

## The Effectiveness of Darask Platform as E-Learning Tool to Improve the Educational Process during COVID-19

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**Abstract**—The globe is grappling with the COVID-19 pandemic, which has enslaved the economy, including the educational sector. This epidemic has caused recent changes and disruptions in all aspects of life, also this pandemic has compelled educational systems all across the world to find alternate methods to keep the process of education going on. To cope with the current case, the Darsak platform is authorized by the Jordanian Ministry of Education to be an alternative choice for proceeding with the educational process. The goal of the current study is to know the impact of the Darsak platform to be a compensation tool to perform the educational process during COVID-19. The data were collected by questionnaires, which distributed by web site, also it was conducted from (108) parents, (120) students, and (43) teachers' participation. So, this descriptive research used a relational survey approach. The responses which obtained from the participants were analyzed using SPSS tools. The result of the study showed that the Darsak platform was a new application to students, so it was found that facilities, flexibility appropriateness, and effectiveness of the Darsak platform were not up to expectation. Students were dissatisfied with the performance of the Darsak platform.

**Keywords**—COVID-19, Darsak, flexibility, appropriateness, facilities, effectiveness

### 1 Introduction

The Corona epidemic has spread most countries of the world. The global extent of this harmful virus has compelled educational institutions to close in order to control the virus's transmission. COVID-19 defined by [1] and [2] is known as spread through the respiratory tract when people have been in immediate contact or in touch with infected people. So that the almost of countries during COVID-19 made lockdown to minimize the spreading coronavirus. COVID-19, a highly contagious coronavirus epidemic, has altered every part of our life, along with how we teach. Under strict worldwide "social distancing" rules, most educational institutions, including schools, were closed.

Hence, to reduce coronavirus spreading and saving the children from the disease, the educational institutes, schools and universities have considered other teaching approaches. They almost utilized web-based method, e-learning, or online learning

approach. Learning has almost shifted into the digital way in today's environment [3], [4]. (Electronic-Learning EL) is a type of learning that has long been discussed and argued about the need to be integrate into the educational process. According to UNESCO COVID-19 and Children's Rights, the Coronavirus outbreak has forced the closure of schools and higher education institutions in more than 188 countries, which causing more than 1.5 billion children and youth to stay at home [5]. In light of the current status, many countries have changed from traditional face-to-face methods to e-Learning.

E-learning is the process of imparting skills and knowledge to a large number of individuals across a network at the same time or over a period of time. It was previously unrecognized since it was thought that this approach lacked the crucial human element for learning. Instruction that is planned and prepared based on the characteristics of the class utilized in such curricula, as well as the methods and strategies that allow the learner to absorb as much information as possible using electronic devices. Like CD-ROM, DVD, teleconferencing, video conferencing, email, live chats, and web blogs are all examples of technology. In proportion to its ability in the current time, coronavirus forced institutions to use a new alternative method to continue educational process during Covid-19 pandemic. Kuatbekov et al. [6] believe that e-learning emerged as a result of technological advancements, particularly after the educational process was directly impacted by industrial automation. The development of "artificial intelligence" technology and the "Internet of Things," as well as the information technology revolution that entered the classroom has become an integral part of education. Amin et al. [7] noticed that, in the momentum of the worldwide to provide shrewdness and high-speed solutions to any or all the changes that unprecedented, which occurred within the world because of the Coronavirus, most of the countries were being tried to provide compensation solutions for the deficiency that affected the education process in schools.

Most of the countries try to get solution to avoid corona virus obstacle, so several solutions were proposed, such as e-learning, blended learning, and so on. With this trend, various tools emerged to be utilized for this purpose such as Zoom, Googlemeet. From the above studies, the researchers noticed that E-learning education require so many devices to make communication channel between students and teachers. Jordan is one of the countries which tries to introduce solution to face corona virus pandemic which caused to lock educational institutions. Although Jordan has limited capabilities and material resources, but it tried to face the obstacle of corona pandemic. It tries to create a technical solution to ensure the permanence of the educational process for its young community and serve the students. Since the programs have started, several of challenges and obstacles have emerged that threaten to stifle its growth and effectiveness: Do all students have adequate electronic devices (computers, tablets, cellphones) to use for distance learning? The students can access and benefit from programs aired on the Internet Distance education channels if they have a good internet connection. Do all schools in villages and remote places have excellent internet connection? All these questions help the researchers to reach to certain result. So that the researchers try to know appropriateness and flexibility to indoctrinate the lesson for students through Darsak platform. Also, to know social benefit and the facilities which produced through Darsak platform to students to avoid the spreading of the coronavirus.

This paper is organized as follows. Section 2 presents the profile for Darsak platform. Section 3, 4 and 5 present the problem of the study, the objectives, and the questions of the study consequently. Section 6 presents the background of related existing approaches. Section 7 is the development of the methodology. Section 8 and 9 discuss about the study in details. Section 10 will summarize the main findings as a result of data analysis. Finally, the study will conclude with a discussion of the study recommendations and conclusion.

## **2 Profile for Darsak platform**

Jordan government established free online educational Jordanian platform (Darsak) platforms for E-learning to be outlet for educational process of semi paralyzed life due to lockdown of corona virus in all the world [8], [9]. Jordan government has established Darsak platform with the aim to deliver lessons of all courses for all grades of Jordanian students with intention to face the challenges of emergence cases and spreading Covid-19 pandemic. So it was provided students with smart and equivalent solution to avoid any delays in the progress of educational system in the schools. So that, the lessons were presented in the form of video clips and fragmented throughout the week that connects the Darsak platform between education service providers and the Jordanian Ministry of Education. Darsak platform mostly tries to contain whole students' subjects. Teachers try to provide their students with available facilities as, sounds, videos, and images. These teachers try explaining the information on the blackboard through Darsak platform.

Multiple teams within an integrated workshop ensure that the lessons are error-free. Teacher introduce the lessons to the students by using various teaching aids which help for promoting the educational process. The student chooses his class from the Darsak platform icon. Automatically, the materials that will be taught in the said day will appear – which varies from day to day – for example the student might chooses the mathematics topic. The students watch the videos devoted to this day and its topic, in most cases. The platform enables the students to have access to the material taught in the particular day only for 24 hours, then these materials will be replaced by the materials of the second day.

On the website of the platform, there are instructions for students on how to deal with lessons. Before starting to browse the platform, students should be aware of the most important steps about the Darsak platform for presenting and distributing lessons for all students according to their grades. A thorough instructions were provided by the Jordanian Ministry of Education on the procedures of Lessons and lectures. Furthermore, teaching process is shown on educational Jordanian television channel for primary to secondary school, with all of its branches on the same platform, This TV show makes the students familiar with utilizing this platform. Students can access the website at any time. However, browsing between 6 a.m. to 4 p.m. is free. The student is not charged the cost of surfing the Internet and is not deducted from his balance upon this browsing. Lessons are offered on a daily basis and are renewed daily. Also, the platform shows the current day's schedule to the student and the content of the previous day is removed. The student cannot browse the previous day's program, bearing in mind

that the Ministry of Education and its partners are currently studying the possibility of providing repetition of some lessons on public holidays days which are Friday and Saturday. Darsak platform offers lessons that correspond to the school calendar. During the presentation of the educational content, the teachers try to support explanation with practical examples that help them communicating the idea and concepts to the student.

### **3 Problem of the study**

E-learning plays a vital role in the success of the educational process during the Coronavirus period. Taking into account the great technological development and the spread of modern means of communication such as computers, the Internet, and multi-media such as audio, image, and video, which are the means that allow a large number of students to receive education easily, and timely.

Due to the conditions that the whole world suffers at the present time represented by the spread of the Corona virus, so educational institutions suddenly found themselves forced to switch to distance learning to ensure the continuity of the teaching and learning process, and the use of the Internet, smart phones and computers to communicate remotely with students.

The Darsak platform is one of the Jordanian online educational platforms, which is employed for communication between students and their teachers in Jordanian schools. Therefore, it is vitally important to know and evaluate the effectiveness of e-learning tools, the extent to which it achieves the objectives of education, its ability to encounter the needs of students, and to create an interactive environment that compensate face-to-face learning.

### **4 Objectives of the study**

- The study seeks to reveal the effectiveness of the Darsak platform as an e-learning tool in light of the spread of the Coronavirus from the viewpoint of the students and their teachers in high school in Ma'an, Jordan.
- To know whether Darsak platform has the capacity of appropriateness and Flexibility to indoctrinate the lesson for students from point of view of (students, teachers, and parents).
- To investigate the surrounding facilities which assist the E-learning through Darsak platform from the point of view of (students, teachers, and parents) and its Effectiveness.

### **5 Questions of the study**

The study attempts to answer the following questions:

1. Whether Darsak platform has the capacity of appropriateness and Flexibility to indoctrinate the lessons for students from point of view of (students, teachers, and parents).

2. Are there environment facilities for Darsak platform to perform the role of E-learning from the point of view of (students, parents and teachers) to enable students for tracking their lessons?
3. What is the effectiveness of Darsak platform from the point of view of (students, parents and teachers) for progressing the educational process for students' lessons?

## **6 Literature review**

### **6.1 E-learning**

E-learning is defined as the use of information and communication technology to help students learn better [10]. E-learning, according to [11], is a system's ability to electronically transmit, manage, support, and control learning and learning resources. E-learning platforms and social media applications are very common, allowing users to contact information directly through the internet.

Many benefits of using e-learning such as: it can be covered vast geographic and many places, learner control (in terms of flexibility and suitability), and cost-effectiveness in course of delivery and management. Educational institutions and professional organisations are embracing e-learning by implementing an expanding array of technology-enabled platforms.

### **6.2 Advantages of e-learning**

1. Teacher able to link the numerous resources in numerous varying forms of audio or video.
2. Teacher can use effective way of delivering online courses.
3. Web-based learning promotes active and independent learning.
4. Students can access to the lessons 24x7, they can do revision for their lesson anytime and from anywhere.
5. E-learning allow students to train themselves on a day to day when they have the free time if there is no hard and fast rule.
6. It encourages students to do discussion boards and chats, they will be able to interact with everyone online.

### **6.3 Disadvantages of e-learning**

1. Some online platforms of E-learning make very limited time and date to access the educational materials.
2. Unavailability of the Internet in some countries.
3. It is easy for cheating if there is no moral.
4. The absence of seriousness of some students.

#### **6.4 Previous studies**

COVID-19's proliferation poses a threat to humanity, as it has forced numerous global operations, including educational process, to shut down [12]. Despite the obstacles that this fast transition presents, education institutions have been obliged to transition to e-learning using accessible educational platforms to minimize the virus's spread. This study focuses on E-learning from the viewpoints of students, instructors and parents to investigate the adoption and implementation of E-learning system in a public institution during the COVID-19 epidemic through Darsak platform. The research focuses on the information society, which includes students, educators and parents in order know the role of Darsak platform as E-learning process during covid-19 crisis. In the following the researchers focus on the studies that have similarity to current study that E-learning considered as the alternative choice for proceeding educational process during covid-19.

The study in [13] assessed the perception of Saudi parents towards distance education during Covid-19 pandemic. The questionnaire was administered as a random sample of 310 parents of elementary school kids in Riyadh. The study found that distance education in primary schools in Riyadh was a successful experience from the perspective of parents, with an average of (2.93), and a high degree of appreciation, despite a discrepancy in the degree of parents' evaluation of different levels. On the experience of distance training, where their assessment of the experience of distance schooling considering the Corona pestilence at the degree of guardians came in any case, with a normal of (3.54), and with a serious level of appreciation, then, at that point the assessment and the involvement with the degree of understudies came in runner up with a normal of (3.17), with a severe level of appreciation, and the assessment of the involvement with the level of the methods for correspondence and innovation utilized came in the third spot. , with a normal of (3.08), and with a serious level of appreciation, as the assessment of the experience came at the degree of educating and learning, and the educational programs positioned fourth, with a normal of (2.85), and with a high appraising. The experience was evaluated at the instructor level, with an average of (2.49) and an average rating. Finally, an average of (2.48) and an average grade were assigned to the experience at the level of elementary school administration. The study concluded with a set of recommendations based on the findings, the most important point to introduce advice to primary school administrations to increase parental participation in distance education instructional plans. Also, to design a plan to train instructors in distance education.

The study in [14] investigated Pakistani university students' opinions about taking mandatory digital and distance learning courses in the face of the COVID-19. The study's findings revealed that great majority of Pakistani students are unable to use the internet owing to technical and financial barriers, online learning is unable to generate intended results. Other difficulties raised by higher education students included a lack of face-to-face engagement with the instructor, reaction time, and the lack of typical classroom socializing.

The study in [15] aimed to distinguish the basic achievement factors for E-picking up during COVID-19 utilizing the multi-measures Analytic Hierarchy Process (AHP) and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS)

strategies to improve the instructive interaction. Information was created by taking 69 E-learning chiefs in instructive organizations during COVID-19 dependent on characterized assessment standards and E-learning approaches through a few channels. The researchers found that innovation the board, support from the executives, expanded understudy attention to utilize E-learning frameworks, and requesting a significant degree of data innovation from educators, understudies, and colleges were the most powerful factors for E-getting the hang of during COVID-19. Among the five learning frameworks, mixed learning was the most appropriate learning framework to rehearse. These outcomes showed that, paying little heed to how uncommon the innovation is in an instructive organization, the status of E-learning execution assumed a huge part in boosting the instructive cycle during the COVID-19 pandemic.

The study in [16] discovered college students' perceptions of their acceptance, use, and receiving of emergency E-learning. The issues investigated were attitude, affect, and enthusiasm; perceived behavioral control (ease of use of technology, self-efficacy, and appropriateness), and cognitive engagement. Quantitative and qualitative data were collected from 270 students. The results present how attitude, stimulus, self-efficacy, and use of technology performance a significant role in the intellectual engagement and academic performance of students. Also, participants preferred face-to-face learning over E-learning. This study offers suggestions on how to increase the acceptance of alternative E-learning.

The study in [17] explored the relationship between school administrators' COVID-19 fear and their work-family conflict, family-work conflict, and overall life satisfaction. A total participation of 356 school administrators took part in this descriptive study, which was constructed using the relational survey approach. The study's data were obtained using online surveys, and the finding showed that Female school administrators had higher levels of COVID-19 phobia than their male according to the findings. Female school administrators, on the other hand, reported much greater levels of life satisfaction than male school administrators.

The study in [2] intended to give conceptual and methodological recommendations for future sustainable research initiatives. Through a bibliometric review of publications on management, leadership, and administration related to COVID-19. The study's data was collected from the web of Science Core Collection (WoSCC) bibliographic database, which was then evaluated using thematic content analysis and bibliometric methodologies. The study's units of analysis include countries, journals, keywords, research models, sample/study group, and time to publication. VOSviewer software and visualization maps were used to report the findings derived from the studied data. When the study's findings are compared to the number of relevant publications and total citations, it's clear that Anglo-American, Chinese, and European supremacy persists in COVID-19-related research.

During the COVID-19 epidemic, the study in [18] explored teachers' perceptions and experiences with their school principal's digital leadership responsibilities and technology skills. The study was done with a study group of 89 Master's degree-holding instructors utilizing a case study-based qualitative technique. In determining the study group, maximum diversity sampling, one of the purposive sampling methods, was selected, and the data produced from the research were evaluated using content analysis. "Digital technology usage, support for the digital transformation, support for technology-based

professional development, support for digital learning culture, and digital leadership abilities” are the five primary themes selected based on the opinions and experiences of the participants. The study found that school principals’ digital leadership skills were divided into three groups: technology usage, management skills, and individual talents.

In study [19], the researchers looked for potential roadblocks that Primary and Secondary school instructors encounter when handling Digital Learning Objects (DLOs) and/or Digital Simulation Tools (DSTs) in science classes. The questionnaire was completed by 176 teachers from all throughout Greece. The findings revealed that the technological equipment is the primary barrier to dealing with DLOs and DSTs. Furthermore, due to a lack of proper level B training, around 25% of instructors are unfamiliar with the DSTs, and 30% are unfamiliar with the DLOs. Teachers’ attitudes against being engaged with the DLOs and DSTs are negatively affected by factors such as teaching experience, specialty, Pan-Hellenic tests, classes taught, and number of pupils per class. Finally, the unfavorable attitude appears to be connected to a lack of faith in curricular material, since teachers prefer to use the internet to look up DLOs and DSTs. Additional study using varied techniques of analysis might aid in achieving satisfying results.

As it noticed that COVID-19 spread unexpectedly in the world and E-learning introduced into students without previous experiences. So that, the effectiveness and the appropriateness is very little to students. But the students who have experience in digital learning they acquired the lessons and got the benefit of E-learning during COVID-19.

## **7 Methodology**

This study relied on its procedures on the descriptive and analytical approach, which relies on collecting data from the study sample from teachers, students, and parents by using the questionnaire which was already prepared to apply the purpose of current study. Also, to analyze the responses which will be obtained from the participants.

### **7.1 Data collection tool**

Data were gathered by an organized structured questionnaire that was created by scientists and reexamined in accordance with the perspective on five of specialists to give it a last structure. The structure included multiples choices. These inquiries were proposed to know the role of Darsak platform as E-learning during Corona pandemic. At the following stage, the data was gathered online by questionnaire were inquired educators, students, and parents to know their attitude of Darsak platform during Corona virus.

### **7.2 Sample of the study**

The sample of the study was selected from high school in Ma’an, Jordan. The participants were 271 members of the students of high school and their teachers and parents. Whereas the numbers of participants as the following, the parents (108), students (120), and (43) from teachers.



## 8 Discussion

**Table 1.** Students' questionnaire

	Students' Questionnaire	Mean	Std.	Level
Appropriateness	1. Darsak platform is an option that relatively covers the curriculum for scientific subjects and mathematics during the Corona pandemic.	2.78	1.08	Neutral
	2. I can pursuit my lessons one by one through Darsak platform.	2.81	1.11	Neutral
	3. Teacher enriches the scientific and mathematics lessons with sufficient explanation and examples to convey the scientific material in a way that apply students' needful.	2.88	1.06	Neutral
	<b>Total</b>	<b>2.82</b>	<b>.924</b>	<b>Neutral</b>
Flexibility	4. Darsak platform allow teacher to convey mathematics and science subjects with Flexibility for all experiment fields.	2.86	1.14	Neutral
	5. During online sessions, teachers give appropriate breaks so that students have time to think about the topic and formulate questions as doubts.	2.53	1.02	Disagree
	<b>Total</b>	<b>2.69</b>	<b>.927</b>	<b>Neutral</b>
Facilities	6. I have sufficient computer knowledge and IT skills to learn lessons and lectures online so, it is easy to deal with the lessons of Darsak platform.	2.91	1.08	Neutral
	7. My parents provide me with educational aids which support me to manage with the services of Darsak platform.	3.01	1.11	Neutral
	<b>Total</b>	<b>2.96</b>	<b>.875</b>	<b>Neutral</b>
Effectiveness	8. Through Darsak platform teachers attach videos and photos in order to deliver the scientific through material during their lessons.	2.83	1.15	Neutral
	9. The home environment is suitable for conducting online lectures through the Darsak platform.	2.75	1.05	Neutral
	10. Darsak platform conveying the main content of the subject to make students sufficient of the main purpose of the lessons.	2.88	1.08	Neutral
	<b>Total</b>	<b>2.820</b>	<b>.9339</b>	<b>Neutral</b>

In the following steps, the researchers discussed in detail the responses obtained from students' questionnaire.

Table 1 shows that E-learning performance in Ma'an City in Jordan was not accepted from view of point of students. The findings of the students of E-learning through Darsak are discussed in the details in the following.

The first question (1) of Table 1 was focused on the inclusive idea of students' question whether the Darsak platform good tool to teach all the scientific and mathematic lessons. The mean is (2.78) with standard deviation (1.084) and the level is neutral. The results of this question considered the platform to be officinal channel as mediator between students and their teachers during Corona pandemic to support educational process. Due to insufficient of its performance in introducing the lessons to students.

The second question of Table 1 of appropriateness section that asked students whether they can pursuit the lessons or not. The mean is (2.81) and the standard

deviation is (1.113) with the level of responses were neutral. It inducted to hesitation of the students that they sometime can pursuit their lesson and sometimes they cannot due to their circumstances.

The last question (3) of appropriateness section of Table 1, which is considered more specific question. It focused on the method that students received their lesson through Darsak platform. The mean is (2.88) and standard deviation (1.066) which means that the level of the responses was also Neutral. Which refers to Darsak platform may be not good tool to convey the lessons for students with step which has possibility to apply students' equipment of the lessons.

In the next section which it related to the flexibility of "E-learning through Darsak platform". The first question (4) of Table 1, the question focused on transfer the material of all subjects of high school through Darsak platform, on how the flexibility of the platform lessons for students. The mean is (2.86) with standard deviation (1.142) and the level of the response is neutral that refers to multi probability of the students to Darsak platform. The students may be new for the situation so that they may not be accepted the lessons. So that the researcher's emphasis that with the second question which focused on the communication between students and teachers through Darsak platform which it may be create feedback and evaluate the performance of education process through platform.

In the next, question (5) of Table 1, the question indicates to the procedure of education process which access by Darsak platform. The mean is (2.53) and the standard deviation is (1.025) and the level of response is disagreed, which means that there are no flexibilities of E-learning through Darsak platform. The researchers asked the students to know the environment facilities that it supposed to be available to help E-learning process through Darsak platform during Corona virus pandemic. The researchers obtained the following findings, the predictable question to know the facilities which supposed to be for students from parents and government to enhance their education process. So that the students asked if they have knowledge how to deal with new technology which enable them to receive their lessons.

In the following question (6) of Table 1, the researchers delivered question to students to know their ability of an opulent of electronic devices which enable them to communicate with Darsak platform. The mean is (2.86) and the standard deviation is (1.142) with the level Neutral. From this point that the finding refers to probability case, students maybe haven't facilities tools as computers, laptop, and TV, and may they have, but it is not sufficient to pursuit their lessons.

The next question (7) of Table 1 emphasized on the responses of the first question that some students have modern technology and some of the students haven't to enable them to receive their lessons. The question is considered as conformation for the facilities which parents facilitate educational process for their children. The means is (3.01) with standard deviation (1.114) and level of the response is Neutral. As the researchers discussed that the majority of the students' responses with neutral which refers to many probabilities as discussed above.

In the following point it focuses on the effectiveness of E-learning through Darsak platform. The result of the first question (8) of Table 1 indicated that E-learning through Darsak Platform hasn't effectiveness from students' perspective. That teacher may not be attaching videos and photos to Darsak platform to make the lesson more effective and attractive. The mean is (2.83) and the standard deviation is (1.150) which refers to

level of the responses Neutral of students answer. Here are some of explanation that students' probability hasn't effectiveness of E-learning through Darsak platform.

Then the students asked whether they have a suitable tool to enhance the education through E-learning, the responses of question (9) of Table 1 were in the side of Neutral with mean (2.75) with standard deviation (1.059). It inducted that their home may be not encourage E-learning due to lack of electronic devices for students' lessons so that the responses were in the neutral level.

The last question, (10) of Table 1, this question considered as emphasis question to the pervious questions that E-learning through Darsak platform is not good tool for effective learning for students to study during pandemic of Corona virus. The mean is (2.88) with standard deviation (1.085) that refer to the level of neutral. Which emphasis the case of probability. That students in the case of hesitation neither they conform of the effectiveness, nor they answered with disagree. So, it can say there is no effectiveness of E-learning through Darsak platform.

Looking at Table 1, it can be observed that when Darsak platform comes to be a tool for online classes, students noticed the online classes lack quality. Things such as technological difficulties through Darsak platform, lack of appropriateness of the E-learning, disturbance some notable variables lowering the efficiency of E-learning classrooms included disruptions in class flow, difficulties in explaining doubts, a lack of enthusiasm, and motivation on perform with sessions. Despite the fact that today's generation is technologically advanced, the majority of the respondents of the students stated that their lack of computer skills made it difficult for them to access the internet.

## 9 Discussion with details

**Table 2.** Parents' questionnaire

	Parents' Questionnaire	Mean	Std.	Level
Flexibility	1. There is no difficulty in direct communication between teachers and students (where ideas and opinions can be exchanged through personal confrontation through Darsak platform.	2.48	1.351	Disagree
	2. Teachers have sufficient skills to design and produce effective electronic content that is suitable for using computers and the Internet. Teachers have sufficient experience and skills.	2.22	.927	Disagree
	<b>Total</b>	<b>2.35</b>	<b>.738</b>	<b>Disagree</b>
Appropriateness	3. Teaching through Darsak platform during Corona pandemic fills the gap of traditional teaching provide in schools.	2.28	1.089	Disagree
	4. Parents express their satisfaction with the side of Darsak platform to teach the lessons so that male and Female students do not stumble in the educational stages.	2.07	1.215	Disagree
	5. Parents feel comfortable as a result of the teachers' Performance through Darsak platform.	2.79	1.479	Neutral
	6. The performance of teachers through Darsak platform attracts the attention of students, which helps them in improving the educational process to apply the needs of students.	1.96	1.224	Disagree
	<b>Total</b>	<b>2.28</b>	<b>.995</b>	<b>Disagree</b>

(Continued)

**Table 2.** Parents’ questionnaire (Continued)

	Parents’ Questionnaire	Mean	Std.	Level
Effectiveness	7. Teaching through Darsak platform is relatively equivalent to traditional teaching in terms of covering lessons in science and mathematics subjects.	2.30	1.084	Disagree
	8. The e-learning system is compatible with the type of subjects, both theoretical and practical.	2.35	1.100	Disagree
	<b>Total</b>	<b>2.33</b>	<b>.783</b>	<b>Disagree</b>
Facilities	9. Parents of students can provide educational requirements through Darsak platform for all their children in secondary school.	2.28	1.089	Disagree
	10. The education at home has sufficient time so that the educational facilities at home is available and I am satisfied with Darsak platform and its performance for my children.	1.92	1.180	Disagree
	<b>Total</b>	<b>1.97</b>	<b>1.068</b>	<b>1.068</b>

In the following steps the researchers discuss in detail the responses as shown in Table 2 which obtained from the point view of the parents for the role of Darsak platform in enhancing students’ education as E-learning. First section discusses about flexibility of Darsak platform in E-learning lessons for high school in Ma’an city, Jordan. The researchers wanted to conform about the performance of Darsak platform from parent’s point of view so that, the researchers asked the following questions.

Question (1) of Table 2, teachers’ performance on the Darsak platform is flexible and draws students’ attention, assisting them in refining the educational process and tailoring it to students’ requirements. It discussed about the performance and the flexibility items so that the obtained findings of arithmetic mean is (1.96) with standard deviation (1.224) and the level of responses were disagreed. Which means that parents not satisfied with the performance of E-learning through Darsak platform. The researchers wanted to measure up the Darsak platform work, hence, asked whether the Darsak platform allowed students to access it anytime, so they are willing to enhance their information.

Question (2) of Table 2, students can access educational materials at any time via the Darsak platform system. The arithmetic mean is (2.35) and the standard deviation is (1.100) with the. level of findings disagrees for the question from all the responses which refers to, that parents emphasized that the access of platform may not allow students to access with sufficient time to pursuit their lessons.

The next section has four questions to know whether E-learning through Darsak platform is appropriate or not; the obtained findings as following.

In the question (3) of Table 2, the researchers related to the situation which made the education to switch from traditional education to E-leaning and the performance of Darsak platform. So that the question enquires about teaching through Darsak platform, whether E-learning equity to the traditional education or even it compensates the traditional education.

Question (4) of Table 2 during the Corona pandemic, teaching via the Darsak platform hits the spot caused of closed traditional schooling. The mean is (2.28) with standard deviation (1.089) and the level of obtain responses were disagree. The point of

view of the parents that E-learning is not being suitable or proper in the circumstances of COVID-19. So that, the researchers asked another question to get more explanation of the parents whether they are satisfied with the performance of Darsak platform.

Question (5) of Table 2 parents express their gratitude for Darsak's role in teaching the lessons, indicating that their children have not stumbled along the educational phases. Hence, the mean is (2.07) and the standard deviation of the responses were (1.215) with the level of the response was disagree with the performance of Darsak platform. They noticed that E-learning is not doing well for their children so that the responses with disagree of the performance of Darsak platform for convey the education as traditional education.

In the next question (6) of Table 2 the researchers asked the parents if they are comfortable with the result of E-learning through Darsak platform, the mean is (2.79) with standard deviation (1.479) and the level of responses were neutral. That refers to probability or eventuality of outcome of the E-learning through Darsak platform. The teachers' output on the Darsak platform has made parents happy and satisfied. The parent did not give clear responses for the outcome of the Darsak platform. They may expected to improve Darsak platform itself or they may noticed that it is as continues process may it give students little compensate of knowledge instated of nothing. The last question is considered as emphasize question to make the appropriateness clear whether the parents are appropriate or not with Darsak platform performance.

Question (7) of Table 2 to conform whether the parent notice that Darsak platform is well to be act during the pandemic period. The mean is (2.48) with standard deviation (1.351) and the level of parents' responses were disagree. It means that the parent don't satisfy with Darsak platform. They may notice it is not qualified for transmission the mathematic and scientific subject for their children.

The next section discusses about the effectiveness of Darsak platform as E-learning for students from the parents' perspective. Question (8) of Table 2 deliberate about the opinion of parents for teachers' skills when they deliver the lesson through Darsak platform. The mean is (2.30) and the standard deviation is (1.084) with the level of parents' responses were disagree. They noticed that teachers may not produce a sufficient skill of the teaching during delivering the lessons.

The last section discusses about the facilities which parents produce for their children to help them in their education. Question (9) of Table 2 focused on the facilities which available at home and parents' stratification, so the mean is (2.28) and the standard deviation is (1.089) with the level of responses of the parent as mentioned in arithmetic mean were disagree of performance of Darsak platform. The reason of rejection of ideas of E-learning it can be due to inability of parents to provide their children the E-learning tools. It also may they have tools, but it may be not sufficient for all children to learn in on times.

The researchers asked the parent with question (10) of Table 2 which refers to the point whether they provide their children with all tools which may be required in E-learning education. But the obtained result of requirements question is unexpected, they all responded with disagree, so that the arithmetic mean is (1.92) and the standard deviation is (1.180) which refers to disagree level of their ability to provide their children with E-learning equipments.

Table 3 illustrates the teachers' questionnaire. The first section of the teachers' questionnaire deliberates about the flexibility of E-learning through Darsak platform. Here are some questions which the researchers directed it to teachers to know their perspective of flexibility of Darsak platform.

The first question (1) of Table 3 discusses the process of the educational material delivery through Darsak platform, whether the teachers deliver the lessons easily or they face difficulties during the lesson's delivery with their educational materials. The mean is (2.57) and the standard deviation is (1.085) with disagree level of responses. From this point the researchers noticed that teachers have difficulties during delivering their lessons through Darsak platform. So, it is better for the executive director of Darsak to make evaluation for the problems and the difficulties which the teachers' face and try to solve them.

**Table 3.** Teachers' questionnaire

	<b>Teachers' Questionnaire</b>	<b>Mean</b>	<b>Std.</b>	<b>Level</b>
<b>Flexibility</b>	1. Through Darsak platform, the educational material is attached to the students easily.	2.57	1.085	Disagree
	2. The educational content includes exercises, activities and assignment that help to deliver the scientific material.	2.86	1.138	Neutral
	3. The student can ask any questions and inquiries through Darsak platform.	2.48	1.131	Disagree
	<b>Total</b>	<b>2.63</b>	<b>.987</b>	<b>Neutral</b>
<b>Facilities</b>	4. The speed of the internet is suitable, and I can give any lessons without any interruption.	2.64	1.226	Neutral
	5. There is no difficulty in direct communication between teachers and students (where ideas and opinions can be exchanged through personal confrontation through Darsak platform).	2.55	1.173	Disagree
	6. Darsak platform system allows the teacher and students to access the educational material at any time.	3.33	1.119	Neutral
	<b>Total</b>	<b>2.84</b>	<b>.929</b>	<b>Neutral</b>
<b>Appropriateness</b>	7. Training courses were held, and teachers prepared during the Corona crisis for of using e-learning technique through Darsak platform.	2.60	.964	Disagree
	8. Through Darsak platform, transfer the scientific material adequately in science and mathematics subjects.	2.50	1.065	Disagree
	<b>Total</b>	<b>2.55</b>	<b>.903</b>	<b>Disagree</b>
<b>Effectiveness</b>	9. Teaching through Darsak platform is very effectiveness and teachers overcome on problems that face them during preparing video lectures.	2.98	1.024	Neutral
	10. E-learning during Corona pandemic is more effective in terms of using time than traditional education.	2.67	1.119	Disagree
	<b>Total</b>	<b>2.82</b>	<b>.909</b>	<b>Neutral</b>

The next question (2) of Table 3 asked the teachers about the curriculum itself and the ability to deliver it with activities to motivate the students. The responses were neutral with the mean (2.86) and the standard deviation (1.138) which refers to probability of the ability of the curriculum to solve students' problem. But the main obstacle which fit may be face students with Darsak platform during delivering the lessons to students.

Question (3) of Table 3 discusses about the communication channel between teachers and students through Darsak platform. The mean is (2.48) and the standard deviation is (1.131) with the level of responses were disagree. The Darsak platform should has an icon to allow student to communicate with their teachers during the lessons.

The next section deliberates about the facilities which the teachers should be faced to help them to deliver their lesson.

Question (4) of Table 3 the researchers enquire whether the teachers can deliver their lessons without any interruption form the side of network. The question dedicated on the speed of internet which it is the best method to deliver E-learning process. The mean is (2.64) with standard deviation (1.226) and the level of responses were tended to neutral. It has the probability case. It may be the problem from the Network side.

In the next question (5) of Table 3 determined on the communication during the lessons between students and their teachers. It also focused on the ability of the students for exchange the ideas and ambiguous questions. The mean is (2.55) and the standard deviation is (1.173) with disagree level of teachers responses that there is no communication, no discussion between students and their teachers during the lessons.

The last question (6) of Table 3 focuses on the Darsak website itself whether it has option to help the students and the teachers to access to the materials of lessons at any time. It is good option for students to make revision at any time for their lessons. The mean is (3.33) with standard deviation (1.119) and the level of responses were neutral. It is probability answer, it may be available option, but it may have not sufficient time to access the materials to do the revision. It refers to that students have limited time to access the lessons. It may not be sufficient for students to do revision for their lesson and they prefer if they have sufficient time.

The next section discusses about Darsak platform appropriateness from teachers' perspective. The first question asked to know teachers' satisfaction for their work through Darsak platform.

Question (7) of Table 3 deliberate about teachers' preparation for delivering the lessons before they started the lesson on the Darsak Platform. The mean is (2.60) and the standard deviation is (.964) with level teachers' responses is disagree. It means that teachers didn't receive lessons' training well before they stated the lesson on Darsak platform. It may refer to spread of COVID-19 suddenly with unexpected time.

In the question (8) of Table 3 refers to more explanation and more conformation of teachers' satisfying with transform the sciences and mathematic subject through Darsak platform. The mean is (2.50) and the standard deviation is (1.065). It refers to the level of teachers' responses is disagreed.

The last section of teachers' questionnaire discusses about E-learning effectiveness through Darsak platform. It consists of two questions as follows:

Question (9) of Table 3 asked about the effectiveness of Darsak platform and whether the teacher overcome on the challenges which may it face them during delivering the lessons through the platform. The mean is (2.98) and standard deviation is (1.024)

which refers to neutral of level of teachers' responses. This point refers to the probability responses which it may refers to the possibility to improve E-learning through Darsak platform to be more effective. It also may be referring to actual case which it means there may be some actual effectiveness of Darsak platform.

The last question (10) of Table 3 which discusses about the effectiveness of E-learning during corona virus pandemic with the comparative with traditional learning. It is direct question whether E-learning is effective for students' performance. The arithmetic mean is (2.67) and the standard deviation is (1.119) with level of teachers' responses is disagree for the effectiveness of E-learning during Corona virus.

## 10 Findings

The findings of the study were discussed in the following Questions:

1. Whether Darsak platform has the capacity of appropriateness.
2. Flexibility to indoctrinate the lesson for students from point of view of (students, teachers, and parents). This question has two parts: the appropriateness and the flexibility of "E-learning through Darsak platform".
3. Are there environment facilities for Darsak platform to perform the role of E-learning from the point of view of (students, parents, and teachers)?
4. What is the effectiveness of Darsak platform from the point of view of (students, parents, and teachers)?

The result in Table 1 showed that the mean of the appropriateness of E-learning through Darsak platform during spread of the Corona virus from the point of view of the students, the mean was (2.82) with a standard deviation of (.924) with a medium degree which refers to Neutral. The mean of the appropriateness of E-Learning through the Darsak platform is (2.55) with standard deviation (.903) and the Disagree level of the teachers' responses. The results which obtained from parents from the side of the appropriateness of the E-learning through Darsak platform, the arithmetic mean is (2.28) with standard deviation is (.995) and the level of responses is disagree. The findings show that students, teachers and parents in Ma'an city in Jordan consider Darsak platform to be inappropriate as E-learning during coronavirus. From teachers view of point, Darsak platform was not able to help them to transfer the scientific material adequately in science and mathematics subjects. It indicated to the lack of preparation for teachers to be familiar with Darsak platform work. Teachers tried to do extremely effort, but they couldn't fill up the gap which created in students lesson due to the absence of traditional mode of education [20]. The following is the order of importance: school policy support for E-learning instruction, network speed and stability, course selection for online instruction, online technical service support, teachers' teaching training and equipment support. The findings of the current study from the point view of students, teachers and parents indicated that Darsak platform performance not appropriate, although, it is the only E-learning possibility to deliver lessons instead of face-to-face lectures. In the high school for example, teachers would not be able to convert all their school curricula into an online resource abruptly. They faced many



problems, for E-learning teaching such as distance, scalability, and personalized teaching and learning. Institutional measures can only support the students in combating this pandemic [21]. So that the performance was not acceptable to the society due to that they may be not crackling with new style of education [22]. It also indicated on the lack of electronic facilities which enable teachers to deliver their lessons smoothly.

The flexibility of E-learning through Darsak platform were reached (2.69) with a standard deviation of (.927) with disagree level of the student's opinion. The mean of flexibility of E-learning through Darsak platform from point of view of teachers is (2.84) with standard deviation (.929) and the level is neutral. The mean for the flexibility of E-learning through Darsak platform from point of view of the parents is (2.35) with standard deviation (.738) with the level is disagree of the parents for the flexibility of Darsak platform. The combination of the mean and standard deviation of flexible side of E-learning through Darsak indicated that all participated were not accepted the idea that Darsak platform have flexibility in its performance. There wasn't flexibility between channel of education and the teachers who deliver the lessons to students regarding of receiving and answering questions. In the other hand the second questions discuss the facilities and the effectiveness of E-learning through Darsak Platform which may be assist students in their educational process. Although some studies refer to satisfaction outcomes from the worth of E-teaching and learning in online environments [23], opposite of the previous studies that supported the time factor as a critical component in online teaching and learning, as well as the fact that flexible study time and the utilization of numerous sources of media to supplement instruction influenced students' online learning. The current study examines Darsak platform which it came with unexpected time with COVID-19 so that, there weren't flexibility in E-learning process through Darsak platform.

Regarding the question related to environment facilities, the findings showed that mean of the facilities which supposed to be available to encourage high school students' in Ma'an city, Jordan, the mean is (2.96) and standard deviation is (.875) with the score of students' opinion Neutral. The mean is (2.84) with standard deviation (.929) and the degree is neutral from point of view of parents. The mean for the facilities which supposed to be tools for enhancement the E-learning is (1.97) with standard deviation (1.068) and the level of the responses is disagree from the point of view of teachers. The findings showed that there were not facilities for students' E-learning through Darsak platform amongst students from the point view of students, teachers and parents. The innovative and flexible operations of Darsak platform insufficient for students' lessons. Regrettably, it appears that most responses have not been acceptable of E-learning Darsak platform performance. Many factors might be responsible for these in the Ma'an city, Jordan such as student population, training of lecturers and students, sustainable internet facilities and electronic devices which facilitate students' E-learning [24]. Theses facilitate may help students of indoctrinate the lessons instead of traditional mode.

Regarding the mean of effectiveness of E- learning for students through Darsak platform is (2.8209) and the standard deviations is (.93397) with level of score Neutral, also, according to the finding which obtained from the teachers approximately same to the students results. In addition, from the point of view of parents, the arithmetic mean of the effectiveness of E-learning through Darsak platform is (2.33) and standard

deviation is (.783) with disagree level of the effectiveness of Darsak platform for the lessons which their children gaining from the Darsak platform. It should not only focus on the benefits of using E-learning during times of crisis, but also on how to build up and develop the quality of virtual courses offered in such situations. in the last section of the effectiveness of E-learning through Darsak platform indicated that all of responses (students, teachers, and parents) were not agree with the effectiveness of E-learning through Darsak platform. It means that the role of E-learning through Darsak platform was not sufficient to inordinate students 'lessons during COVID-19 pandemic.

## **11 Suggestions and recommendations**

The researchers introduce many recommendations for students, teachers, and parents and the responsible of Darsak platform to get little of tangible improvement of E-learning during the emergency's cases. Students should be aware and serious towards their lessons, also follow their teachers' lessons assignment. Students must study seriously as if they are in the face-to-face classes. The researchers recommend that teachers must prepare the lessons and provide them with more explanation to attract students' attentions. Parents should provide their children with electronic devices to enable them to have an easy access to the lessons.

## **12 Conclusion**

COVID-19 crisis has affected many countries and forced it to close schools, colleges, and universities to stop the extent of the corona virus. Due to the long-lasting negative significances of all school closings would have on educational skill growth, many educational systems moved rapidly toward E-learning on an exceptional scale. Darsak platform was used as channel to compensate students lesson in Jordan. The researchers used Ma'an city as sample to investigate of role of Darsak platform as E-learning for students to proceeding educational process. The researchers collected data and analyzed it using SPSS and conclude to certain results. The findings showed that Darsak platform has not good impact among students from the point of view of parents, teachers, and students. Their response fell under neutral or disagree categories with most of questions which refers to appropriateness. The findings indicate that the students, teachers, and parents in Ma'an city perceive Darsak platform is improper for E-leaning during coronavirus. Darsak platform was not able to assist teachers in effectively transferring scientific content in science and math disciplines, according to teachers. It pointed to a lack of teacher training in terms of understanding how the Darsak platform operates.

Regarding flexibility and facilities from the perspective of students, teachers, and parents, the findings revealed that there were no facilities for students to study using the Darsak platform. The Darsak platform's creative and adaptable operations are insufficient for students' learning. Regrettably, it appears that the majority of replies were unsatisfactory in terms of the E-learning Darsak platform's performance.

In the concluding section of the effectiveness of E-learning through Darsak platform, all of the respondents (students, instructors, and parents) showed that the effectiveness of E-learning through Darsak platform was not agreed upon. It suggests that E-learning via the Darsak platform was insufficient to provide students' lessons during the COVID-19 epidemic.

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