

The Degree of Technological Proficiency Attained by Al al-Bayt University Students through Blended Learning

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Abstract

The study aimed to explore the degree of technological proficiency attained by Al al-Bayt University students through blended learning in light of some variables. The descriptive survey methodology was applied. The study population consisted of all Al al-Bayt University students studying in the second semester of the academic year 2023/2022 AD. A random sample of (800) male and female students from Al al-Bayt University was selected. In order to achieve the research objectives, a questionnaire consisting of (20) items was developed and distributed to the study sample, and the validity and reliability of the questionnaire were verified. The result showed that the level of technological skills acquisition among Al al-Bayt University students using blended learning in light of some variables was found to be moderate. There were no

statistically significant differences in the estimates of the study sample members regarding the level of technological skills acquisition among Al al-Bayt University students using blended learning in light of some variables (gender, major and academic year). Based on the findings, the researcher presented some relevant recommendations, including the need to develop the technical infrastructure for Al al-Bayt University, by improving the internet, and equipping computer laboratories, with the aim of developing blended learning and the students' technological skills.

Keywords: Blended Learning, Technology Skills, Al al-Bayt University Students.

درجة اكتساب المهارات التكنولوجية في ضوء التعلم المدمج (Blended Learning) من وجهة نظر طلبة جامعة آل البيت

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ملخص

هدفت الدراسة إلى التعرف على درجة اكتساب المهارات التكنولوجية لدى طلبة جامعة آل البيت من خلال التعلم المدمج في ضوء بعض المتغيرات. وتم تطبيق المنهج الوصفي المسحي. تكون مجتمع الدراسة من جميع طلبة جامعة آل البيت الدارسين في الفصل الدراسي الثاني من العام الجامعي ٢٠٢٣/٢٠٢٢م. تم اختيار "عينة عشوائية" مكونة من (٨٠٠) طالب وطالبة من جامعة آل البيت. ولتحقيق أهداف البحث تم تطوير استبانة مكونة من (٢٠) فقرة، وتوزيعها على عينة الدراسة. وتم التحقق من صدق وثبات الاستبيان. وأظهرت النتائج أن درجة اكتساب المهارات التكنولوجية لدى طلبة جامعة آل البيت باستخدام التعلم المدمج في ضوء بعض المتغيرات كان متوسطاً. لا توجد فروق ذات دلالة إحصائية في تقديرات أفراد عينة الدراسة في مستوى اكتساب المهارات التكنولوجية لدى طلبة جامعة آل البيت باستخدام التعلم المدمج في ضوء بعض متغيرات (الجنس والتخصص والسنة الدراسية). وفي ضوء النتائج قدم الباحث بعض التوصيات ذات العلاقة، ومنها ضرورة تطوير البنية التحتية التقنية لجامعة آل البيت، من خلال تحسين شبكة الإنترنت، وتجهيز مختبرات الحاسوب، بهدف تطوير التعلم المدمج والمهارات التكنولوجية لدى الطلبة.

الكلمات المفتاحية: التعلم المدمج، المهارات التكنولوجية، طلبة جامعة آل البيت.

Introduction

In contemporary educational development, especially within higher education, there is a significant emphasis on integrating technology and modern instructional methods into the learning environment. Traditional educational models often fall short in meeting the evolving needs of society, particularly in facilitating widespread knowledge dissemination and skill acquisition.

The use of technology in the educational process requires the possession of a set of technical, educational and technological skills, in order to be able to deal with modern technologies and their tools effectively and effortlessly, which facilitates the effective employment of modern technologies in the educational

process, which once more indicates the importance of the technological skills and the level of their necessity in the light of the developments resulting from the technological revolution.

Researcher in the field of teaching and learning is currently using different technological implications so as to ease the learning process and overcome challenges in the educational field. Such implications include blended learning, Web learning, Telegram, WhatsApp, Messenger and many other internet-based tools.

Blended Learning, a new trend in pedagogy, has been given multiple names, including Blended Learning, Mixed Learning, Hybrid Learning, and Authored or Composite Learning in Arabic. It is also referred to as Hybrid Learning, Multi Method Learning, and Interested Learning in English. The multiplicity and diversity of these names is due to the different views and perspectives on the definition of Blended Learning ([Al-Hila, Muhammad Mahmoud, Khalifa, Ghazi Jamal, and Al-Sarayrah, Ahmed , 2012](#)).

[Sari & Wahyudin \(2019\)](#) pointed out that Blended Learning is one of the natural evolutions of teaching methods that utilize modern technology and its tools in the educational process. This type of learning does not eliminate e-learning or traditional learning, but rather combines the two types of education, along with computer programs within an educational framework. Many teachers and researchers are interested in Blended Learning, especially in higher education, in order to improve student-learning outcomes. In addition, it is an effective tool to combat the increasing cost of higher education by distributing the cost between traditional and electronic or online classes ([Korkmaz & Toraman, 2020](#)).

Blended Learning has become a bridge between e-learning and traditional learning, and therefore there are several advantages that surpass both e-learning and traditional learning. These advantage are not limited to the classroom boundaries but also include communicating with students regardless of their large number, even after the end of classroom lessons to achieve continuous effectiveness ([Abu Rawaq, 2023](#)).

Blended Learning is not limited to the use of technology, but it is a redesign of all the pillars of the educational process, and works on restructuring the roles of

students and teachers, as well as the overall educational environment (Saboeala & Manghirmalani, 2020). It is worth mentioning that Blended Learning can be an effective alternative to traditional classroom education, as it allows individual independence for students (Angelova, 2020).

Blended Learning is both a restructuring and a redesign of the educational process; its strategies and methods in line with the technological developments, and in a manner that suits the aspirations and capabilities of the new generation and is compatible with the nature of the educational stage. In light of the technological developments and modern electronic educational resources, students are in dire need of modern methods that transfer them from traditional methods to more flexible ones, and as a result, this transfer should make students become the focus of the educational process in order for education to become more beneficial. (Al-Harithy and Al-Arini, 2023).

Ibrahim, Ahmed, and Abdul Muttalib (2023) stated that Blended Learning is of great importance, in terms of enabling students to access training resources easily at any time without facing any problems. It contributes to providing the material to be learned in various ways, allowing customization according to students' preferences. It allows students to focus on important ideas while writing and compiling the lesson. The Blended Learning system covers all types of education and teaching styles and works to benefit from scientific and technological advancements in implementation, usage, and design. It also provides personal training experiences for teachers, which contributes to enriching students' experiences and stimulates their motivation through suspense, curiosity, and independence.

Blended Learning provides students with the opportunity to experiment with things hands-on and apply what they have learned in the classroom to the real world, and this consequently motivates students and enhances their understanding of the subject.

Ibrahim (2023) highlighted the advantages of Blended Learning in enhancing the quality of the educational process, through utilizing internet programs to reinforce information and ensure the effectiveness of learning. Blended Learning contributes to achieving learning satisfaction, which promotes the consistency of

students and improves their attitudes towards learning. It also provides educational flexibility by meeting the individual needs and learning styles of different students. Blended Learning saves time, effort and cost in accessing scientific knowledge. It facilitates interaction during the learning process, whether between students and teachers or between students and the educational content, which consequently strengthens social and human relationships and makes learning more enjoyable.

One of the advantages of Blended Learning is that it provides the opportunity to overcome the constraints and limitations of time and place in the educational process, in addition to obtaining information immediately through the electronic information network. It facilitates communication with the students by providing a continuous interactive environment, and providing scientific material clearly through various applications, accompanied by visual and auditory aids; through visual presentations using PowerPoint or displaying images through different programs, or displaying clips from film or video tapes. It helps in delivering the required material in many different ways which allows modification according to the method best for the student. Blended Learning provides students who face a difficulty in concentrating and organizing tasks a decent opportunity to benefit from the material, because it is arranged and coordinated in an easy and effective manner. The use of e-mail and various e-learning systems enables communication between teachers and students outside the official class times or office hours. It also allows students to send their inquiries to the teacher and submit their required assignments at a later time through e-mail, which has increased participation and interaction with the teacher. Moreover, Blended Learning helps in creating an atmosphere in which there are numerous opportunities for cooperation among students and this nurtures the development of positive attitudes among students towards each other. It helps enable learners to express their ideas and save their time to participate in the classroom, and search for facts and information through more effective means than that is used in the traditional classrooms. Blended Learning can help in the improvement of the overall level of achievement, thinking, creativity and innovation. It also provides an attractive learning environment and a real employment of

information technology applications in teaching situations, in addition it achieves interaction during learning, and greatly contributes to increasing the effectiveness of learning by improving the learning outcomes, it is based on employing more than one means of knowledge appropriate to students' abilities (Ansu, 2017; Hiyari, 2017; Al-zabin, 2019).

Fauziyaah & et.al (2019) indicated a set of requirements for the application of Blended Learning, as follows: good planning for employing e-learning technology in the Blended Learning environment; defining the function of each medium in the program and how it is used by the teacher and learners accurately and ensuring the teachers' skills in using the E-learning technology included in the Blended Learning environment. Moreover, it is important to ensure the availability of the devices, references and various resources used in the Blended Learning environment, whether for learners or in the educational institution.

Ibrahim (2023) referred to the fact that the most important factors affecting the use of Blended Learning are the extent to which students possess skills that are based on the use of the Internet and mobile devices. A student who does not possess these skills cannot keep up with technological and technical development and deal with emergency conditions. (Mohamed and Abdel-Rahim, 2023) stated that Blended Learning requires that students and teachers be fully aware of the ways to use modern technological means such as the Internet and computers in the educational process.

Technological skills are those skills related to the ability to employ technology and modern techniques and use them in the educational process, whether it is in the technical aspect (skills in dealing with technologies such as materials, software and devices), or the personal aspect (personal skills such as the ability to clarify, analyze, interpret and perceive), or the employment aspect (technological employment skills in education) (Abu Qweider, 2019).

Technological skills also represent a set of skills that are based in one aspect on the employment and use of modern technologies in the educational process, including basic and minor skills, as well as the ability to deal with various technological applications and software (Al adwan, 2016).

In this regard, Lal Kumar & Ravindra (2019) conducted a study aimed at shedding light on the integration of information and communication technology in the teaching process, so that it is fruitful not only on interactive education but also benefits self-learning. These trends include the use of audio broadcasting, multimedia products, the concept of virtual classrooms, the use of teleconferencing, and forms of learning on the Internet. The study confirmed that this technology adds a new dimension in various aspects of the teaching and learning process.

(Fauziyaah & et.al, 2019) study which aimed to find out the impact of the Blended Learning strategy on the educational achievement and skills of the educational process at the Nigeri University. This study used the semi-experimental approach, and the sample of eighth grade students was divided into an experimental group that was taught using the blended education method, and the control group was taught in the traditional manner. The results of the study showed that the Blended Learning strategy has had an effective influence in enhancing the students' educational achievement and the skills of the educational process in the "plant tissue culture" course compared to the traditional learning strategy.

Consequently, this study study seeks to explore the degree of technological proficiency attained by Al al-Bayt University students through Blended Learning. The research raises the following question: "What is the Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning?"

Study Problem:

Based on the new technological developments, many changes have occurred in the educational field, including the teaching methods that support the shift from teacher-centered classroom to learner- centered classroom. Such changes urge instructors to adopt new strategies and techniques to create a motivating and encouraging atmosphere in the classroom so as to motivate the learners to actively take part in the learning process and achieve the educational goals.

Interest in Blended Learning has increased in the recent period specifically after the COVID-19 pandemic in the entire world, particularly in Jordan., and

this resulted in three human, technological and technical requirements, as humanity must be technically and technologically prepared, that is, having the ability to deal with other requirements, which are the programs and applications for Blended Learning.

As university instructors, the researcher believes that there is a gap between the implementation of Blended Learning and the extent to which students have the essential technological skills to carry out the educational process properly .

A large number of analytical studies published in recent years that analyzed hundreds of studies concluded that Blended Learning is more efficient, effective, and equal in its efficiency and effectiveness to traditional teaching. A recent study conducted by the American EDUCAUSE Group, which included (213) institutes and universities in America, concluded that blended education has become effective, and has become the dominant system in educational institutions, and many students believe that blended education effectively supports their way of learning, . Therefore, the researcher implemented this stud.

In this regard, [Al-Zahrani \(2020\)](#) indicated that Blended Learning has a great degree of effectiveness in developing students' computer skills, and through the researcher' observation of Al al-Bayt University students, it was noted that there is a fluctuation in the degree to which Al al-Bayt University students use technological skills, even though all of them experienced Blended Learning and its utilization in universities. In light of the aforementioned, the problem of the study is that there is a gap between the Blended Learning process on the one hand, and the level of technological skills among Al al-Bayt University students on the other hand. Thus, the current study comes to find out the Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning.

Study Questions:

The current study aimed to answer the following questions:

1. What is the level of technological skills acquisition by Al al-Bayt University students using Blended Learning?
2. Are there statistically significant differences at the level of significance ($\alpha = 0.05$) in the estimates of the study sample members on the Degree of Technological

Proficiency attained by Al al-Bayt University Students through Blended Learning attributed to (gender, specialization, academic year) variables?

Study Objectives:

The current study aimed to achieve the following:

1. To explore the degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning.
2. To detect the individual differences in the estimates of the study sample members about the degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning including gender, specialization and academic year.

Study significance:

• **The theoretical significance:**

1. The significance of this study lies in the critical importance attributed to blended learning methodologies, and the extent to which it contributes to solving many problems facing university education, as well as the overcrowding in university classrooms.
2. It is hoped that the study will provide a descriptive model through which the degree of use of Blended Learning in acquiring technological skills among students of Al al-Bayt University can be clarified.
3. The current study is a qualitative addition to studies and research, in light of the lack of studies that dealt with the degree of Blended Learning usage in acquiring technological skills.

• **The practical significance:**

1. - The results of the current study may benefit universities in determining the effectiveness of using Blended Learning in students' technological skills acquisition.
2. The recommendations of the study are hoped to contribute to the development of technological skills among students of Al al-Bayt University.

3. The current study may open the way for researchers and specialists to conduct further studies on the effectiveness of Blended Learning in the development of technological skills.

Study Terminology and Procedural Definitions:

Blended Learning: "A new form of training and teaching programs, which appropriately blends classroom and electronic learning, according to the requirements of the educational situation, with the aim of improving the achievement of educational objectives at the lowest possible cost" (Al-Mutairi, 2022:72).

Procedurally, it is defined as an educational model that mixes face-to-face education and e-learning for Al al-Bayt University students through the use of electronic educational platforms.

Technological skills: "are skills that enable an individual, teacher or learner, to deal with the educational situation, in order to employ modern educational techniques and technologies and innovative ideas" (Al-Mallah, 2017: 190).

It is defined procedurally: as the possession of Al al-Bayt University students with a set of skills and capabilities necessary to deal with technological applications.

Al al-Bayt University students: They are the people whose scientific competence allowed them to move from the secondary stage to Al al-Bayt University. The student is considered one of the basic and active elements in the educational process throughout his/her university training.

The researcher define them procedurally: they are the students who study at the bachelor's (undergraduate) level regardless of their gender (males and females), or their theoretical and scientific literary disciplines and majors. This study will be limited to undergraduate students and not graduate students.

Study Limits and Limitations:

The current study was limited to the following limitations:

1. Spatial limitations: The current study was applied at Al al-Bayt University in Jordan.
2. Time limits: The current study was conducted in the second semester of the academic year 2023/2022.

3. Human limitations: The current study was limited to bachelor students enrolled at Al al-Bayt University and their point of view.
4. Determinants of the study: The results of the study were determined by each of (the validity of the tool, the stability of the tool, and the study tool that was built to achieve the objectives of the study).

Study Methodology:

The current study follows the descriptive design that aims to describe the studied phenomenon and portray it qualitatively and quantitatively. The researcher relied on the descriptive survey method because it is the most appropriate approach to deal with research procedures to reach results, as the method allows describing the reason for the existence of specific situations, explaining and examining them, in order to test research questions.

Study Population and Sample:

The study population consisted of all undergraduate students at Al al-Bayt University who are studying in the second semester of the academic year 2023/2022. Totaling (17,426) male and female students. A random sample consisting of (850) students was selected from the study population. (800) valid questionnaires were retrieved for statistical analysis purposes; This will be done through the following table:

(Table 1)

Frequencies and Percentages according to the Study Variables.

	Categories	Repetition	Ratio
Gender	Male	380	47.50%
	Female	420	52.50%
major	Scientific	343	42.88%
	Humanitarian	457	57.13%
academic year	First	235	29.38%
	Second	180	22.50%
	Third	185	23.13%
	Fourth	200	25.00%
Total		800	100.0

Study Tool:

In collecting data, the researcher relied on a questionnaire designed according to items in the light of the study questions to find out the opinion of the sample towards the studied phenomenon. The questionnaire included several questions that address the study, and consisted of the following axes:

1. The first axis: primary data that look at the demographic characteristics of the members of the study sample.
2. The second axis: are the items that measure the degree of use of Blended Learning in acquiring technological skills among students of Al al-Bayt University.

Cut-off Score Values:

The following was relied upon:

1. The arithmetic means between (3.68-5.00) means that the level of use of Blended Learning is (large).
2. The arithmetic means between (2.34-3.67) means that the level of use of Blended Learning is (medium).
3. The arithmetic average mean (1.00-2.33) means that the level of use of Blended Learning is (small).

Validity of the Study Tool:

To verify the validity of the study tool, it was presented to a group of arbitrators with expertise and specialization in the fields of educational technology, curricula and teaching, and measurement and evaluation, to find out their opinions about the validity and clarity of the items from the linguistic and educational aspects of the subject to be studied. They were requested to make amendments or observations to the items if needed or add other items that are not included in the tool. In light of this, the researcher made the amendments suggested by the arbitrators, and thus the final form of the tool consisted of (20) items.

Construct Validity:

To extract the indications of the construction validity of the scale, the correlation coefficients of the paragraph with the total score of the scale were

extracted in an exploratory sample from outside the study sample consisting of (30) students. The correlation coefficients of the paragraph with the total score of the scale ranged between (0.49-0.82), and the following table shows that.

(Table 2)

Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient
1	.69(**)	8	.60(**)	15	.69(**)
2	.80(**)	9	.82(**)	16	.62(**)
3	.62(**)	10	.63(**)	17	.63(**)
4	.63(**)	11	.68(**)	18	.49(**)
5	.74(**)	12	.71(**)	19	.55(**)
6	.54(**)	13	.60(**)	20	.80(**)
7	.82(**)	14	.72(**)		

* Statistically significant at the degree of significance (0.05).

** Statistically significant at the degree of significance (0.01).

It should be noted that all correlation coefficients were of acceptable and statistically significant degrees, and therefore none of these items were deleted.

Stability of the Study Tool:

To ensure the stability of the study tool, it was verified by the test-retest method by applying the scale, and re-applying it after two weeks on a group outside the study sample consisting of (30) students, and then the Pearson correlation coefficient was calculated between their estimates in the two times if it reached (0.87).

The stability coefficient was also calculated using the internal consistency method according to the Cronbach alpha equation, if it reached (0.81), and these values were considered appropriate for the purpose of this study.

Statistical Processing and Treatment:

Study Variables:

The study included the following variables:

Independent Variables: include variables of gender and it has two levels (male-female), specialization and it has two levels (scientific, humanitarian), and the academic year and it has four levels (first year, second year, third year, fourth year).

Dependent Variable includes acquisition of technological skills.

Study Results:

– **Results of the First Question:**

What is The Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning?

The researcher will answer this question through the following table:

(Table 3)

Means and standard deviations for the Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning arranged in a descending order according to the means.

Rank	No.	Items	Mean	Standard deviation	Level
1	4	I can use technological applications such as (Telegram, WhatsApp, Messenger) to communicate with the faculty member and students.	3.89	.875	high
2	3	I am aware of all uses of computer programs and electronic devices and their functions in the educational process.	3.84	1.087	high
3	1	I can browse online courses.	3.78	.959	high
4	5	I using modern technological devices to deal with Blended Learning.	3.71	.979	high
5	2	I can use search engines and access websites through the Internet.	3.68	.963	high
6	20	I do not find it difficult to solve problems that happen to the computer.	3.68	1.082	high
7	13	I have the ability to interact with the outside world through the internet.	3.66	1.092	average

Rank	No.	Items	Mean	Standard deviation	Level
8	9	I use technological applications in knowledge of teaching courses.	3.61	1.128	average
9	19	I have enough skill to deal with Microsoft office package.	3.58	.951	average
10	11	I can use the WhatsApp application during Blended Learning and listen to the given courses.	3.55	1.116	average
11	12	I deal with technological applications easily in Blended Learning.	3.46	1.097	average
12	17	I can deal with various different computer applications.	3.34	1.028	average
13	7	I exchange information electronically between the various academic courses.	3.22	1.124	average
14	15	I have sufficient knowledge to understand the parts of a computer.	3.18	1.128	average
15	8	I cooperate with the faculty members and students to transfer knowledge of the course through modern technologies.	3.09	1.325	average
16	10	I can easily deal with computers and technological devices during Blended Learning.	3.01	1.306	average
17	6	I use many technological applications to communicate effectively with students.	2.97	1.296	average
18	16	I do not face technical problems attending online lessons.	2.96	1.278	average
19	18	I have the ability to deal with software related to image processing.	2.91	1.249	average
20	14	I have sufficient skills to use Blended Learning technologies.	2.74	1.293	average
		Macro Level	3.39	.655	average

The previous table shows that the arithmetic averages ranged between (2.74-3.89), as Paragraph No. (4) states: “I can use technological applications such as (Telegram, WhatsApp, Messenger) to communicate with faculty members and students” in The first place with an average of (3.89), while Paragraph No. (14) which reads “I have sufficient skills to use Blended Learning technologies”

ranked last with an average of (2.74). The arithmetic mean of The Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning as a whole was (3.39).

– **Results of the Second Question:**

Are there statistically significant differences ($\alpha = 0.05$) in the estimates of the study sample about The Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning due to the variable (sex, specialization, and academic year)?

To answer this question, the means and standard deviations were extracted for The Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning according to gender, specialization, and academic year. The table below shows that.

(Table 4)

The Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning according to gender, specialization, and academic year

		Mean	Standard Deviation	Number
Gender	Male	3.44	.648	420
	Female	3.34	.664	380
Specialization	Scientific	3.37	.697	343
	Humanitarian	3.44	.576	457
Academic Year	First	3.34	.738	235
	Second	3.42	.634	180
	Third	3.45	.667	185
	Fourth	3.37	.548	200

The previous table shows an apparent variation in the means and deviations of The Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning due to the different categories of variables of gender, specialization, and academic year. Moreover, in order to show the significance of the statistical differences between the arithmetic means, the three-way analysis of variance (ANOVA) was used (Table 5).

(Table 5)

The Degree of Technological Proficiency attained by Al al-Bayt University Students through Blended Learning due to the different categories of variables of gender, specialization, and academic year

Source of variance	Sum of squares	Degrees of freedom	Mean of squares	P-value	Statistical significance
Gender	.606	1	.606	1.409	.236
Specialization	.975	1	.975	2.267	.133
Academic Year	.838	3	.279	.649	.584
Error	109.241	750	.430		
Total	111.249	800			

The previous table shows the following:

1. There were no statistically significant differences ($\alpha = 0.05$) attributable to the effect of gender, as the P value was 1.409 and the statistical significance was 0.236.
2. There were no statistically significant differences ($\alpha = 0.05$) attributable to the effect of specialization, as the P value was 2.267 and the statistical significance was 0.133.
3. There were no statistically significant differences ($\alpha = 0.05$) attributable to the effect of the school year, as the P value was 0.649 and the statistical significance was 0.584.

Discussion of the Study Results:

The results of the study showed that the level of Blended Learning in acquiring technological skills among Al al-Bayt University students from their point of view came at an average level. The researcher attributes this result to the fact that Al al-Bayt University students possess the technological skills for dealing with educational programs and applications. As public universities possess a technical infrastructure, especially with regard to the availability of high-quality Internet networks, in addition to Al al-Bayt University owning laboratories and

computers to meet the needs and aspirations of students. Such findings are in line with the results of Zaghoul (2023), which indicated that the success of Blended Learning is positively affected by students' technological skills and their ability in dealing with technological devices and applications properly.

This results may also be attributed to the impact of Blended Learning on the development of technological skills among Al al-Bayt University students, as Blended Learning provides the necessary understanding and knowledge for Al al-Bayt University students in order to become more effective and efficient in dealing with technology and modern techniques, and this enhances the level of their possession of technological skills. This result is also attributed to the fact that Blended Learning is able to provide students with the necessary information about modern technologies and their tools, which enhances their technological skills.

The researcher believes that the Blended Learning method is one of the modern and advanced educational methods that take into account the various technological skills of students in an appropriate manner, as Blended Learning provides a set of educational activities that motivate students to show their skills significantly, which has a positive impact on Al al-Bayt University students' possession of technological skills.

Paragraph No. (4), which states, "I can use technological applications such as (Telegram, WhatsApp, Messenger) to communicate with faculty members and students" came first. The researcher explains this result to Al al-Bayt University students' knowledge of the technological skills necessary to deal with the programs, and educational electronic applications, given the availability of the necessary capabilities and materials, which may be considered the main factor in students' ability to possess technological skills at an appropriate level.

The result of the current study agreed with the result of the study (Al-Zahrani, 2020) which indicated that Blended Learning has a moderate degree of effectiveness in developing computer skills among secondary school students. The result of the current study also agreed with the result of the study (Fawzy, 2023), which indicated that there is a clear gap among the research sample between the skills of working on the computer before and after e-learning. In the period preceding the conduct of e-learning, the skills of most of them were weak, but

after applying the procedures of e-learning, it was noticed that these skills rose to a good level.

The findings of the current study affirm the fact that the learning environment highly affects the outcomes of the educational process. The sample of the current study passed through nearly similar conditions while using Blended Learning, a fact that affected their mastery and acquisition of technological skills. The students appeared of nearly similar levels regardless their gender, specialization and academic year and that was proved through statistical analysis.

Conclusion:

The results of the study indicated that there were no statistically significant concerning the level of acquisition of technological skills by Al al-Bayt University students using Blended Learning in light of gender, specialization and year. This results revealed that the degree of technological proficiency attained by Al al-Bayt University students through Blended Learning came without apparent differences, and this may be due to the fact that the students of Al al-Bayt University had face the same difficulties when using Blended Learning.

Recommendations:

Based on the findings, the researcher recommended the following:

- Developing the technical infrastructure of Al al-Bayt University, by improving the Internet, and equipping computer laboratories, with the aim of developing students' Blended Learning and technological skills.
- Holding courses for Al al-Bayt University students on technological skills, their importance, and how to utilize them in Blended Learning.
- Developing educational and technological plans for Blended Learning in light of global transformations and the experiences of developed countries in the field of Blended Learning.

References:

- Abu Qweider, S. A. A. M. (2019). *The training needs of English language teachers in light of integrating technology into education from their point of view in Liwa Al-Quwaisma* [Unpublished master's thesis]. Middle East University, Amman.
- Abu Rawaq, M. A. (2023). Attitudes of secondary school teachers towards the use of blended learning in Irbid schools in light of the Covid-19 pandemic. *Palestinian Journal of Open Education and E-Learning*, 17(17), 35-49.
- Al-Adwan, Z. S. M. (2016). The degree of mobile learning practice among history and geography students at the University of Jordan. *Journal of Educational Sciences*, (26), 13-34.
- Al-Harithy, M. M., & Al-Arini, H. (2023). The extent of using virtual lab technology in teaching chemistry course in a blended learning environment from the viewpoint of female teachers. *Journal of Educational and Psychological Sciences*, 7(14), 33-51.
- Al-Hila, M. M., Khalifa, G. J., & Al-Sarayrah, A. (2012). Employing blended learning based on the systemic approach in university teaching. *Sulaymaniyah University Journal*, 30(2), 1-39.
- Al-Mallah, T. (2017). *Technological innovations and nanotechnology*. Dar Al-Sahab for publication and distribution.
- Al-Mutairi, M. M. (2022). Attitudes of secondary school teachers towards the application of blended learning during the return to school stage after the Corona pandemic in Jeddah. *Journal of Young Researchers in Educational Sciences for Postgraduate Studies at Sohag University*, 14(14), 63-94.
- Al-Zaben, A. (2019). *The effect of using the blended learning strategy on achievement in national education and social communication skills among seventh grade students in Jordan* [Unpublished master's thesis]. University of Jordan, Amman, Jordan.
- Al-Zahrani, A. A. (2020). The effectiveness of blended learning in developing computer skills among secondary school students. *Journal of the Faculty of Education, Assiut*, 36(4), 325-344.

- Angelova, M. (2020). Students' attitudes to the online university course of management in the context of COVID-19. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 283-292.
- Ansu, A. (2017). *The impact of blended learning on the achievement of tenth grade female students in life sciences in UNRWA schools in Jordan and their motivation towards learning* [Unpublished doctoral thesis]. University of Jordan, Amman, Jordan.
- Fauziyah, H., Nanda, E., & Binari, M. (2019). The effect of blended learning on students' learning achievement and science process skills in plant tissues culture course. *International Journal of Instruction*, 12(1), 521-538.
- Fawzy, T. (2023). University e-learning and its role in raising technological skills. *Al Haqiqa Magazine*, 22(1), 111-149.
- Hiyari, L. (2019). The effect of using the blended learning strategy on the achievement of the students of the University of Jordan in English. *Studies Journal*, 46(2), 23-34.
- Ibrahim, E. M. (2023). The degree of using blended learning in teaching mathematics from the point of view of Qasbat Al-Salt teachers. *Journal of the Faculty of Education, Assiut*, 39(2), 149-165.
- Ibrahim, G., Abdel-Muttalib, A., & Ahmed, H. (2023). Benefiting from the blended learning strategy in achieving targeted learning outcomes for polytechnic students. *International Journal of Internet Education*, 22(1), 18-47.
- Korkmaz, G., & Toraman, Ç. (2020). Are we ready for the post-COVID-19 educational practice? An investigation into what educators think as to online learning. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 293-309.
- Lal Kumar, Ravindra, & Dr.M.T.V. (2019). Online learning platforms for flexible learning in educational framework. *Think India Journal*, 22(14).
- Mohamed, M., & Abdel-Rahim, A. (2023). Blended learning based on the stimuli of educational games and its impact on the cognitive achievement of female students in the course of methods and methods of teaching modern

education. *Journal of Theories and Applications of Physical Education and Sports Sciences*, 40(2), 123-144.

- Saboeala, R., & Manghirmalani, M. (2020). Perception of in-service teachers towards blended learning as the new normal in teaching learning process post COVID-19 pandemic. *Research Square*, 5(21), 1-16.
- Sari, F., & Wahyudin, A. (2019). Undergraduate students' perceptions toward blended learning through Instagram in English for business class. *International Journal of Language Education*, 3(1), 64-73.
- Zaghoul, S., Abdul Hamid, M., Ramzy, H., & Ali, Z. (2023). The effectiveness of blended learning based on game stimuli (badges) in developing some technological skills for students with mild intellectual disabilities. *The Arab Journal of Specific Education*, 7(25), 157-192.