientific qualification.

Research Significance

The importance of the current research lies in the following points:

1.   Practically, it reveals the extent to which teachers of social curriculum possess e-learning skills.
2.   Theoretically, it provides a database on the skills required for e-learning process.
3.   For teachers, it provides a guide to e-learning skills.
4.   For educators, it provides data on the electronic teaching level at schools in order to make the appropriate decision in relation to development or promotion.

5.   For researchers, it is useful for researching this variable in relation to other educational subjects and stages.

Research Scope

The current research limited to studying e-learning skills and their employment by teachers of social curriculum at the intermediate schools in Nasiriyah Education Department/ Dhi Qar Education Directorate at the second semester of the 2020/2021 academic year.

Definition of Terms

Skills: Halas and Abu Shuqir (2010) define skills as the teacher's ability to perform the teaching process. This skill grows through educational preparation and previous experiences. This performance varies depending on the subject matter, its nature, characteristics and objectives of its teaching.

Theoretically, the researchers define it as a set of practices performed by the teacher, enabling him to provide the best teaching-learning process and communicate the scientific material to students.

E-learning: Al-Khatib (2012) defines it as an educational system in which electronic communication is adopted using modern computers and electronic devices with the aim of presenting scientific material in the form of lectures, discussions and tests to which learners are subjected systematically and orderly.

Theoretically, the researchers define it as the learning process that is communicated between the teacher and the student through electronic means of communication using computers, smart devices and internet networks for communicating information to students.

E-Learning

The urgent need under the spread of the Corona epidemic (COVID 19) throughout the world has prompted the adoption of e-learning, especially during banning gatherings and other manifestations that prevent schools from continuing to provide education to students directly. These conditions have made it difficult to have a direct communication between students and their teachers, and hence the use of technology has become necessary to overcome these conditions and continue to provide education to students. In this regard, the modern techniques urged by the competent authorities have been used in the e-learning process including computers, smart devices and internet networks in order to provide the so-called e-learning to students. The interest in modern technology and systems has emerged in communication to teach students and transmit information to them. This has drawn attention to the development of these technologies to reach the best learning through adopting the best means of communication, providing fast internet networks, and training teachers to use the educational platforms launched by the Ministry of Education (Rabah, 2004).

The Concept of E-Learning

The concept of e-learning is associated with the employment of modern technologies and techniques to teach students in a way that can deliver information to them through indirect communication using the Internet, ensuring that the teacher interacts with students during virtual classes and transferring the learning process to virtual classes. The teacher creates virtual environments online whether the learning is entirely, i.e., replacing virtual classes instead of real classes, or in a blending method, i.e., adopting both virtual and real environments (al-Hadi, 2005).

E-learning has a number of features and characteristics when compared to traditional means, such as the possibility of providing scientific content using multimedia (graphics, photos, videos, etc.) which can be easily obtained through the Internet to achieve the objectives. Moreover, it provides the possibility to keep up with scientific development and provide courses without printing costs and other issues. It also ensures that the scientific material offered to students is not damaged because it is kept in digital files that can be obtained at any time. It also works to raise the motivation of students towards learning as it is more interesting for students and works to achieve interaction among learners, teachers and educational content. Additionally, it helps to review the subject and teacher's explanation at any time, and works to achieve the self-assessment of the student through applying direct electronic tests aimed at measuring the level of student's mastery and understanding of the subject (al-Mosa & al-Mubarak, 2004).

The Significance of E-Learning

The significance of e-learning lies in that it helps in educating students and continuing to provide information to them under the impossibility of being in the classroom. It also helps students to develop their skills in mastering technological development using computers and internet networks. In addition, it works to develop the teacher in the field of technology and the use of modern technologies. It adds a kind of pleasure in relation to the students learning, as it helps teachers to provide the scientific content efficiently, especially if the teacher is able to use these modern technologies and networks (Qatit, 2009).

Objectives of E-Learning

E-learning aims at:

1.   Developing the levels of teachers in the preparation of electronic educational supplies.
2.   Speedy access to sources of information and the possibility of using images, files and media available on the Internet and sending them to learners or teaching them through using these media more easily.
3.   Providing scientific content on the Internet that allows the student to use it in a simple way.
4.   The possibility of providing virtual lessons for schools that suffer from a lack of teaching staff.
5.   Helping the student and teacher to review the subject offered at any time.
6.   Working to raise the level of cultural awareness of the student and the teacher through the use of internet networks and the use of time properly.
7.   Building a network of communication among the student, the parents and the teacher with the aim of keeping parents informed of the progress of their children.
8.   The school communication with educational and government institutions in an orderly and easy method (Sa'adah, 2003).

The Teacher's Role in E-Learning

The teacher's role in e-learning is very important, as s/he designs the educational environment, guides and motivates the students in their learning. Therefore, his/her role in virtual learning is more difficult than learning in real classes. The teacher must be very creative and highly qualified to manage the educational process and meet the ambition of students through using varied teaching methods and must be skillful in the use of modern techniques. Accordingly, the teacher must work to make the virtual classroom environment active. S/he must know the needs of students in e-learning, and must master the teaching skills to make e-teaching more attractive and motivating (Al-Sharqawi, 1997).

E-Learning Skills

E-learning is based on a number of skills that make e-learning successful and exciting for learners. These skills include the availability of motivation among the learners in e-learning, the need to identify the goals that the teacher seeks to achieve clearly. The teacher must also have a number of teaching methods that enable him to provide scientific content easily to students, the ability to estimate the scientific content provided during the virtual lesson, and the preparation and presentation of scientific material systematically. Furthermore, the teacher must ensure the participation of all students in the virtual lesson, avoid long lectures, provide study tasks for students, use the means and techniques available on the Internet, and correct the learning methods among students using concise languages. The teacher must work to develop education patterns for students by promoting methods of reviewing the scientific content presented and discussing it with students, assigning students scientific activities that help to understand electronic lessons, and using the electronic final assessment of students' understanding of the content presented (Abdul Rauf, 2014).

The e-learning skills that should be obtained by teachers in e-learning can be summarized as follows:

1.   Skills of using computer.
2.   Skills of using the Internet.
3.   Skills of managing virtual classrooms.

2. Research Methodology and Procedures

The researchers followed the descriptive research approach as being appropriate for achieving research objectives.

Research Community

The research community consisted of (1,698) teachers of social curriculum at the intermediate schools in the Nasiriyah Education Department/ Dhi Qar Education Directorate, distributed to (84) schools, (42) for boys and (42) for girls.

Research Sample

The researchers randomly selected a sample of (400) teachers of social curriculum as indicated in the following table:

Table 1: distribution of research sample

Experience	Qualification						Total
	Bachelor		Master		PhD.		
	Male	Female	Male	Female	Male	Female	
Less than (3) years	32	41	11	0	1	1	86
Less than (10) years	30	47	21	13	11	9	131
More than (10) years	51	52	34	19	17	10	183
Total	113	140	66	32	29	20	400

Research Tool

The researchers reviewed the literature and built a questionnaire consisting of (40) items distributed to three areas according to the five-level Likert scale as shown in the following table:

Table 2: Likert scale

Very high	High	Mid	Low	Very low
5	4	3	2	1

The areas of questionnaire were as follows:

1. The use of computer: this area consisted of (11) items (from 1 to 11).
2. The use of internet networks: it consisted of (9) items (from 12 to 20).
3. Electronic Classroom Management: it consisted of (20) items (from 21 to 40).

The Validity of Research Tool

Face Validity

This kind of validity was achieved by presenting the questionnaire to (18) experts in order to judge the validity of the items. After finding Scott's coefficient value for the experts' responses to items, face validity was obtained, because the lowest value obtained by the items was greater than (0.80). Therefore, all items were acceptable as having an agreement ratio of more than (0.80) (al-Chalabi, 2005).

Structural Validity

Structural validity of the questionnaire means the extent to which its items are linked to the theoretical basis on which they were built. It can be obtained by analyzing the score of respondents to the questionnaire in the light of the correlation between the item and the area to which it belongs, the association between the item and the overall scale, and the correlation between the field and the scale (Abu Jadu, 2000).

This type of validity represents the correlation between the structural content of the test, which is the relationship of the item to the overall test. The questionnaire was applied to a sample of (200) teachers of social curriculum at the intermediate schools according to the law (1×5). It was found that all items were statistically significant and correlated at the significance level (0.05). This indicates the correlation between each item and the area to which it belongs and its association with the overall scale, which was statistically significant as well. The correlation between the areas to each other and their association with the overall scale was statistically significant.

Discriminatory Power of Items

Odeh (2002) defines discrimination as the ability of questionnaire items to distinguish between the respondents in the upper group and the lower group of characteristics measured by the questionnaire. By calculating the discriminatory power of the questionnaire according to Johnson's equation of discrimination, the researchers found that the discriminatory power of questionnaire items ranged from (0.31 to 0.54). Therefore, all items were considered acceptable according to Ebel scale (1963).

Reliability

The researchers applied the questionnaire to (30) teachers and found the questionnaire reliability using two methods. The first one was split-half method, where the reliability result was (0.92) and after correcting it using Sperman Brown corrective equilibrium, because the reliability extracted was for half the test, the result was (0.96), which was a high reliability indicator. As for the second method, the researchers used Alpha Cronbach method as the reliability value was (0.96), which was also a high reliability value.

Statistical Means

The researchers used the Statistical Package of The Humanities (Spss).

3. Results and Discussion

Objective one: identifying the extent to which the research sample possess e-learning skills

The research sample was (400) with the arithmetic mean on the e-learning skills scale (125.35) and a standard deviation of (11,803), which was higher than the hypothetical mean (120). When calculating the significance of the difference between the two means using the T-test for a single sample, the calculated T-value was (9.066), which was greater than the tabulated T-value (1.96) at the significance level (0.05) and a degree of freedom (399), as shown in table 3.

Table 3: the significance of difference between the arithmetic mean, the hypothetical mean, the calculated and tabulated T-values

Sample	Arithmetic mean	Standard deviation	Hypothetical mean	T-value		Significance	Freedom
				Calculated	Tabulated		
400	125.35	11,803	120	9.066	1.96	0.05	399

This means that the sample of the study has high e-learning skills.

To know the level of possession of e-learning skills by field, the results were as follows:

Table 4: arithmetic means, standard deviations and T-values for the questionnaire according to the area

Test	Arithmetic mean	Standard deviation	Hypothetical mean	T-value		Significance	Freedom
				Calculated	Tabulated		
Skills of using computer	34.78	5.873	33	6.071	1.96	0.05	399
Skills of using the Internet	29.88	7.659	27	7.514	1.96	0.05	399
Skills of	60.69	4.161	60	3.316	1.96	0.05	399

managing the virtual classes							

Objective two: identifying the differences in the level of possessing e-learning skills among the research sample according to the variables of gender, experience and scientific qualification

To identify statistical differences in the level of possessing e-learning skills among the research sample according to the variables of gender, experience and scientific qualification, the researchers extracted the results by analyzing the variation coefficient. The analysis results were shown in table 5.

Table 5: arithmetic means and standard deviations for the questionnaire of e-learning skills according to the variables of gender, experience and scientific qualification

Gender	Experience	Qualification	Arithmetic mean	Standard deviation	Sample
Male	Less than (3) years	Bachelor	132.21	7.307	52
	Less than (10) years	Bachelor	127.36	6.277	56
	More than (10) years	Bachelor	144.07	6.498	14
		Master	134.70	5.217	57
		PhD.	130.48	4.146	29
		Total	134.79	6.589	100
	total	Bachelor	131.34	8.448	122
		Master	134.70	5.217	57
		PhD.	130.48	4.146	29
		Total	132.14	7.346	208
Female	Less than (3) years	Bachelor	122.76	6.179	34
	Less than (10) years	Bachelor	124.04	11.533	69
		PhD.	97.67	2.338	6
		Total	121.93	13.210	75
	More than (10) years	Bachelor	118.36	5.632	28
		Master	113.62	5.247	29
		PhD.	104.85	8.038	26
		Total	112.47	8.383	83
	Total	Bachelor	122.50	9.531	131
		Master	113.62	5.247	29
		PhD.	103.50	7.816	32
		Total	117.99	11.304	192
Total	Less than (3) years	Bachelor	128.48	8.273	86
	Less than (10) years	Bachelor	125.53	9.652	125
		PhD.	97.67	2.338	6
		Total	124.25	11.102	131
	More than (10) years	Bachelor	126.93	13.594	42
		Master	127.59	11.291	86
		PhD.	118.36	14.342	55
		Total	124.67	13.395	183
	Total	Bachelor	126.76	10.038	253
		Master	127.59	11.291	86
		PhD.	116.33	14.973	61
		Total	125.35	11.803	400

The researchers employed the analysis of variation coefficient and the results were as illustrated in table 6.

Table 6: results of the analysis of variation coefficient for the questionnaire of e-learning skills according to the variables of gender, experience and scientific qualification

Source of variation	Total of squares	Freedom	Mean of squares	F-value	Significance
Gender	17176.126	1	17176.126	317.886	.000
Experience	1444.434	2	722.217	13.366	.000

Qualification	7191.206	2	3595.603	66.545	.000
Gender * experience	3609.210	2	1804.605	33.399	.000
Gender * Qualification	220.528	2	110.264	2.041	.131
Experience * Qualification	648.283	1	648.283	11.998	.001
Error	21018.591	389	54.032		
Total	6340630.000	399			

It is clear from the results shown in table (6) that there are statistically significant differences in relation to gender in favor of males, as the calculated F-value is greater than the tabulated value (3.8). The arithmetic mean of males was higher than that of females. In addition, there were significant differences in relation to the variable of experience for teachers whose service was less than 10 years because the calculated F-value was greater than the tabulated F-value. Moreover, there were statistically significant differences in relation to the variable of scientific qualification in favor of Master's degree holders as the calculated F-value was greater than the tabulated F-value.

4. Conclusions

Based on the research results, the researchers concluded that:

1.   The research sample has a high level of e-learning skills.
2.   Males outperform females in the level of possessing e-learning skills. The researchers attribute this to the interest of male teachers in the innovations of educational techniques.
3.   Teachers whose experience is less than 10 years have excelled in possessing e-learning skills. The researchers attribute this to the practice and habitual teaching as well as that this segment is the largest in the teaching community.
4.   Teachers with Master's degree have high level of possessing e-learning skills. The researchers attribute this to the fact that this segment is more using computer and the Internet.

5. Recommendations

The researchers recommends the following points:

1.   The necessity to hold courses on e-learning skills for new teachers.
2.   The necessity to hold courses on the use of computers and internet networks for all teachers.
3.   The necessity to hold courses on skills of managing the virtual classes.
4.   Focus on the role of supervisors in supervising electronic lessons and continuous follow-up.
5.   The necessity for teachers' visits to the virtual classes for the purpose of increasing experiences.

6. Suggestions

The researchers propose the following suggestions:

1.   Carrying out research on the relationship of the level of e-learning skills to the students' academic achievement.
2.   Carrying out research on e-learning skills for other subjects and classrooms.
3.   Carrying out research on the effect of a training program in e-learning skills on the level of teachers' performance in e-teaching.

References

1.   Abdul Rauf, N. (2014). *E-learning: Innovations in vision and strategy*. Egypt, Cairo: World of Books.
2.   Abu Jadu, S. (2000). *Educational psychology*, 2nd Ed. Jordan, Amman: Al-Maserah Press for Publishing and Distribution.
3.   Al-Chalabi, S. (2005). *Basics of building the psychological and educational tests and standards*, 1st Ed. Syria, Damascus: Aladdin Foundation for Printing and Distribution.
4.   Al-Hadi, Mohammed (2005). *Online e-learning*. Egypt, Cairo: Egyptian-Lebanese Press.

5. Al-Khatib, L. (2012). Motivations and obstructions of e-learning from the point of view of faculty members at the Arab Open University. *Moata University Journal of Research and Studies*, 27(2), pp. 349-378.
6. Al-Mosa, A. & al-Mubarak, A. (2004). E-learning: Basics and classifications. KSA, Riyadh: Data Network Foundation.
7. Al-Sharqawi, A. (1997). *The psychology of education*. Egypt, Cairo: Anglo Egyptian Press.
8. Halas, D. & Abu Shuqir, M. (2010). *Skills of effective teaching*. Palestine, Gaza: Afaq Press.
9. Odeh, A. (2002). *Measurement and Evaluation in the Teaching Process*, 5th Ed. Jordan, Amman: al-Amal Press.
10. Qatit, G. (2009). *Computer, teaching methods and evaluation*. Jordan, Amman: Culture Press.
11. Sa'adah, J. (2003). *The use of computers and Internet in the field of education*, 1st Ed. Palestine, Ramallah: Ash-Shrooq Press.