# Attitudes Of Tenth Degree Students Towards The Blended Learning In The Directorate Of Education- Qabatia 

Dr. Hussam H. Al-Qassim ${ }^{1 *}$, Hiba O. Nazzal ${ }^{2}$<br>1*Faculty of Arts and Educational Sciences, Palestine Technical University Kadoori, Palestine, Email: dr.husamalqasm@gmail.com ${ }^{2}$ Palestine Technical University Khadouri<br>*Corresponding Author: Hussam H. Al-Qassim<br>*Email: dr.husamalqasm@gmail.com

Citation: Hussam H. Al-Qassim, Hiba O. Nazzal (2024) Attitudes Of Tenth Degree Students Towards The Blended Learning In The Directorate Of Education- Qabatia, Educational Administration: Theory and Practice, 30(4), 3201-3217 Doi: 10.53555/kuey.v30i4.828

| ARTICLE INFO | ABSTRACT |
| :--- | :--- |
|  | The study aimed to identify the attitudes of tenth degree students towards the |
| blended Learning in the Directorate of Education of Qabatia, and to identify the |  |
| effectiveness of the blended Learning system from the learner's point of view, as |  |
| well as the role of some variables (Gender, educational orientation, educational |  |
| achievement). In order to achieve the aim of this study, a questionnaire consisting |  |
| of (29) statements were prepared, divided into three areas (student-related, |  |
| teaching-related, teacher-related) and given to the study sample of (476), (212) |  |
| male students and (264) female students. 10 female students were interviewed. |  |
| The results of the study showed that the attitudes of tenth degree students towards |  |
| the blended Learning in the Directorate of Education of Qabatia were high. It was |  |
| found that the field related to the teacher was ranked first in terms of the attitudes |  |
| of tenth degree students towards the blended Learning in Qabatia Directorate of |  |
| Education, while the field related to teaching was ranked second, and the field |  |
| related to the student was ranked third. |  |
| The results also showed that there were statistically significant differences in the |  |
| attitudes of tenth degree students towards the blended Learning in the |  |
| Directorate of Education of Qabatia, due to the variables of (gender, educational |  |
| orientation, and academic achievement). The results of the interview questions |  |
| also showed that blended learning is appropriate for some of the subjects, and |  |
| that there are some difficulties facing the blended learning. Within the framework |  |
| of these difficulties, the students agreed on a set of suggestions to solve these |  |
| difficulties. The study also found through its results (questionnaire and interview) |  |
| the most important recommendations to promote the concepts of blended |  |

Keywords: Attitudes, Blended Learning.

## Introduction:

In the 21st century, the world has moved to the age of transformation and change, and witnessed a scientific and technological revolution affecting all aspects of life in general and education in particular. The technological revolution contributed to the providing modern means and instruments that led to new attitudes in education and learning which encouraged the use of new strategies that provide an effective educational setting that helps to stimulate students' interest and motivate them to learn and address the individual differences between them.
Until our current age, education is still a process of "lower technology" based on speaking by the teacher, as the traditional technologies of the educational process are no longer the only ones available to teaching and learning. As for other technologies, they did not succeed in changing the methods of teaching and learning, but were the reason for the emergence of different arrangements for distance learning. (Brunner, 2001).
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And we must not forget that education is the main pillar in the progress and development of nations, so nations seek to develop their education regularly in line with their capabilities by employing technological innovations that make the learner the core of the educational process. The best example of that is blended learning, as it is based on the combination between traditional education and e-learning in its various forms. (Asr, 2018).
The traditional education is one of the oldest and most common educational systems. The process takes place between the teacher and the learner and requires presence in the same place, where the content is presented in the form of a printed book, And the teacher relies on the method of recitation, and the role of the learner is limited to memorizing information, with the aim of developing the cognitive side of the learner without any effort for research and survey. (Al-Turki, 2019).
As for e-learning, it is one of the most important applications used in the field of education, and education techniques represented in all multimedia are used to transcend the boundaries of the traditional classroom, and facilitate the student's understanding of the school subject according to his abilities and at any time he wants, as the educational process is transferred from the teacher to the learner to become the core of the educational process. The learner learns by the computer, which develops the skills of research, survey and selflearning, and enables him to obtain feedback. So, this helps educational departments to overcome the shortage of teachers and overcome the problem of private lessons in addition to reducing overcrowding inside the classroom. (Attar, 2005).
By combining the two methods of learning - the traditional and the electronic - that provide direct communicative meetings between both the teacher and the learner within the inside the classroom that preserve the learner's connection with his school and teacher, we can avoid many of the disadvantages of relying on the traditional education alone or e-learning away from the boundaries of the classroom. This is what is known as blended learning. (Naklawy, 2021).

## Study Problem

As a result of the scientific progress and rapid technological development that occur in the third millennium, and the current conditions imposed by the pandemic of Corona, which affected various areas of life, including education, the Ministry of Education decided to transfer the educational process initially to e-learning. But as a result of the health matters that were followed such as vaccination, sterilization, and following Safety rules, and in order to ensure the continuity of the educational process in all schools, And the urgent need to diversify the teaching methods used with students, the education has been transformed into blended learning that combines e-learning and traditional education. So that students attend schools and have classes with the addition of materials from assignments and explanations on the special electronic platform in the school. As a result, the teacher must balance between traditional education and e-learning.
Studies and research conducted on the students' attitudes towards the blended learning as a study (Al-Ajami, 2021) indicated that there is a dilemma in adopting this approach for several reasons, including: the lack of providing schools with technologies that help achieve the blended learning, and the lack - or scarcity - of the training courses for teachers to teach them how to use the blended learning in the educational situation, in a way that enriches the educational process, helps to develop the academic achievement, and the lack of finding an appropriate learning environment for applying of blended learning. Hence, the problem of the study appears in determining the knowledge of the tenth-degree students' attitudes towards the blended learning in Qabatia Directorate of Education.
The tenth degree students were chosen for several reasons, the most important of which is that the tenth degree is a transitional stage from the primary stage to the secondary stage, in which the appropriate educational branch is chosen for each student. Therefore, this study aimed to answer the following questions:

1. What are the attitudes of tenth degree students towards blended learning in Qabatia Education Directorate? 2. How effective is the blended learning system from the learner's point of view?
2. Are there statistically significant differences in the tenth degree students' attitudes towards the blended learning in Qabatiya Education Directorate related to the variables (gender, educational orientation, academic achievement )?

## Study Objectives:

1.Identifying the attitudes of tenth degree students towards the blended learning in Qabatia Directorate of Education.
2. Identifying the effectiveness of the blended learning system from the learner's point of view.
3. Identifying the significance of statistical differences between the tenth-degree students' attitudes towards the blended learning in the demographic variables (gender, educational orientation, academic achievement).

## Study hypotheses:

1.There are no statistically significant differences in the attitudes of tenth degree students towards the blended learning in Qabatiya Directorate of Education, related to gender.
2. There are no statistically significant differences in the attitudes of the tenth-degree students towards the blended learning in Qabatia Directorate of Education, related to the educational orientation.
3. There are no statistically significant differences in the attitudes of the tenth-degree students towards the blended learning in Qabatiya Directorate of Education, related to the level of the academic achievement.
Study Significance:
: The significance of the theoretical study is due to the following
1.Determining the attitudes of tenth degree students towards blended learning in Qabatia Educational Directorate.
2. It responds to research recommendations that call for the use of blended learning strategy.
3. Provides a study of the current situation and an outlook for the future.

## The importance of the applied study is due to the following:

1.The results of the research encourage the education administration in Qabatia district to hold training courses for male and female teachers in order to apply the blended learning.
2. The results of the research encourage to provide the necessary techniques to adopt the blended learning system.
3. Provide recommendations that can help in the use of the blended learning in other educational stages and subjects.

## Study Limitations:

-Objective limit: identifying the attitudes of the tenth degree students in Qabatia Directorate of Education.
-Time limit: the first semester of the academic year 2021_2022.
-Spatial limit: the schools of the Directorate of Education, Qabatia.

- The human limit: a sample of the tenth-degree students in Qabatia Directorate of Education.


## Research Terminology:

- Attitude: "a state of transitional mental readiness for positive or negative behavior regarding a specific topic" (Khulaifi, 2019, 323).
The two researchers define it procedurally as: adopting an idea that expresses the extent of the individual's willingness to generalize or spread the ideas that he believes in, and then the ability to reject what contradicts the ideas that he believes in, as it becomes part of the behavior and the personality of the individual, whether these ideas were satisfactory or unsatisfactory.
- Blended learning: "one of the learning models in which e-learning combined with traditional classroom learning in one framework, where e-learning instruments are employed, and the learner meets the teacher face to face most of the time" (Asr, 2018, 16)
The two researchers defined it as: one of the modern teaching methods based on the combination of face-toface traditional education, which requires the presence of the teacher and the learner within the classroom, and e-learning, in which all technical instruments are used.


## Theoretical framework:

## Attitude's definition:

The psychologist (Allport) describes the attitude as "one of the states of preparation and mental adaptation that is regulated by experience helps to influence and direct the individual's responses to various things and situations, as it is thus a general dynamic." Bojards defined it as, " A tendency to act positively or negatively toward a situation in the environment that assigns positive or negative values to that behavior." (Siddiq, 2012).

## How the attitude is formed?

During the process of socialization, the individual passes through situations and experiences known as personal experiences, and as a result of the interaction that occurs between the individual and the elements of his environment, it makes him acquire and form his attitudes. To free the individual's attitudes, cultural and civilizational factors and influences play this role. are at the beginning, attitudes are related to physical matters such as the love of family members, and then they expand to include moral matters. (Youssef, 2019).

## Characteristics of the attitude:

Attitudes direct the behavior of the individual and the group, ranging from extreme positivity to extreme negativity, and are linked to the society's culture and values, and differ from one social environment to another. They are acquired, subject to modification, development and correction, and they are firm and have relative stability. Sometimes, attitudes may have a contrast between a person's attitudes acquired from his own experiences and those he represents according to the culture, values and customs of his society. Attitudes have three main components: behavioral, cognitive and emotional. (Kenza, 2014).

## Importance of attitude:

Attitudes are an important part of our lives; Because attitude has a major role in directing social behavior in social life situations, as it gives us true predictions about the behavior of the individual in those situations, in addition to being one of the important outcomes of the socialization process. Attitudes are the responses of acceptance or rejection towards a specific situation or topic either in the psychological or educational field. Students' interest in learning is influenced by their attitudes towards the subject and other activities, and the relationship between them. (Louiza and Haimouda, 2011).

## What is Blended Learning?

During the recent years, modern technology has provided many instruments and means, and perhaps the most important instrument for this scientific development in information technology is the World Wide Web (the Internet), which has contributed to the development of teaching and learning methods, including the emergence of e-learning, which harnessed the latest technology in hardware and software in the educational processes. Despite the many advantages of e-learning, there are shortcomings in some aspects that it could not overcome, and in order to avoid these shortcomings and defects, the so-called blended learning appeared. (Kazem, 2019).

## The strategies of Blended Learning:

It is often understood from the initial use of blended learning the link between education in the traditional classroom and e-learning activities, but the term has developed to include a group of learning strategies as discussed by (Al-Mukhaini, 2017):

1. Combining direct online learning with indirect classroom learning: It is the simplest blended learning strategy in which direct learning and indirect learning in the classroom are combined through Internet and Internet technologies,
2. Combining self-learning with immediate cooperative learning: self-learning or self-paced learning includes individual learning and on-demand learning processes, happens based on the learner's need and at the pace that suits him. As for cooperative learning, it includes more lively communication between learners that leads to the sharing of knowledge and experience.
3. Combining the special content modified according to the need and the ready-made content: in which the special content that is self-contained according to the need and requirements is merged, and the ready-made content is comprehensive and general and ignores the environment and unique requirements and can be adapted by merging a number of classroom and network experiences.
4. Combining the formal and non-formal learning: formal learning that takes place in training sessions is combined with informal learning that takes place in workplaces through internet chats.

## Benefits of Blended learning:

Blended learning combines the advantages of both traditional and e-learning, and its benefits as discussed by (Asim and Masry, 2018) as follows:

1. Increasing the effectiveness of education: Blended Learning improves educational outcomes by providing a link between the learner's needs and the education program, increasing the possibilities of accessing information and achieving the best results in the field of work.
2. Diversity of means of knowledge: The Blended learner can employ more than one means of knowledge, so he chooses the means (electronic and traditional) based on his abilities and skills, thus helping students to acquire more knowledge.
3. Achieving active learning for learners: Blended learning focuses on the learner's role and interaction in obtaining information, through the combination of individual and collaborative activities and projects.
4. Achieving interaction during education: Blended education enables learners to have the pleasure of interacting with their teachers and colleagues, which helps to consolidate human and social relations.
5. Educational flexibility: Blended learning achieves sufficient flexibility to meet the individual needs and learning styles of learners of different levels, ages, and times.

## Previous studies:

The two researchers reviewed many Arab and foreign research and studies related to the attitudes and motives of blended learning, and its role in the educational process, which are closely related to the subject of the study. The studies were presented from the most recent to the oldest:
-The study of (Abdullah, 2021) aimed at revealing the attitudes of general diploma students in Diploma educational centers in Al-Azhar Al-Sharif towards blended learning during the Corona pandemic, and to find out if these attitudes are affected by the variables. The study used the descriptive approach, using a questionnaire that was applied electronically to a sample of (1337) male and female diploma students. The study found out several results, the most important of which is that the students' attitudes were positive, and that there were statistically significant differences in the responses of the sample members. It recommended training students on digital skills for downloading programs as prior requirements for applying e-learning programs or blended learning, and training them on electronic communication skills.
-The study of (Al-Badry et al., 2021) aimed at identifying the attitudes of twelfth degree students towards blended learning, and the obstacles in the light of Covid 19 pandemic. In his study, he adopted the electronic questionnaire, and the study sample was (813) male and female students from the twelfth degree, where the results showed that the levels of students' attitudes towards blended learning in the light of Covid 19 pandemic are significant, and the obstacles to its use were moderate, and there are no statistically significant differences about students' attitudes towards blended learning and its obstacles in the light of Covid (19) according to the gender variable, while there were differences about students' attitudes according to the variable of mathematics subjects in favor of the applied.

- The study of (Al-Ajami, 2021) aimed at knowing students' attitudes towards blended learning, and the difficulties facing its application at the Arab Open University in the Kingdom of Saudi Arabia. The questionnaire was applied to a sample of (1197) male and female university students, and the results showed that students' attitudes towards blended learning were significant. and there were no statistically significant differences in students' attitudes towards blended learning due to the variables of gender, academic year, and age, while it was found that there was a difference according to the city variable. Officials in the branches of Al-Quds Open University recommended providing material and moral motivations to distinguished faculty members in blended learning, benefiting from the expertise and experiences of leading universities in elearning and blended learning, and working to provide all the requirements of blended learning.
-- The study of (Hawash, 2020) aimed to find out the attitudes of students of the Faculty of Medicine at the University of Jordan towards employing the blended learning in teaching university courses. The researcher used the descriptive survey approach, and used the questionnaire as an instrument for her study. The results showed that the attitudes are positive towards employing the blended learning strategy in teaching university courses, and there are no statistically significant differences due to the variable of the source of the secondary certificate or the type of university admission. The study recommended emphasizing the importance of blended learning, and its applicability in the educational process, as it combines more than one method of teaching.
-- The study of (Salim, 2018) aimed to identify the attitudes of Al-Balqa Applied University students towards the blended learning in Al-Balqa Applied Academy from the students' point of view. The study sample consisted of (500) male and female students to whom the questionnaire was applied, and the results showed that there are statistically significant differences between the arithmetic means in favor of male students and students who studied computer subject, while no statistical differences appeared due to the interaction between the variables of gender and subject matter. The study recommended emphasizing the importance of blended learning and its capacity in the educational process, as it combines more than one educational method. - The study of (Akbarov and others, 2018) aimed at investigating students' attitudes towards blended learning and related concepts (traditional and paperless classrooms). The questionnaire was used as an instrument, and the sample was (162) male and female students, and the results showed that students prefer blended learning over traditional school classes in the context of English as a foreign language. However, they liked to conduct English language tests in paper and pencil format rather than in digital format. students had a somewhat positive attitude toward graphs and paperless classrooms within an EFL setting, and their English proficiency levels were in a positive relationship with their preferences toward blended learning for EFL purposes. The research recommended examining gender and age differences in the preferences and attitudes toward blended, traditional, and digital learning.
-The study of (Jia, 2018) aimed to identify the learners' attitudes and perceived success in blended learning, and the main factors that contribute to individual differences. A survey was conducted on 149 LBS students participating in three Ontario community colleges, along with holding interviews with 37 students. The results of the correlation and analysis showed that there were differences in their attitudes between face-to-face learning environments and online learning environments, (90\%) versus (40\%) positive, respectively. Individual differences were found in their perceptions related to their age, time of interruption from formal education, education levels, and computer skills.
--The study of (Dweikat, Amer, 2017) aimed to investigate the impact of using the blended learning strategy on students' attitudes towards blended learning at Al-Quds Open University. In his study, he adopted a questionnaire instrument to collect information about students' attitudes towards the blended learning, and the results showed that the total number of students' answers related to the blended learning were positive and got a high percentage of acceptance, and there were no statistically significant differences due to age, place of residence, and interaction between them. The study recommended that teachers do their best to create a more flexible environment that uses a range of resources and includes providing additional materials and guidance to enable learners to improve their learning.
-The study of (Mohammed, Ja'ashan, 2015) aimed to study students' perceptions and attitudes towards the Blending learning course in the English language at the University of Bisha, and to clarify the problem that disturbs the university students about the Blending learning in the English language course. The researcher conducted a survey through a questionnaire distributed to (130) students, and one of its findings was that students' perceptions and attitudes towards blended learning were generally positive and that blended education is as effective as face-to-face learning in developing and improving knowledge and skills. The study recommended encouraging students to take responsibility for their own learning process.


## Comments on the previous studies:

After reviewing the previous Arab and foreign studies related to the variables of the study, the two researchers noticed several aspects of those studies, the topics they dealt with, the instruments and samples they used, and the results they found, which can be summarized as follows:
The objectives dealt with by previous studies varied. Some studies targeted blended learning in terms of attitudes, such as the study of (Al-Badri et al., 2021), which dealt with the attitudes of twelfth degree students, and impact investigation as the study of (Dweikat, Amer, 2017), and perception as the study of (Mohammed, Ja'ashan, 2015).
As for the approach used, this study agrees with most previous studies in using the descriptive approach, as in the study of (Al-Ajami, 2021) and (Akbarov and others, 2018).
The current study also agrees with some previous studies in using the questionnaire as a study instrument with a difference in the axes and fields as the study of (Salim, 2018), and (Mohammed, Ja'ashan, 2015), and conducting an interview as a second instrument for the study as the study of (Jia, 2018) in which survey and interview were used.
The researchers also noted that the gender variable towards the blended learning is consistent with some studies, such as the study of (Abdullah, 2021), and differs with the study of (Mohammed, Ja'ashan, 2015).
Thus, the researchers benefited from previous studies in enriching and strengthening the theoretical framework, in addition to the absence of studies within the limits of the researchers' knowledge that dealt with the tenth-degree students' attitudes towards the blended learning in the place of study in Qabatia Educational Directorate. This gives more importance to the current study. In addition to identifying the appropriate statistical methods for processing data and using them in building the items of the study instruments (questionnaire, interview) in the light of the questions answered by the current study.

## Method and procedures:

The study aimed to identify the tenth degree students' attitudes towards the blended learning in Qabatia Directorate of Education where this part dealt with the approach used in this study, and included a detailed description of the procedures that the researchers carried out in the implementation of this study in terms of describing the population and the sample, and the method in which they were chosen, the study instruments and how they were prepared, validity and reliability procedures, application steps, study design, procedures and statistical processing used to analyze data and find the results.

## Methodology of the study:

Based on the study problem, and after reviewing the previous studies and the research methods, the researchers determined the appropriate approach for the current study, which is the descriptive analytical approach due to its suitability for the objectives of the study. It is the most common used method for human studies so far, as a result of the difficulty of using the experimental method in humanitarian fields. The importance of the descriptive method is also highlighted because it is the only possible method for studying some human subjects, as the descriptive method relies on studying the phenomenon as it exists in reality, and is concerned with describing it accurately, and expresses it qualitatively or quantitatively.

## Study population:

The study population consisted of all tenth-degree students of both sexes in the schools of the Directorate of Education of Qabatia, in the first semester of the academic year (2021_2022). The number of them is (2468), (1117) males, (1351) females distributed to (45) schools, where there were (1117) males in (22) schools, and (1351) females in (23) schools, based on the records of the Directorate of Education.

## Study sample:

The study sample size was (10) schools, with (5) males' schools and (5) females' schools, where this sample was selected randomly and simple by lot. The number of males was (212) and the number of females was (264), according to the records of Qabatia Directorate. Table (1) describes the study sample based on its independent variables. This is what is related to the measurement instrument (questionnaire). As for the interview, a school was chosen from (10) schools that were chosen randomly, and the school was for girls, and (10) students were chosen randomly.

Table (1) Distribution of the study sample based on its main variables

| Variable | Fategory | Percentage |  |
| :--- | :--- | :--- | :--- |
|  |  |  | 44.4 |
|  | Female | 227 | 55.6 |
|  | Total | 408 | 100.0 |
| Educational Orientation | Scientific | 130 | 31.9 |
|  | Literary | 145 | 35.5 |
|  | Industrial | 72 | 17.6 |
|  | Other | 61 | 15 |
|  | Total | 408 | 100.0 |


| Achievement level | Excellent | 203 | 49.8 |
| :--- | :--- | :--- | :--- |
|  | Good | 176 | 43.1 |
|  | Acceptable | 29 | 7.1 |
|  | Total | 408 | 100.0 |

Study instrument: To find out the attitudes of tenth degree students towards Blended learning in Qabatia Directorate, the following were used:
1- The questionnaire: It consisted of two parts, the first part was basic data, and the other part was (29) statements distributed over three areas (related to the student, related to teaching, and related to the teacher); to find out the attitudes of tenth degree students towards Blended learning in Qabatia Directorate of Education. 2- Interview: The interview consisted of seven questions to measure the effectiveness of the Blended learning system from the learner's point of view.

Measuring the variables: In this study, the attitudes of tenth degree students towards Blended learning were identified in the Directorate of Education in Qabatiya, where these data and information were obtained by analyzing the questionnaire that was specially prepared for this study according to the statistical method through the SPSS program, which works by collecting information through a questionnaire, the method of statistical analysis of data, and statistical analysis instruments by means of arithmetic means, relative weights, analysis of variance, and correlational relationships and their statistical significance.
The questionnaire was designed according to the five-point Likert scale and weights were given as follows: strongly agree: 5 degrees, agree: 4 degrees, neutral: 3 degrees, disagree: 2 degrees, strongly disagree: 1 point.

## Data collection sources:

1. Primary sources: the main data obtained from the respondents through the questionnaire that was designed to meet the purposes of the study, and the interview that was conducted.
2. Secondary sources: the theoretical studies related to the subject of the study from available books and through previous studies.

Validity of the instrument: The validity of the two instruments was verified by presenting it to a group of arbitrators who are specialized and experienced in the field, where they were asked to express their opinion on the statements of the questionnaire and the interview by deleting, amending and adding new statements that are appropriate to the subject of the study. Based on the arbitrators' feedbacks, the questionnaire instrument was modified so that it became in its final form consisting of three main areas distributed over 29 statements, and the interview, which consisted of seven questions.

Reliability of the instrument: (Al-Qasim, 2021) defined Reliability as the accuracy in estimating the real degree of the individual on the characteristic measured by the test. The reliability of the study instrument used by the researchers is according to the reliability coefficient using Cronbach's alpha equation (0.957) on all statements. This indicates that there are no problems in the formulation of the statements, as he indicates that the instrument is characterized by a high degree of stability, and the strength of interconnection between its statements.

The validity of the internal consistency: the internal consistency means that the questions of the questionnaire measure what has been set to actually measure it, the clarity of the questionnaire, its vocabulary, its statements, and its concept for the sample members included in the questionnaire, as well as the extent to which each statement of the questionnaire is consistent with the field to which it belongs, and the extent to which each of the fields is consistent with the total degree of the questionnaire. The internal consistency was calculated by calculating the correlation coefficients for each field with the total degree. Table (2) illustrates this.

Table (2): Correlation matrix between each field of the study and the total degree

| The first field <br> related to the <br> student |  | The second field <br> related to teaching | The third field <br> related to teacher | Total |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| The first field <br> related to the <br> student | Pearson Correlation | 1 | $.819^{* *}$ | $.761^{* *}$ | $.929^{* *}$ |
| The second field <br> related <br> teaching | Sig. | Pearson Correlation | $819^{* *}$ | .000 | .000 |
| The third field <br> related to teacher | Sig. | Pearson Correlation | .000 | 1 | $.774^{* *}$ |
| Total | Sig. | $.761^{* *}$ | $.774^{* *}$ | .000 |  |

Table (2) shows the correlation matrix between each field of study and the total degree, which indicates that the correlation coefficients are statistically significant at the level ( $\alpha=0.05$ ), where we find that the level of significance calculated in all fields is ( 0.000 ) and this value is less than ( $\alpha=0.05$ ). Thus, the fields are considered valid to what they were set for, and that is between each of the fields and the total domain.

Statistical methods: After collecting the questionnaires from the study sample, the number of questionnaires valid for statistical analysis was (408). SPSS program was employed to perform statistical processing in the data in order to answer the study questions through the following methods:

1. Cronbach's alpha coefficient to extract the stability of the instrument.
2. Pearson correlation coefficient to find the validity of the internal consistency of the questionnaire.
3. The frequencies and percentages of the sample description according to its variables (gender, educational orientation, achievement level).
4. Arithmetic means and $t$-tests for independent samples, and Analysis of variance (ANOVA).
5. In the interpretation of the results of the study, the two researchers relied on the limits of numbers, where the five-point Likert scale was used in answering the statements of the questionnaire, as shown in Table (3).

Table (3): Interpretation of the results of the study on the limits of numbers

| Arithmetical mean | Percentage | Degree |
| :--- | :--- | :--- |
| $1-1.80$ | $36 \%$ Less than | Very low |
| $1.81-2.60$ | $36.1-\% 52 \%$ | Low |
| $2.61-3.40$ | $52.1-\% 68 \%$ | Medium |
| $3.41-4.20$ | $68.1-\% 84 \%$ | High |
| $4.21-5$ | $84 \% M o r e$ than | Very high |

## First, the results of the study related to the first question:

This part deals with answering the hypotheses of the study and examining them statistically on the Statistical Packages for Social Sciences (SPSS) program. The following are the findings of the study.
Before we begin the analysis, we would like to answer the main question: What are the tenth-degree students' attitudes towards the Blended learning in Qabatia Directorate of Education?
To answer the question, the arithmetic means and percentages were calculated. Tables (4-7) show that:
Table (4) shows the results of the study for the first field related to the student

| serial <br> number | Number in the <br> questionnaire | The first field is related to the student | arithmetic <br> mean | Percentage | Degree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 10 | Having a personal computer makes it easier for me <br> to get involved in the Blended learning | 3.66 | 73.2 |  |
| 2 | Blended learning increases my self-confidence | 3.57 | High |  |  |
| 3 | 4 | Blended learning enhances my self-learning | 3.52 | 71.4 |  |
| 4 | Blended learning increases my involvement in <br> classroom discussions | 3.51 | 70.4 | High |  |
| 5 | Blended learning raises the level of my academic <br> achievement | 3.46 | 70.2 | High |  |
| 5 duplicates | 9 | The Internet facilitates my involvement in <br> Blended learning | 3.46 | 69.2 | High |
| 7 | 8 | Blended learning helps with my timekeeping | 3.43 | 69.2 | High |
| 8 | Blended learning helps reduce learning anxiety | 3.40 | 68.6 | High |  |
| 8 <br> duplicates | 1 | Blended learning improves my concentration level <br> 3.40 <br> Medium <br> 10 | 2 | Blended learning encourages me to remember my <br> course. | 3.39 |
| The total degree for the first field related to the student | 3.47 | 68 | 69.8 | Medium |  |

The results of Table (4) indicate that the arithmetic mean for the highest statement was (3.66), with a percentage of ( $73.2 \%$ ) with a high number of students believe that having a personal computer facilitates the process of engaging in blended education, which is considered the most student-related attitude towards blended education. The results also indicated that the arithmetic mean for the lowest statement was (3.39), with a percentage of ( $67.8 \%$ ) with a medium number of students believing that blended learning encourages students to remember the subject from the attitudes related to the student, and the total degree in the field related to the student shows that the arithmetic mean was (3.47), and a percentage ( $69.6 \%$ ) with a high number of students believe that there are student-related attitudes facing blended learning in the schools of Qabatia Education Directorate from the point of view of tenth degree students.

Table (5) shows the results of the study for the second field related to teaching

| Serial <br> number | Number in the <br> questionnaire | The second field related to teaching | arithmetic <br> mean | Percentage | Degree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 12 | 11 | Blended learning allows for a variety of teaching <br> methods | 3.69 | 73.8 |
| 2 | 16 | Blended learning helps me use more than one sense in <br> my learning process. | 3.67 | 73.4 |  |
| 3 | 18 | Blended learning improves discussion skills. | 3.65 | High |  |
| 4 | Blended learning enables me to gain knowledge in <br> multiple ways | 3.64 | 73 | High |  |
| 5 | The variety of teaching methods increases my <br> motivation to learn | 3.62 | 72.8 | High |  |
| 6 | 19 | Blended learning limits the effectiveness of some <br> teaching methods, such as: cooperative learning (work <br> groups)... | 3.59 | 71.8 | High |
| 7 | Blended learning makes it easy to choose the teaching <br> method appropriate for each objective | 3.55 | 71 | High |  |
| 7 duplicate | 17 | The diversity of blended learning instruments <br> contributes to the understanding of academic subjects | 3.55 | 71 | High |
| 9 | 15 | The classroom promotes the integration with the <br> blended learning | 3.53 | 70.6 | High |
| 10 | The multiplicity of teaching methods in blended <br> learning helps to gain educational experience | 3.49 | 69.8 | High |  |
| 11 | 14 | Teaching methods used in the blended learning <br> increase my follow-up to the subject | 3.44 | 68.8 | High |
| Total degree for the second field: related to teaching (methods and instruments) | 3.58 | 71.68 | High |  |  |

The results of Table (5) indicate that the arithmetic mean for the highest statement was (3.69), with a percentage of ( $73.8 \%$ ). To a high degree, students believe that blended learning allows for a variety of teaching methods, which are considered the most attitudes related to teaching compared to blended learning. The results also indicated that the arithmetic mean for the lowest statement was (3.44), with a percentage of (68.8\%). To a high degree, students believe that teaching methods in blended education increase students' follow-up to the subject in terms of the attitudes related to teaching. The total degree in the field related to teaching shows that the arithmetic mean is (3.58) with a percentage. ( $71.7 \%$ ), with a high degree of students believe that there are some attitudes related to teaching that face blended learning in Qabatia Directorate of Education schools from the point of view of tenth degree students.

Table (6) shows the results of the study for the third field related to the teacher

| Serial <br> number | Number in the <br> questionnaire | The third field related to the teacher | arithmetic <br> mean | Percentage | Degree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 25 | 28 | Blended learning helps the teacher to use different links <br> to knowledge resources | 3.76 | 75.2 |
| 2 | 26 | Blended learning increases the teacher's ability to <br> provide knowledge <br> Blended learning provides an environment of <br> communication between the teacher and the learner | 3.75 | High |  |
| 3 | 24 | Blended learning helps the teacher to use a variety of <br> methods | 3.67 | High |  |
| 4 | 23 | Blended learning helps the teacher manage roles and <br> responsibilities | 3.59 | 74.2 | 71.8 |
| 5 | Blended learning encourages the teacher to consider <br> individual differences | 3.57 | High |  |  |
| 6 | 27 | Blended learning enables the teacher to complete tasks <br> more quickly | 3.55 | 71.4 | High |
| 7 | Blended learning facilitates the use of simulation by the <br> teacher in the classroom | 3.48 | 71 | High |  |
| 8 | The total degree for the third field: related to the teacher | 3.63 | 72.70 | High |  |

The results of Table (6) indicate that the arithmetic mean for the highest statement was (3.76), with a percentage of ( $75.2 \%$ ), with a high degree of students who believe that blended learning helps the teacher in using different links to sources of knowledge that are considered the most teacher-related attitudes to blended learning, as well. The results showed that the arithmetic mean for the lowest statement was (3.48), with a percentage of (69.6\%) with a high degree of students believe that blended learning facilitates the process of using simulation by the teacher in the classroom from the attitudes related to the teacher. The total degree in the field related to the teacher shows that the arithmetic mean is (3.63), with a percentage of (72.8\%), With a high degree of students believe that there are teacher-related attitudes facing blended learning in Qabatia Directorate of Education schools from the point of view of tenth degree students.

Table (7) shows the results of the study related to the fields of study and the total degree

| Serial number | Field's number | Students' attitudes towards blended learning | arithmetic mean | percentage | Degree |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Third | related to the teacher | 3.6354 | 72.708 | High |  |  |  |  |
| 2 | Second | related to the teaching | 3.5844 | 71.688 | High |  |  |  |  |
| 3 | First | related to the student | 3.4799 | 69.598 | High |  |  |  |  |
| The total degree of students' attitudes towards blended learning |  |  |  |  |  |  | 3.5661 | 71.322 | High |

The results in Table (7) show that most of the tenth-degree students' attitudes towards blended learning in Qabatia Directorate of Education are related to the teacher, with an arithmetic mean of (3.63) and a percentage of (72.7), with a high degree, followed by those related to teaching, with an arithmetic mean of (3.58) and a percentage of (71.68) with a high degree, followed by the student- related with an arithmetic mean of (3.47) and a percentage of (69.59), with a high degree. As for the attitudes of all fields, they came with an arithmetic mean of (3.5661) and a percentage of (71.32), with a high degree. this result agrees with the result of the study of (Al-Badri et al., 2021), and (Al-Ajmi, 2021), which indicated that the attitudes were at a high degree.

Second, the results of the study related to the second question, which states:
How effective is the blended learning system from the learner's point of view?
The sample of this question consisted of 10 females who were selected randomly after choosing females teacher from the targeted schools in the first instrument. The study instrument (interview) related to seven questions was analyzed:

## The first question: What are the most suitable subjects for blended learning?

The two researchers discuss the subjects that are suitable for blended education (from the point of view of the sample included in the study). Through the results, it was found that there is an agreement about (social studies, Islamic studies, technology, and English) that they are suitable for blended learning, and this is due to the fact that these subjects are simple, uncomplicated, and understandable through reading and simple clarification. It is possible to use technological innovations to convey information.

The second question: What subjects are not suitable for blended learning, and why?
Through the results, the sample answers indicate that (mathematics, physics, chemistry) are not $100 \%$ suitable for blended learning, because understanding can only be done through face-to-face education, and patience is needed to deliver the information correctly, and the steps in the operations must be sequenced.

The third question: What is the extent of applying blended learning in your school?
Through the students' responses, it was found that there is an application of blended learning in some subjects and others are not applied, and this is up to the teacher.

The fourth question: What is the extent of your interaction with the blended education system? Through the students' responses, it was found that there is a range between partial commitment at a rate of $40 \%$ and non-compliance at a rate of $60 \%$, due to the lack of time among some students, and the lack of seriousness in following the e-learning sessions by others.

The fifth question: In your opinion, does the approved educational platform meet your needs as a student?
The answers indicate that the approved education platform (Teams) does not meet their needs as students by 90\%.

The sixth question: What are the difficulties you face in blended learning?
The results of analyzing the sample's answers about the difficulties they face in blended learning indicated the following:

- The lack of electricity in agreement with the size of the educational platforms, and its continuity at all times, and it was $100 \%$.
- The lack of a personal computer for each student in his family, which was $80 \%$.
- The economic level, which does not allow the acquisition of a computer for each student in the family, which hinders commitment to blended learning, and it was 8o\%.
- The internet available to students is not compatible with the requirements of blended learning, which was 70\%.
- The lack of seriousness of the students in the regular follow-up of e-learning, which forces the teacher to repeat the subject in the class, which was at a rate of $60 \%$.
- The difficulty of some subjects that require deep thinking, viewing, and experimentation made students leave the virtual classrooms, as the percentage of $40 \%$, and this is consistent with phrase (27) of the questionnaire instrument, which states (blended education facilitates the process of using simulation by the teacher inside the classroom) It was at (69.6\%), and this is the lowest percentage in the field related to the teacher.

The seventh question: What are your suggestions for activating blended learning?
The results of analyzing the sample's responses to suggestions for activating blended learning indicated the following:

- Providing a personal computer for each student
- Providing free internet for students
- Consider dividing students' attendance time into two periods, morning and evening, so that roles are exchanged between face-to-face and electronic ones.
The researchers believe that there are some difficulties that may be the cause of tenth degree students' attitudes towards blended learning in Qabatia directorate, including: lack of experience and sufficient training for teachers to deal with the blended learning system, and at times the teacher needs to get acquainted with the instruments of the educational platform and apply them during the class, which leads to a waste of time. So, these difficulties must be considered and solved, and laws must be put in place to adhere to attending elearning sessions, in addition to the students' suggestions to activate the blended learning.


## Third, the results of the third question related to the hypotheses, which states:

Are there differences in the attitudes of tenth degree students towards blended education in the Directorate of Education of Qabatia related to the following demographic variables: (gender, educational orientation, academic achievement)?

The results of the first hypothesis: There are no statistically significant differences at the level of significance ( $\alpha=0.05$ ) between the sample members' estimates of the tenth-degree students' attitudes towards integrated education in the Directorate of Education of Qabatia due to the gender variable. To test the hypothesis, the arithmetic means and standard deviations were found, and -t- was calculated. For the independent samples of the respondents' responses to the degree of attitudes of the tenth degree students towards blended education in the Directorate of Education, Qabatia, due to the gender variable, as shown in Table (8):

Table (8): Arithmetic means of students' responses according to the gender variable

| Field Student's gender |  | Number | Arithmetic mean | standard deviation | $\begin{aligned} & \mathrm{T} \\ & 3.885 \end{aligned}$ | Sig.O* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The first field is related to the student | Male | 181 | 3.6525 | 0.87054 |  |  |
|  | Female | 226 | 3.3416 | 0.74323 |  |  |
| The second field related to teaching | Male | 181 | 3.6916 | 0.86337 | 2.415 | 0.01* |
|  | Female | 227 | 3.4990 | 0.74635 |  |  |
| The third field related to the teacher | Male | 181 | 3.7873 | 0.85584 | 3.406 | 0.001* |
|  | Female | 227 | 3.5143 | 0.76076 |  |  |
| The total degree of students' attitudes towards blended learning | Male | 181 | 3.7105 | 0.79666 | 3.514 | 0* |
|  | Female | 226 | 3.4505 | 0.69461 |  |  |

*Statistically significant at the significance level $\alpha=0.05$
The results of Table (8) shows that there are differences in the arithmetic means between males and females in the attitudes of tenth degree students towards blended learning in the Directorate of Education of Qabatia, according to the gender variable, where the (T) test was used for the independent samples to clarify these differences. The results of T-test showed that these differences are statistically significant in the three fields and the total degree, as the level of significance calculated on the three fields and the total degree was less than the level of significance determined by the null hypothesis ( $\alpha=0.05$ ), which indicates finding differences in the attitudes of tenth degree students towards the blended learning in Qabatia Directorate of Education, the differences were in favor of males, meaning that their attitudes were more positive than of females. This is due to the fact that the Palestinian society is a a male- oriented Arab society, which gives males greater opportunities than females, and here, males want to imitate their colleagues who have advanced mobile devices. This result is consistent with the study of (Saleem, 2018), which indicated that there are differences in favor of males, and differs from results of the study of (Abu Akl and Sabah, 2013), and the study of (Al-Badri et al., 2021), which indicated that there are no differences between males and females.

The results of the second hypothesis: There are no statistically significant differences at the level of significance ( $\alpha=0.05$ ) in the attitudes of the tenth-degree students in the Directorate of Education of Qabatia, according to the educational orientation variable. To test the hypothesis, the arithmetic means and standard deviations were found for the responses of the study sample to the degree of attitudes of tenth degree students towards the blended learning in the Directorate of Education of Qabatia, according to the educational orientation variable, as shown in Table (9).

Table (9): Arithmetic means of the students' responses according to the educational orientation variable

|  | N |  | Mean |
| :---: | :---: | :---: | :---: |
| The first field is related to the student | Scientific |  | 3.3646 |
|  | Literary | 145 | 3.5269 |
|  | Industrial | 71 | 3.6873 |
|  | Other | 61 | 3.3721 |
|  | Total | 407 | 3.4799 |
| The second field: related to teaching | Scientific |  | 3.4727 |
|  | Literary | 145 | 3.6890 |
|  | Industrial | 72 | 3.7702 |
|  | Other | 61 | 3.3547 |
|  | Total | 408 | 3.5844 |
| The third field: related to the teacher | Scientific | 130 | 3.5606 |
|  | Literary | 145 | 3.6983 |
|  | Industrial | 72 | 3.8125 |
|  | Other | 61 | 3.4365 |
|  | Total | 408 | 3.6354 |
| The total degree of the students' attitudes towards blended learning | Scientific | 130 | 3.4660 |
|  | Literary | 145 | 3.6381 |
|  | Industrial | 71 | 3.7557 |
|  | Other | 61 | 3.3878 |
|  | Total | 407 | 3.5661 |

The results of the study indicated that there are differences in the arithmetic means of the attitudes of tenth degree students towards blended learning in the Directorate of Education Qabatia, according to the educational orientation variable. To test whether these differences were statistically significant, the one-way analysis of variance (ANOVA) test was used. The results of Table (10) show that:

Table (10) Results of one-way analysis of variance to indicate differences between the arithmetic means according to the educational orientation variable

*Statistically significant at the significance level $\alpha=0.05$
Table (10) shows that there are statistically significant differences at the level ( $\alpha=0.05$ ) in the tenth-degree students' attitudes towards blended learning in the Directorate of Education of Qabatia, according to the educational orientation variable in all the fields and the total degree as ordered, where the calculated level of significance reached ( $0.033,0.033,0.029,0.009$ ) as this value is less than ( $\alpha=0.05$ ). This means that there are statistically significant differences in the attitudes of tenth degree students towards the Blended learning in the Directorate of Education of Qabatia, with the different educational orientations. To examine in favor of who these differences were, the LSD test for post-comparisons was used to examine these differences. Table (11) shows the results of the LSD test for post-comparisons to examine the differences.

Table (11): The results of the LSD test for post-comparisons to examine differences according to the educational orientation

|  |  | Branch |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Field | Branch | Scientific | Literature | Industrial | Other |
| The first field: related to the student | Scientific |  |  |  |  |
|  | Literary |  |  |  | * |
|  | Industrial |  |  |  | * |
|  | Scientific |  | * | * |  |
| The second field: related to teaching | Literary |  |  |  | * |
|  | Industrial |  |  |  | * |
| The third field: related to the teacher | Scientific |  |  | * |  |
|  | Literary |  |  |  | * |
|  | Industrial |  |  |  | * |
|  | Scientific |  |  | * |  |
| The total degree of students' attitudes towards blended education | Literary |  |  |  | * |
|  | Industrial |  |  |  | * |

*Statistically significant at the significance level $\alpha=0.05$
Table (11) shows that there are statistically significant differences at the level of significance ( $\mu=0.05$ ) in the attitudes of the tenth degree students towards blended learning in the Directorate of Education of Qabatia, according to the educational orientation variable in the first field related to the student, between students with a scientific orientation and students with an industrial orientation In favor of students with an industrial orientation, and between students with a literary orientation and students with another orientation in favor of students with another orientation, and between students with an industrial orientation and students with another orientation in favor of students with another orientation.
As for the second field related to teaching between students with a scientific orientation and students with a literary orientation in favor of students with a literary orientation, and between students with a scientific orientation and students with an industrial orientation in favor of students with an industrial orientation, and between students with a literary orientation and students with another orientation in favor of students with another orientation. That, and between students with an industrial orientation and students with a different orientation in favor of students with another orientation.
In the field related to the teacher, between students with a scientific orientation and students with an industrial orientation in favor of students with an industrial orientation, and between students with a literary orientation and students with another orientation in favor of students with another orientation, and between students with an industrial orientation and students with another orientation in favor of students with another orientation. As for the total degree of students' attitudes towards the blended learning between students with a scientific orientation and students with an industrial orientation in favor of students with an industrial orientation. The researcher believes that the reason for this is due to the fact that the educational curricula of the industrial branch are more capable of blended learning than the educational curricula of the scientific branch, as many professions require high technology skills which are considered the characteristic of the eras, and that the industrial branch is characterized by the presence of technical skills that can be used from technological and electronic programs to identify and learn from, and between students with a literary orientation and students with another orientation in favor of students with another orientation, and between students with a industrial orientation and students with another orientation in favor of students with another orientation. Note that this variable has not been discussed in the previous studies until it is compared with similarities and differences.

The results of the third hypothesis: There are no statistically significant differences at the level of significance ( $\alpha=0.05$ ) in the attitudes of the tenth degree students in Qabatia Educational Directorate, according to the variable of the level of academic achievement. To test the hypothesis, the arithmetic means and standard deviations were found for the respondents' responses to the tenth-degree students' attitudes towards the blended learning in Qabatia Directorate of Education, according to the variable of the level of academic achievement, as shown in Table (12).

Table (12): Arithmetic means of students' responses according to the variable of the level of academic achievement

|  |  | N | Mean |
| :---: | :---: | :---: | :---: |
| The first field: related to the student | Excellent | 203 | 3.4094 |
|  | Good | 175 | 3.5817 |
|  | Acceptable | 29 | 3.3586 |
|  | Total | 407 | 3.4799 |
| The second field: related to teaching | Excellent | 203 | 3.5423 |
|  | Good | 176 | 3.6865 |
|  | Acceptable | 29 | 3.2602 |
|  | Total | 408 | 3.5844 |
| The third field: related to the teacher | Excellent | 203 | 3.5751 |


|  | Good | 176 | 3.7237 |
| :--- | :--- | :--- | :--- |
|  | Acceptable | 29 | 3.5216 |
|  | Total | 408 | 3.6354 |
|  | Excellent | 203 | 3.5089 |
|  | Good | 175 | 3.6633 |
|  | Acceptable | 29 | 3.3801 |
|  | Total | 407 | 3.5661 |

The results of the study indicated that there are differences in the arithmetic means of the attitudes of tenth degree students towards the blended learning in Qabatia Directorate of Education, according to the variable of the level of academic achievement. To test whether these differences were statistically significant, the one-way analysis of variance test was used, and the results of Table (13) show that:

Table (13) Results of one-way analysis of variance to indicate differences between the arithmetic means according to the variable of the level of academic achievement

|  |  | Sum <br> squares of | Degrees freedom | Mean squares | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The first field: related to the student | Between groups | 3.251 | 2 | 1.625 | 2.458 | 0.087 |
|  | Within groups | 267.164 | 404 | 0.661 |  |  |
|  | Total | 270.415 | 406 |  |  |  |
| The second field: related to teaching | Between groups | 5.241 | 2 | 2.621 | 4.105 | *0.017 |
|  | Within groups | 258.560 | 405 | 0.638 |  |  |
|  | Total | 263.801 | 407 |  |  |  |
| The third field: related to the teacher | Between groups | 2.486 | 2 | 1.243 | 1.881 | 0.154 |
|  | Within groups | 267.657 | 405 | 0.661 |  |  |
|  | Total | 270.143 | 407 |  |  |  |
| Total | Between groups | 3.318 | 2 | 1.659 | 2.962 | 0.053 |
|  | Within groups | 226.273 | 404 | 0.560 |  |  |
|  | Total | 229.591 | 406 |  |  |  |

*Statistically significant at the significance level $\alpha=0.05$
Table (13) shows that there are statistically significant differences at the level ( $\alpha=0.05$ ) in the tenth-degree students' attitudes towards the blended learning in the Directorate of Education of Qabatia, according to the variable of the level of academic achievement. And that is in one field, which is the second one, where the calculated level of significance was ( 0.017 ), and this value is less than ( $\alpha=0.05$ ). This means that there are statistically significant differences in the attitudes of the tenth-degree students towards the blended learning in the Directorate of Education of Qabatia, according to the level of academic achievement. To examine in favor of who these differences were, the LSD test for post-comparisons was used to examine these differences. Table (14) shows the results of the LSD test for post-comparisons to examine the differences.

Table (14) The results of the LSD test for the post comparisons to examine the differences
according to the variable of the level of academic achievement

|  |  | the level of academic achievement |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Field | Branch | Excellent | Good | Acceptable |  |
| The first field: related to the student | Excellent |  | $*$ |  |  |
|  | Good |  |  |  |  |
| The second field: related to teaching | Excellent |  |  |  |  |
|  | Good |  |  |  | $*$ |
| The third field: related to the teacher | Excellent |  |  |  |  |
|  | Good |  |  |  |  |
| The total degree of students' attitudes towards blended education | Excellent |  | $*$ |  |  |

*Statistically significant at the significance level $\alpha=0.05$
Table (14) shows that there are statistically significant differences at the level ( $\mu=0.05$ ) in the attitudes of the tenth degree students towards the blended learning in the Directorate of Education of Qabatia, according to the variable of the level of academic achievement in the first field related to the student, between students with an excellent level of academic achievement and students with a good level of academic achievement in favor of students with a good level of achievement, while in the second field related to teaching between students with a good level of academic achievement and students with an acceptable level of academic achievement in favor of students with an acceptable level of achievement. As for the total score between students with an excellent level of academic achievement and students with a good level of achievement in favor of students with a good level of achievement. This is due to the fact that the student with a good level of achievement prefers the learning process by simulation and experimentation, which leads to the use of more than one sense in the
learning process. This variable has not been discussed in previous studies until it is compared for similarities and differences.

## Findings, conclusions and recommendations:

## Study findings:

- The results of the study showed that the attitudes of tenth degree students towards the blended learning in the Directorate of Education of Qabatia were at an arithmetic average of (3.56), with a percentage of (71.32), with a high degree. This is due to the fact that blended learning made a change in the prevailing education pattern, which provides the opportunity for students to keep pace with the development of the technological era, as this result is consistent with the result of the study of (Al-Badri et al., 2021), and (Al-Ajami, 2021).
- The results showed that the first field related to the student had an arithmetic mean of (3.47) and its percentage was (69.6), and with a high degree "The third". This is due to the fact that some educational subjects are not suitable for the current blended learning system, and it is also due to the poverty of the capabilities and requirements of the blended learning, such as electric power, Internet, in addition to the lack of awareness of the importance of applying the blended learning, which helps in the progress of the country, since education is the main pillar in the advancement of any society.
- As for the second field related to teaching, its arithmetic mean is (3.58) and its percentage is (71.7), with a high degree "The second". This is due to the fact that some of the educational subjects are not suitable for the current blended learning system, which needs capabilities and requirements that help in making the blended learning system more successful.
- The third field related to the teacher, its arithmetic average is (3.63) and percentage is (72.8), with a high degree "The first". This indicates that there is a diversity in the educational methods, and education is no longer limited to the indoctrination routine inside the classroom, in addition to that the communication atmosphere between the teacher and the student in the blended learning system is not limited to the classroom alone, which helps to create an atmosphere of balanced social relations.
- The results of the gender variable showed that there are statistically significant differences in the attitudes of tenth degree students towards the blended learning in the Directorate of Education of Qabatia, in favor of males. They want to imitate their colleagues who have advanced mobile devices, as this result agrees with the study of (Saleem, 2018), which indicated that there are differences in favor of males, and this result differs with the result of the study of (Abu Akl and Sabah, 2013), and the study of (Al-Badri et al., 2021) that She indicated that there are no differences between males and females.
- The results of the educational orientation variable showed that there were statistically significant differences in the attitudes of the tenth-degree students towards the blended learning in Qabatia Directorate in favor of the industrial branch. This is due to the fact that the educational curricula of the industrial branch are more appropriate for the blended learning than the educational curricula of the scientific branch, as many careers require high skills of technology, which is a feature of this era. And that the industrial branch is characterized by the presence of technical skills that can be used to provide technological and electronic programs to identify and learn from them, keeping in mind that this variable has not been discussed in previous studies until it is compared with similarities and differences.
- The results of the variable of the level of academic achievement showed that there were statistically significant differences in the attitudes of tenth degree students towards blended learning of the Directorate of Education of Qabatia in favor of a good level. This is due to the fact that the student with a good level of academic achievement prefers the process of learning by simulation, observation and experimentation, which leads to using more than one sense in the learning process, keeping in mind that this variable has not been discussed in previous studies until it is compared with similarities and differences.
- The results of the study for the interview questions showed that the academic subjects such as (social studies, Islamic studies, technology, English) are suitable for applying the blended learning, while (mathematics, physics, chemistry) are not suitable for it, because understanding can only be achieved through face-to-face education, and the necessity of the the sequence of steps in mathematical questions. So, blended learning can be used with some subjects, and can't be used with others depending on the teacher. The answers ranged between partial compliance and non-compliance, due to the lack of time for some students, and the lack of seriousness in following the e-learning sessions by others. The educational platform (Teams) does not meet the students' needs, from their point of view. Also, there are some difficulties they face in the blended learning system, including (lack of electricity needed for the size of the educational platforms and their continuity all the time, the lack of a personal computer for each student within his family, the economic level of the family, which does not allow having a computer for each student within the family, which hinders the commitment to the blended learning). In addition to that, the shortage of the Internet available for students with the requirements of the blended learning, the lack of seriousness of students in regularly following the e-learning sessions, which forces the teacher to repeat the educational subject inside the classroom. Also, he difficulty of some subjects that require deep thinking, observation, and experimentation, which made students leave the virtual classes. In the context of these difficulties, proposals were put, including (providing a personal computer for each student, providing free internet for students, considering the issue of dividing students'
attendance hours into two periods, morning and evening. , so that the roles are exchanged between the face-to-face and the electronic learning according to the period).


## Study conclusions:

- The problems of electric power and Internet services controlled by the occupation are among the most important problems facing the blended learning system, which affect the tenth-degree students' attitudes towards the blended learning in Qabatia Directorate of Education.
- The occupation policy affects the comprehensiveness of the blended learning system in all regions of the Palestinian state with its geographical divisions (A, B, and C), which hinders the students' discipline and their involvement in the blended learning, so, this makes a difference in the overall educational process.
- The economic situation experienced by the Palestinian people affects the education system in general, and the attitudes of tenth degree students towards blended learning in Qabatia Directorate of Education in particular.
- A number of the Palestinian subjects and curricula approved by the Ministry of Education in schools had an impact on the tenth-degree students' attitudes towards the blended learning in Qabatia Directorate of Education.


## Study recommendations:

In light of the findings of the study, the two researchers recommend:

- Promoting the students' concepts of blended learning in the educational process because of its importance in dealing with the problems facing the current century.
- Studying students' attitudes for each stage separately towards blended learning and in all educational directorates.
- Studying the role and diversity of the teaching methods in the blended learning process.
- Studying the attitudes of teachers and educators towards blended education.
- Holding intensive training courses for blended learning instruments.
- Reconsidering the nature of the curricula, and molding them in a way that is compatible with e-learning. Acknowledgments:
It is my great pleasure to thank my university (Palestine Technical University-Kadoorie) for all the encouragement and support to achieve my research.


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