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# **Challenges to the Operationalisation of the Distance Learning Platforms (Zoom, Darsak, Microsoft Teams, Skype) Used in the Period of COVID 19**

Dr. Hammam Samir Hmadneh

Ministry of Education

Jordan

Email: [dr.hammam1986@gmail.com](mailto:dr.hammam1986@gmail.com)

ORCID ID: <https://orcid.org/0000-0001-5155-4589>



## Abstract:

The Coronavirus pandemic made all schools in the world use virtual education and its various tools. Jordan was one of the countries that responded rapidly to implement this type of education as an alternative and complementary at the same time to traditional education. This study seeks to reveal the perceptions of teachers in Bani Kenana District schools regarding the challenges they face when using the electronic platforms (Zoom, Darsak, Microsoft Teams, Skype). The data was collected by distributing an electronic questionnaire to (922) teachers. The findings of the study indicated that there are considerable problems that prevent teachers from employing virtual platforms in Jordanian schools.

**Keywords** – Challenges, Learning Platforms, Distance Learning, Coronavirus Pandemic.

## Introduction:

Over the ages, the world has witnessed the spread of many dangerous diseases that killed so many millions of people, including plague, cancer, malaria, tuberculosis, acquired immunodeficiency virus (AIDS), (SARS), (H5N1) and (H1N1) (Qriz, 2021). Some of these epidemics were confined to a specific country or spatial area (Salem, 2020). At the present, however, the countries of the world have woken up to a new virus that people have not been familiar with before, which is characterized by rapid transmission and infection (El-Dahshan, 2020). China was the first to announce the outbreak of this virus on (11/31/2019) when the residents of Wuhan were infected with a strange and unknown disease, which went viral. Given the gravity of this disease, the Chinese Ministry of Health called it the Corona pandemic (Mahalakshmi, & Radha, 2020).

Three months after China was infected with the Coronavirus, this disease swept all regions of the world, and it claimed many human lives, as well as led to the occurrence of many crises in various fields and levels. In addition to the drop-out of more than (1.6)



billion students in (161) countries, i.e. nearly (80%) of the students enrolled in educational institutions worldwide (Raheef, 2021).

Many countries in the world have taken a set of preventive measures to limit the spread of the Coronavirus, as they have implemented the health protocol and physical distancing, closing schools, and switched to distance learning instead of face-to-face learning (Nadire, & Daniel, 2021).

Jordan was among the first countries to quickly close schools as a precautionary measure to reduce the severity of the spread of the viral disease on 3/15/2020 (ALjawawdeh, 2021). As well as resorting to virtual education via the Internet and modern electronic applications such as Skype, Zoom, and Microsoft Teams (El-Dahshan, 2020). Despite the efforts made to implement distance education in Jordanian educational institutions, they face a set of challenges and dilemmas that prevent them from operationalizing distance education and achieving its goals to the fullest, which necessitated this study.

## Research Questions

The primary goal of this study is to discover answers to the following two questions:

RQ1: What are the perceptions of the teachers of Bani Kenana District schools about the Challenges to the operationalization of the Online educational platforms used in the period of the Coronavirus pandemic?

RQ2: Is there a statistical difference in significance ( $\alpha = 0.05$ ) between the responses of teachers to the challenges of the operationalization of the online learning platforms used in light of the spread of the Coronavirus due to the gender variable?

## Literature Review

### \* Distance Learning Platforms Used in Times of Coronavirus Pandemic.

The great spread of the Coronavirus pandemic in the world has brought great changes to all fields, especially educational ones. Like other countries, Jordan was keen to confront this pandemic, especially concerning education by maintaining the continuity of education, as the Ministry of Education worked to provide logical, scientific, and technical solutions



by adopting a set of educational platforms and software that guarantees students to continue their learning without exposing them to the risks of the Coronavirus epidemic, in line with health requirements and defense laws (Alsmairat, 2021). The following are the distance learning platforms currently used in Jordan:

**1- (ZOOM):** A free website, that provides video communication and chat services directly through the Internet, and provides the ability for students to share the content presented through this site, as well as attend conferences and meetings, anytime or anywhere they are (Guzacheva, 2020). The number of callers reaches during the one meeting to (200) people and (3000) viewers, and the duration of the meeting or communication does not exceed (40) minutes (Alfadda, & Mahdi, 2021). Zoom offers options for group messaging and commenting, whiteboard use, and emojis (Berges, et al, 2021). The Zoom application can be used through computers, laptops, or smartphones (Laili, & Nashir, 2020). It contributes to developing the skills and knowledge of students and teachers alike, in addition to promoting teamwork among students, by assigning them educational works and tasks that require collaboration and teamwork (Erna, et al, 2022).

**2- (Darsak):** A distance learning platform launched by the Ministry of Education in Jordan. To make it easier for students to continue their learning, this platform targets all school students from the first grade to the second grade of secondary school. The platform broadcasts videos and organized lessons according to the school calendar. In addition, the educational lessons are broadcast on the platform's TV channels: "Darsak 1 and Darsak2" (Your Lesson 1, Your Lesson 2), in addition to the lessons on the platform that are renewed daily (Alsmairat, 2021)). The platform allows students to enter and benefit from its services at any time without deducting the Internet balance during the browsing time on the platform, starting from (6) in the morning until (4) in the afternoon (Hmadneh, 2020).

**3- (Microsoft Teams):** A free online application that combines chatting, meeting forums, chat sharing, content, files and other application options (Rojabi, 2020). Microsoft Teams allows teachers to create and manage virtual classrooms as was the case in traditional classroom management and enables students to communicate with colleagues and teachers (Sobaih, et al, 2021). Moreover, It lets anyone access it and helps teachers assign and transfer student assignments across teams using the Assignments tab. It allows audio-visual, web conferencing with anyone inside or outside the school, attending events directly, and



provides the feature of sending instant messages without the need to use e-mail (Alshammari, 2021).

**4- (Skype):** A free, downloadable tool that allows making phone calls over the Internet with another Skype user (Alsaïdi, 2017). It is a necessary way for students to interact with each other and increase their understanding of many academic, recreational or social topics (Ghraib, 2017). The number of participants on Skype is up to (25) people per meeting (Alfadda, & Mahdi, 2021).

**\* Teaching is carried out via distance learning platforms through the following:**

\* Synchronous teaching: It is a method of teaching that depends on the presence of students and teachers in real-time to teach the academic content through virtual classes on the platform (Daradkah, 2022).

\* Asynchronous teaching: That is, teaching that allows the student to freely choose the times and places that suit his circumstances to study the course through the educational platform (Alshammari, 2021).

The distance education used during the Coronavirus pandemic, compared to traditional education, is characterized by a set of advantages, the most important of which are the following: removing the spatial and temporal boundaries between the users of distance learning platforms, whereby any person can access, use and share the information available on those platforms with others (Mahdi, & El- Hinawi, 2021), allowing students to study the curricula according to what suits their times and circumstances (Mahalakshmi, & Radha, 2020), the possibility of downloading platforms through various modern technology devices with ease, enhancing communication and interaction between students and teachers (Al-Sarhan, 2020), the possibility of downloading all educational lessons as quickly and less expensively (Nadire, & Daniel, 2021) and reducing tuition fees and travel costs by up to 25% (Dung, 2020).

**\*Challenges to the Operationalization of Distance Learning Platforms Used in the Period of the Coronavirus Pandemic.**

Distance education, like any modern educational system, faces many challenges that prevent it from implementing its desired goals, including the weak technological culture of teachers, the lack of training and the slow interruption of the Internet (Hamdi, 2021).



Moreover, (Mustafa, 2021) stressed in his study that distance learning platforms do not meet the special needs of some students, and those teaching methods used in these platforms lack interaction between the students themselves and their teachers, and the extreme difficulty in accessing those platforms as well. While (Amir, et al, 2020) indicated that students suffer from difficulty in concentrating while studying via electronic platforms, as their level of satisfaction with distance education is low.

(Fatoni, et al, 2020) revealed in their study that students are not ready for online learning, and complain about class time not being synchronized. (Rummana, & Shamasneh, 2020) mentioned in his study that students are busy with other things that are not related to distance education. The findings of the study conducted by (Akel, 2021) showed that the difficulties that teachers face in employing e-education are due to the sudden adoption of this type of education from traditional education, and their failure to prepare and train them about the mechanism of its application and dealing with it. The study conducted by (Qashou, 2022) showed that the gender of faculty members has an impact on their use of virtual learning platforms, as technological means and electronic platforms are most often applied by females compared to their male colleagues, which poses more Challenges for females than males, and makes females more knowledgeable and able to identify Challenges associated with the use of electronic platforms.

## Methodology

### Research Design

This research was designed as a quantitative study that included the descriptive survey method, depending on the data retrieved from the participants, which was obtained using an electronic questionnaire. The questionnaire was developed based on the educational literature and previous relevant studies. The questionnaire used in this study comprised of two sections, namely: The first section: the personal information of the study sample members, while the second part included (35) paragraphs to measure the Challenges to the operationalization of the distance learning platforms.

### Participants and Sample

The participants in the study were (2480) teachers from the Jordanian Directorate of Bani Kinana District Education's schools in the second semester of the scholastic year (2021/2020). The study sample was chosen by the stratified random method at a rate of

(40%), which corresponds to (992) teachers. The sample members provided their demographic information in the first part of the electronic questionnaire, which was distributed to them through the following link: (<https://forms.gle/5WG9nHFM4yfBGQVLA>). Table 1 shows the distribution of the sample by gender variable.

**Table 1. Demographic Analysis of Data Teachers (male & female) (n=992).**

Gender	Frequenc y	Percentage (%)
Male	221	0.22
Female	771	0.78
<b>Total</b>	<b>992</b>	<b>%100</b>

### Data Analysis

The quantitative data in this research were processed using (SPSS) software; the value of the arithmetic means and standard deviations of the answers of the study sample members have been extracted for each paragraph of the tool through the use of the five-point Likert scale scoring. The statistical criterion shown in Table 2 was also determined to judge the results of the quantitative study.

**Table 2. The statistical standard for judging the results of the study.**

Answer Scale Scores	Category (Means)	Challenges Degree
1	1.0 – 1.80	very little
2	1.81 –	little
3	2.60	medium
4	2.61 –	high
5	3.40	very high
	3.41 – 4.20	

4.21 –

5.00

## Results and Discussion

Table 3 shows the results of the descriptive statistics used to answer the first question, which show that the participants' responses to the study tool items ranged between (4.98) and (3.36), and to a degree that ranged between (very significant) and (little). It is noted from Table (4), first; that there are (14) paragraphs out of (35) paragraphs got (a very significant) degree with a percentage of (40%), and that there are (12) paragraphs out of (35) paragraphs got a (significant) degree with a percentage (34%), while (6) paragraphs out of (35) got a (medium) degree with a percentage (17%), and (3) paragraphs out of (35) got a (little) degree with a percentage (9%). Secondly; The overall arithmetic mean of the study sample's responses to the tool as a whole was (4.40) to a (very significant) degree. This is due to the Ministry of Education's introduction of distance learning platforms into the educational process without providing proper and adequate training for teachers on how to use these platforms, meaning that distance-learning software was suddenly adopted as an alternative type of face-to-face learning and because of what was imposed by the repercussions of the Coronavirus crisis. This is consistent with what was (Akel, 2021) confirmed. The result of this study may be explained by the students' preoccupation with other websites or matters not related to education through virtual platforms (Rummana, & Shamasneh, 2020).

**Table 3. Descriptive Statistics results for Items.**

Rank	No	Item	M	SD	Degree
1	34	The synchronization of class times for more than one brother at the same time prevents the completion of studying distantly.	4.98	0.14	Very High
2	29	The evaluation process in distance learning is unfair.	4.96	0.21	Very High

3	30	The limitations of the electronic test questions on measuring basic skills in the various courses.	4.95	0.23	Very High
4	17	Students lack computer skills and the mechanism of using distance learning platforms, especially students of the first three grades.	4.93	0.26	Very High
5	18	Parents of students use distance learning platforms instead of the student himself.	4.91	0.29	Very High
6	16	Lack of interaction and face-to-face communication among the teacher and students.	4.89	0.32	Very High
7	15	Lack of interaction and face-to-face communication among the students themselves.	4.88	0.32	Very High
8	13	Students' preoccupation with other matters not related to distance learning platforms.	4.85	0.35	Very High
9	8	Lack of internet for students at home.	4.80	0.40	Very High
10	9	Poor internet infrastructure.	4.72	0.45	Very High
11	11	Shortage of technical support and maintenance services.	4.65	0.48	Very High
12	10	Computer hardware failure.	4.55	0.50	Very High
13	7	Slow connection with the website of the distance learning platform system.	4.30	0.46	Very High
14	12	The lack of computer services in the school.	4.25	0.44	Very High

15	26	Difficulty understanding the applied aspects of theoretical courses in distance learning.	4.20	0.82	High
16	31	The time allotted to answer the electronic exam questions is not enough.	4.18	0.81	High
17	28	Scarcity of supporting websites for different courses.	4.15	0.80	High
18	24	The dominance of the spoon-feeding approach to distance learning meetings.	4.14	0.79	High
19	23	Participation and discussion are limited to a limited number of students in distance education.	4.11	0.78	High
20	14	Low level of students' motivation to distance learning.	4.10	0.30	High
21	2	Students are not convinced of the importance and usefulness of distance learning.	4.05	0.22	High
22	6	The distance learning system does not take into account the needs and aptitudes of students.	3.96	0.31	High
23	5	Lack of financial and moral support for teachers who use distance learning platforms.	3.92	0.37	High
24	3	Teachers are not convinced of the usefulness of distance learning platforms.	3.87	0.39	High
25	1	Lack of adequate training for teachers to use distance learning platforms.	3.82	0.40	High
26	4	Lots of work and responsibilities on the shoulders of the teacher.	3.74	0.46	High

27	25	The failure of electronic home activities and assignments to achieve the objectives of distance learning.	3.40	0.46	Moderate
28	35	There are many topics in which students need face-to-face meetings.	3.36	0.51	medium
29	32	During distant learning, the feedback is poor.	0.34	0.49	medium
30	33	Students leave the electronic classroom without the teacher's permission.	3.30	0.47	medium
31	19	Frustration among teachers as a result of changing the traditional teaching style to electronic ones.	3.28	0.45	medium
32	22	Lack of school administration awareness of the importance of distance learning.	3.24	0.43	medium
33	20	Some teachers are afraid that distance education cancels out their role.	2.50	1.34	Low
34	27	Lack of important illustrative examples during distance learning.	2.43	1.33	Low
35	21	Some teachers are concerned about getting a low grade when their annual performance is evaluated based on students' findings.	2.36	1.30	Low
<b>Weighted Mean</b>			<b>4.06</b>	<b>0.23</b>	<b>Very High</b>

Table (4) shows the findings of the T-test to answer the second question, where the value of ( $t = 2.592$ ) at the significance level (0.01) is greater than (0.05), which confirms that there is statistical variance in favor of gender while the variances came in favor of (females). This result explains that female teachers face more difficulties when using e-learning platforms compared to their male colleagues, due to their full use of these platforms and their attention to detail. This is consistent with the study conducted by (Qashou, 2022).

**Table 4. T-test for statistical differences according to the gender variable.**

Gender	M	SD	T	Sig
Males	0.22	4.03	*0.01	2.592
Females	0.24	4.09		

## Conclusion

In this study, a set of challenges were identified that prevent teachers from using distance-learning platforms effectively. In light of the current study's findings, the decision-makers and those responsible for these platforms in the Ministry of Education must overcome the challenges that teachers face while using the electronic platforms.

## Suggestions

In light of the findings of the study, the following is recommended:

- Restoring the tasks of the learning resource centers of the education directorates in training teachers to use distance learning platforms and providing the necessary training programs for them to reach the desired goals and objectives of distance learning.
- Spreading a culture of distance learning among members of the community to achieve the greatest interaction with this type of education.
- Strengthening the community partnership between the school and the student's family in a way that serves the goals and objectives of the distance learning platforms.



- Increasing the bonds of cooperation between schools to exchange experiences among them to reach the optimal and correct use of distance learning platforms.
- Providing support, material and moral incentives for teachers who use distance learning platforms most and raising competition among them in this field.
- Providing logistic and technical support, including providing a specialized technical supervisor in schools to address urgent problems that may prevent the work of distance learning platforms.
- Developing the infrastructure, means and technologies in schools, in a way that contributes to achieving the desired goals of distance learning platforms.
- Developing distance learning platforms in a way that ensures students' preparations are taken into account, the individual differences among them and their continuous interaction through distance learning platforms.
- Providing parents of students with Internet, supported by free Internet packages, that ensure the effective use of distance learning platforms.



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