

# Children's Use of Moodle and the Obstacles faced while Distance Education: The Role of Parents' Perceptions of Primary School Students in Amman

Amani Muhammad Ahmed Amira<sup>1</sup>, Prof. Khaled Ibrahim Al-Ajlouni<sup>2</sup>

Arab Open University, Jordan  
Jordan university, Jordan

15/03/2024: قبول البحث	10/03/2024: مراجعة البحث	2024 /01/16: استلام البحث
------------------------	--------------------------	---------------------------

## Abstract:

This study is conducted to identify parents' perceptions of primary school students regarding their children's use of Moodle as a learning management system, and then to determine the challenges they face while using it. The researchers used a descriptive survey approach to conduct this research. Researchers distributed 384 questionnaires among parents, in order to achieve the study's objectives. The findings of the study indicated that the level of satisfaction experienced by the parents of primary school students regarding the utilisation of Moodle in educational settings was of a moderate degree (3.19), and the level of difficulty experienced by primary school students in terms of the obstacles encountered by their parents while utilising Moodle in educational settings was of a mean value of (3.73). This study recommended that further research be conducted in this area, as well as policy-makers and school leaders have to pay attention to students' age, training, and educating them on the distance education importance, and enhancing e-learning management systems' uses with their multiple capabilities because of the many benefits that serve the educational process. Additionally, this study recommended that further research be conducted regarding this topic including experimental studies.

**Keywords:** Private Schools in Amman, Moodle, Primary Students' Parents.

## Introduction

Educational institutions have sought to change their educational policies around the world in search of alternatives to learning in accessible forms. This can provide educational opportunities for all on the one hand, and support various levels of learning by integrating information and communications technology into the learning process in order to achieve the goals of modern education on the other hand. New concepts and modern methods in presenting learning material through the application of modern technology in the learning process, for example; Computer-based learning, using the Internet in learning, programmed learning, open learning, distance learning, and e-learning have become common and widespread terms, especially as a result of the integration of information and communications technology into the learning process.

As digital technologies become more and more integrated into our daily lives, decision-makers in educational institutions and teachers are trying to include technology in classroom practice to enhance learning process. As usual teaching methods in which teachers perform in front of the blackboard giving long hours of lectures do not work with today's students, and will not work with tomorrow's students. Indeed, currently, the role of teachers is transformed from a traditional profession to a supporter and mediator towards facilitating students' learning to obtain knowledge through the use of information and communications technology. (Stasinakis & Kalogiannakis, 2015).

Accordingly, educational platforms appeared, as e-learning platforms and they are seen to be one of the second generation web applications (Oweb2.) used by many Internet users around the world. They have become famous in educational institutions through the use of learning management systems such as: Blackboard, WebCT, and Moodle, which have worked to increase e-learning materials in both quantitative and qualitative terms, and to develop tools designed to create and develop e-content.

Hence, it can be said that e-learning, in essence, seeks to transform the learning process in schools or universities into digital in line with information and communications technology, provide solutions to the problems that occur during learning, and complete the scientific journey instead of face-to-face learning. Hence, teaching and learning is a challenge including learning English language as it need interaction (Al-qadi, & Naser, 2022; Alzobidy & Naser, 2022; Naser & Hamzah, 2018; 2022). This can be a suitable solution during unexpected event as it was seen in the Corona pandemic (Al-Bataineh, et al., 2021).

As it is observed in education sectors in countries around the world, face-to-face learning has been transformed into distance learning in all of Jordan's schools, colleges and universities through the use of various platforms, applications and tools that rely on the Internet such as; Using Moodle as a learning management system (LMS), and various online tools such as; Applications (Zoom), (Microsoft Teams) and (Easy-class), and classrooms from (Google) for virtual classrooms, in addition to applications (Facebook) and (WhatsApp) to communicate with students and inform them of the latest developments related to the learning process (Al Bataineh, et al., 2019).

Despite the opportunities and advantages that distance learning provides in light of the pandemic, David, et al., (2021) confirm that the Corona crisis (COVID-19) as unexpected event has created multiple obstacles as a result of the widespread use of distance learning platforms during the pandemic. Perhaps the most prominent of them is: Weak management of the distance learning process due to the difficulty of measuring its results accurately, students sometimes falling behind in learning curricula, especially among primary school students and those with low achievement, weak or outage of the Internet in some remote areas, lack of objectivity in the examination system, and the discrepancy between students' parents in financial capabilities to provide Internet connectivity and laptop computers for each individual, especially among low-income families, in addition to the lack of technological expertise and competencies among some teachers, students, and parents who are trying to help their children continue distance learning, indicates that distance learning is surrounded by distraction. Also, some students who do not feel serious or some kind of responsibility in dealing with this type of learning, but rather view it as an official holiday, while others see distance learning as a new educational burden, as tasks and duties are imposed on them, however, this type of learning is not compatible with all educational curricula (Al-Anazi, 2020), and all of this is the result of the sudden and rapid shift to face-to-face education and its transfer to distance education.

This is what caused a tangible weakness in the academic level of the students, as the researchers believe that there is a tangible weakness in the academic achievement of some basic stage students, represented by the interaction between them and their teachers on the one hand, and between them and the learning content on the other hand. In return, their parents follow them in daily learning activities that emphasize the use of ICT at home and school. Through their work in educational institutions, the researchers noticed the weakness addressed in some studies, the most important of which are: Study (Al-Sarayra & Al-Ajlouni, 2018); Which acknowledged that there is a weakness in students' possession of the skills to use and deal with computerized educational programs and applications; Among them is the learning management system Moodle. In this context, both the study (El-Maghraby, 2021) and the study (Kapsargina, & Olentsova, 2020) indicated the importance of the topic and the importance of researching it.

The researchers tried to investigate the perceptions of the students' parents about the educational process, and to identify their opinions about their children's use of the Moodle learning management system and the obstacles they face while using it, with a desire to explore some appropriate methods for education, and to evaluate the systems used in the e-learning process for children in the basic educational stages, as well as parents' participation in the e-learning process has not received much attention from researchers at separate intervals, and this is what studies have indicated, including (Al-Bataineh, et al., 2021; Kong, 2017; Ihmeideh, & Shawareb, 2014).

## Research Questions

This study attempts to answer the following questions:

1. What are the perceptions of parents of primary stage students in Amman while using Moodle in learning?
2. What are the obstacles facing primary stage students in Amman while using Moodle in learning based on their parents' perceptions?

Accordingly, this study aimed to:

1. To identify the perceptions of parents of primary stage students in Amman while using Moodle in learning.
2. To determine the obstacles facing primary stage students in Amman while using Moodle in learning based on their parents' perceptions.

Based on these research questions and objective, it is essential to mention that this study sought to uncover the obstacles that, in one way or another, affect students' performance and their interaction with Moodle, including; Integrating various tools into one system as a stand-alone system to manage the learning process within the framework of an integrated system, to provide these services to the parties of the learning process and manage them by taking into account the perceptions of parents.

This study can be significant as it can develop an interactive national curriculum, by taking into account parents' perceptions about using the learning management system, and also mentioning the obstacles facing students. This study provides a good use of Moodle as a learning management system through the perceptions of parents in the primary stage in among Jordanian school. The results and recommendations also would enhance the Moodle use for students' learning activities and interaction in schools based on parents' perceptions. Additionally, it can provide promotional programmes, training workshops and courses by decision-makers and educational institutions in the optimal use of this system.

## Literature Review

Moodle is known as an e-learning management system that enhances learners' independence and self-reliance in pursuing their learning, as the learning and teaching process is implemented through the use of Internet applications, which helps learners learn at their own pace. Moodle aims to enhance students' learning experience. Perhaps one of the most important factors that plays a role in selecting Moodle as a learning method is that teachers can access the program on their own web page and design a page for their training courses for free. (Gundu & Ozcan, 2017)

It is a system built on educational principles to help teachers create an electronic learning environment. Thousands of educational institutions around the world use the Moodle platform to build and produce online

courses, as well as develop learning activities, and support traditional courses. It is also seen as one of the most important e-learning platforms, as it is approved by millions of participants, in addition to being one of the course management systems. It is used in learning, managing learning contents, and managing the learning process. There is no doubt that Moodle system has requirements in order to deal with it. It can be installed on most CPUs, whether old or new, making it very dynamic (Chourishi, et al., 2011) and on all platforms of devices, tablets, and mobile learning. The Moodle system is equipped with an application that allows users to benefit from the system via mobile phone and without the need to sit in front of the computer. This application is distinguished by its focus on tasks and touch-based screens and is divided into units that can be increased and decreased and can be used without the need to connect to the network. Most applications can be opened and used in Moodle, for example; (Microsoft Word), (Excel), and (PowerPoint). The Excel viewer and PowerPoint viewer work, in addition to a simple word processor, Open Office can be also used as an alternative.

It can be said that Moodle helps teachers integrate a number of methods used in regular teaching methods in classrooms with web-based technologies in one application. Al-Ajlouni (2015) states that the teacher can build the course agenda and follow up on students' activities by adding a new event. The faculty member can add new events to all of his courses, prepare the work agenda for the course, as well as reports, and follow up on the various activities that it is carried out by students within the curriculum, and the extent of their interaction is achieved by monitoring the time spent on each activity.

On the other hand, Moodle provides ways to communicate with students and build polls. In this context, Awad (2012) mentioned the existence of chat rooms and holding conferences, which are among the most important real-time communication tools that the teacher uses to communicate, including; questionnaire, which is presenting a topic through a question and having several answers to vote on this topic. It is useful in evaluating students' attitudes toward thinking and learning, and choosing is a means of voting or a quick referendum. It allows the teacher to ask a single question in the form of a multiple-choice question, where the students read the question. They choose the answer (i.e., they vote), and the teacher has the right to display the results of the poll whenever he/she wants. A study by Simanullang and Rajagukguk, (2020) mentions there is a possibility of using the forum, and benefiting from the Moodle program as an electronic forum for learning parties, and interacting with each other.

The Moodle system contains the feature of creating self-tests for trainees, either by specifying a time or without specifying it. The system automatically corrects and records grades according to the criteria specified by the trainer (teacher) for multiple-choice tests or true-false tests, and short-answer questions, while enabling the trainer to providing answers, explanations, and links related to the content, and providing the trainer with all the features related to the tests electronically. Despite the advantages offered by the Moodle system, there are some challenges that hinder its use in the learning process, including the large time required to monitor students' learning and prepare courses through it, weak skills in dealing with the system and its applications by students and faculty members, as it requires a structure and fully equipped internal-system, and a high level of self-discipline (Al-Omari, 2019).

## **Related Studies**

There are many studies that have dealt with the subject of Moodle as a learning management system in general, but there are few previous studies - according to the researchers' knowledge - that have dealt with Moodle to identify the perceptions about this system and its effectiveness. Below is a review of some previous studies related to the subject of this the study.

The study of El-Maghraby (2021) aimed to confirm the effectiveness of using Moodle to enhance students' learning skills. The study sample consisted of 61 first-year students at the Faculty of Foreign Languages and Translation at Misr University of Science and Technology, where members of the experimental group were taught writing skills using existing blended learning methods. on the Moodle system, while the control group used the normal method. Quantitative data were collected in order to evaluate the written achievement of the learners across the control and experimental groups at the beginning and at the end of the study. The quantitative method was also used to analyze the data to evaluate the data acquired before and after the experiment. SPSS was used to analyze the data, and tests were conducted. T test for independent and paired sample data analysis. The results showed that students' responses and attitudes toward activities using Moodle to enhance learning skills were positive.

Kapsargina and Olentsova (2020) conducted a study to investigate the Moodle use of students at the Far Eastern Federal University in Russia. It sought to identify students' perceptions about the effectiveness of using Moodle, and to present the obstacles that students face while using the system. The study adopted the descriptive analytical approach, using a questionnaire, and it was found that the system provides high effectiveness in learning, and the use of Moodle is one of the effective tools for organizing the independent work of students, and works to raise the efficiency of learning in a tangible form, in addition to that it allows for continuous qualitative control in mastering the subjects.

Al-Omari (2019) aimed to evaluate the experience of Mu'tah University in the use of faculty members of the Moodle, their attitudes towards it, and the obstacles that limit its use, relying on the descriptive analytical approach. The study sample consisted of (523) faculty members, and the study distributed a questionnaire to achieve the study goal. The results of the study concluded that the degree of the Moodle use and the obstacles were moderate, while the attitudes towards it were positive, in addition to that there were statistically significant differences in favor of females in using Moodle between the gender, and the results showed differences in use according to academic rank and type of college and experience.

As for the study by Al-Sarayrah and Al-Ajlouni (2018), it investigated the effect of teaching using Moodle and the interactive whiteboard on the achievement of female students in the computerized children's programs subject at Mu'tah University. The researchers intentionally selected the study members from two divisions teaching the computerized children's programs subject, and the number of female students enrolled in these groups are (44) female students, who were distributed into two groups: The first experimental group consisted of (22) female students using Moodle as a teaching process and the interactive whiteboard together. As for the control group, which consisted of (22) female students, they were taught using the conventional teaching method. The study tool consisted of an achievement test in the presentation program unit (Power Point), consisting of (28) multiple-choice items, and each item contained four alternatives. The results showed that there were statistically significant differences at the level of ( $\alpha = 0.05$ ) between the average scores of academic achievements due to the teaching method variable in favor of the experimental group. The study recommended urging university lectures to use a teaching method based on Moodle as a learning management system and interactive whiteboard together.

The study of Ozcan and Gunduz (2017) addressed students' perception of the Moodle system among secondary schools' EFL students in Turkey. A mixed method approach was used with qualitative and quantitative research models. The study group consisted of (333) students and (12) EFL language teachers. Quantitative data was collected through a questionnaire, and qualitative data was collected by answering five open-ended questions. The results showed that students get benefits from the use of Moodle system, and teachers believe that Moodle system is modern and in line with the transformation of the online learning system.

Pumjarean, et al. (2017) aimed to investigate the degree of students' and teachers' satisfaction with Moodle use and the effectiveness of learning to enhance the academic competence of students in Thailand. In this study, two tools were designed: Questionnaire and test. The results of the study found that the students' knowledge of English grammar increased significantly, as the average score on the post-test was much higher than the average score on the pre-test. The results also concluded that the degree of students' satisfaction with (Moodle's LMS) was neutral.

Bani Marai, et al., (2016) aimed to identify the attitudes of University of Jordan students towards using Moodle in their learning. The study tool was a questionnaire, which was designed to achieve its goal, was distributed to the study members, which numbered (131) male and female students. In the second semester of 2013, the study tool consisted of (35) items distributed into three areas: The first is to facilitate, organize and accelerate the teaching and learning process / academic year 2012. Second, developing teaching methods and changing the role of the faculty member. The third is to reduce obstacles to the learning process and provide an interactive learning environment that helps in human development. The results indicated that there are positive trends among the subjects towards using Moodle in their learning. The study members indicated that Moodle helped facilitate their learning process and increase their participation. Based on these results, the study recommended the necessity of activating the use of Moodle in all colleges of the University of Jordan, so that it may enrich the development of the learning process among its students, and provide distance learning for interested members of society.



Stasinakis and Kalogiannakis (2015) aimed to evaluate the use of the Moodle platform. It adopted in the first and second years of secondary school in Greece. As a distinct course in the 2012-2013 curriculum, students used the Moodle system, and the main use of Moodle included to submit written projects, receive relevant comments, plan collaboration among students, participate in open discussions for better implementation of the course, and record various data from the total student input to the group project through the use of quantitative and qualitative evaluation methods. Also, it was used to show that students are able to familiarize themselves with the platform, benefiting from its integration into the learning process. The platform is still in use with improvements from a learning and technological point of view. The results showed a high degree of students' use of learning management systems attributable to students' technological competence, the role of faculty members, and the learning system itself.

Through reviewing previous studies and extrapolating some of the methods used in these studies and some of their objectives and results, the researchers present the following:

Previous research focused on the importance of Moodle as a learning management system and its effectiveness in enhancing the learning system, such as the study El-Maghraby (2021) that aimed to verify the effectiveness of using Moodle in raising students' academic level, and the study of Kapsargina and Olentsova (2020) on students' use of Moodle at the Far Eastern Federal University in Russia and learning about students' perceptions about the effectiveness of using the Moodle system, and reaching the obstacles they face. Accordingly, it can be said that the current study is similar to previous studies in several matters, including:

- It was addressed to study Moodle evaluation as a learning management system, but on the other hand, it addressed other matters, including:

- Identifying the learning effects of students' use of Moodle, and working to conduct experimental studies. In addition, this study confirms the results reached by previous studies, and complements them in terms of rapid technological innovations, such as the study Al-Sarayrah and Al-Ajlouni, (2018), which recommended conducting more research and studies with different designs and measurement tools to address Moodle and its impact from various angles and different levels of study.

Therefore, it becomes clear to us that the role of the students' parents in evaluating this system (Moodle) in the primary school stages has not been addressed, despite their basic role in the learning system that cannot be ignored, especially in this most important stage for the student who will not be independent during learning process. Their interactions and learning; Hence, the presence of parents and their monitoring of the learning process is inevitable. Based on the above, this study seeks to shed light on the perceptions of parents of primary stage students in Amman about their children's use of Moodle and the obstacles they face while using it.

## Methods and Procedures

### Study personnel

The study used a descriptive survey research, where the study population consisted of all parents of primary stage students in Amman, Al-Qasba District, where the approximate number of parents was determined, as it reached approximately 100,000. A random sample of (384) respondents was selected. The researchers distributed (384) questionnaires electronically to parents of primary school students, and they were collected within three weeks, a rate of (100%). 17 questionnaires were excluded as they were not filled out correctly, and the effective response rate for the current study was (95.5%).

In this study, the researchers distributed a questionnaire. The questionnaire was used to collect data from the students' parents to help answer the study's questions and achieve its objectives using Google Form. Specifically, after the researchers finished building the questionnaire to measure the perceptions of parents of primary stage students about their children's use of Moodle and the obstacles they face while using it in its initial form, the questionnaire used was adapted from Bani Marai, et al., (2016), Al-Omari, (2019), and Amr, (2018). It was presented to a group of 12 experienced and specialized arbitrators, and their comments on the questionnaire's items and fields were taken into account. The questionnaire, in its initial form, consisted of (41) items, and the researchers modified some of the items agreed upon by the arbitrators were deleted, and the number of its items became (35) in its final form. The questionnaire in its final form included three main sections, which are: demographic information including (age, gender, qualifications) and the section related to

the items for parents' perceptions of primary school students. The basic principles of their children's use of Moodle are 20 items, and the third section represents the perceptions of parents of primary stage students about the obstacles they face during distance learning and is 15 items.

In order to examine the reliability of the study tool, the researchers extracted the internal consistency coefficient using the Cronbach-Alpha equation. The reliability coefficient for the first domain (the perceptions of parents of primary school students about their children's use of Moodle) was (0.905), while for the second domain (obstacles facing students) it was (0.887), and these values are considered acceptable for the purposes of this study.

A five-point Likert scale was adopted to correct the study scales, where each item is given one score out of five (strongly agree, agree, neutral, disagree, strongly disagree), which is represented numerically (5,4,3,2,1) Respectively, the following scale was adopted for the purposes of analyzing the results to clarify the degree of agreement of the respondents, as shown through the use of the following equation:

$$\frac{\text{The upper limit of alternative} - \text{the limit minimum for alternatives}}{\text{The number of levels}} = \frac{5 - 1}{3}$$

Figure 1 Questionnaire's measurement scale

- The values of the mean of the individuals' responses were calculated according to the following equation: The response range is  $5 - 1/3 = 4/3 = 1.33$ , so the values are as follows:
  - A. The mean value from (1 to less than 2.33), the response is of a low degree.
  - B. The mean value (2.34 to less than 3.67) is of moderate degree.
  - C. The mean value from (3.68 to less than 5) the response is high.

### Demographic Information

First: The frequencies and percentages were presented for the study individuals according to age groups, gender, and qualifications, and Table (1) shows these results:

Table (1) Frequencies and percentages for respondents' age, gender, and qualifications

		Frequency	Percent
<b>Age</b>	Less than 35 years	80	21.8
	from 35-45	222	60.5
	More than 45 years	65	17.7
<b>Gender</b>	Male	142	38.7
	Female	225	61.3
<b>Qualifications</b>	Secondary School /Tawjihi	107	29.2
	Diploma Degree	99	27.0
	Bachelor Degree	129	35.1
	Master Degree	20	5.4
	Ph.D.	12	3.3
	Total	367	100.0

It is clear to us as seen in Table (1) that 60.5% of the respondents were between the ages of 35 and 45 years, and their number was (222) respondents out of (367), which is the highest percentage among the respondents, and then those whose ages were less than (35) years, and their percentage was 21.8%, and their number was (80) respondents. As for the lowest percentage, it was for those aged (45) years and over, where their percentage was 17.7%, and their number was (65). Table (1) also shows the number of males and females, the number of males was 142, representing 38.7%, and the number of females was (225), representing 61.3%. Accordingly, females are the highest percentage than males.

In addition, Table (1) shows the academic qualifications of each of the respondents, as the percentage of those holding a bachelor's degree was 35.1% and their number was (129), which is the highest percentage, followed by the percentage of those who obtained secondary school /Tawjihi, their percentage was 29.2%, and their number was (107) respondents, and as for those who obtained diploma degree, their percentage was 27% and their number is (99) respondents, then those who hold a master's degree, their percentage is 5.4%, and the lowest percentage was for respondents who hold a doctorate, their percentage is 3.3% and their number is (12) respondents. It is clear from the table that the largest percentage of parents who hold a bachelor's degree, this is because the literacy rate in Jordan is one of the high rates for both males and females.

## Results and Discussion

### The First Research Question

To answer the study's first question, which states, "What are the perceptions of parents of primary stage students in Amman while using Moodle in learning?" The means, standard deviations, and score for each items of the study tool were extracted, and Table (2) shows these results sorted in descending order by arithmetic averages:

Table (2) means, standard deviations, and rank arranged in descending order according to the means

Parents' perceptions of primary stage students regarding their children's use of Moodle	Mean	Std. Deviation	Rank
Moodle contributes to the development of school education	3.58	1.071	Moderate
Moodle makes it easier for my son/daughter to submit assignments faster and easier	3.56	1.114	Moderate
I provide support and involvement when my child is doing e-learning at home	3.50	1.269	Moderate
I find that the activities sent to my son/daughter through Moodle are useful	3.49	1.091	Moderate
Moodle provides my son/daughter with the opportunity for continuous learning	3.36	1.183	Moderate
Moodle helps my son/daughter to learn independently	3.34	1.226	Moderate
Learning using Moodle saves effort, time, and curricula	3.26	1.160	Moderate
I see that the activities sent to my son/daughter via Moodle are clear	3.25	1.195	Moderate
Moodle organizes my son/daughter's subject matter well	3.23	1.234	Moderate
I find that using Moodle in studying increases my child's interaction with his classmates	3.19	1.319	Moderate
Moodle provides interactive activities that increase my son/daughter's role in learning	3.17	1.263	Moderate
Moodle provides fun learning for my child	3.16	1.231	Moderate
Using Moodle increases my son/daughter's academic achievement	3.16	1.213	Moderate
I believe it is safe for my child to e-learn at both home and school	3.15	1.263	Moderate
Moodle provides better academic achievement results for my son/daughter than traditional learning	3.12	1.265	Moderate
Through Moodle, my son/daughter obtains a greater amount of information than they obtain in the school classroom	3.05	1.240	Moderate
My son/daughter learns the new material through Moodle more than through class discussions	2.94	1.278	Moderate
Moodle helps my son/daughter prepare the educational material before explaining it	2.91	1.255	Moderate
Moodle provides my son/daughter with additional learning resources	2.74	1.325	Moderate
Moodle helps my son/daughter learn during distance learning	2.64	1.266	Moderate

The results in Table (2) indicate that the means and standard deviations for each item of the perceptions of parents regarding their children's use of Moodle were moderate, and the average scores for all items ranged between 2.64 - 3.58, the highest mean values are for the means of the first three items.

The following item (Moodle contributes to the development of school education) ranked the highest item with a mean of (3.58), and it is followed by this item (Moodle makes it easier for my son/daughter to submit assignments faster and easier) with a mean score of (3.56). This result is attributed to parents' views of the importance of Moodle and the prominent role it will play in the near future. The following item (Moodle helps my son/daughter learn during distance learning) ranked last among the items of the perceptions of parents with a mean of (2.64). In penultimate place, the following items (Moodle provides my son/daughter with additional learning resources) with a mean of (2.74). This indicates that the satisfaction of the parents of primary stage students in Amman regarding the use of Moodle in learning moderate, and this is what some studies agreed with, the most important of which are: (Al-Bataineh, et al., 2021; Amr, 2018; Al-Jadi, 2013; Mazrou, 2013), and the percentage of females was highest among the respondents, and this is due to the fact that mothers are the ones who follow their children the most, due to the father's work.



## The Second Research Question

To answer the second research question, which states: “What is the degree of obstacles facing basic stage students in the city of Amman while using the Moodle learning management system in learning from their parents’ perceptions?”

“The means, standard deviations, and score for each item of the obstacles facing primary school students in Amman were extracted according to what was stated in the study tool, and Table (3) shows these results arranged in descending order according to the arithmetic averages:

Table (3) means, standard deviations, and score for items on the perceptions of parents of primary school students, and the obstacles they face during distance learning, arranged in descending order according to the arithmetic means:

Perceptions of parents of primary school students and the obstacles they face during distance learning	Mean	Std. Deviation	Rank
My child needs training in using Moodle	4.07	.817	High
Using Moodle learning management system can cause health problems for my child, such as neck and back pain when using the computer	3.98	.998	High
Using Moodle causes my child distress	3.94	.980	High
Training courses to learn to use Moodle are limited	3.92	.881	High
I have difficulty following their children's lessons and homework	3.87	1.017	High
I feel that using Moodle increases the academic burden on my child	3.83	1.000	High
The economic situation of the family is the most important obstacle to the distance learning process	3.83	.954	High
I notice that Moodle is slow when my child uses it	3.76	1.131	High
The use of Moodle is considered ineffective in the educational process	3.74	.967	High
The cost of learning using Moodle is higher than traditional learning due to the use of the Internet	3.73	1.086	High
My child finds it difficult to obtain technical support for Moodle when needed	3.66	.992	Moderate
My child cannot use Moodle from home because there is no computer available	3.55	1.146	Moderate
Moral support from the school for my son/daughter to use Moodle is limited	3.55	1.057	Moderate
There is difficulty in receiving and sending assignments through Moodle	3.42	1.225	Moderate
My child is having difficulty accessing Moodle from home	3.12	1.827	Moderate

Table (3) shows the means and standard deviations for each item on the perceptions of parents regarding the obstacles they face during distance learning, where the scores for all items range between 3.12 - 4.07, and the first three items were the highest in terms of arithmetic average.

As it is shown that there are some obstacles facing students in using Moodle, and this result agreed with some studies, including (Amr, 2018; Bijeesh, 2017; Badawi, 2015). The following item (My child needs training in using Moodle) ranked the highest among all items with a mean of (4.07), such mean agree with the study of Mahmoud (2012) which pointed out some of the obstacles that students faced, the most important of which were the lack of effective training of students on using such systems, in addition, the study of Amr (2018), who indicated that the most significant obstacle facing students in using Moodle is training finding that students’ reluctance to use Moodle due to their need for training in using it, and this is due to the fact that the children are not trained in managing Moodle use, because the move to e-learning came suddenly due to the Corona pandemic, as the children were not trained to use or practice distance learning, so both schools and parents had to train the children to use distance learning management systems, including Moodle, and this in turn affects the learning process. It may not help the child in obtaining learning properly, as the nature of traditional learning is more common and widespread in Jordanian learning fields before the emergence of the Corona pandemic, as children are not trained to manage Moodle learning system.

In second place was this item (Using Moodle learning management system can cause health problems for my child, such as neck and back pain when using the computer) with a mean of (3.98), and this is consistent with the study of Al-Khatib (2012). On contrary, the following item (My child is having difficulty accessing Moodle from home) scored the lowest mean last being (3.12), and this result is consistent with (Al-Qudah & Magableh, 2013; Amr, 2018). In penultimate place, the following item (There is difficulty in receiving and sending assignments through Moodle) with a mean of (3.42). The weakness of the Internet plays a fundamental role in

the presence of obstacles, as parents confirmed that students face many challenges, the most important of which is; Weak internet, students' age, effective communication, and scarcity of devices. At this age, students see e-devices as a toy rather than a learning tool, while parents try to help them log into the system. These results are consistent with many studies, the most important of which are: (Al-Bataineh, et al 2021; Amr, 2018; Bijeesh, 2017). The current study confirms strengthening the effective role of the learning management system (Moodle), and this is what was proposed by the study of Al-Ajlouni (2015), which indicated that the Moodle as a learning system is an educational necessity to achieve the desired academic goals, solve many educational problems, improve learning outcomes, save time and effort, instil self-reliance, and self-confidence.

## Recommendations and Suggestions

In light of the study results, the researchers recommend the following:

- A. The school and parents of students must take into consideration the challenges and obstacles facing students regarding the use of the learning management system (e.g., Moodle) and work to solve them.
- B. Encouraging teachers and learners to use e-learning management systems (e.g., Moodle) with their multiple capabilities because of their many benefits that serve the learning process.
- C. Developing the capabilities of students and their parents, and training them to deal with learning management systems used in e-learning.
- D. Conducting experimental studies that show the effectiveness of employing e-learning management systems (e.g., Moodle) during learning process.

## References

1. Abdel Majeed, A (2008). *A proposed program in e-learning using free open source software and its impact on developing the skills of designing and producing e-mathematics lessons and the attitude towards e-learning among students. Faculty member, (Unpublished master's thesis), Sohag University, Egypt.*
2. Abdel-Wahab, M, & Ali, F (2012). Difficulties in using the electronic learning management system Moodle in some Egyptian universities from the perspective of faculty members and their students, "Evaluative Study," *Journal of the Faculty of Education, Mansoura University*, 78 (2) 115-145.
3. Abdula, I., Baluta, A., Kozachenko, P., & Kassim, A. (2020). Peculiarities of using of the Moodle test tools in philosophy teaching. *Creative Commons License Attribution 4.0 International (CC BY 4.0)* 306-320
4. Al Bataineh, K., Banikalef, A., & Albashtawi, A. (2019). The Effect of Blended Learning on EFL Students' Grammar Performance and Attitudes: An Investigation of Moodle. *Arab World English Journal*, 10(1), 324–334.
5. Al khalifa, H. (2008). From e-learning management systems to personal learning environments: presentation and analysis. *The First E-Learning Forum. 19-21/5/1429*. Riyadh, Kingdom of Saudi Arabia.
6. Al Mezher, S (2006). *E-learning management in public education in the Kingdom of Saudi Arabia, an applied model proposed for* (unpublished doctoral thesis). King Saud University, Riyadh, Kingdom of Saudi Arabia.
7. Al-Ajlouni, K (2015). The learning effects of Arab Open University students' uses of the learning management system Moodle, in Proceedings of the Interdisciplinary Academic Conference on Learning, Teaching and E-Learning (MAC-ETel), Prague, Czech Republic).
8. Al-Ajlouni, K. I. (2015). Learning Effects of Using Learning Management System Moodle by Students of Arab Open University. In *Proceedings of the Multidisciplinary Academic Conference on Education, Teaching and E-learning (MAC-ETel), Prague, Czech Republic (7-8/8/2015)* (1),1-28
9. Al-Anazi, M. (2020). Parents' attitudes towards the role of the distance learning system in teaching the Arabic language subject to students in foreign private education schools during the Corona crisis in the State of Kuwait. *Journal of the Faculty of Education - Mansoura University*. 110 (5). 1404-1433
10. Al-Bataineh, B., Atoum, M. S., Alsmadi, L. A., & Shikhali, M. (2021). *A Silver Lining of Coronavirus. International Journal of Information and Communication Technology Education*, 17(2), 1–11
11. Al-Hawamdeh, M (2011). Obstacles to using e-learning from the point of view of faculty members at Al-Balqa Applied University. *Damascus University Journal of Educational and Psychological Sciences*. 27, (1-2), 803-831
12. Al-Jadi, N. S (2013). *The degree of faculty members' use of the e-learning management system at the Hashemite University* (Unpublished master's thesis). The Hashemite University, Zarqa.
13. Aljaraideh, Y., & Al Bataineh, K. (2019). Jordanian Students' Barriers of Utilizing Online Learning: A Survey Study. *International Education Studies*, 12(5), 99–108. [HTTP://doi:10.5539/ies.v12n5p99](http://doi:10.5539/ies.v12n5p99)
14. Al-Jarayda Y, & Al-Batayneh, (2019). Obstacles facing Jordanian students to using online learning: a survey. *Journal of International Learning Studies*, 12(5). 99-108.

15. Al-Khatib, L (2012). Incentives and obstacles to using e-learning from the point of view of faculty members at the Arab Open University. *Mutah Research and Studies, Humanities and Social Sciences Series*, 27 (2), 349-378.
16. Al-Omari, O (2019). Evaluating Mu'tah University's experience in using the Moodle e-learning management system. *Jordanian Journal of Educational Sciences*, 16, (2). 141-129.
17. Al-qadi, M. J., & Naser, I. M. M. (2022). Lexical Relation Presentations In The Views Of Usage-Based Cognitive Semantics: The Case Of Antonymy, Synonymy, And Polysemy. *Journal of Positive School Psychology*, 2494-2499.
18. Al-Qudah, K, & Magableh, B (2013). E-learning challenges facing faculty members in private Jordanian universities. *Al-Manara*, 19(3). 1-42
19. Al-Ruwaili, A (2018). Obstacles to using the Blackboard e-learning management system among students of the College of Education at King Saud University. *Journal of the Faculty of Education: Assiut University - Faculty of Education*, 34, (1), 475-512.
20. Al-Sarayer, R; & Al-Ajlouni, K (2018). The effect of teaching using the learning management system Moodle and the interactive whiteboard on the achievement of female students in computerized children's programs, *Studies, Educational Sciences*, 45, (4), 164-178.
21. Al-Sawat, T (2019). *Factors facilitating and hindering the acceptance of the deployment of learning management systems in Saudi public schools*.
22. Al-Zaboun, M (2015). *The impact of teaching using the Moodle electronic course system on the achievement of University of Jordan students in computer skills and on developing their self-learning and social communication skills* (Unpublished doctoral dissertation), University of Jordan, Amman, Jordan.
23. Alzobidy, S., & Naser, I. M. M. (2022). The Presentations Of Van Dijk Model In The Speech Of Putin In The Independence Of The Donetsk People's Republic And The Lugansk People's Republic. *Journal of Positive School Psychology*, 6(8), 2416-2424.
24. Amr, M (2018). *The degree to which faculty members in private Jordanian universities use e-learning management systems (LMS) and the factors that limit that use from their point of view*, (Master's thesis), Middle East University, Amman, Jordan.
25. Anastasiades, P. S., Vitalaki, E., & Gertzakis, N. (2008). Collaborative learning activities at a distance via interactive videoconferencing in elementary schools: Parents' attitudes. *Computers & Education*, 50, 1527–1539.
26. Awad, H (2012). A proposed vision for developing the use of Al-Quds Open University for electronic training in developing human resources in Saudi society. *International Arab Journal of Information*. 1(1), 57-72.
27. Ayub, A., Tarmizi, R., Jaafar, W., Ali, W & Luan, W (2011). Factors influencing students use alarning Management System: Perspective from Higher Education Students. *International Journal of Education and Information Technology*. 2(4), 100-108.
28. Badawi, M, F., (2015). Obstacles to the use of e-learning management systems (LMS) by faculty members at Menoufia University from their point of view. *Journal of Educational and Psychological Research* 30(4), 69-146.
29. Bani Marhi, A, Al-Dhamidi, M, Al-Anzi, & Al-Jarrah, A. (2016). Attitudes of University of Jordan students towards using Moodle software in their learning. *Journal of Studies for the Human Sciences*, 43(2). 415-426
30. Bijeesh, N. A. (2017). Advantages and disadvantages of distance learning. Retrieved from: <http://www.indiaeducation.net/online-education/articles/advantages-and-disadvantages-of-distancelearning.html>
31. Bounab, S (2019), *The role of e-learning in the academic achievement of Mohamed Boudiaf University students via the Moodle platform (field study)* (Master Thesis). Mohamed Boudiaf University. Algeria.
32. Campo, M., Amandi, A., & Biset, J. C. (2021). A software architecture perspective about Moodle flexibility for supporting empirical research of teaching theories. *Education and Information Technologies*, 26(1), 817-842.
33. Chen, W. (2010). Brief introduction of new instruction – network learning. *Living Technology Education Journal*, 34(4), 10–16.
34. Chourishi, D., Buttan, C. K., Chaurasia, A., & Soni, A. (2011). Effective e-learning through moodle. *International Journal of Advance Technology & Engineering Research (IJATER)*, 1(1), 34-38.
35. Cohen, L., Manion, L., & Morrison, K. (2013). *Research methods in education*. Routledge. USA
36. Creswell, J. W. (2014). *Research design qualitative, quantitative, and mixed methods approaches* (4<sup>th</sup> ed.). New Jersey: Upper Saddle River.
37. David, R., Jordan, K., Phillips, T., & Pellini, A. (2021). Education during the COVID-19 crisis Opportunities and constraints of using EdTech in low-income countries. *Revista de Educación a Distancia (RED)*, 21(65). 1-15
38. Davies, C. (2011). Digitally strategic: How young people respond to parental views about the use of technology for learning in the home. *Journal of Computer Assisted Learning*, 27, 324–335.
39. El-Maghraby, A. L. (2021). Investigating The Effectiveness of Moodle Based Blended Learning in Developing

- Writing Skills for University Students. *Journal of Research in Curriculum Instruction and Educational Technology*, 7(1), 115-140.
40. Goyal, E., & Tambe, S. (2015). Effectiveness of Moodle-enabled blended learning in private Indian Business School teaching NICHE programs. *The Online Journal of New Horizons in Education*, 5(2), 14-22.
  41. Gundu, N., & Ozcan, D. (2017). Implementation of the Moodle system into EFL classes. *Profile Issues in Teachers Professional Development*, 19, 51-64.
  42. Hamouda, A, and Hadi, E (2019). The impact of using the Moodle e-learning platform on the level of students in the Information and Libraries Department: An experimental study. *Al-Mustansiriya Journal of Etiquette*, 43 (87), 73-98.
  43. Hwang, W. Y., Liu, Y. F., Chen, H. R., Huang, J. W., & Li, J. Y. (2015). Role of parents and annotation sharing in children's learning behavior and achievement using e-readers. *Journal of Educational Technology & Society*, 18, 292-307.
  44. Ihmeideh, M., & Shawareb, A. (2014). The association between Internet parenting styles and children's use of the Internet at home. *Journal of Research in Childhood Education*, 28, 411-425.
  45. Kapsargina, S., & Olentsova, J. (2020). Experience of using LMS MOODLE in the organization of independent work of bachelors in teaching a foreign language. In *International Scientific Conference "Far East Con"(ISCFEC 2020)* (pp. 537-544). Atlantis Press.
  46. Kishan, M. (2020). Upgradation of tems academy digital learning platform to enhance advanced education during COVID 19. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 6015-6026.
  47. Kong, S.-C. (2017). *Parents' perceptions of e-learning in school education: implications for the partnership between schools and parents*. *Technology, Pedagogy and Education*, 27(1), 15-31.
  48. Krejcie, V., & Morgan, D. W. (1970). *Determining sample size for research activities*. Educ psychol meas.
  49. Mahmoud, M (2012). Difficulties in using the Moodle e-learning management system in some Egyptian universities from the point of view of faculty members and their request for an evaluation study. *Mansoura College of Education Journal*, 2(78) 115-154.
  50. Mazrou, Y (2013). Attitudes of faculty members at King Khalid University towards using the Blackboard e-learning management system. *Journal of the Educational Association for Social Studies* (52) 84-114
  51. Munezero, M., Irura, M., Kirongo, B., Etiegni, L., & Suhonen, J. (2016). Challenges and solutions to providing online courses in Kenya: a lecturer's perspective at a Kenyan university. *The Online Journal of Distance Education and e-Learning*, 4(1), 1.
  52. Naser, I. M. M., & Hamzah, M. H. B. (2018). Pronunciation and conversation challenges among Saudi EFL students. *JEES (Journal of English Educators Society)*, 3(1), 85-104.
  53. Naser, I. M., & Hamzah, M. H. (2022). Pronunciation difficulties and challenges in the field of research in Jordan. *Journal of Humanities and Social Sciences*, 6(14), 140-157.
  54. Pumjarean, W. et al. (2017). The Development of blended e-learning using Moodle's LMS for EFL Grammatical and writing instruction for first-year students in the English major. *Journal of Education and Social Sciences*, 7 (1), 81-89.
  55. Rogers, P. L., Berg, G. A., Boettcher, J. V., Howard, C., Justice, L., & Schenk, K. D. (Eds.). (2009). *Encyclopedia of distance learning*. IGI Global.
  56. Simanullang, S., & Rajagukguk, J. (2020, February). Learning Management System (LMS) Based On Moodle To Improve Students Learning Activity. In *Journal of Physics: Conference Series 1462*, (1). 012067). IOP Publishing.
  57. Singh, J (2021) *Moodle Administration*: retrieved from:
  58. Stasinakis, P., & Kalogiannakis, M. (2015). Using Moodle in secondary education: A case study of the course "Research Project" in Greece. *International Journal of Education and Development using ICT*, 11(3).50-64
  59. Traxler, J. (2018). Distance learning: Predictions and possibilities. *Education in Science*, 8(1), 35 1-13.
  60. Valcke, M., Bonte, S., De Wever, B., & Rots, I. (2010). Internet parenting styles and the impact on Internet use of primary school children. *Computers & Education*, 55, 454-464.
  61. Wu, V., Yen, L., & Marek, M. (2011). Using online EFL interaction to increase confidence, motivation, and ability. *Journal of Educational Technology & Society*, 14(3), 118-129.