

Received on (20-06-2022) Accepted on (13-12-2022)
<https://doi.org/10.33976/IUGJEPS.31.4/2023/33>

The Degree of Employment of Arabic Language and Islamic Education Teachers for Mobile Teaching Device Services during the COVID-19 Pandemic in Jordan

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Abstract:

This study aimed to identify the degree to which teachers of Arabic and Islamic education employ mobile Teaching device services during the COVID-19 pandemic in Jordan. Interviews with (20) teachers were conducted for the purpose of qualitative research. The study concluded that mobile tablets constituted the highest employment rate, and the highest percentage was among Arabic language teachers. The results also showed that the degree of employment of mobile learning device services by Arabic language and Islamic education teachers during the COVID-19 pandemic was high, and the results also showed that there was no statistically significant difference between the arithmetic means of the degree of employment of Arabic language and Islamic education teachers for mobile learning devices in Jordan during the COVID-19 pandemic due to the effect of the variables of specialization and gender. In light of these results, the study concluded a number of recommendations such as developing and organizing the content of Arabic language and Islamic education curricula books in a way that is compatible with the great capabilities offered by mobile learning devices in the learning and teaching processes.

Keywords: Arabic language, COVID-19 pandemic, Islamic education, Jordan, learning and Teaching, Mobile learning.

درجة توظيف معلّمي اللغة العربية والتربية الإسلامية لخدمات أجهزة التعليم النقالة في ظل جائحة الكورونا في الأردن

الملخص:

هدفت هذه الدراسة التعرف إلى درجة توظيف معلّمي اللغة العربية والتربية الإسلامية لخدمات أجهزة التعليم النقالة في ظل جائحة الكورونا في الأردن، واعتمدت الدراسة منهج البحث الوصفي، وتم توزيع أداة الدراسة الأولى الاستبانة على عينة ممثلة لمجتمع الدراسة، بلغت (225) معلّما ومعلمة، كما أجريت مقابلات مع (20) معلّماً ومعلمة، وذلك لغايات البحث النوعي. وتوصلت الدراسة إلى أن الأجهزة اللوحية النقالة شكلت أعلى نسبة توظيف، وكانت النسبة الأعلى لدى معلّمي اللغة العربية. كما أظهرت النتائج أن درجة توظيف معلّمي اللغة العربية والتربية الإسلامية لخدمات أجهزة التعلم النقالة في ظل جائحة الكورونا كانت مرتفعة، كما أظهرت النتائج عدم وجود فرق ذي دلالة إحصائية بين المتوسطات الحسابية لدرجة توظيف معلّمي اللغة العربية والتربية الإسلامية لخدمات أجهزة التعلم النقالة في الأردن في ظل جائحة الكورونا تعزى لأثر متغيري التخصص والجنس. وفي ضوء هذه النتائج خلصت الدراسة إلى عدد من التوصيات، مثل تطوير دورات تدريب وإعداد معلّمي ومعلمات اللغة العربية والتربية الإسلامية بدمج أعلى لمصطلحات تكنولوجيا التعليم، وكيفية الاستفادة من توظيف جميع الأجهزة النقالة التي وردت في الدراسة والإفادة من إمكانياتها ليس في مواجهة جائحة كورونا فحسب، وإنما في ممارسة عمليتي التعلم والتعليم داخل الغرفة الصفية وخارجها.

كلمات مفتاحية: تعلم نقال، تعلم وتعليم، لغة عربية، تربية إسلامية، جائحة الكورونا، الأردن.

Introduction:

This era is characterized by technological progress, as learning remotely is one of the most important modern trends in light of dealing with the Coronavirus pandemic. These trends are achieved starting from computer-based and e-learning to learning through mobile devices. These devices are widespread, making them available to many members of the same society regardless of its categories and social levels.

These devices have had a significant impact on societies due to the large number of services they provide to individuals, with the capabilities they possess, allowing them to be used in various fields such as education, health, economy, and politics. Education is one of these sectors in which mobile learning devices are used effectively. Students need these devices to improve their skills and achieve success, and they work to develop new forms of learning (Attamemi, 2015).

The employment of mobile learning devices is a new form of learning that transcends the limits of space and time, especially as it gives the learner real opportunities to continue their learning according to their abilities. The devices provide an interactive, synchronous, and asynchronous learning environment based on the concept of active learning between the teacher and the student (Badr, 2012; Abdul Majeed, 2015).

Accordingly, a number of researchers have indicated that this type of learning has become the most appropriate solution for learning during the pandemic and that learning through mobile learning devices can be as simple as a short message service to complex services such as an interactive video service. The guide in this is the science of teaching, and the power of this type of learning can benefit all members of society of all ages and social, economic, and cultural levels (Al-Husami, 2021).

In light of the Coronavirus pandemic, teachers were forced to stop dealing directly with students and move to distance learning and rely on digital devices and software. They were also forced to develop skills for designing digital and multimedia lessons so that they could follow the educational process in light of the pandemic (Hansena, Ardwichai & Sinlarat, 2020). More than two million students in Jordan, starting from kindergarten to secondary grades, were affected by the Coronavirus pandemic that struck the world, and the month of March 2020 witnessed continuous developments and radical daily changes for learners between complete closures of schools and kindergartens and the transition to distance and mobile learning (UNICEF, 2020b).

There are procedural and scientific definitions of mobile learning by a group of researchers (Salim, 2012, Ghamdi , 2013, Attamemi, 2015) who have focused on the devices and technical tools used in learning, such as Traxler's definition that learning is supported by electronic tools and media, and uses mobile devices and various wireless communications (Traxler, 2005).

In light of the increased interest in this new type of learning in recent years, advocates of this type of learning have reconsidered the foundations from which known learning theories are based, and they have adapted them in line with digital technological development. E-learning has imposed itself strongly in the learning and teaching process, which required development, in order to keep pace with the smart technology that swept traditional learning environments and became an approach applied in many schools and universities around the world (Salim, 2012; Al-Ghamdi, 2013, Attamemi, 2015).

The information on the learning network is in a state of constant change, and the knowledge is renewed, so linking learners to learning networks gives learners the opportunity to explore the educational content through which new knowledge is formed. The associative theory is a reflection

of the rapid development in the field of educational technology. It can also be considered the best learning theory that fits the electronic environment, and its advantages are (Siemens, 2005). :

- Gain different perspectives and opinions from additions to personal networks, and benefit from them in learning how to make critical decisions in many things in life.
- The ability to deal with huge amounts of data available on networks, and to share and collaborate with learners in an e-learning environment.
- The ability to explain learning from its modern perspective, and to overcome the shortcomings of traditional learning theories that are no longer able to keep pace with the rapid developments in the era of digital technology .

Mobile devices provide a range of services that can be used in the learning and teaching processes, including:

- Voice service: Can be used in language lessons, dictionaries, the Noble Qur'an, hadiths, maps exams, implementing lectures via mobile devices, and facilitating the feedback process.
- SMS: Can be used in exams, games, questionnaires, discussions, and academic supervision.
- Graphic display; like: animations, maps, and places, can be used in lectures.
- Browsing the Internet: Can be used to provide the basic tools of the Internet and search engines.
- Downloadable software: Can be used in collaboration tools, tutorials, programming languages, and communication with other tools and devices.
- Photography: Can be used in collecting data, documentation, maps, and creative written stimuli.
- Video: Can be used in presentations, and the preparation of creative films.
- Positioning services: Can be employed on field trips. (Saleem, 2012, Al-Ghamdi, 2013, Attamemi, 2015, Pernsky, 2005).

In light of the era of technological and digital progress and the presence of the Coronavirus pandemic, there is an urgent need for new means and sources of learning that help increase this process of interaction, especially with the control of smart technology devices such as personal digital assistants, tablets, minicomputers, and smart phones that have reached almost all homes with what they provide. There are many services that may help learners of these topics to learn them and to complete the stages of this learning appropriately. These devices support the context of lifelong learning, and they support the interaction between the elements of the educational learning process, and they help learning, as learning through mobile learning devices depends on the use of wireless technologies, crossing the boundaries of time and space.

Literature Review

Several studies have indicated the cognitive impact provided by modern technologies that rely on mobile learning devices in the learning and teaching processes, and the role that these devices play in developing learning skills and various activities for students inside and outside the classroom, in a way that gave the learning and teaching process a new dimension, in addition to what it adds from excitement, joy, and vitality to the performance of the teacher and students. Among these studies, Alhasanat's (2020) study explored the use of smartphones by Arab Open University (AOU) students in learning the Arabic Language. The sample consisted of 275 students of those taking Arabic for primary school teachers. A questionnaire was prepared by the researcher to specify uses and was divided into four sections: types of students' devices, useful services, students' purposes of using such services and challenges to the learning of Arabic on these relevant devices. The results showed, first, that most students used smartphones, by different percentages, except for the GPS application. Second, they made use of all the services, by various percentages, except for those of

games and image viewers. Third, they are used smartphones for diverse purposes, but not for administrative data related to learning Arabic. Fourth, there were numerous challenges to the learning process on these devices.

Imelda. Bambang and Utari (2019) conducted a study aimed at investigating the effect of a process writing approach combined with video-based mobile learning on the writing skill of Indonesian learners of English as a foreign language (EFL) across their creativity levels. Aquasiexperimental study was employed by involving 61 learners of Vocational High School students in Indonesia. They were assigned into two groups: experimental and control. The treatment was conducted at five sessions, including the pre-test and post-test. The scores of pre-test and post-test in writing were used as a base of quantitative data analysis, whereas the learners' responses to a creativity questionnaire were used to categorize their creativity level. The result revealed that the process writing approach combined with video-based mobile learning was effective to enhance the learners' writing skill. Additionally, it was implied that to apply the combination of process writing approach and video-based mobile learning, teachers should not worry about the difference levels of the learners' creativity.

Dalton (2018) has indicated the problems faced by faculty members in a digital educational environment during the Coronavirus pandemic were in the different nature of methodological work of the teacher. The digital education environment differs greatly from the normal teaching environment, and Dalton (2018) stresses that teachers must practice active collaborative teaching methods and help students shape their learning methods through the Internet, such as studying the possibilities of online learning platforms and overcoming the difficulties and barriers of electronic communication. In addition, Dalton explains teachers must know how to encourage students to learn independently in order to achieve successful lessons, in addition to the need for teachers to ensure that students focus on learning tasks, and develop critical thinking skills, reflecting on the achievements made by students and encouraging students to share their experience with their peers via the internet.

Altakhneh (2018) conducted a study aimed at investigating the attitudes towards mobile learning in open learning systems of teaching mathematics, the sample of the study consisted of (57) male and female students enrolled in the mathematics course in the department of educational studies at the Arab Open University / Jordan branch for the academic year 2016/2017. Results of the study showed that the percentages of students' attitudes toward using mobile applications reached 80%. Each of the following scores is ranked as ascending: mathematical thinking (75%), achievement motivation (76%), developing social and emotional skills 77%, and application technology (96%). There was no statistical significance difference ($\alpha \leq 0.01$) between the variable type of general secondary certificate (scientific / literary stream) as well as the nature of work in terms of the fact that the learner is (employee / non-employee). In light of results of the study, the researcher recommends using mobile applications in teaching courses of mathematics in the open learning systems.

The study of Abdul Majeed (2015), aimed to know the effectiveness of using a proposed training program based on mobile learning in developing the skills of engaging in learning and designing digital learning units for mathematics teachers before service, in addition to identifying the most influential contexts in learning mathematics through mobile phones for a sample of students of the College of Education/Mathematics major at King Saud University. The results indicated that the proposed program had contributed to improving the level of skills to engage in learning, and the design of digital learning units in the field of mathematics, as the interactive context ranked first for contexts that have a significant impact on learning mathematics via the mobile phone.

As for Al-Ghamdi's study (2013), it aimed to measure the impact of using mobile learning through the SMS service, and sending educational materials in developing practical skills and achievement

among students at the College of Education at Al-Baha University in the design of educational software, and its production at the three cognitive levels of Bloom: remembering, understanding, comprehension and application. The study relied on the quasi-experimental approach, on a sample of (30) students, who were divided into two groups, control and experimental. The study revealed a statistically significant effect in the total score on the achievement test in favor of the experimental group, as well as on the practical skills scale.

Salim (2012) pointed out in his study, which aimed to build a knowledge system, in which the features of the image of mobile learning technology, its environment, its characteristics, and the challenges facing its application in the learning and teaching processes become clear. The study concluded the need to reconsider the inputs of the educational learning process, and the procedures for their implementation in order to accommodate the concepts of the new knowledge revolution. As for Salem (2010), the study indicated the need to modify the teachers and students' view of the nature of the use of mobile devices such as mobile phones, personal digital assistants, and tablets (iPad) from just using it in telephone communications, to employing it in the learning and teaching processes, which transfers it from consumption devices to investment, and the benefit accustomed to each of the students and teachers. As for Schuller's study (2009), it confirmed that there are a set of advantages offered by mobile learning, which is to encourage learning anywhere and at any time, provide the so-called digital justice, improve social interaction among learners, and be in harmony with different learning environments.

It is clear from the previous studies about employing mobile learning devices, that they agreed in many of their results on the importance of these devices and their role in improving the level of learners and their skills in the learning and teaching processes, and that teachers in general have benefited a lot from the applications on mobile learning devices that they use inside and outside the classroom, in addition to the necessity of their orientation towards this new type of learning through these devices. This study has benefited from previous studies in enriching the theoretical framework of the study, defining the nature of mobile learning, and the services and benefits it provides to the learning and teaching processes in the two educational stages in Jordan. The study also benefited from previous studies in preparing the two study tools because it combines a quantitative and qualitative approach to reach honest results that reflect the degree of real employment of mobile learning devices.

The Study Problem

Based on the researchers' observation, learning the subjects of the Arabic language and Islamic education does not receive the attention it deserves, and there is a lack of interest in learning these subjects with concentration, attention and effectiveness, in light of the dominance of traditional methods practiced by male and female teachers in these two disciplines. In addition, there is a superficial view of these two disciplines and the belief that they do not need to employ digital and technological developments in learning their content and skills in comparison to other materials of a scientific nature that receive constant attention and follow-up. Teachers learned the skills of the Arabic language and Islamic education subjects, mastered them with the associated training, learned them for long periods of life, and interacted during the learning process with all aspects of the educational learning process, including teachers, learners, and the curriculum. In the light of learning during the Coronavirus pandemic, this study came to investigate the reality of the employment of Arabic language and Islamic education teachers for mobile learning services in light of the Coronavirus pandemic in the Hashemite Kingdom of Jordan. Accordingly, the study problem is determined by answering the following research questions:

- A. What mobile education devices are used by teachers of Arabic and Islamic education in the learning and teaching processes during the COVID-19 Pandemic in Jordan?
- B. Are there statistical differences in the employment of teachers of Arabic and Islamic education for mobile learning device services in the learning and teaching processes during the COVID-19 Pandemic from the teachers' viewpoints in Jordan according to the specialization variable?
- C. Are there statistical differences in the employment of teachers of Arabic and Islamic education for mobile learning device services in the learning and teaching processes during the COVID-19 Pandemic from the teachers' viewpoints in Jordan according to the gender variable?

Objectives of the Study

This study aimed to identify the employment of Arabic language and Islamic education teachers for mobile Teaching device services during the COVID-19 Pandemic in Jordan. Through this objective, the following sub-objectives will be achieved:

- A. Learn about the mobile education devices are used by teachers of Arabic and Islamic education in the learning and teaching processes during the COVID-19 Pandemic in Jordan.
- B. Recognize of statistical differences in the employment of teachers of Arabic and Islamic education for mobile learning device services in the learning and teaching processes during the COVID-19 Pandemic from the teachers' viewpoints in Jordan according to the specialization variable.
- C. Recognize of statistical differences in the employment of teachers of Arabic and Islamic education for mobile learning device services in the learning and teaching processes during the COVID-19 Pandemic from the teachers' viewpoints in Jordan according to the gender variable.

The Importance of the Study

This study is important in that it:

- Concerns a new research topic related to the employment of mobile learning services with the topics of teaching Arabic and Islamic education, which will enrich this aspect in the field of studies concerned with the employment of educational technology in the learning and teaching processes.
- Is useful for those concerned with modifying and developing pre-service and in -service teacher preparation programs, and designing training programs that are concerned with employing mobile learning devices.
- Provides teachers of Arabic language and Islamic education and those interested with the necessary information to enrich the methods of learning and teaching the subjects of the Arabic language and Islamic education, and to develop the employment of services provided by these mobile devices to suit them.

The Limits of the Study

- Objective limits: The study was limited to an investigation of the degree of employment of teachers of Arabic and Islamic education for the two educational stages: basic and secondary, for the services of mobile learning devices in the learning and teaching processes in light of the Coronavirus pandemic in Jordan.
- Time limits: The period of time in which the study was applied, which is the second semester of the academic year 2020/2021.

- Spatial limits: The study was limited to all government schools (males and females) in the capital, Amman, Jordan, to measure the degree to which they employ mobile learning services in the learning and teaching processes during the COVID-19 Pandemic.
- Human limits: The application of the study was limited to a sample of teachers of Arabic language and Islamic education in the capital, Amman, Jordan, to measure the degree of their employment of mobile learning device services in the learning and teaching processes in light of the Coronavirus pandemic, and the results of this study may differ if it is applied to another sample of teachers or the parameters in other places or other different materials.

Terminology of Study

- Teaching via mobile devices: It is procedurally intended in this study as a form of e-learning in which mobile Teaching devices are used such as iPad personal computer tablets, mobile phones, and similar devices and to employ any of the services they provide in the process of students' learning inside or outside the classroom.
- Mobile Teaching devices: In this study, they are meant procedurally as hand-held devices, such as such as iPad personal computer tablets, mobile phones, digital game consoles, digital video cameras, digital voice recorders and selectors, GPS, and personal digital assistants (PDAs), and personal computer laptops to achieve flexibility and interaction in the processes of teaching and learning anytime and anywhere.
- Coronavirus Pandemic: The period during which the Coronavirus (COVID 19) affected the world in the month of December of 2019 until the moment of writing the study.

Methodology

Research Design

The qualitative approach was used to answer the study questions, and the explanatory sequential design was chosen, in which the researcher first collects and analyzes quantitative data, and then builds upon it the qualitative stage of his study to expand the research problem of the study with the aim of expanding the understanding of the parts of the research problem studied.

Sample and Data Collection

The study community is made up of all teachers who teach Arabic and Islamic education for the two levels of education: compulsory and secondary in the capital Amman/Jordan, for the academic year 2020/2021. The number of teachers is distributed among (107) public schools. Table 1 shows the distribution of the study community according to the subject matter and the educational stage: compulsory and secondary.

Table 1

Distribution of the Study Population According to the Subject and Educational Stage

Stage	Arabic	Islamic education	Total
Mandatory Stage	822	420	1242
High school	368	270	638
Total	1190	690	1880

To select the study members, (30) schools were selected from the study population according to stratified randomization, with (10) schools (5 boys and 5 girls) from each stage, and then the study tool was distributed to all (225) teachers of Arabic and Islamic education, 125 of whom specialize in Arabic language, and 110 in Islamic education. The number of returned questionnaires reached (200). Table 2 shows the distribution of study members according to the study variables.

Table 2

Distribution of Study Members According to Study Variables

Specialization	Male	Female	Total
Islamic education	50	46	96
Arabic	54	50	104
Total	104	96	200

Semi-structured interviews were also conducted with 20 male and female teachers (10 male and 10 female teachers), who were selected from the study sample according to stratified randomization (10 Arabic language majors, 10 Islamic education majors), for the purposes of qualitative research.

Analyzing of Data

Study Tools

A - Resolution

The study used the questionnaire as a study tool that, in its final form, consisted of (28) items to measure the degree to which teachers of Arabic and Islamic education employ mobile learning device services in light of the Coronavirus pandemic in Jordan. The questionnaire used a Likert scale format. The response of teachers to the questionnaire items was as follows:

I strongly agree and I award a grade of (4), I agree and I award a grade of (3), I do not agree and I award a grade of (2), and I strongly disagree and I award a grade of (1).

The questionnaire was prepared as follows:

- A review of the educational literature related to teacher use of mobile learning device services.
- Drafting the questionnaire paragraphs in the light of the fields of study: the type of mobile learning devices used in the learning and teaching processes, the purposes of using these devices, and the services they provide to teachers and learners. The questionnaire, in its initial form, consisted of (40) items, in the format of a five-point Likert scale.
- Determining the independent variables related to the study: specialization (Arabic language and Islamic education), gender (male or female), and then completing the preparation of the questionnaire.
- Evaluation of the questionnaire by presenting it to a group of educational specialists. It was presented to six faculty members who hold PhDs in methods of teaching Arabic language and Islamic education, three faculty members who hold a PhD in measurement and evaluation, and three faculty members who hold a PhD in educational technology.
- Considering the opinions of the evaluators in terms of drafting the paragraphs, either by deleting, modifying, or adding, the final form of the questionnaire contained (28) paragraphs. Table 3 shows the fields of the questionnaire and the number of paragraphs for each field and for the questionnaire as a whole:

Table 3

Domains for a Questionnaire About the Degree of Employment of Teachers of Arabic and Islamic Education for Mobile Learning Devices under the Coronavirus Pandemic

The Domain	Number of Paragraphs
The Type of Mobile Learning Device Used	8
Mobile Learning Device Services	11
Purposes of Using Mobile Learning Devices	9
General Total of Paragraphs	28

- The reliability of the tool was verified by applying it to an exploratory sample of 40 male and female teachers (from outside the study members). The questionnaire was re-applied to the same sample, and the reliability coefficient was calculated by recalculating the Pearson correlation coefficient (0.86), and the value was sufficient for study purposes. The value of the internal consistency stability coefficient for the three dimensions of the resolution was also calculated by

calculating the value of Cronbach's alpha stability coefficient for the sub-resolution dimensions and for the tool as a whole. Table 4 shows the values of the stability coefficient (Cronbach's alpha) for the three dimensions and for the instrument as a whole.

Table 4

Stability Coefficient Values (Cronbach's Alpha) for the Three Dimensions and for the Instrument as a Whole

Variable	Mobile Device Quality	Mobile Device Services	Purposes of Use	The Tool as a Whole
Stability Coefficient	0.85	0.80	0.81	0.82

- Distribution of (225) questionnaires to a random sample of teachers of Arabic and Islamic education, and the number of questionnaires retrieved was (225).

B - Personal Interviews

This interview aimed to investigate and know the most commonly used devices, and the usefulness of employing these devices. Twenty teachers were interviewed, and each interview lasted (15-20) minutes, was recorded, and then analyzed.

The interview questions were presented in their initial form to the evaluators of the questionnaire, and their opinions were taken in terms of modifying the wording of some questions, either by deletion, modification, or addition. The final interview included the following questions:

- What is the most employed mobile learning device in teaching and learning process for your students? What is your rate of hiring per week?
- Are mobile learning devices employed in the learning and teaching processes? And why? And how is that done?
- Did your use of mobile learning devices add anything to your teaching abilities from your point of view? Explain this.

Teachers were interviewed in their schools (10 male and 10 female teachers), selected from the study sample according to simple randomization (10 Arabic language majors, 10 Islamic education majors), and they were interviewed taking into account health controls.

Results

First: The Results Related to the Quantitative Aspect and Their Discussion

The data for the quantitative aspect of the study were analyzed by performing statistical processing and data analysis using (SPSS). The following is a presentation of the results of the study according to its questions:

The Results of the First Question and its Discussion

The text of the first question: What mobile education devices are used by teachers of Arabic and Islamic education in the learning and teaching processes during the COVID-19 Pandemic in Jordan?

To answer this question, the number of users of the study personnel were calculated for each of the mobile learning devices, as well as the percentage of this number of users, and then the rank of using each of these devices was determined. Tables 5 and 6 illustrate this.

Table 5

The Number of Users from the Sample for Each Mobile Device, the Percentage of Them, and the Rank of each Device According to Use and According to the Specialization Variable

The Number	Mobile Learning Device Type	The Number	The Ratio	Rank	The Number	The Ratio	Rank

Specialization		Arabic			Islamic education		
1	Mobile Tablets	82	78%	1	66	68%	1
2	Digital Game Consoles	32	30%	6	33	35%	6
3	Digital Video Recording Equipment	36	35%	5	46	44%	3
4	Digital Voice Recorders	42	40%	4	37	38%	5
5	Digital Positioning Devices GPS	11	10%	8	12	12%	8
6	Personal Digital Assistant	13	12%	7	14	15%	7
7	Pocket Computers	48	46%	3	41	43%	4
8	Mobile Phone	71	68%	2	60	63%	2

Table 6

Number of Users from the Sample for Each Mobile Device, Their Percentage, and the Rank of Each Device According to the Degree of Employment for the Two Specialists

Total Specializations				
Number	Type of Mobile Learning Device	Number	Percentage	Rank
1	Mobile Tablets	148	74%	1
2	Digital Game Consoles	65	33%	6
3	Digital Video Recording Equipment	82	41%	3
4	Digital Voice Recorders	79	40%	5
5	Digital Positioning Devices GPS	23	12%	8
6	Personal Digital Assistant	27	14%	7
7	Pocket Computers	89	45%	4
8	Mobile Phone	131	66%	2

Table 7

Arithmetic Averages and Standard Deviations of the Degree of Responses of Teachers of Arabic and Islamic Education to the Items of the Questionnaire

Specialization	Number of Teachers	SMA	Standard Deviation
Arabic	104	2.93	0.087
Islamic Education	96	2.9	0.09

It is clear from Table 7 that the degree of Arabic and Islamic education teachers' employment of mobile learning devices in the educational process was high, and that there is a slight difference

between the arithmetic averages of the two disciplines, where the Arabic language specialization scored an arithmetic average (2.93), and the Islamic education specialization averaged (2.93). This result can be attributed to the interest of the Ministry of Education in Jordan to encourage all teachers to employ modern devices in the teaching-learning process, as well as the ease of acquiring these devices, and the ease of employing them in the learning and teaching processes, as well as because of the pleasure that the learner feels when using these devices. This result is in agreement with the findings of the studies of Alhasanat (2020), Altakneh (2018), Imelda et.al (2019), and the study of Abdul Majeed (2015) which examined the use of mobile phones in improving the learning and teaching processes.

The Results of the Second Question and its Discussion

Text of the second question: Are there differences in the employment of teachers of Arabic and Islamic education for mobile learning device services in the learning and teaching processes during the COVID-19 Pandemic in Jordan according to the specialization variable?

To find out if these differences are statistically significant at the level of significance ($\alpha=0.05$) the t-test was used. Table 8 shows the arithmetic averages, standard deviations, and the "t" value of the degree of teacher response according to the specialty variable.

Table 8

Arithmetic means, standard deviations, and the "t" Value of the Degree of Teacher Response According to the Specialty Variable

Specialization	Number of Teachers	Arithmetic Means	Standard Deviation	Degrees of Freedom	Value of "t"	Indication Level
Arabic	104	2.93	0.087	2	1.33	0.268
Islamic education	96	2.9	0.09	3		

Table 8 shows that there is no statistically significant difference between the arithmetic means for the degree of employment of mobile learning devices by teachers, due to the effect of the specialization variable. The calculated t-value reached (1.33), which is not statistically significant at the level of significance ($\alpha=0.05$), where the level of statistical significance of the variance between the two study groups (Arabic language and Islamic education) was (0.268). The effect size was also calculated to find out the (independent) specialization variable on the dependent variable (the degree of employment of mobile learning devices by male and female teachers in the two specializations). The value of the variance ratio was ($0.43 * 10^{-7}$), which means that almost 100% of the total variance in the dependent variable (the degree of employment of mobile learning devices) is due to the effect of the independent variable (specialization). The value (d) of the impact volume was (0.001) and reflects the small impact size of the independent variable.

This result may be attributed to the training courses held by the Ministry of Education to train male and female teachers, and to raise the level of awareness of the employment of teachers of Arabic and Islamic education for mobile learning devices in all situations of the educational process. We can also attribute this to teachers' interest in keeping pace with modern technology and trying to employ it in the classroom. This result is consistent with Schuller's (2009) study, which indicated the advantages that students get from teachers' use of mobile learning devices, and that learning through these devices allows learners to learn alone, leading to meaningful learning.

The Results of the Third Question and its Discussion

The text of the third question: Are there differences in the employment of teachers of Arabic and Islamic education for mobile learning device services in the learning and teaching processes in light of the Coronavirus pandemic in Jordan according to the gender variable?

In order to answer the fourth question of the study, the arithmetic means and standard deviations of the responses of teachers of Arabic and Islamic education to the study questionnaire items were calculated according to the gender variable. The arithmetic mean for male teachers was (2.94), while the arithmetic mean for female teachers was (2.9). To find out whether this difference is statistically significant at the level of significance ($\alpha=0.05$) a t-test was used. Table 9 shows the arithmetic averages, standard deviations, and the "t" value of the teachers' response degree according to the gender variable (males and females).

It is clear from Table 9 that there is a slight difference between the two arithmetic averages on the degree of employment of teachers of Arabic and Islamic education for mobile learning devices in the teaching-learning process. Table 9 also shows that there are no statistically significant differences between the average degree of teachers' response to the scale of the degree of using mobile education in the educational process due to the effect of gender (male or female) at a significance level ($\alpha=0.05$). The level of statistical significance of the variation between the two independent study groups (males or females) was (0.148), and this indicates that there is no effect of the gender variable on the responses of the sample members on the scale of the degree of employment of Arabic and Islamic education teachers for mobile learning devices in the educational process.

Table 9

Arithmetic Means, Standard Deviations, and "t" Value for the Degree of Response of Teachers of Arabic and Islamic Education to the Items of the Questionnaire According to the Gender Variable

Gender	Number of Teachers	Arithmetic Means	Standard Deviation	Degrees of Freedom	Value of "t"	Indication Level
Male	104	2.94	1.02	3	1.37	0.148
Female	96	2.9	0.84			

The effect size was also calculated to find out the effect of the (independent) gender variable on the dependent variable (the degree of employment of mobile learning devices by male and female teachers). The value of the variance ratio was (0.07), which means that approximately 07% of the total variance in the dependent variable (the degree of employment of mobile learning devices) is due to the effect of the independent variable (gender), and the value (d) of the effect size amounted to (0.016), which expressed the small effect size of the independent variable.

This result may be attributed to the similarity of circumstances, environment, and experiences between male and female teachers in the two specializations in public schools, in terms of the degree of academic achievement, and training courses and workshops to raise male and female teachers' awareness of the need to employ technology in educational learning situations.

The Results Related to the Qualitative Aspect and Their Discussion (Analysis of the Results of the Interviews)

The results of the personal interviews that were conducted with (20) male and female teachers representing the two specializations were analyzed, and the following is a presentation and discussion of the results of the study related to the personal interviews.

The results of the first question and its discussion:

- What is the most employed mobile learning device in my teaching and learning process for your students? What is your rate of hiring him per week?

Most teachers referred to tablets as the most widely used among the mobile learning devices that they employ in the learning and teaching processes, with an employment rate ranging from one to four times a week, according to the level of students and the nature of the subject to be taught. This result is consistent with what was indicated by the results of the questionnaire, that tablets are the most used and employed by teachers in the two specializations, given the great spread that these devices enjoy in society, and the ease of obtaining them for their cheaper prices compared to other devices, and the ease of use, and the availability of many of the ready-made free applications that serve the educational process inside and outside the classroom. The laptop and the projector ranked second in terms of the degree of use. Some teachers indicated the use of these two devices in displaying lessons, pictures, maps, and videos related to learning outcomes, twice a week. Two teachers also indicated that they use the mobile phone in the process of learning and teaching students, while none of the teachers interviewed indicated the use of other mobile learning devices (digital video cameras, digital game devices, digital positioning devices, GPS). This difference between the results of the questionnaire and the interview can be attributed to the size of the interview sample, which represents 10% of the study sample, in addition to the nature of the interview question, which refers to determining the most employed device in the classroom and outside, and not the rest of the other devices.

The results of the second question and its discussion:

- Are mobile learning devices employed in the learning and teaching processes? And why? And how is that done?

Most of the teachers indicated that they relied heavily on one or more mobile learning devices to implement the lessons they planned and implemented in the classroom. This is due to the capabilities offered by these devices that facilitate the process of learning and teaching students, banish boredom from them, increase their motivation to learn, and interact with the content they study inside and outside the classroom. The forms of employment of these devices varied, between their use in displaying videos, audio recordings, images, new words or concepts, values, trends and ideas, maps and geographical or demographic surveys associated with the content of lessons in the two disciplines, according to free applications and programs available on mobile learning devices, which serve this purpose.

Some teachers also pointed to the role of these devices in increasing students' motivation towards learning, and benefiting from them in optimizing modern strategies in teaching, due to the specifications of these mobile devices that are easy to use by students and their teachers within well-known applications such as Twitter, Instagram and Snapchat, in addition to the possibility of teachers to add, delete or modify the duties and activities they provide to their students according to their academic level.

The results of the third question and its discussion:

- Did your use of mobile learning devices add anything to your teaching abilities from your point of view? Explain this.

Most of the teachers pointed out the significant impact that the use of mobile learning devices had on their teaching competencies, as this was clearly reflected on their abilities in planning and preparing lessons, and diversifying the presentation methods, depending on the type of mobile device used, in a more interesting, attractive, and fun way for students. In addition to the role that these devices have provided for teachers, it is easy to follow students and communicate with them outside the classroom through the applications of Snapchat, Instagram, and Twitter, answer their questions, and clarify what is difficult for them to understand. Some teachers also mentioned the impact of these devices in reducing the effort and time spent in evaluating students' learning and

adopting the principle of diversification in employing modern teaching strategies, depending on the availability of these devices in the hands of students, in addition to the opportunity provided by employing these devices to discover students' talents, and show what they have of creations.

In the overall results of this study, mobile tablets occupied the highest rate of use for the two disciplines, and the mobile phone ranked second. The results showed that the employment of Arabic and Islamic education teachers for mobile learning devices is high, and that there is a slight difference between the two specializations. As well as there is a slight difference in the employment of organs attributed to gender..

Interviews with teachers confirmed the results that appeared in the questionnaire.

Recommendations

Based on the results of the study, the researchers recommend the following:

- Develop training and preparation courses for teachers of Arabic and Islamic education with a higher integration of educational technology terms, and how to benefit from the employment of all mobile devices mentioned in the study and take advantage of their capabilities not only in the face of the Coronavirus pandemic, but also in practicing the learning and teaching processes inside and outside the classroom.
- Develop and organize the content of Arabic language and Islamic education curricula books in a way that is compatible with the great capabilities offered by mobile learning devices in the learning and teaching processes.
- That the school administration and the Ministry of Education provide smart mobile devices and educational applications for teachers of Arabic language and Islamic education.
- Conducting other studies on different samples and new disciplines that employ mobile learning devices in the learning and teaching processes inside or outside Jordan.

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