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Problems of Implementation of Arabic Language E-Curriculum in Amman's Schools

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This study aims to explore the problems that exist in the challenges of implementation of Arabic language e-curriculum in Amman's Schools. The researcher designed a questionnaire to identify these problems. The most prominent problems that confronted Arabic language teachers while applying e-curricula for the subject included technical problems in computer devices or communication networks, the scarcity of devices, inadequate class time allotted to the computerized subject, shortage of support personnel in school administration, the deficiency in teachers' perception of level as to what their role entails in this process, and the negative attitudes some of them have towards applying technology in education. The study suggests some recommendations based on the findings such as review and refine the training programs in order to better prepare and certify Arabic language teachers in effective Arabic e-curricula application; or offer a greater quantity of courses catering to the variable levels of teacher expertise. The results of the study showed no differences between males and females in estimating the problems of applying Arabic language e-curricula in Jordanian schools.

Key words: *curriculum, E-curriculum, Blended Learning, instructional aide.*

Introduction

In this age of science and technology, there is a veritable explosion in cognitive understanding, and a more rapid spreading of cultural information and standards. One must strive to adjust and take advantage of what this age offers to increase learning and cognitive skills through available education technologies, and to be informed of current practical uses and trends.

Educational technology has now become a wide field that concerns, among other things, the designing of curriculums, tailoring of educational experiences, and regular evaluations of the learner and teaching methodologies. In spite of that, it is, in essence, a logical entity devoted to solving problems. Such technology is still, at best, partially integrated in a curriculum. It's teaching capabilities inside classrooms are still largely in the phase of observation and not implementation— in spite of the intention being that this entity function in a manner consistent with the needs of the educational system, with the benefits of technology and network communications, inside the classroom and open galleries of the school.

It is of utmost importance to establish an integrated education dependent upon these technical tools. Advantages to using the computer include being able to create unique educational experiences based on the student's ability, thus creating programs to serve all levels and abilities, and establishing organized curriculums built on scientific foundations. Establishing such tools would make the student the crux of the learning process, and potentially create an interactive and successful environment of working with students in which they are the foundation (Lowry, 2003). The use of the computer in the learning process has grown in significance with the advent and proliferation of the internet, which made it easier to access knowledge and scientific concepts; and this attracted educators looking for the best methods to create an interactive environment to grab students' attention, and to encourage the exchange of opinions and experiences.

The technical capabilities of the computer and Internet provide a rich environment in which students may collaborate in cooperative projects by facilitating the communication process between them and their colleagues in different geographical locations, while pushing them to grow their thinking skills and search for information. These technical tools also enable teachers to connect with an abundant set of experiences and educational research that would otherwise be inaccessible to them. The strength of the Internet lies in its ability to connect people across exceptional distances and from different cultures and experiences. Thus, using this technology increases learning opportunities and stretches them to an extent farther than conventional schools can (Al-Mousa, 2003).

Martin Tsash defines electronic learning as a group of processes connected with education performed via the internet, such as obtaining information connected with a certain subject of study. It isn't simply a teacher, whether human or virtual, instructing and commanding pupils

across the internet, nor is it the pure exploitation of available technical resources, but it is an evolving, highly flexible form of education (Tsash, 2006). Electronic learning, in its different forms, has been able to spread due to its ability to be employed in self-learning programs, offering unique educational experiences specific to the learner, allowing him or her to learn alone and still keep up with the set curriculum. It allows the learner to control the speed and timing for lessons and allow them to transcend the barrier of time. An ideal form of this learning would also encourage the learner to interact and cooperate, and it would make this easier by bridging geographic constraints between the sender and receiver.

Electronic learning is compatible with numerous cognitive techniques and learning techniques and can make use of a multitude of "voices," images, and media. To succeed in the communication process with students, it seeks to stabilize and carry out the activation principle with the educational curricula. Curricula, here, does not only connote that different disciplines specify the area and scope of their subjects or give the information to be studied at each subject. A curriculum by this specification will only care for the cognitive aspect, more than anything else, and any activity that does not specifically concern the subject of study will be outside the curriculum, and so is considered of little significance. This is quite a narrow and limited view of what a school curriculum should and can do and seems to suggest that a school treat learners as one-dimensional objects to which they feed predetermined information, rather than holistic beings with mental, physical, social, and emotional needs (Ibrahim,1962). These are the needs that have come to be central to the design of the curricula used by electronic learning, or e-curricula, that are made to resemble the spirit of school curricula but with a developed contemporaneous outlook that can adjust to the needs of contemporary society.

Electronic Curricula are Divided into Three Types:

1. ***Prepared curricula:*** curricula comprised of the most disseminated subjects in the general curricula.

2. ***Customized prepared curricula:*** general curricula that are somewhat customized, with some amendments made to fit the needs of the parties using them.

3. ***Customized curricula:*** curricula that are being designed, from the ground up, for the sake of certain parties, taking into account their environment, culture, and circumstances (Anderson, 2001).

With the adoption of these developed modern technological tools, a teacher's role should also progress and develop, or else these innovations will not have the desired impact in education. Schools cannot adopt them without first preparing the basic human structure, and that includes satisfactory training for teachers.

It may be believed that the cost of electronic learning is confined to the tangibles, such as the cost of computers, required software, Internet service, and of delivering the scientific subject electronically. However, the overall costs include the initial development of the educational programs by specialized work teams and sufficient teacher training in dealing with these technical tools and interacting with the educational environment electronically. *Intermixed learning* requires the support of supervisors and assistants and should nurture an interactive environment between teachers and assistants from one side and learners from the other (Tsash, 2006; Alrammal, 2006).

The efficacy of teachers in intermixed learning is established by the quality of their communication skills, their capacity for self-learning, their ability to critically think, their skills in understanding and using modern advances and technical tools at work, their ability to present an academic subject in an effective manner, the effectiveness of their class management, their maintenance of an optimal class environment, and their ability to use continuous evaluation and feedback during teaching. The typical role of the teacher will change from that of a lecturer to one who is a source, trainer, model, and decision-maker (Hussein, 2002).

The process of preparing teachers for this changing role is not a simple matter and will not be achieved by simply organizing a set of training courses that mostly concentrate on technical and technological concerns. It has to involve laying out an integrated plan which addresses all the domains and responsibilities of teachers and that helps in altering unhealthy preconceptions and attitudes about technology. Teachers must be able to appreciate the significance of technology in aiding in the learning process in order to enter into a beneficial partnership with it.

Some educational scholars believe in prioritizing in training the desired educational and scientific standards, as well as the relevant cultural considerations, and selecting to train teachers who wish to develop themselves and those competencies (Hasan, 2002). Scholars also emphasize the technical considerations, such as training in specialized technical skills for working with computer programs, training in the intricacies of computers and network communications, having the use of a comprehensive support and moderation structure to increase efficiency, investing in modern educational advances to develop teaching strategies, designing and publishing educational pages on the internet, developing class plans that merge Internet sourcing in the curriculum, and the management of an effective learning operation that is interactive with the environment and technology (Omar, 2003; Al-Mousa, 2003).

The learner will also have added responsibility and must also be prepared for his or her new role in this system, but this does not decrease the importance of preparing teachers because they will be implementing it and thus need experience in dealing with modern technologies in addition to providing psychological support to learners. Still, students will have to possess the ability to organize and plan their time alone without external pressure, to exhibit ethical

etiquette in using the Internet, to efficiently search the Internet for learning objectives without distraction. Their wellbeing must be accommodated, and this concerns the height of the seat and size of computer screen for comfortable usage. They would have to be trained on customizing their eyes for long periods in front of the screen, with proper breaks, and be given exercises to train their fingers on typing. Students should be trained to build up their immunity against damage that may be caused by electronic learning, and to assist them in recognizing appropriate limits when making use of the digital world (Tsash,2006).

Literature Review

Electronic learning, and how it is approached by educators, has been studied and written about extensively. In such a study, Jerifer (2003) classified into specific categories the problems to electronic learning; and they are:

1. Students: The study found that students' lack of incentive towards learning, and their dependence to a great extent on conventional methods like the dictation technique, made them overly dependent on the teacher. Electronic education methods challenged that dependence and placed a greater responsibility on them for their own learning, which resulted in poor initial attitudes towards these methods and hindered their success. Students needed more time to adjust to their new roles and gain more trust in themselves and their abilities to learn via these new methods.

2. Supervisors and trainers: The study showed that the unavailability, in sufficient numbers, of trainers possessing necessary skills for training and certifying the teachers is a significant reason for delaying the spread of electronic learning.

3. Electronic curricula: The study showed that deficiencies in the ability to prepare e-curricula, and the unavailability of satisfactory support to those preparing them, constitutes a great obstacle towards the spread of electronic learning.

Palumbo (2004) found some key points with regards to e-curricula, and posited that if they were ignored it may lead to greater difficulties in understanding the educational subject and achieving the objectives of electronic learning: Presenting subject material in various forms based on the different abilities of students greatly contributed to those students' better understanding of the educational subject, using motive pictures and the story technique in paraphrasing a subject had a great impact in attracting students to the subject, as it made it easier to understand what is presented by stimulating and exciting their senses, and paying close attention to technical considerations when transferring educational material via the Internet, such as having optimal network connections to ensure quick and satisfactory transmission, had a good impact on students.

In the Seidi, Dastnaee, & Hedayati (2014) study "Developing Electronic Materials for Language Curriculum Development: Issues, Problems, and Implications," the authors explain developments that have given acceleration to technological language teaching in a digital context. We can see the widespread use of such teaching in many educational contexts including schools, institutes, and online language learning. The development of e-learning materials is usually considered as being complex, time-consuming, and expensive which leads to producing materials that are difficult to adapt and maintain. It has always been a challenge to identify proper e-learning materials that can be reused at a reasonable cost and effort and this issue needs further attention. Considering the material development process, more information should be provided for language teachers to use technology in language teaching processes. The use of technology in language teaching is increasing and as a result online courses will be more provided by ELT teachers in the future. This rises new issues about the curriculum of such courses. This paper aims at investigating the main issues concerning the development of electronic materials for language teaching and the roles and responsibilities of teachers in this regard in relation with a digital curriculum with the bigger framework of a digital culture.

Al-Basheer (2019) studied the obstacles of employing electronic Arabic curricula for all teaching stages at general public schools in Al-Jahra governorate in Kuwait: an analytical study. The study aimed to identify the obstacles of employing electronic Arabic language curricula for the elementary, intermediate, and secondary stages in the public schools in Al-Jahra Province in the State of Kuwait from the point of view of the Arabic language teachers. To achieve the objectives of the study, a questionnaire was designed illustrating the obstacles in three areas related to school administration, the teacher, and the students. Individual semi-structured interviews were also used with a number of Arabic language teachers from the three educational stages to identify these obstacles and their impact on employing the electronic curricula within the classroom. The study also attempted to determine whether some independent variables (gender, educational stage) contribute in statistically significant differences at the level of ($\alpha = 0.05$) between the average score of the teachers of the Arabic language. The study population included all female and male Arabic language teachers (n=983) in Al-Jahra governorate for the academic year 2016/2017. A representative sample of 327 teachers was selected to apply the study tools, conduct the appropriate statistical analyses, and present the results and discuss them according to the study questions. The results showed that the obstacles in the field of school administration had the highest averages, followed by the obstacles associated with the field of teacher, and then obstacles associated with the field of students. The results did not indicate a statistically significant effect on gender and educational stage. The study concluded with a number of recommendations.

A study by Alanezi (2019) concluded that organizations in diverse fields are faced with challenges that require them to develop, adopt, and/or innovate new administrative methods

to save time and effort. Based on the need for school administrators to cope with these challenges, this study investigated the main problems to applying electronic school management in Kuwait from a teacher's perspective. The findings showed that there were statistically significant differences between males and females in their views on administrative problems. The author recommended having an integrated plan for the process of transformation into electronic management and plan a project to shift towards the use of electronic management systems.

A study Boru and Evmenova (2019) concluded that the growth of online learning has placed increased pressure on K-12 schools and universities to provide students at all levels with qualified instructors. It is especially important that colleges of education provide pre- and in-service teachers with skilled online instructors so that they can experience the benefit of quality online instruction firsthand as students. This case study examined the effectiveness of a 6- to 7-week professional development course designed to improve faculty members' knowledge, skills, and dispositions--all required to teach online effectively in a college of education. Faculty participants were also given the opportunity to earn up to seven digital badges for demonstrating specific skills during the professional development course. Analysis of 18 faculty interviews, surveys, and discussion board comments found that course content and assignments improved faculty members' knowledge and skills, but the ways the course was delivered and the online teaching methods modeled by the course instructor appeared to have a larger impact on perceptions and attitudes towards online learning. As a result, online teaching professional development may have its greatest impact when it models the types of online courses the college would like faculty themselves to design and facilitate. Faculty appeared to be more motivated to earn digital badges than they had originally anticipated but were confused about what to do with the badges once they were earned.

Abbas & Al Sa'aeedy (2020) studied the obstacles in applying electronic classroom technology in teaching electromechanical engineering students from the viewpoint of the teachers. The study aims to identify the most important technical obstacles in the electromechanical department from the point of view of the teachers. The questionnaire consisted of (46) (3) because the number of alternatives to the questionnaire is five alternatives, that is, they have abandoned the ideal aspects to be available in order to facilitate the application of electronic grade technology.

The Jordanian Trial

The educational initiative in Jordan began with an ambitious plan costing half a million dollars and was executed by the Ministry of Education over a period of five years—from 2002 to 2007. It was aimed at hastening socio-economic growth with a wide-ranging application of electronic learning at the levels of developing curricula, making required devices available, and training teachers— all for the sake of developing education under the umbrella of *cognitive economy* (Tougan, 2003).

The Ministry of Education set out this initiative by first making sure teachers are qualified to use computers adequately. It did so by enrolling them in International Computer Driving License (ICDL) courses, as well as Intel courses. This increased their ability to merge technological tools with their curricula in order to improve students' learning and proceed at the level of their learning. This step obtained great support at all levels in the state and encouraged those responsible for the educational process in Jordan to continue towards the implementation of electronic learning as part of a growing trend of moving towards using technology within state systems (Tougan, 2003).

The ministry's policy became to develop learning content by employing information technology and communications effectively, and to build a bridge between local and worldly schools of thought. They sought to collaboratively establish a Jordanian model of electronic learning through strategic partnerships, which were meant to lead to other key partnerships in this area. When computerizing the mathematics curriculum of the first to twelfth grade, as devised by Jordanian company Rubicon, they signed on a partnership agreement with Microsoft to finance that project and to provide technical support. Then, the Jordanian Company Minhaj did conduct, develop, and computerize the project with support of experts from Bristol University.

Minhaj had completed computerizing the physics curriculum for the eleventh grade in the year 2002, with support from Japanese Company Jaica, and submitted it to the Ministry of Education, which then started applying it in Exploring Schools from the 2003/2004 academic year.

The trial aimed at measuring experiences with this type of curriculum and gain practical knowledge about how to best employ the computer in education to facilitate learning, as well as how to illustrate difficult concepts for students by using the different methods available. This fostered discussion about the extent to which the system may apply these curricula in students' lives.

Study Terminology

Electronic learning: a learning process in which an educational subject is taught to a student through modern technological means— a computer, networked software, or the Internet— and through a system of electronic learning inside the classroom or a computerizing laboratory.

Arabic e-curriculum: a curriculum for the study of the Arabic language that has been adapted into computerized software. It hinges on student self-learning, and on the use of a computer in learning.

Research Goal and Significance of Study

This study attempts to shed light on the most prominent problems that prevent the spreading of electronic learning, which in turn hinders the application of an electronic curriculum (e-curriculum) in the Arabic language. Recognizing what these significant issues are will aid towards understanding how to best address them in the design, improvement, and implementation of e-curriculum.

Study Question

The study attempts to answer the following question:

1. What are problems of implementation of Arabic language e-curriculum in Amman's Schools?

2. Is there a difference between male and female teachers in their estimates of Problems of implementation of Arabic language e-curriculum in Amman's Schools?

Study limitations: The study sample was restricted to Arabic language teachers in ten government schools in Amman, which the researcher had chosen intentionally for their cooperation. The results of the study are determined by the tool employed by the researcher, and accordingly, it is not permissible to generalize the results of this study in the event that tools other than the aforementioned are used.

Temporal boundaries: This study was implemented in the first semester of 2019/2020.

Methodology

Study methodology: The study followed the descriptive and analytical approach, by analyzing the results of the questionnaire as a study tool to investigate the problems of implementing Arabic language curricula in Amman schools.

Study subjects: The sample of the study chosen from Arabic language teachers in Amman schools, and the researcher choose (120) male and female teachers randomly.

Study Instrument

To answer the study questions, the researcher used a questionnaire to identify specific problems of implementation of Arabic effectively at Amman's schools. The questionnaire included the following domains:

1- The technical considerations inherent to the computer devices, Arabic e-curriculum programs, and the general local communications network when implementation of Arabic language e-curriculum. This domain included 10 items.

2- The role of school administration in implementation of Arabic language e-curriculum. This domain included 10 items.

3- The role of the Arabic language teacher in implementation of Arabic language e-curriculum. This domain included 15 items.
4- The role of the student in implementation of Arabic language e-curriculum. This domain included 10 items.

5- The views of the Arabic language teachers about the design of Arabic e-curriculum and their impact on its application. This domain included 10 items.

Reliability of the Questionnaire

Reliability of the questionnaire was measured by re-administering it one month later to the same sample. Pearson's equation was used to calculate a connection coefficient of (0.90), and the reliability coefficient was considered convincing for the study purposes.

Also to verify the validity of the study tool, it was presented to (10) reviewers who specialize in curricula and methods of teaching Arabic, Arabic language, and educational psychology, and their observations were based on amending some paragraphs related to the representation of the study plan, deleting some paragraphs, and they were taken into consideration. And the stability of the tool was confirmed by calculating the internal consistency using the (Cronbach Alpha) equation, and the result was equal to (0.79), which is an acceptable ratio.

The response scale for each paragraph was organized into five ratings as follows: (Strongly agree, agree, neutral, disagree, and strongly disagree) and grades were given according to the response (1, 2, 3, 4, 5).

Procedures of the study: After putting the tool in its final form, it was applied to the study sample. (120) male and female teachers answered the questionnaire, then data were collected and statistically analyzed in order to answer the study questions and arrive at the results.

Statistical used: Analyzing the collected data and the following statistical methods were used: Frequencies, percentages, arithmetic means.

Results

This study sought to investigate the problems of implementation of Arabic language e-curriculum at Amman's schools. To do so, a questionnaire was devised that aimed to uncover those problems and was distributed to the sample of Arabic language teachers. Then, all items were entered into SPSS software to calculate the arithmetic mean of each item, paying close attention to negative items within the employed scale. The results are discussed below.

First Domain: Technical Considerations (computer devices, Arabic e-curriculum programs, communications network)

The descriptive statistics done on items of the scale indicated agreement among teachers that these considerations are significant contributors to problems during the implementation of Arabic language e-curriculum.

Table 1

Percentage rates and means on each items of the scale items concerning the technical side (devices, programs and communications)

no	Item	Extremely	Agreed	neutral	Disagreed	Extremely disagreed	Mean With indication Of answer ladder
1	Devices maintenance is delayed by the team of technical support in the ministry.	%42	%38	%17			4.2667
2	Lab supervisor shares in solving problems maintenance.	%10	%65	%22	%3		3.8167
3	He finds himself unable to solve some technical problems In the lab. that hinders exciting electronic Arabic curriculum.	%23	%67	%5	%5		4.0500
4	When communication with Queen Rania is severed it loses contact with computerized Arabic curriculum.	%73	%27				4.7167
5	Teacher of Arabic uses the server at school to solve problem of contact with Queen Rania Center.	%10	%32	%40	%15	%3	3.3167
6	Communication net break down inside the school continuously.	%48	%27	%15	%10		4.1167
7	Pressure continues on the net so it loses swift dealing with electronic Arabic curriculum.	%42	%53	%5			4.3966
8	An ability of teacher of Arabic to reach electronic Arabic curriculum from home makes him lose preparation.	%73	%20	%5	%2		4.5167
9	Number of computers is considered enough	%7	%13	%13	%53	%14	2.4333

	in the tab compared to students number.						
10	Devices were distributed in lab. Of automation that assists the teacher to follow the electronic Arabic curriculum.	%3	%32	%25	%30	%10	2.9167

As seen in the previous table, these technical considerations account for some significant problems to Arabic e-curricula. It was specifically noted that the breaking down of the network in Queen Rania's Center would lead to the inability of teachers to access the Arabic e-curriculum from home, and thus they lose the ability to adequately prepare their material. It was noted that continuous pressure and demand on the network makes it slower and thus quite problematic.

The items in this domain are categorized, in descending order according to the arithmetic mean for the answer ladder, as follows: 4,8,3,7,1,6,2,5,1.

Second Domain: The Role of School Administration in Implementation of Arabic Language E-Curriculum

The electronic statistics developed for the items of the scale indicated a great agreement among the sampled teachers with regards to the importance of the school principal's role in the process of implementation of Arabic language e-curriculum. This was due to what he or she may offer in moral support for teachers and connections to resources aiding them to successfully apply electronic learning— though there is some variation among school principals in these regards.

Table 2

Percentage rate and means on each items of the scale items concerning the school administration as one of Problems of Implementation of Arabic Language E-Curriculums.

No	Item	Extremely	Agreed	Neutral	Disagreed	Extremely disagreed	Mean With Indication Of Answer Scale
11	School and administration save contact means with other schools for cooperation partnership and mutual experience.	%10	%28	%30	%23	%10	3.0833
13	There is a follow up of the machinery of applying the electronic Arabic curriculum inside the lab. That: through presence of principal more than one class.	%13	%58	%22	%5	%3	3.7167
14	A periodical meeting is concluded with students to hear their views about Computerization.	%7	%30	%23	%37	%3	2.9500
15	The administration does follow the ministry and the team of technical support to mend the breaks down that occurs to computer and communication net inside the school.	%20	%44	%33		%3	3.7667
16	The administration continuously supports Arabic language teachers, who apply the Arabic e-curriculum, through their understanding of the nature of the teacher's role and their assistance to make this great national project succeed	%27	%55	%5	%10	%3	3.9333
17	Administration gives teachers of Arabic who apply the electronic Arabic curriculums enough time to recognize these curriculums.	%13	%27	%10	%27	%23	2.4167
18	Administration offers moral support (encouragement) and substantial motivations for teachers of Arabic who succeed in applying the curriculum of Arabic language e-curriculum effectively.	%10	%20	%10	%18	%42	2.4167
19	Administration shares in candid ting الكلمة هذه من متأكدا لست teachers of Arabic to present suitable courses continuously.	%23	%37	%35	%5		3.7833
20	Administrations of school organizes an exhibition to show students accomplishments and teacher of Arabic in the domain of computerizing of studying units.	%23	%21	%28	%28		3.4167

It can be seen in the above table that item 18— "The administration offers moral support (encouragement) and substantial motivation for teachers of Arabic, who succeed in implementation of Arabic language e-curriculum effectively "— did not garner required support, as 60% of teachers indicated that school administration does not serve such a role at all. The second most disagreed with statement was item 17— "Administration gives teachers of Arabic who apply the electronic Arabic curriculums enough time to recognize these curriculums Both these items represent ideal practical roles that the principal and school administration should serve in supporting the application of electronic learning,

On the other hand, the item most agreed with was item 16— "the administration continuously supports Arabic language teachers, who apply the Arabic e-curriculum, through their understanding of the nature of the teacher's role and their assistance to make this great national project succeed "However, this item is considered general, and cannot imply a specific degree of required support.

Third Domain: The Role of the Arabic Language Teacher in Implementation of Arabic Language E-Curriculum.

The descriptive statistics done on items of the scale indicated considerable agreement among sampled teachers as to the importance of the teacher's role in implementation of Arabic language e-curriculum, and how that role may be impacted by his or her perceptions of, and level of comfort with, technology, which in turn impacts the success of the learning process.

Table 3

Percentage Rates and Means on Each Item of the Scale Items Concerning the Role of the Teacher of Arabic in Implementation of Arabic Language E-Curriculum

No	**Item**	**Extremely Agreed**	**Agreed**	**Neutral**	**Disagreed**	**Extremely Disagreed**	**Mean by Indication Of answers ladder**
21	I think that technology has an important role to play in improving students' learning	%28	%58	%22			4.1034
22	I seek to learn everything new in the domain of educational science	%33	%50	%17			4.1667
23	Disowning necessary skills to using technology (computer &Data show) limits applying the curriculum of electronic Arabic un ability to recognize.	%15	%47	%25	%8	%5	3.5667
24	Arabic curriculum outside school prevents me of good preparation beforehand for it.	%22	%63	%3	%12		3.9500

25	I don't find enough time to balance between applying electronic Arabic curriculum inside the lab and formal curriculum (book).	%20	%58	%12	%10		3.9138
26	Applying the curriculum of electronic Arabic makes me lose ability to conduct the class.	%17	%13	%24	%18	%28	2.7167
27	I can employ the curriculum of electronic Arabic in processing individual differences among students	%22	%45	%15	%10	%38	3.6167
28	I can't process technical problems (computer or net) during class, this causes trouble to me.	%22	%32	%20	%13	%13	3.4000
29	I think that computerized Arabic curriculums are designed at anon-effective way.	%20	%25	%37	%8	%10	3.4483
30	Teacher of Arabic non-participation in any role in the process of preparation &designing curriculums of computerized Arabic bids him lose wish in executing electronic Arabic curriculum.	%28	%22	%38	%10	%3	3.6667
31	Applying the curriculum of electronic Arabic many things to me occupational burdens.	%37	%28	%13	%18	%3	3.7667
32	Teacher of Arabic role will be contracted in class for the interest of electronic Arabic curriculum.	%25	%35	%18	%15	%7	3.5667
33	I feel proud as teacher of Arabic at the school.	%37	%43	%12	%18		4.0833
34	Unavailability of computer at my house limits developing myself personally, so I can't prepare for the curriculum of electronic Arabic well.	%32	%27	%15	%23	%3	3.6333
35	Absence of tangible or greater incentives for development leads me to lose the desire to work effectively	%58	%25	%7	%7	%3	4.2500

It can be seen in the above table that item 35— "absence of tangible or greater incentives for development leads me to lose the desire to work effectively"— garnered the highest rate of agreement among sampled teachers. This was followed in the agreement scale by item 22— "Iseek to learn everything new in the domain of educational science" — then item 21— "I think that technology has an important role to play in improving students' learning."

Fourth Domain: The Student's Role in the Process of Implementation of Arabic Language E-Curriculum

The descriptive statistics done on items of the scale indicated agreement among sampled teachers about the significance of a student's role in the success of implementation of Arabic

language e-curriculum, where the discussed aspects were student attitudes towards the computerized subject, the computer device, and the teacher, in addition to the perceived importance of his acquiring the necessary skills.

Table 4

Repetitions, Percentages, and Means on each Item of the Scale's Items, Concerning the Student's Role in Implementation of Arabic Language E-Curriculum

No.	The item	Extremely agreed	Agreed	Neutral	Disagreed	Extremely disagreed	Medium by indication of answers ladder
36	Prevents weakness of the student's technical ability to deal with the computer from interaction with positivity with the computerized curriculum of Arabic.	%45	%40	%7	%5	%3	4.1833
37	Students use of the computer in other purpose in absence of control from the teacher of Arabic assists in dispersion of the student.	%27	%57	%10	%3	%3	4.000
38	Individuality of students appears in dealing with the computer and loss of the spirit of participation with their colleagues.	%22	%36	%22	%17	%3	3.5667
39	Some students feel bored during applying the curriculum of computerized Arabic.	%29	%18	%23	%20	%10	3.3500
40	Student's academic level weakness negatively impacts on his following the curriculum of electronic Arabic	%38	%3&	%15	%3	%7	3.9667
41	Student's love of the subject impacts in his response to curriculum of electronic Arabic	%43	%45	%7	%5		4.2667
42	Prevents student's bear from causing breaking down the device of computer from dealing easily with computerized Arabic curriculum.	%7	%33	%50	%7	%3	3.333
43	Prevents student's conviction represented in non-significant role of electronic Arabic curriculum in improving his learning.	%27	%30	%28	%12	%3	3.6500
44	Student's non- commitment leads to trouble of teacher of Arabic and break down the computerized class.	%33	%57	%7	%3		2.200
45	Student's love of the teacher greatly impacts in his interaction with the curriculum of electronic Arabic.	%32	%58	%10			4.2167
38	Individuality of students appears in dealing with the computer and loss of the spirit of participation with their colleagues.	%22	%36	%22	%17	%3	3.5667

39	Some students feel bored during applying the curriculum of computerized Arabic.	%29	%18	%23	%20	%10	3.3500
40	Student's academic level weakness negatively impacts on his following the curriculum of electronic Arabic.	%38	%3&	%15	%3	%7	3.9667
41	Student's like of the subject impacts in his response to curriculum of electronic Arabic.	%43	%45	%7	%5		4.2667
42	Prevents student's bear from causing breaking down the device of computer from dealing easily with computerized Arabic curriculum.	%7	%33	%50	%7	%3	3.333
43	Prevents student's conviction represented in non-significant role of electronic Arabic curriculum in improving his learning.	%27	%30	%28	%12	%3	3.6500
44	Student's non-commitment leads to trouble of teacher of Arabic and break down the computerized class.	%33	%57	%7	%3		2.200
45	Student's like of the teacher greatly impacts in his interaction with the curriculum of electronic Arabic.	%32	%58	%10			4.2167

It can be seen in the previous table that item 41— "student's love of the subject impacts his/her understanding of the Arabic e-curriculum" — and item 45— "student's love of the Arabic language teacher greatly impacts his/her interaction with the Arabic e-curriculum" — both obtained the highest rate of agreement among teachers. These items concentrate on the significance of students' psychological state and attitudes towards the subject and its teacher and the impact of these intangible aspects on the success of the Arabic e-curriculum. The results of the questionnaire also show the significance of the student owning the basic skills to interact with the computer, and the significance of employing these skills in utilizing the Arabic e-curricula under the optimal guidance of the Arabic teacher.

Fifth Domain: The Views of the Arabic Language Teachers About the Design of Arabic Language E-Curriculum

The descriptive statistics done on items of the scale indicated the existence of some variation in views between Arabic teachers towards the Arabic e-curriculum.

Table 5 ***Arabic Language E-Curriculum Percentage Rates and Means on Each Item of the Scale Items Concerning the Teachers of Arabic - Arabic Language E-Curriculum.***

No.	The Item	Extremely Agreed	Agreed	Neutral	Disagreed	Extremely disagreed	Medium by indication of answers ladder
46	Non-seriality of the school text with the curriculum of electronic Arabic causes some problems in implementation.	%30	%50	%20			4.1000
47	Activities submitted in curriculums of the computerized Arabic are considered easy compared with the difficulty of the subject, the thing that made it never express it clearly.	%15	%48	%23	%10	%3	3.6167
48	The laboratory experiments in the physical lab aid in deepening and clarifying students' scientific conceptual understanding	%45	%48	%7			4.3833
49	The imaginative experiences impact negatively in the weakness of training the student on the skill of divest notice, registration and processing.	%30	%40	%23	%7		3.9333
50	Examples submitted to illustrate the concepts of the teacher indicate that they are weak .	%18	%42	%32	%3	%5	3.6379
51	Scientific and linguistic mistakes abundantly within the curriculum of the computerized Arabic.	%15	%43	%31	%10		3.6566
52	Ideas submitted in the Curriculum of electronic Arabic non-derived from our local environment.	%13	%20	%58	%13	%17	3.0943
53	There is a clear variation in the method of preparing some lessons greatly.	%23	%40	%30	%3	%3	3.7667
54	The curriculum of Electronic Arabic does not concern with the educational psychological side of students.	%23	%32	%30	%15		3.6333
55	The curriculum of electronic Arabic lacks to variation in methods of paraphrasing the educational subject.	%25	%35	%25	%15		3.6897

It can be seen in the above table that there was overwhelming agreement to item 48— "the laboratory experiments in the physical lab aid in deepening and clarifying students' scientific conceptual understanding."— garnering a 93% agreement rate. The second highest agreement rate of 80% was seen to item 46— "the non-seriality of the Arabic e-curriculum and its incompatibility with the school text causes some problems in implementation." Additionally, none of the sampled teachers objected these two items. The rest of the questionnaire items obtained various different responses as can be perceived in Table 5.

Also, to explore the differences between male and female teachers in their estimates of Problems of implementation of Arabic language e-curriculum at Amman's schools.

Athematic means, standard deviation, and t-test were used, as the following table shows the significance of differences:

Table 6

T-Test of the Significance Differences Between Male and Female Teachers of Estimating the Problems of Implementation of Arabic Language E-Curriculum at Amman's Schools.

Gender	Arithmetic means	S. Deviation	df	t-value	Sig.
Males	3.62	1.07	119	-0.247	0.492
Females	3.67	1.14			

From the above table, we notice that there were no differences between male and female teachers in estimating the Problems of implementation of Arabic language e-curriculum at Amman's schools, Where the value of the calculated reached (-0.247) with significance level of (0.492).

Summary of Study Results

The most prominent problems that faced Arabic teachers in of implementation of Arabic language e-curriculum were:

- Technical problems with the computer devices, communication network
- Shortage of devices
- Unsatisfactory amount of time allocated to studying the computerized subject
- Lack of concern from school administration in fulfilling the role required from it in supporting the process of computerization
- Deficient understanding of Arabic language teachers to the nature of their role in this process

- The negative perceptions of teachers towards technology in education.
- No differences between males and females in estimating the problems of implementation of Arabic language e-curriculum at Amman's schools.

Discussion

By asking, "what are the problems of implementation of Arabic language e-curriculum at Amman's schools?" the researcher used a generalized question aimed at uncovering problems

that faced Arabic teachers during the implementation of Arabic language e-curriculum at Amman's schools.

The First Domain

The first domain of the questionnaire dealt with the technical considerations being some of the basic problems in the way of successfully implementing the Arabic language e-curriculum. Results showed that the most significant technical issue was the constant communication network interruptions at the Queen Rania Center for Information Technology. It is the center that hosts the e-curricula, and such issues with its network lead to the inability of teachers to access and interact with these curricula, which negatively impacts the teachers and students. The cause of these service cessations is due to the high amount of demand and pressure which the network is exposed to daily by schools, in addition to weakness of the communication network infrastructure.

The researcher was informed that the Ministry of Education is particularly determined to solve these problems by working to connect the schools with a network of light-fibers, which make the communication process more swift and stable (Tougan, 2003). The researcher believes that making the Arabic e-curriculum available on compact disks, or on a special device which functions as a server, may solve such problems of communication completely. This would entail the network becoming local (Intranet), and this means a more rapid and stable communication system and a stronger signal response.

The results additionally showed that weakness in network communications impeded teachers' ability to use the e-curriculum from home to prepare the computerized classes before presenting them in school. This causes the teacher to lose much time in the process of preparation, and to not be able to use these curricula efficiently or sometimes at all. The researcher is certain that providing Arabic teachers with these curricula on compact disks will make it more accessible to them to properly prepare the class before presenting it to students. That grants him or her trust in themselves first and foremost, and in their ability to employ technology inside the classroom without surprises, ideally. This is especially important because the preparation process for a computerized class takes longer than that for a conventional class.

Another technical obstacle for successful implementation of Arabic language e-curriculum is the delay in periodical maintenance by the technical teams of the Ministry of Education, and deficiencies in the qualifications of the computer supervisor appointed at the school. When there is a technical problem faced with the computer devices, the school has to submit a maintenance demand to the Ministry for service. The response team is often delayed in implementing the required activity. In addition, the problem may be simple enough to be locally solved, but if the supervisor is not satisfactorily qualified to address it, it could lead to lengthy delays to solving it. The researcher has been informed that all appointed supervisors of the computer labs are diploma bearers, who had graduated more than seven years ago. Without continuous education in the field, their knowledge is quite outdated, and that

explains their weakness in treating the technical problems of the computer labs and their apprehension of these devices and the network. The researcher, during his visit to some schools, met with some of these supervisors and talked to them, and believes that they need to be enrolled in suitable certification and training programs to better prepare them to process emergent problems of the computer devices and local area network. Therefore, the researcher recommends to those responsible in the Ministry of Education to better allocate specialized teams for the maintenance of computer devices and the local area network in abundant numbers to better serve the needs of the schools. The researcher also recommends amending the policy of appointing computer lab supervisors and make them submit to suitable certification or qualifying courses.

Insufficient number of devices in the labs is another technical obstacle that hinders the effective implementation of Arabic e-curricula in schools. The researcher believes that this issue has a direct correlation to material costs allocation, which are in the domain of the ministry. However, the tools of distribution must still be provided based on each school's relative needs; and this may entail specialists in education technology auditing and observing the nature and day-to-day demands of each school, the area of their labs, and the types and number of students.

Overall, the results in this domain showed that technical issues run the gamut of problems with the tools used, such as stoppages in Internet communication and shortages and breakdowns of computer devices inside the lab, to deficiencies in supervisor and personnel knowledge and qualifications for operating and servicing the devices. The researcher believes in the significance of looking into these problems seriously and considering them true problems that hinder the effective implementation of Arabic e-curriculum.

The Second Domain

The results indicated that school administration has an important role to play in the process of implementing e-curriculum. This role, in the sampled teachers' view, can be represented in several ways:

- Active support of Arabic language teachers who implement these curricula, which can be exhibited by offering substantial encouragement and practical incentives. This type of support shows the teachers that administration is on their side, assisting them to make this great national project succeed.
- Recommending Arabic language teachers to the required courses and working on choosing suitable times within schedules.
- Showing up at the computerized classes implemented by the teachers.
- Following up with the Ministry and technical support team to promptly solve any problems that may occur during implementation.

The results of the questionnaire showed a wide variation of reactions among Arabic language teachers in their perceptions of how well their administration is performing the required role. Some of the teachers felt that school administration did constantly follow up on the progress of the computerization process, worked to make it succeed, and exerted their full capacity to do so. Conversely, some others viewed that their administration did not exhibit appropriate levels of concern with this process and that it was not one of their priorities, which is also the impression the researcher got during his visits to the schools and his meetings with some principals. What confirmed this impression is the Arabic language teachers' stated views during the meetings he had with them, where they spoke of the impact of this type of obstacle on the nature of their work, morally and systematically.

The results showed that Arabic language teachers wished to hold periodic meetings with the school principal and students so that they may relay some of their experiences with the process and establish open dialogue— and this was a matter some felt very strongly about. The researcher agrees that such meetings with the principal are necessary, and that the principal should make them a great priority as they may have an impact in increasing interaction with all parties of the learning process. Such active interaction is key to improving the process of implementing the Arabic e-curricula, especially in the shadow of the variations in teaching experiences of Arabic language teachers between different schools.

Accordingly, the researcher posits that the Ministry of Education must also be committed to following up with school administrations on their ongoing progress, and these should not be superficial follow-up visits. Ministry personnel should build strong professional relationships with school principals by getting to know their qualifications and enrolling them in specialized courses as needed. They must actively work to spread the culture of computerization and its significance in this age.

The Third Domain

The study results showed the significance of the teacher in of implementation of Arabic language e-curriculum. The Arabic language teacher is the backbone of this process and may either be one of the causes for successful implementation of an e-curriculum or a significant player in hindering it. Some of the reasons for a teacher becoming a handicap to the process of implementation are summarized as follows:

- A shortage of moral support and tangible incentives.
- The negative attitudes of the Arabic language teachers towards curriculum computerization, or of technology.
- The teachers not feeling that they are partners in the computerization process, but instead the implementers only.
- The deficiency in teachers of necessary computer skills.

- The lack of satisfactory training for the Arabic language teachers on the required skills for implementing Arabic e-curriculum.
- The teachers felt that they shouldered heavy burdens, as well as not having enough time to prepare the e-curricula.

It was noted that there is a variation in the rate of importance given by the Arabic language teachers towards the previous points, though all of them unanimously agreed on the presence of these points as problems to implementing Arabic e-curricula—to differing degrees. The researcher believes in the significance of the teacher's role as leader of the learning process. Due to the fact that this role differs significantly when implementing Arabic e-curriculum, as compared with traditional teaching methods, Arabic language teachers should adequately adjust by attending training courses that expand their knowledge of the expansive possibilities of technology; and how it may assist them by improving on the learning process.

These teachers should be able to view this technology as malleable, taking any form they see suitable to achieve the learning objectives, and that it is not meant as a replacement for the teacher. If Arabic language teachers' opinions were to remain negative towards technological instruments, they become the real problems to the process of implementing Arabic e-curriculum effectively. In this way, the researcher agrees with Abdullah (1992), whose study showed that the most important obstacle preventing true investment in teaching was negative teacher perceptions towards using the educational means.

The researcher concurs with the findings that indicated that heavy burdens are laid on the shoulders of Arabic language teachers, and that lack of satisfactory training on suitable techniques to teach Arabic e-curriculum are core problems to the implementation process in the field.

The Fourth Domain

The results do indicate that the student may be a hindering element to the process of implementing the Arabic electronic programs, even though students are considered the crux of learning process. The sampled Arabic language teachers concurred on the following points as explaining the causes for this:

- Negative student attitudes towards the computerized subject, and towards the subject teacher.
- Deficiency of basic technical skills to interact with the computer device.
- Lacking proper etiquette with regards to computers and colleagues in the computer lab.
- Using the computer for different purposes than what it is allocated for.
- The general negative attitude of a student towards technology, and towards the computer, in particular.

With the above points in mind, the researcher believes that it is very important to truly include the student in the learning process, whether computerized or not. When the student feels important in the process and has a positive connection with the subject and teacher, he or she would go above and beyond for learning. This will certainly be reflected as an increase in knowledge retention, as student and teacher enjoyment of the learning process is often key to achieving the learning objectives. Conversely, if the student had a negative opinion toward the subject or its teacher, he or she would not benefit from the course knowledge, even if he or she had high grades there.

Therefore, the researcher strongly recommends to teachers that they establish a closer academic relationship between themselves and their students, and to learn more about the individual students to accommodate their learning styles and how they approach the subject matter. The e-curriculum method may be especially useful in this respect, for its versatility and the ability to include aspects in it that pique student interest and excitement.

The researcher notes that the basic skills for dealing with Arabic e-curriculum are currently adequately taught in elementary school computer classes, which, in addition to the spread of computers in Jordan, may point to inadequate skills no longer being an obstacle to teaching for long. As well, the effort exerted by the Ministry of Education in spreading the computer to all public schools is another positive development noticed by the researcher during his visits to schools. Also, the students he met with indicated that working on Arabic e-curricula does not need specialized skills, but rather basic skills for operating the device, such as controlling the mouse and the keyboard, and transferring between tabs and screens. These skills are now learned by the student at a young age.

The researcher also notes the necessity for continually monitoring students and regulating their activity during their work in the computer lab, especially when using the Internet, so as to halt unethical or purely recreational activities. This may be accomplished by installing various protection and restriction programs, in addition to putting some thought into judiciously distributing computers in the lab to students in a way that discourages misuse. However, the researcher believes that fostering student self-control is most preferable, and most effective, in this regard. The Arabic teacher has to initially, and continually, promote an ethical computer culture, and set the etiquette for proper usage while establishing the dangers of misuse. Only after these expectations are established, should the training commence in how to best use the available devices.

There were a few findings indicating that some students found the Arabic e-curriculum boring and unsatisfactory, and preferred the conventional learning method because they were used to it for a long time. The researcher submits, therefore, that the complete conversion of classroom learning to the Arabic e-curricula method alone may not achieve the desired objective, at least in the short term. The Arabic language teacher has to better organize and plan the use of these curricula in the current classroom environment and should not proceed

as though all students share the same perception towards, and comfort with, technology. The teacher has to respect the various comfort levels and do his or her best to vary the techniques in which to present these curricula in a way that serves all students. The researcher finds this in line with the findings of Jenifer (2003), whose study concluded that students' lack of incentive for learning, and excessive dependence on the dictation technique, made them overly dependent on the teacher. Because of that dependence, they viewed electronic learning as laying the burden and responsibility of learning on them. They were not adequately prepared for that responsibility and this, in turn, hindered the progress of the learning process. The students needed more time to adjust to their new reality, to change their attitudes towards it, and to acquire trust in themselves and their ability to learn with the new technique.

The Fifth Domain

Results showed that the views of Arabic language teachers about the Arabic e-curriculum itself may form an obstacle towards implementing it. Here, the researcher differentiates between teachers' attitudes to technology and their attitudes to the electronic curriculum. For example, the teacher may perceive that the e-curriculum are a warranted use of technology, as well as believing it was possible to employ technology better and more subject-comprehensively. The following are the most salient findings, as raised by teachers in this domain:

- The preference for practical lab experiments over virtual experiments, for their relative effectiveness in deepening the understanding of scientific concepts.
- The non-serial nature of how some e-curricula are presented and laid out, or their incompatibility with the school text, causes some problems in implementation.
- Presence of linguistic mistakes, and deficiencies in the given examples and work papers in the e-curriculum.
- The e-curriculum not catering holistically to the students— socially, educationally, and psychologically.

The researcher agrees with the view raised by Arabic language teachers about the negative effects of linguistic and scientific mistakes found there—though he considers it a positive occurrence if it pushes teachers to submit requests to responsible parties, for the sake of continual improvement and development. However, it must be noted that these e-curriculum cannot be equally acceptable to all teachers due to the differing natures and levels of experience with the curriculum itself. Still, the researcher believes in the necessity to deeply exploit an electronic curriculum when possible. All experiments cannot be performed inside the lab because they need lots of time to prepare, may be costly and dangerous, and require uncomfortable crowding of students inside the lab class—though the researcher concedes that the actual experiments more effectively develop practical, tangible skills and experience.

With regard to the point about the non-serial structure and organization of e-curriculum within the school curriculum, such as how the mathematics e-curricula may not exactly reflect textbook content, the researcher disagrees with the impression that it is necessarily an obstacle to implementing these curricula. This is an age characterized by searching for knowledge, and students should be trained on the basics of effective research and how to navigate between interconnected subjects within the school curriculum; and should not be spoon-fed knowledge in a linear and effortless fashion. Of course, this cannot be achieved except if the teacher is convinced of the philosophy of modern learning, and the type of required education and knowledge that the Ministry practices— *cognitive economy*. The researcher holds that with the constant searching and renewal of knowledge, the student is better prepared for any disruptive change within the world of information and communications. Therefore, a teacher should not stick only to what can be found in books but should encourage the (controlled) active search for the information by students.

Results showed some Arabic teachers criticized the Arabic e-curricula for not properly addressing the complete educational and psychological needs of students. The researcher thinks that this outlook lacks objectivity, and that is because the philosophy of electronic learning that the Ministry of Education in Jordan promotes does not entail comprehensive self-learning at all, even if it naturally progresses towards that in time. Therefore, the teacher is still tasked with addressing student needs that technology is unable to reach, because that technology is, at present, simply a means to communicate knowledge to the students and not a replacement of the teacher. It is imperative that teachers are aware of their role and know how to use the e-curricula, while supplementing it in ways that it is unable to function, to fulfill the desired objectives. This means using all teaching techniques available to achieve the objectives of learning, which is called intermixed learning.

Also results showed no differences between males and females in estimating the problems of implementation of Arabic language e-curriculum at Amman's schools.

Conclusion

Ultimately, however, the researcher believes in the comprehensive potential of the electronic learning, as it is essentially an integrated system built on the mutual relationships among its elements that work interactively as one unit for the sake of achieving particular objectives. The researcher recommends shifting the general perception of electronic learning being simple instruments and means, or helpers to the teacher, to being a part of an extensive teaching structure enlisted within an educational organization. This will entail planning for such a comprehensive tool, specifying the learning and educational objectives, and working to achieve them. Also results showed that no differences between males and females in estimating the problems of implementation of Arabic language e-curriculum at Amman's schools.

Recommendations

Based on the results of this study, the researcher recommends the following:

- Review and refine the training programs in order to better prepare and certify Arabic language teachers in effective Arabic e-curricula application; or offer a greater quantity of courses catering to the variable levels of teacher expertise.
- Establish advanced standards in choosing the teacher trainers in ICDL or Intel courses, wherein, ideally, their technical skills would correspond with their educational experiences.
- Work on involving the teachers in the process of computerizing the curricula and listen to their feedback about the computerization labs and e-curriculum.
- Increase the number of dedicated educational supervisors to follow up with teachers at schools, to offer assistance and advice to teachers confronting problems with the computerization process.
- Work on also certifying school principals with specialized courses, and spreading the computerizing culture among them, to better understand the significance of computerizing curriculums and to better offer support to the teachers.
- Increase maintenance teams specialized in solving technical problems to which computers are exposed in the labs, to address them as hastily as possible.

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