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The reality of blended learning implementation among upper elementary school teachers in UNRWA schools in Bethlehem and Hebron Governorates

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Abstract

This study aimed to explore the reality of Blended learning implementation among upper elementary school teachers in the governorates of Bethlehem and Hebron. The descriptive approach was adopted, and a tool was developed to measure the reality of Blended learning implementation. The tool was applied to a stratified sample consisting of 23 male and 73 female teachers during the first semester of the academic year 2021/2022, representing 32% of the study population.

The study results showed that the reality of Blended learning implementation among upper elementary school teachers in Bethlehem and Hebron governorates was moderate with a mean score of 3.27. The results also revealed differences in the mean scores of Blended learning implementation between Bethlehem and Hebron governorates, due to the gender variable in favor of males. Furthermore, differences were due to the training courses variable in favor of teachers who received training courses. The results indicated no differences in the mean scores of Blended learning implementation due to the variables of academic qualification, years of experience, and governorate.

Based on the conclusions the researchers recommend; the study plan should contain the use of blended learning during the semester, and conduct training courses for teachers in order to develop their employment and use of blended learning, and equip schools with the necessary technological techniques to employ blended learning, and conduct more studies and research on blended learning on other variables and other educational environments.

Keywords: Reality; Blended; Blended Learning; Implementation

1. Introduction

The world in general, and the Arab society in particular, are facing increasing and rapid challenges due to the rapid developments in various fields, especially in the scientific and technological field, which has witnessed significant progress in the last quarter of the previous century. This progress in science and technology has accompanied the evolution of education, the renewal of teaching methods, and the integration of technology in education. Machines have become a necessity rather than a luxury, particularly with the spread of the COVID-19 pandemic. Education is one of the most affected sectors, as it has been impacted by social distancing measures and the closure of educational institutions, reaching its peak at the end of March 2020. This led to the closure of most schools and educational institutions, prompting educational systems worldwide to adopt multiple educational alternatives and utilize technology to ensure the continuity of education, such as e-learning, distance learning, and blended learning.

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It is worth noting that despite the numerous advantages of e-learning, there are certain limitations that it has been unable to overcome, such as high costs and the lack of human interaction between teachers and learners in a face-to-face setting. It does not sufficiently help individuals in practicing dialogue, discussion, and exchanging opinions. Learners who received online lessons have shown less efficiency and skill in dialogue and the ability to present ideas compared to their counterparts. To overcome these limitations, the concept of blended learning emerged as a natural progression of e-learning [1].

[2] states that blended learning emerged after e-learning due to the weak relationship between teachers and learners, as well as the development of e-learning Instruments that lack direct face-to-face communication. Blended learning has several benefits, including time and effort saving, cost reduction, the potential to enhance overall understanding, and the creation of an attractive learning environment for students anywhere and anytime without depriving them of social relationships among themselves or with their teachers. Blended learning aims to help learners achieve the desired learning outcomes by employing traditional forms of learning and teaching (face-to-face) with various modes and technological advancements of e-learning, both inside and outside the classroom.

[3] explain that blended learning is an educational strategy that involves learners rotating between different learning stations, with one of these stations being online learning. These stations may include learning in small groups or the whole class, project-based learning, according to a specific timetable or at the discretion of the teacher.

Problem of the Study The adoption of blended learning has become an urgent necessity, especially in light of the COVID-19 pandemic and its repercussions, which have cast their shadow on all aspects of economic, political, social, and educational life. The educational process has been forcibly halted, leading to the need for alternative educational approaches to ensure the continuity of learning.

The schools were closed, and it was necessary for education, especially, to keep up with these rapid changes and developments to ensure its continuity. Educational institutions in Palestine have sought to employ blended learning to keep up with the advancements in education in the era of information and communication technology on one hand, and the need for implementing this type of learning imposed by the COVID-19 pandemic and the state of emergency witnessed by the world on the other hand.

Therefore, this study came as an attempt to describe the reality of employing blended learning among teachers of the upper basic stage in the schools of the United Nations Relief and Works Agency for Palestine Refugees in Bethlehem and Hebron governorates.

1.1. Research Questions

The study attempted to answer the following Questions:

What is the reality of employing blended learning among teachers of the upper basic stage in the schools of Bethlehem and Hebron governorates?

Does the reality of employing blended learning among teachers of the upper basic stage in the schools of Bethlehem and Hebron governorates based on different variables (gender, educational qualification, years of experience, governorate, training courses)?

1.2. Research Hypotheses

The second question was converted into the following Null hypotheses:

- First Null Hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of gender.
- Second Null Hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of educational qualification.
- Third Null Hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of years of experience.
- Forth Null Hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of governorate.

- Fifth Null Hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of training courses.

1.3. Importance of the Study

The study sought to uncover the reality of employing blended learning among teachers of the upper basic stage in the schools of the United Nations Relief and Works Agency for Palestine Refugees in Bethlehem and Hebron governorates. This study addresses an important educational topic due to the successive technological developments that affect the educational process. It may assist specialists and curriculum planners in understanding the reality of blended learning to develop learning projects and overcome obstacles and difficulties in its implementation. Researchers can benefit from this study in terms of its theoretical framework, methodology, and the Instruments used by adapting them to their own research.

1.3.1. Study Objectives

The study aimed to explore the reality of employing blended learning from the perspective of teachers of the upper basic stage in Bethlehem and Hebron governorates, as well as to understand the role of some variables (gender, educational qualification, years of experience, governorate, training courses) in the reality of employing blended learning.

1.3.2. Study Limitations

Human boundaries: Teachers of the upper basic stage in the schools of Bethlehem and Hebron governorates. Spatial boundaries: Schools affiliated with the United Nations Relief and Works Agency for Palestine Refugees, West Bank region/Hebron educational district. Temporal boundaries: This study was conducted in the first semester of the academic year 2021/2022.

1.3.3. Study Terminology

Blended Learning Reality: It is a description of the degree to which teachers employ blended learning in teaching subjects to students in the basic stage [4].

1.3.4. Blended Learning

It is a learning model that integrates both online and face-to-face learning in This development and improvement are the result of the tremendous technological explosion that the world is experiencing today. It continuously changes lifestyles and contributes to the innovation of devices and equipment used in every household and institution. All of these innovations and other that dominate various aspects of life are undoubtedly the product of technological thinking, characterized by human creativity and development. It is based on the meticulous understanding of applying new technologies, which have become a measure of development in any country, determining the future of nations [5].

As a result, many technological advancements have emerged in recent times with the goal of making the learner the focal point of the educational process instead of the teacher. There is a focus on active learning strategies and collaborative learning [6].

Traditional teacher-centered education is no longer suitable for the era of technological advancements that societies are experiencing today. The teacher is one component of the educational system, influencing and being influenced by other components. The teacher is also considered a key input in the educational system, and their role in the 21st century differs from the past [7].

As a reaction to the developments in the field of education, learning environments, and learners, educators in the late 20th and early 21st centuries began reevaluating the effectiveness of teaching methods and strategies used, as well as the elements of the educational process. This includes the increasing number of learners and the changes imposed by modern educational trends in the information age, shifting the focus from the teacher as the center of the educational process to the learner as an individual rather than just a number among a group of learners. All of this is done to ensure the outcomes of the educational process. The first stage of change in teaching strategies, known as e-learning, began in the late 1990's [8].

Blended learning is considered one of the recent forms of e-learning that has gained popularity. It combines traditional face-to-face teaching with e-learning, making it one of the most important learning approaches. Research and studies

have proven its effectiveness in providing effective learning environments, improving learning outcomes, and achieving positive attitudes among students [9].

Blended learning integrates e-learning with traditional face-to-face teaching in a single framework. Electronic teaching Instruments, whether computer-based or network-based, are used in lessons, such as computer labs and smart classrooms. Most of the time, the teacher interacts face-to-face with the learners [10].

Blended learning, also known as hybrid learning, is the natural extension and logical mediator between traditional face-to-face education and e-learning. It combines the advantages of traditional face-to-face teaching and e-learning in the teaching and learning processes through various different strategies ,including flipped learning, rotation, and the flipped classroom [11].

According to [10], blended learning is an approach that blends traditional teacher-centered methods with e-learning, audiovisual aids, and online learning to improve and enhance the teaching and learning process.

Blended learning is a learning model that combines both traditional face-to-face learning and e-learning, utilizing media from both approaches, employing the available technologies from each model to achieve the desired educational objectives.

The objectives of blended learning, as outlined by [12], include enhancing the effectiveness of teachers, increasing the number of students in classrooms, providing electronic curricula to teachers and learners, facilitating annual updates to electronic curricula, saving time and costs, promoting technological culture in society, and providing a broader concept of lifelong learning.

1.4. Previous Studies

[13] aimed to explore the utilization of Blended learning from the perspective of Arabic language teachers in teaching elementary school students. The study employed the Blended learning reality scale on 250 male and female Arabic language teachers in elementary schools in the "Bisha" governorate, randomly selected. The results indicated that the degree of Blended learning reality was moderate, while the obstacles to Blended learning were high. Furthermore, the results revealed no significant differences in the teachers' responses regarding the reality and obstacles of Blended learning based on the gender variable.

The study [14] aimed to examine the effectiveness of Blended competitive learning in teaching home economics for developing technological creativity and ethical behavior among first-grade secondary school female students. The researchers followed a descriptive-analytical and quasi-experimental design. The research sample consisted of 64 female students divided into an experimental group of 33 students and a control group of 31 students. The educational materials included the teacher's guide for teaching the research unit based on Blended competitive learning and the students' activity booklet. The research Instruments included a test of technological creativity skills and an ethical behavior scale. The results showed statistically significant differences in the mean scores of the experimental group compared to the control group in the post-application phase for both the technological creativity skills test and the ethical behavior scale, in favor of the experimental group. Moreover, the results confirmed a positive correlation between the growth of technological creativity and ethical behavior after teaching the unit "Keys to Your Personality" based on Blended competitive learning among first-grade secondary school female students.

[15] aimed to examine the current utilization of Blended learning by secondary school teachers in Kuwait from the perspective of teachers and principals. The study utilized a descriptive survey design and questionnaires were used to collect data from a random sample of 217 teachers and principals in secondary schools in Al-Jahra governorate, Kuwait. The results indicated a moderate level of utilization of Blended learning by teachers and principals. The study found no statistically significant differences in the responses of the study sample regarding the utilization of Blended learning by secondary school teachers in Kuwait based on variables such as gender, experience, and job title, across all domains and the overall tool.

Managers, depending on the variability of their academic qualifications in all fields and as a whole, showed differences in favor of individuals with higher academic qualifications.

[16] conducted a study aiming to determine the impact of blended learning models on mathematical creative thinking skills and mathematics anxiety among students in general secondary schools in Sukoharjo Regency, Central Java, Indonesia. The research method used was quasi-experimental, employing cluster random sampling techniques. Three

schools were selected as research samples, and data collection involved a written test as well as questionnaires administered after the experimental program implementation. The study concluded that blended learning models were superior to direct learning models in enhancing mathematical creative thinking skills. However, in terms of mathematics anxiety, the direct learning model outperformed the alternating station learning model.

[17] aimed to examine the performance and work process of pre-service teachers in a blended learning environment and their satisfaction with it. They designed a computer-based curriculum using blended learning and trained students on it during the fourth semester of their academic year. The curriculum was implemented on 53 male and female students studying English language at Yildiz Technical University in Turkey. After the completion of teaching, a questionnaire, a cognitive achievement test, and a performance observation card were administered. The results indicated the effectiveness of blended learning in improving the practical performance of pre-service teachers more than the theoretical aspect of language skill training. The study also revealed the satisfaction of pre-service teachers with learning the curriculum using blended learning. The results showed no statistically significant differences based on gender in performance and satisfaction with the curriculum within the study sample.

[18] aimed to compare e-learning, blended learning, and traditional learning in terms of achievement and attitudes among pre-service teachers in the United States. The study included 403 second-year university students from five departments, divided into three groups: one studied using e-learning, another using traditional learning, and the third using blended learning. Achievement tests and attitude measures were used as study Instruments. The results showed the superiority of the third group, which employed blended learning in teaching, in terms of achievement. Their attitudes were more positive compared to the first two groups. Furthermore, the attitudes of the group that utilized e-learning were more positive than those of the group that studied using traditional learning.

2. Method and Procedures

The study utilized a descriptive methodology to achieve its objectives, which is suitable for the nature of the data and information required for this study.

2.1. Study Population

The study population included all teachers of schools affiliated with the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) in the West Bank, Hebron Educational District, during the first semester of the academic year 2021/2022.

2.2. Study Sample

The study sample was selected using cluster sampling, and it consisted of 96 male and female teachers from schools affiliated with UNRWA in the West Bank, Hebron Educational District. The sample represented 32% of the population.

2.3. Study Instruments

A questionnaire was prepared to measure the actual implementation of blended learning, consisting of 26 items.

2.3.1. Instrument Validity

The study tool was presented to a number of experts in the field for validation.

2.3.2. Instrument Reliability

The Cronbach's alpha coefficient was calculated, resulting in a value of 0.94.

2.4. Study Variables

2.4.1. Independent Variables

Gender: Male, Female

Academic Qualifications: Bachelor's, Postgraduate Studies

Years of Experience: Less than 5 years, 5-10 years, More than 10 years

Governorate: Bethlehem, Hebron

Training Courses: Yes, No Governorate: (Bethlehem, Hebron)

Training Courses: (Yes, No)

2.4.2. Dependent Variable

The reality implementation of Blended learning among teachers in the governorates of Bethlehem and Hebron.

2.5. Statistical Analysis

Statistical measures such as means, standard deviations, Cronbach's alpha coefficient, independent t-test, and one-way ANOVA were conducted using the Statistical Package for the Social Sciences (SPSS). The following correction key was used as on Table 1:

Table 1 Correction key

High Score	Medium Score	Low Score
mean > 3.66	$2.34 \leq \text{mean} \leq 3.66$	$\text{mean} \leq 2.33$

3. Study Result

3.1. Results related to the First Question

What is the actual implementation of Blended learning among upper elementary school teachers in the governorates of Bethlehem and Hebron?

Means, standard deviations, and grades for the implementation of Blended learning were calculated. The average mean was 3.27, indicating a medium score, with a standard deviation of 0.61 as appeared on Table 2

Table 2 Means, standard deviations, and grades for the implementation of Blended learning

Paragraph Number	Paragraph	Mean	Stand. Deviation	Degree
26	I use word processing software (Word) to prepare worksheets for students.	3.99	0.80	High
21	I encourage students to research through the internet.	3.98	0.74	High
16	I use spreadsheets (Excel) to store and organize students' grades and records.	3.83	0.89	High
22	I use social media platforms to discuss teaching-related issues.	3.63	0.79	Medium
17	I focus on using multimedia for preparing exercises and exams.	3.59	0.90	Medium
15	I prepare lessons using presentation slides (PowerPoint).	3.57	0.98	Medium
11	11The school sets clear standards for student evaluation.	3.44	0.92	Medium
18	I attend remote meetings (tele-conferencing).	3.43	0.92	Medium
24	I use remote cloud storage Instruments (Google Drive).	3.36	0.98	Medium
4	The school provides assistance when facing issues with Blended learning.	3.33	1.04	Medium
14	I employ data projectors provided by the school.	3.31	0.93	Medium
7	There are clear instructions for electronic communication between students and teachers.	3.82	1.00	High

6	The school has constant access to the internet.	3.21	1.22	Medium
19	I encourage students to submit their assignments via USB flash memory.	3.16	0.99	Medium
20	I communicate with students via email.	3.14	0.93	Medium
9	The school uses the Microsoft Teams platform, which facilitates organization between teachers and participating students.	3.14	1.12	Medium
8	Student complaints regarding Blended learning are dealt with effectively.	3.12	1.02	Medium
2	There is a dedicated website for the Blended Learning Center for communication purposes.	3.09	0.99	Medium
25	I use the Ministry's online portal for teachers' services.	3.03	0.84	Medium
12	The school provides opportunities for students to participate in the development of Blended learning.	3.03	1.00	Medium
1	Teachers are trained in using Blended learning methods in their teaching.	3.00	0.96	Medium
10	The Education Directorate holds educational workshops that help in using Blended learning.	2.97	1.07	Medium
23	I use a Smart board.	2.94	1.04	Medium
5	The school provides the ability to communicate electronically with research centers to benefit from their capabilities.	2.88	1.06	Medium
3	The school has computer labs specifically equipped for Blended learning.	2.84	1.04	Medium
13	There is an interactive electronic course for the educational subject.	2.70	0.88	Medium
	Total	3.27	0.61	Medium

From Table 2 it is evident that the highest mean scores were for item number (26), which states "I use word processing software (Word) to prepare worksheets for students," with a mean score of (3.99) and a standard deviation of (0.80), indicating a high degree. This was followed by item number (21), which states "I encourage students to research using the internet," with a mean score of (3.98) and a standard deviation of (0.74), indicating a high degree. On the other hand, the lowest mean scores were for item number (13), which states "There is an interactive e-course for the subject material," with a mean score of (2.70) and a standard deviation of (0.88), indicating a moderate degree. This was followed by item number (3), which states "The school has specially equipped computer labs for Blended learning," with a mean score of (2.84) and a standard deviation of (1.04), indicating a moderate degree.

3.2. Results related to the Second Question:

Does the reality of employing blended learning among teachers of the upper basic stage in the schools of Bethlehem and Hebron governorates based on different variables (gender, educational qualification, years of experience, governorate, training courses)?

These have been converted into the following null hypotheses.

3.2.1. First Null Hypothesis

There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of gender.

The differences in the means of employing learning employment are due to the gender variable ($\alpha \leq 0.05$). To test this hypothesis, the Independent T-test was used for the independent samples, as shown in Table 3.

Table 3 Results of the Independent T-test for employing learning employment according to the variable

Educational Qualification	Number	Mean	St. Deviation	df	t-value	Sig.
Bachelor's Degree	23	3.55	0.62	94	2.65	0.009
Postgraduate Studies	73	3.17	0.58			

From Table 3 it is evident that the computed significance level is (0.009), which is lower than the statistical significance level ($\alpha \leq 0.05$) Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating the presence of differences in employing learning employment due to the gender variable. The differences were in favor of males, with a mean of (3.55), while for females, it was (3.17).

3.2.2. Second Null Hypothesis

There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of educational qualification.

To test this hypothesis, the Independent T-test was used for the independent samples, as shown in Table 4:

Table 4 Results of the Independent T-test for employing learning employment according to the educational qualification variable

Educational Qualification	Number	Mean	Standard Deviation	Degrees of Freedom	Computed t-value	Significance Level
Bachelor's Degree	68	3.25	0.66	94	0.24	0.809
Postgraduate Studies	28	3.29	0.48			

From Table 4 it is evident that the calculated significance level is (0.809), which is greater than the statistical significance level ($\alpha \leq 0.05$) Therefore, the null hypothesis of no differences in the implementation of Blended learning due to the educational qualification is accepted.

3.2.3. Third Null Hypothesis

There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of years of experience.

To test this hypothesis, the means and standard deviations of the Blended learning implementation were calculated based on the variable of years of experience, as shown in Table 5.

Table 5 Means and standard deviations of the Blended learning implementation based on the variable of years of experience

Years of Experience	Number	Mean	Standard Deviation
Less than 5 years	8	2.86	0.51
5-10 years	19	3.27	0.51
More than 10 years	69	3.31	0.63
Total	96	3.27	0.61

From Table 5, it is evident that there are noticeable differences between the means of the Blended learning implementation due to the variable of years of experience. To test whether these differences are statistically significant, a One-Way ANOVA test was used, as shown in Table 6:

Table 6 Results of One-Way ANOVA analysis for the Blended learning implementation based on the variable of years of experience

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	Value (F)	Calculated Significance Level
Between Groups	1.446	2	0.72	1.95	0.15
Within Groups	34.44	93	0.37		
Group	34.88	95			

From Table 6, it is evident that the calculated significance level is (0.15), which is greater than the statistical significance level ($\alpha \leq 0.05$) Therefore, the null hypothesis is accepted, indicating no significant differences in the Blended learning outcomes due to the variable of years of experience.

3.2.4. Forth Null Hypothesis

There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of governorate.

To test this hypothesis, an Independent T-test was used for the samples, as illustrated in Table 7.

Table 7 Results of the Independent T-test for the Blended learning outcomes based on the variable of conservation.

Governorate	Number	Mean	Standard Deviation	Df	t-value	sig
Bethlehem	28	3.09	0.71	94	1.84	0.068
Hebron	68	3.34	0.55			

From Table 7, it is evident that the calculated significance level is (0.068), which is greater than the statistical significance level ($\alpha \leq 0.05$) Therefore, the null hypothesis is accepted, indicating no significant differences in the Blended learning outcomes due to the variable of governorate.

3.2.5. Fifth Null Hypothesis

There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of employing blended learning due to the variable of training courses.

To test this hypothesis, an Independent T-test was used for the samples, as illustrated in Table 8.

Table 8 Results of the Independent T-test for the Blended learning outcomes based on the variable of training courses.

training courses	Number	Mean	Standard Deviation	df	t-value	sig
Yes	63	3.38	0.63	94	2.62	0.01
No	33	3.04	0.52			

From Table 8 it is evident that the calculated significance level is (0.01), which is lower than the statistical significance level ($\alpha \leq 0.05$). Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating the presence of significant differences in the Blended learning outcomes due to the variable of training courses. The differences were in favor of those who received training courses, with an average of (3.38), while those who did not receive training courses had an average of (3.04).

4. Discussion

4.1. Discussion of the results of the First Question

The utilization of Blended learning among teachers in the primary stage in the governorates of Bethlehem and Hebron was found to be moderate, with an average of (3.27). This indicates the presence of Blended learning utilization among teachers in these governorates, but it requires further development and preparation of teachers to be prepared for this learning approach. Teachers also need intensive training on how to effectively employ Blended learning through Blended learning programs and techniques, as it is a relatively new program in our schools. These findings are consistent with the results of Al-Fuhaid's study (2015), which showed that the respondents' responses to the use of Blended learning were at a moderate level.

4.2. Discussion of the results of the Second Question

Do the mean values of the Blended learning utilization differ among teachers in the primary stage in the governorates of Bethlehem and Hebron based on different variables (gender, academic qualification, years of experience, governorate, training courses)?

4.2.1. Discussion of the First Null Hypothesis

The first null hypothesis states that there are no statistically significant differences at the statistical significance level ($\alpha \leq 0.05$) between the mean values of Blended learning utilization due to the variable of gender.

The results of the test showed the existence of differences in the actual implementation of Blended learning among teachers due to the variable of gender, in favor of males with an average of 3.55. This difference can be due to the fact that male teachers have a greater ability to use computer applications, devices, and technologies compared to female teachers. The reason for this may be that male teachers have more time available to use devices and receive training on using applications, due to the burden and responsibilities assigned to female teachers. Additionally, training courses have helped teachers increase their experience and skills in using Blended learning.

4.2.2. Discussion of the Second Null Hypothesis

There are no statistically significant differences at a significance level ($\alpha \leq 0.05$) between the means of the implementation of Blended learning due to the variable of educational qualification.

The results of the test showed no statistically significant differences in the actual implementation of Blended learning among teachers due to the variable of educational qualification. This may be due to the similarity of the educational and environmental conditions experienced by teachers regardless of their educational qualifications. The reason could also be the similarity of the training courses they received.

4.2.3. Discussion of the Third Null Hypothesis

There are no statistically significant differences at a significance level ($\alpha \leq 0.05$) between the means of the implementation of Blended learning due to the variable of years of experience.

The results of the test showed no statistically significant differences in the actual implementation of Blended learning among teachers due to the variable of years of experience. This result can be due to teachers' interest in keeping up with technological advancements regardless of their years of experience, in order to contribute to the improvement and development of the education system. The reason could also be that they use the same programs for implementing Blended learning.

4.2.4. Discussion of the Fourth Null Hypothesis

There are no statistically significant differences at a significance level of ($\alpha \leq 0.05$) between the means of the actual implementation of Blended learning due to the variable of the governorate.

The results of testing this hypothesis showed no differences in the actual implementation of Blended learning among teachers based on the variable of the governorate. This result can be due to the fact that the schools in Bethlehem and Hebron governorates are under one educational office/Hebron Educational District. Therefore, all schools and teachers are subject to the same educational environment and apply the same assigned procedures. They have received their training from supervisors and officials responsible for the implementation of Blended learning.

4.2.5. Discussion of the Fifth Null Hypothesis

There are no statistically significant differences at a significance level of ($\alpha \leq 0.05$) between the means of the actual implementation of Blended learning due to the variable of training courses.

The results of testing this hypothesis showed the presence of differences in the actual implementation of Blended learning among teachers due to the variable of training courses. Those who received training courses had an average of (3.38). Training courses are essential to help teachers effectively implement Blended learning. Such courses enable teachers to apply Blended learning through the necessary programs and techniques for its implementation. Therefore, it is necessary to focus on and prioritize training courses in the field of Blended learning due to the methods and skills they provide to enable teachers to implement Blended learning in the most effective way.

Study Recommendations

Encouraging and enhancing teachers' use of Blended learning, both materially and morally, to develop their professional abilities towards Blended learning. Conducting training courses and workshops for teachers to enhance their utilization and use of Blended learning. Adopting an organized plan by the ministry to develop mechanisms for the implementation of Blended learning and continuing to monitor technological advancements that serve the educational system. Ensuring that the curriculum includes the use of Blended learning throughout the academic semester, rather than during a specific period or when needed for implementation. Equipping schools with the necessary technological devices that suit the number of students.

5. Conclusion

Our study showed that the reality of Blended learning implementation among upper elementary school teachers in Bethlehem and Hebron governorates was moderate with a mean score of 3.27. The results also revealed differences in the mean scores of Blended learning implementation between Bethlehem and Hebron governorates, due to the gender variable in favor of males. Furthermore, differences were due to the training courses variable in favor of teachers who received training courses. The results indicated no differences in the mean scores of Blended learning implementation due to the variables of academic qualification, years of experience, and governorate. The results motivate the decision makers in Hebron Educational Directorate and Bethlehem Educational Directorate; the study plan should contain the use of blended learning during the semester, and conduct training courses for teachers in order to develop their employment and use of blended learning, and equip schools with the necessary technological techniques to employ blended learning, and conduct more studies and research on blended learning on other variables and other educational environments.

Compliance with ethical standards

Disclosure of conflict of interest

I declare that there is no conflict of interest.

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