

**Effectiveness of Digital Learning Platforms used by Teachers in times of COVID-19****Dr. Shazia Mansoori\****Assistant Professor**Department of Education**Aligarh Muslim University, Aligarh***Ms. Ufra Shahid***Aligarh Muslim University, Aligarh***Abstract**

The field of digital learning has gained mounting popularity. It offers a comprehensive learning experience to engage the students. Educators use Digital Learning Platforms to make teaching-learning process more interactive, interesting and attractive. The outbreak of COVID-19 pandemic has bent close and record challenges for education. Digital Learning Platforms open up a new world of educational opportunities in the COVID-19 pandemic. The aim of the study was to explore the effectiveness and usage of digital learning platforms by teachers in times of COVID-19. The purposive sample was employed with a group of 63 teachers. The questionnaire was adapted from Technology-Enabled Learning Implementation Tool (Das and Mishra, 2016). The findings of the study showed that majority of teachers have awareness of Digital Learning Platforms in order to use them in their teaching process. The current study however, revealed that majority of teachers faced various challenges while using Digital Learning Platforms.

**Keywords:** *COVID-19, Digital Learning Platforms, Education in pandemic, technology-enabled learning*

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## Introduction:

As of 31<sup>st</sup> March 2020, 185 countries around the world announced the closure of schools and universities. Nearly, 1.5 Billion youth have been impacted by this crisis. In India, total schooling system was confronted with harsh conditions, when on 24<sup>th</sup> March 2020, honourable Prime Minister Shri. Narendra Modi announced a nationwide lockdown (Surror, N. & Khan, M.N.S., 2020). The process of education has changed after COVID-19 pandemic like scope of open schools, open universities, online degrees increase and lessen classroom learning and promote remote learning. It gave guidance to teachers, students, parents and administration in this crisis. To lessen the anxiety of pandemic and to reduce the loss of learning during this crisis, teachers began taking online classes, giving assignments, reconstructing curriculum and even changing methods of assessment (Daniel, 2020). Many platforms were introduced to fill the gap in continuity of learning process, which included Zoom App, Google Hangouts, Skype meet up, Google Classroom, LMS and YouTube, etc. (Shenoy, et al., 2020). Structures of schooling and learning including teaching and assessment methodologies were adversely affected. We can mitigate the effects of pandemic on internship programs and research projects, by adapting e-learning courses with different levels of certifications, methodology and assessment parameters (Choudhary, 2020).

In many ways, digital learning platforms changed the way of learning in India. It provided basic tutorials, high quality lessons, text, video games and interactive lessons and quizzes with real-time feedback (Sawaikar, 2020). The convergence of technology and learning led to unexpected changes in the field of education and finance sector. Students learn at their own pace by using various digital learning platforms; school ERP, simplifies management process and reduces cost- based Indian education system, etc. (Norzom, 2020). Digital platforms worked as to increase interaction, retention, collaboration, engagement, sharing of content, etc and many teachers rated it effective in their teaching-learning process (Nagel, 2019). On the other hand, many students don't have proper gadgets like laptops, computer and smartphones. Some were totally unaware about digital learning platforms; major problem was observed with respect to visually challenged students as they were not capable to do assignments. Also, problem of limited resources and poor connectivity always came in the path of online classes (Bedi, 2020). Some teachers neither use technology as an instructional delivery system nor integrate technology into curriculum (Afshari, et al., 2009). Some teachers do not use ICT in their teaching-learning process as a mediator for achieving educational outcomes. This created a gap between current use of ICT in class and its potential, which signalled the teachers' central role in effective use of ICT in their teaching process (Aydin, et al., 2016). Loss of contact hours and lack of e-learning facilities, students cannot interact with teachers. It affected examination and marks of students because students were unable to prepare and achieved low marks (Sintema, 2020).

The aim of the present study was to explore the effectiveness of Digital Learning Platforms used by school, colleges and university level teachers for teaching during COVID-19 Pandemic. The sample of the present study consist of 63 teachers participated from Aligarh

Muslim University. All the responses were digitally recorded with the consent of each participant.

### Objectives of the study:

1. To determine the awareness of various digital learning platforms used by teachers in teaching process during times of COVID-19.
2. To study the perception of teachers towards effectiveness of digital learning platforms in teaching process.
3. To study the perceived barriers faced by teachers while using digital learning platforms in teaching process.

### Research methodology:

1. **Sample:** The research sample consisted of 63 teachers teaching in schools and colleges of Aligarh Muslim University, AMU. Out of the total sample, 31 teachers were male while 32 teachers were female.
2. **Procedure:** In the present study, data were collected through online survey form. After seeing the spread of novel coronavirus infection, the researcher decided to convert the questionnaire digitally into survey form with the help of Google form Apps, create link and send it to teachers of Aligarh Muslim University via WhatsApp groups and E-mails. The names and E-mail addresses of the respondents were not revealed in order to maintain privacy.
3. **Tool used:** The questionnaire was adaption of “Technology-Enabled Learning Implementation” Tool developed by “Das and Mishra” (2016).
4. **Analysis procedure:** On the basis of objectives framed for the study, the data were analysed using Microsoft Excel. Different operations like converting the data into percentage, etc.were used. Based on the analysis and interpretation of data, findings and suggestions for further studies have been given.

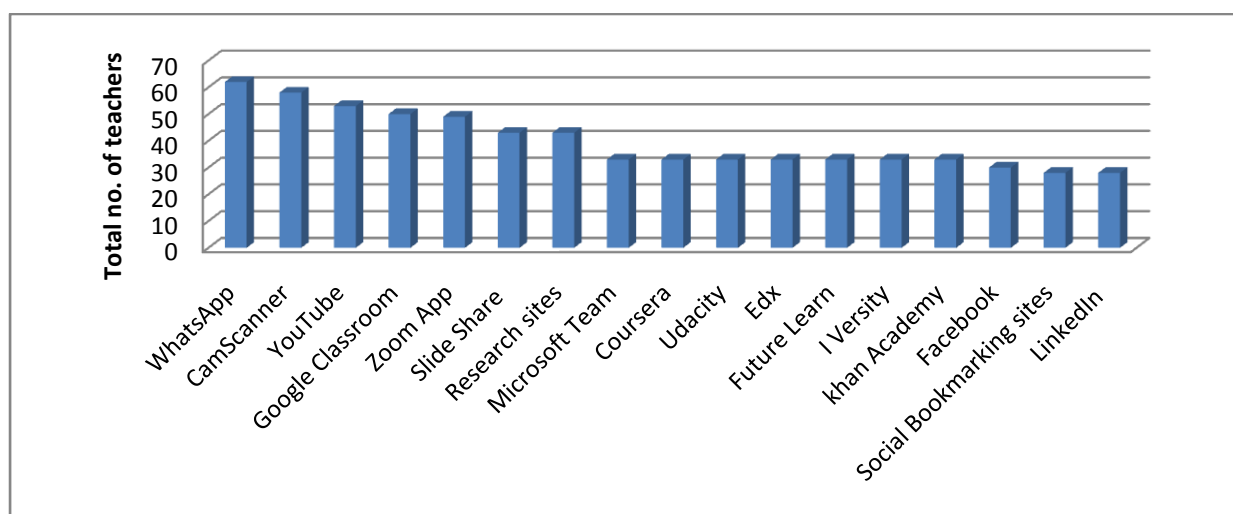
### Main findings of the study:

*Objective 1: To determine the awareness of various digital learning platforms used by teachers in teaching process in times of COVID-19*

For the said objective, the online questionnaire survey was used by the researcher. The participants of the study were enquired about the various digital learning platforms used by them. The responses of the participants were tabulated accordingly as given in the Table 1.

**Table 1: List of various Digital learning platforms used by teachers in teaching process in times of COVID-19**

Digital learning platforms	Percentage of teachers
WhatsApp	98.4%
CamScanner	92%
YouTube	84.1%
Google Classroom	79.3%
Zoom App	77.7%
Slide share	68.2%
Research sites	68.2%
Microsoft Team	52.3%
Coursera	52.3%
Udacity	52.3%
Edx	52.3%
Future Learn	52.3%
I Versity	52.3%
Khan Academy	52.3%
Facebook	47.6%
Social bookmarking sites	44.4%
LinkedIn	44.4%



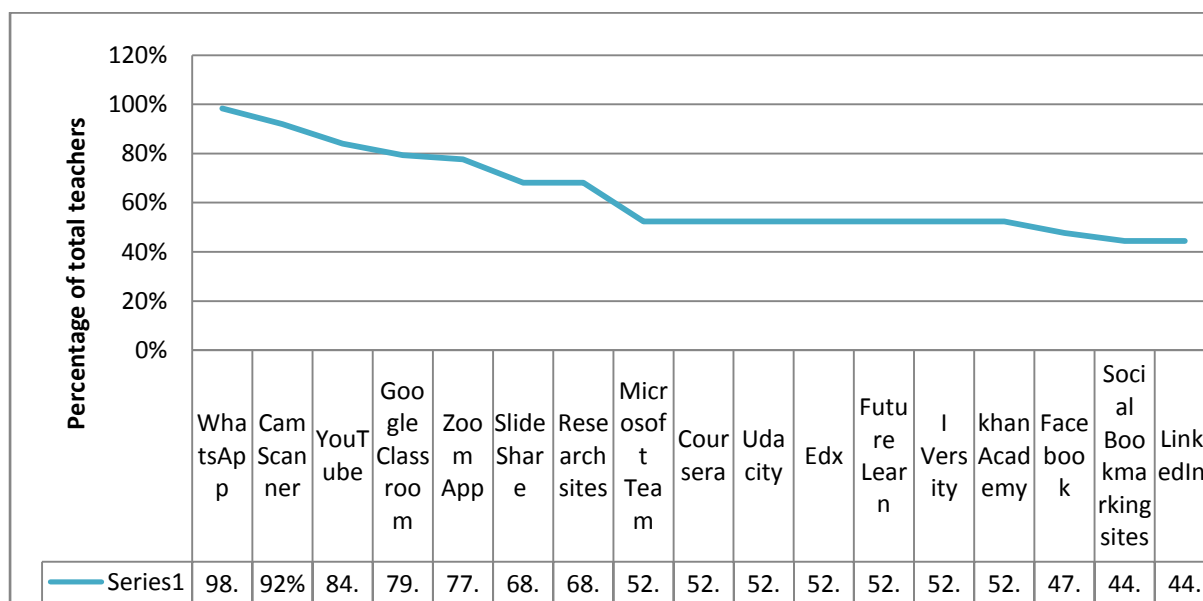


Figure1: Awareness of various digital learning platforms used by teachers in teaching process in times of COVID-19

### Findings and Interpretations:

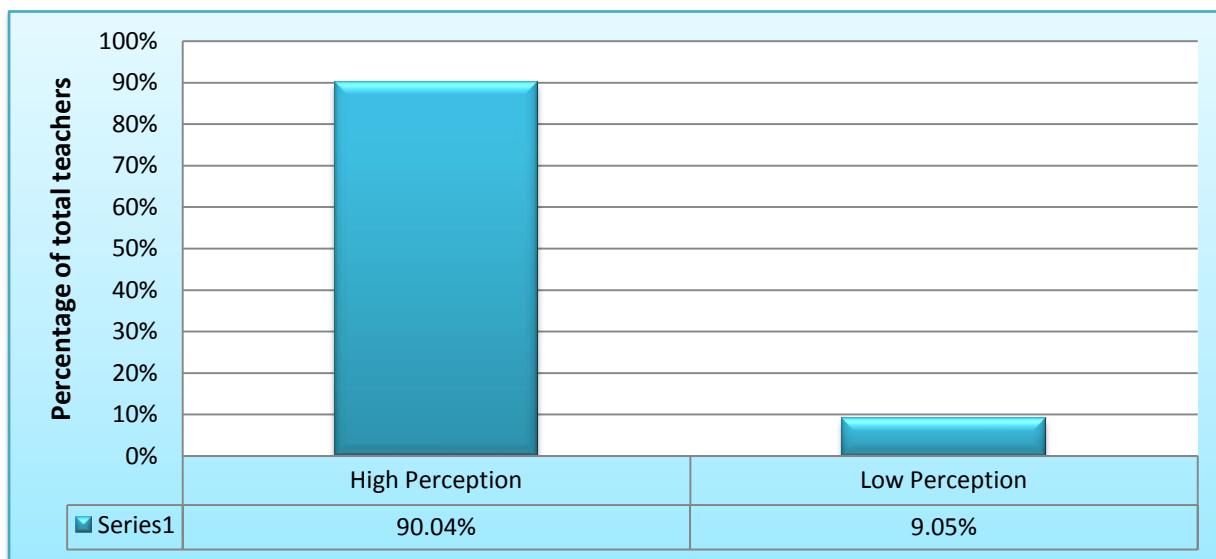
After analysis of the data as given in Table 1, it was revealed that a majority of teachers were aware of WhatsApp, CamScanner, YouTube, Google Classroom, Zoom App, Slide share and Research sites because these Apps and sites were widely used by them in their teaching-learning process during COVID-19. The reason may be teachers use WhatsApp and Google classroom for sharing their study materials. Students and teachers use CamScanner for converting their study material into PDF files, which could be easy to access for teachers and students both. Teachers can upload their video presentation on YouTube and easily take live classes through Zoom App. On the other hand, very less percentage of teachers are aware of social bookmarking sites and LinkedIn may be these sites were not so helpful in their teaching-learning process or may create disturbances in teaching process.

*Objective 2: To study the perception of teachers towards effectiveness of digital learning platforms in teaching process*

Table 2 explains the perception of teachers towards digital learning platforms.

**Table 2: Perception of teachers**

Level of perception	Percentage of teachers
High perception	90.04%
Low perception	9.05%



### Findings and interpretations:

From the findings of this objective, the researcher concluded that the maximum percentage of the teachers have high perception towards the use of digital learning platforms. The reason may be during this period of COVID-19 pandemic, the situation led to forced immersion of learners into e-learning. In order to continue teaching and learning practices in educational institutions, our education system has restored to online learning through digital platforms, it acts as a life-saver for education sector. On the other hand, few of the sample teachers had low level of perception towards the use of digital learning platforms. The reason may be that some of them may feel uncomfortable or unable to access information or faced problems while using these learning platforms.

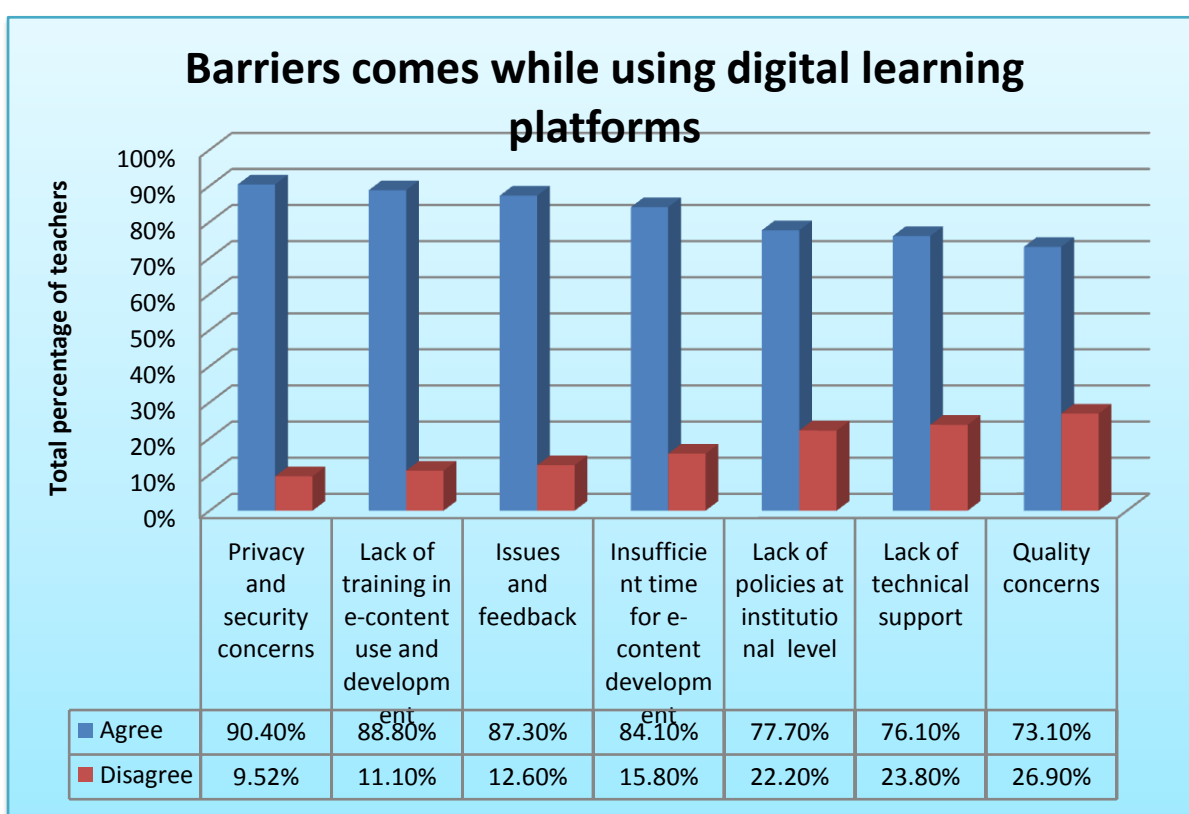
*Objective 3: To study the perceived barriers faced by teachers while using digital learning platforms in teaching process*

Table 3 shows some barriers which the teachers face while using digital learning platforms.

**Table 3: Perceived Barriers comes while using digital learning platforms**

Perceived barriers while using digital learning platforms	Agree	Disagree
Privacy and security concerns	90.40%	9.52%
Lack of training in e-content use and development	88.80%	11.10%

Issues of feedback	87.30%	12.60%
Insufficient time for e-content development	84.10%	15.80%
Lack of policies at institutional level	77.70%	22.20%
Lack of technical support	76.10%	23.80%
Quality concerns	73.10%	26.90%



### Findings and Interpretations:

From the findings of this objective, the researcher analysed the barriers faced by teachers while using digital learning platforms. They are listed as privacy and security concerns, lack of training in e-content use and development, issues of feedback, insufficient time for e-content development, lack of policies at institutional level and lack of technical support. From the analysis of findings, it was found that maximum percentage of the sample agreed that privacy and security concerns were important barrier while using Digital Learning Platforms, lack of training in e-content use and development, issues of feedback and insufficient time for e-content development as a barrier comes while using digital learning

platforms. The reason may be that during COVID-19 usage of digital learning platforms increased rapidly and also, cyber-crime was increased. For accessing these platforms, user personal information was requested like E-mail ID, phone number, address, WhatsApp number, etc. and therefore could be misused. Lack of training of creating and uploading documents, conducting online classes etc. were also found. Teachers felt insecure to access the digital learning platforms and so appropriate institutional policies were required. Quality concern of the online material was also a hindrance in using Digital Learning Platforms. Poor connectivity also acted as a barrier while using digital learning platforms.

### **Conclusion:**

Every sector of development was affected in the times of COVID-19 pandemic including the education sector. Fortunately, the closing of schools did not entirely stop education, it transformed its methods and forms to reduce the impact of closures, schools have been looking for alternative ways to provide access to education. Digital learning emerged as an indispensable resource for education. From the findings of the study, the researcher concluded that the awareness of various digital learning platforms in pandemic was found to be high among majority of sample participants. They were more aware of WhatsApp, CamScanner, YouTube, Google Classroom, Zoom App, Slide Share and research sites like Academia, Research Gate and Springer, etc. The reason may be that the teachers used digital learning platforms as part of their instruction to make interesting and interactive through virtual classes. In many ways, some teachers used these tools to select lessons materials for students, send assignment and review data from student work. Moreover, many platforms offered e-library to the teachers. It also increased motivation of teachers and students resulting from creative content and game-based online strategies. It also stimulated collaborative learning and achieved the exchange of content with both between teacher and students like sharing audio and video lessons, sending PPTs or documents, easily scan text or graphic and covert printed and handwritten material into editable and searchable digital copies, with the help of phone or tablet. Students who belong to remote areas took tremendous advantage in fulfilling their learning needs. Based on the data analysed, the researcher concluded that the teachers had high level of perception towards the use of digital learning platforms prevailed. During COVID-19 pandemic, the situation had forced immersion of learners into e-learning. In order to continue teaching and learning practices in educational institutions, our education system has restored to online learning through digital platforms because content is rich, deep and up-to-date. Instant and multiple forms of feedback, smart profiles that will drive customized learning and it also introduced transparency through parent involvement. It acted as life-saver for education sector. This study also exposed several barriers faced by teachers while using digital learning platforms. Problems like privacy and security, lack of training in e-content use and development, issues of feedback, insufficient time for e-content development, lack of policies at institutional level and lack of technical support are mostly encountered. The reason may be that in times of COVID-19 usage of digital learning platforms increased rapidly and some of the teachers were hesitate to use digital learning platforms as they were concerned about sharing their



personal details on website. Now, it is important that concern given to relevant and appropriate use of digital learning platforms, proper training should be given to all the teachers by the institutions so that system run smoothly and effectively and teachers should be aware of pros and cons of learning platforms to lessen the risk of indulging into the fake websites as of cyber-crime has also increased. Regulatory mechanism should be used to evaluate and assess the teaching process which is conducted online or on digital learning platforms.

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