

## Learners' Perception of Virtual Learning Amidst COVID-19

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**Abstract:** **Background:** paper intends to explore students' perceptions of virtual learning amidst COVID-19. It also elicits information about an alternative e-learning strategy which is perhaps the only option left after an official call for social distancing. The research was initially undertaken to find out the pedagogic relevance of virtual learning as a novel teaching strategy. Hence it is essential to mention that King Abdul-Aziz university-Jeddah has been utilizing technology and e-learning/blended learning technique for around 11 years.

### Method of the study

The study is qualitative-descriptive. Data collected through an adapted questionnaire was qualitatively analysed to achieve the research objectives. The sample was taken from a government university in Saudi Arabia.

### Findings & Conclusions

The results show that many students think distance or e-learning was a good experience. However, they felt a lot other personal, pedagogic and technical issues. All of them agreed that distance learning as a mode of education could be both useful and innovative, yet it poses many challenges during successful implementation for achievement of objectives.

### Implications

Based on the findings the researcher recommends that distance learning can be made more relevant, effective and quality - oriented if teachers are well trained, students are motivated and administration is supportive.

**Keywords:** COVID-19, virtual learning, e-learning, distance learning, perception, social distancing

## 1. Introduction

Information and communication Technology (ICT) has rapidly advanced and has greatly impacted the whole process and system including education. The use of most sophisticated tools is not limited to a classroom rather mobile learning can be accessed anytime and anywhere. Teacher can teach an individual student or a group using an App while sitting 1000 miles away. Similarly, students can submit their assignment using an online learning system, *whatsapp* or an email. Teachers and students can exchange opinions via audio or video chats or discussion forum.

Buzzetto-More (2008) successfully attempted to elicit students' perceptions related to various e-learning components and explored as to which components are more beneficial and easier in utilization. E-learning has emerged as a very effective teaching strategy in recent past. As felt by Croxton (2014) and Rubin & Fernandes (2013) that innovative pedagogies/strategies foster student learning, satisfaction, and learning outcomes.

### 1.1. The background

The outbreak of corona virus (COVID-19) has not only created a global health issue but also huge problems in economic and educational sectors. Institutions have been

closed due to fear of Corona especially due to the fact that kids can't maintain social distancing and can't abide by prevention measures. Keeping in view the context of health related threats and risks, the only option left is social distancing as suggested by medical agencies and organizations. But, the ultimate question is related to the time limit: how long. Should educational activities be on hold for the whole period of social distancing? How will studies be completed and exams be conducted?

Mass media's role has been recognized for not less than 3 decades, but in the specific context of today's social conditions, it has emerged as a champion due to the very reason that distance education is the only way out to deal with COVID-19. Therefore, this study seems to be of some significance which will ultimately come out with some appropriate recommendations in the present global context in general and Saudi Arabia in particular.

Though a lot of teachers, learners and administrators don't think that digital technology will replace the traditional classroom, the Covid-19 crisis has persuaded the stakeholders as to how important technology can be in unfavourable circumstances. Since institutions and pedagogues have experienced first phase of educational crisis, it is high time now to be ready for higher demands and tougher tests for digital companies and the consumers.

### **1.2. Importance of the study**

The potential for e-learning has now been unanimously agreed by scholars and businessmen especially when COVID-19 affected the entire dimensions of life. Use of mass media, e-learning or social networking for education is not a novel idea at least for Saudi Arabia or King Abdulaziz University (KAU) which has been utilizing e-learning/distance learning/blended learning mode for not less than 11 years. The university has electronic system for both the students and staff. Each related information is accessible anytime and anywhere provided there is a tool and internet access.

It is always a point to follow once there is a proposal from concerned deanship or authority. It is therefore the high time for all equipped institutions to utilize electronic learning or mass media and explore through research regarding challenges if any so teaching-learning can be improvised. This research, therefore, aims to analyse the perceptions of students, teachers and other stakeholders about e-learning, distance learning, blended learning or virtual learning.

Remaining paper is organized as Section I contains the introduction which includes conceptual framework,

while section II contains the related literature review. In addition, section III deals with methods especially about sample, tool selection, data collection etc. Section IV includes analysis of data and the last part deals with conclusion, recommendations and suggestion for further studies.

## **2. Literature Review**

This part includes literature/studies related to the concepts and definitions of the term 'e-learning', conceptual differences between virtual learning online, hybrid/blended, distance learning modes and similar terms/concepts.

### **2.1. E-Learning defined**

There can be variety of definitions of a single term/concept. Electronic learning (e-learning for short) is not an exception. E-learning has been conceived as a form or mode education that is managed electronically via the internet and its technologies. (Masrom, 2007). In this connection, Khan (2016, 126) stated that E-learning can be thought of nothing more or less than electronic utilization, e-delivery and accomplishment of learning goals via electronic media.

### **2.2. Blended and hybrid Learning**

Etymologically blended and hybrid learning may emerge from different roots, but in practice both may mean somewhat the same. Therefore a lot of people use them interchangeably. Hairline demarcation lies in the practice that the former emphasises on the combination of offline and online instruction, while latter seeks to find a balance that promotes the best experience (most time it is novel and innovative) for specific group of students.

A lot of studies in global as well as Saudi contexts have been conducted in the area of blended/online learning. Mirza (2008) questioned if E-Learning was finally welcomed due to its legitimacy in Saudi Arabia, and put forth different variables. While attempting a different area, Buzzetto-More (2015) studied learners' attitudes towards the integration of YouTube in online, and found the results quite useful. Al-Asmari (2011) and Al-Qahtani (2013) researched on different aspects of e-learning and concluded its effect on pre-service EFL teachers and students' achievement respectively.

### **2.3. Distance learning VS blended learning**

Distance learning mostly does not incorporate the 'in-person' interaction between teachers and students while online learning will involve in-person on a regular basis. Online learning can be utilised as a blended learning technique, but distance learning can't be blended with traditional face to face learning.

#### **2.4. Blackboard: the concept and usefulness**

Blackboard Learn is an application for online teaching, learning, community building, and knowledge sharing.

([https://help.blackboard.com/Learn/Instructor/Getting\\_Started/What\\_Is\\_Blackboard\\_Learn](https://help.blackboard.com/Learn/Instructor/Getting_Started/What_Is_Blackboard_Learn))

Blackboard is a platform/tool of teaching/learning which includes almost all the facilities. It has three levels: Blackboard basic, collaborate and Ultra. Each one has distinguished features. The link is: <https://www.blackboard.com/teaching-learning/learningmanagement/blackboard-learn> (Khan, 2020, 471)

#### **2.5. Advantages of e-learning**

Advantages of modes or methods initially depend on the context. Though online learning/distance learning offers many more opportunities than traditional face to face learning environment, it can't be rated as a better option. Had it been so, many good institutions would have offered online courses which could be accredited by top ranked institutions across the globe. The fact is that most of the reputed/government/public institutions/bodies don't even recognize or accredit online degrees.

There are reasons why advocates of E-learning support the concept and idea that it has some obvious pedagogical advantages over face-to-face learning: it is utilized to make teaching more effective and interesting. (McEwen, 1997; Smart & Cappel, 2006). In other words, benefits of online learning are observed more and far better if these modes are blended with traditional mode. Therefore, both the modes seem to be complimentary to each other. E-learning appears to be more flexible and learner controlled in many ways (Kocur & Kosc, 2009). On the other hand, if e-learning is monitored by a face to face instructor, the outcomes may be more and far better. Al Shehri (2010) asked a very crucial question: to 'e' or not to 'e', and revealed interesting findings.

Recently Allo (2020) investigated if the online learning was effective in the midst of Covid-19. The study explored that the experiment of e-learning/virtual learning has been quite supportive in teaching-learning. However it

was also hinted that the use of learning resource and application of pedagogy were bit challenging while using. Hence, preparedness is needed.

The main features are: comfort, easy and efficient communication, exposures on things, fruitful and lively interaction.

#### **2.6. Features of e-learning**

A lot has been said about advantages and features of e-learning. Here, blackboard as an app needs to be discussed more because virtual learning classes were conducted via blackboard, a tool that King Abdulaziz University has been using for more than a decade.

Hence a summary of e-learning feature are presented to cross check with the blackboard. The users are not always supposed to worry about technical issues. The identity of instructors is easily accessed. In addition, e-learning is characterised by self development and reasonable cost.

#### **2.7. Features of 'blackboard'**

Blackboard as an e-tool offers an innovative way to interact with many dimensions: the courses, syllabus, content, teaching, instructors, and the learners. It displays only the courses where one is registered as students, instructors or the coordinators. No one else can access. In the Blackboard app, one can easily utilise following features for better learning outcomes:

- 1- View course items
- 2- course announcements
- 3- attend virtual class
- 4- Participate in discussions
- 5- Take assignments and tests
- 6- Interact with your instructor and class in Blackboard Collaborate

([https://help.blackboard.com/Blackboard\\_App/Feature\\_Guide](https://help.blackboard.com/Blackboard_App/Feature_Guide))

#### **2.8. Features of virtual learning**

There are numerous benefits and features of virtual learning. Following is a summary of some of the features: The learners have the freedom to access learning materials from anywhere and at any time. If one is out of city or campus for some reasons one can continue learning from a airport lounge, hotel or a parking lot. In addition, virtual learning can suit one due to the reason that learning programs are built on a weekly structure related to tasks and assignments which due dates must be met by the clients: be online test, submitting homework, papers, and projects or attending a virtual presentation. An online education in general and virtual classes in particular creates a learner

friendly environment for some adults who work simultaneously with family responsibilities.

'Face to face learning' can provide limited interaction opportunities within a class, however virtual learning can involve global learners and an interaction with them may lead to better insights and outcomes. In addition to numerous learning-teaching opportunities, virtual learning can facilitate the learners to access immediate feedback on tests. Above all, in the present digital environment, virtual learning can increase one's knowledge and skills in one's specific area of study. It will enhance the learner's ability to cope with future digital demands.

### 2.9. Challenges while using of e-Learning & blackboard

E-learning can pose great challenges for many reasons one of which could be lack of self-discipline and internal motivation as it is mainly pursued independently. (Golladay et al., 2000; Serwatka 2003). In other words, e-learning goals can be better achieved if the learners are genuinely motivated towards learning as well as e-learning. (Geiger & Cooper, 1996; McKeachie, 2002; Adler, et. al, 2001; Brass, 2002; Burke & Moore, 2003; Benbunan-Fich & Starr, 2003) .Time management and commitment are other factors responsible for better results. (Golladay, et. al, 2000; Serwatka, 2003). Availability of mobile chat applications makes it more convenient for the users to participate in course related discussions (Smart & Cappel,2006).

Following cartoon though made for fun and humour yet is full of educational reality which catches attention of many pedagogues.



Figure-1: (google image)

It will be unfair if it is not mentioned that e-learning initially facilitates the learners. But, if otherwise taken it starts posing challenges. (McDonald, 1999-2000). Even if one traditional teacher does not agree to the idea that e-learning has great advantages, he/she has to admit the fact

that e-learning enhances the learning process with in face to face teaching context. (McEwen,1997).

### 2.9.1. Challenges in using Blackboard for virtual learning

Users can't face additional challenges in using blackboard unless there is a problem in the software of the blackboard.

It is a very easy to use App/tool. If the user is equipped to utilize e-learning or distance learning mode, he/she will not encounter any specific obstacle due to the blackboard tool. Most institutions using the blackboard have copyrighted the program, and appointed a coordinator/facilitator to monitor if there are any hitches due to the blackboard in particular.

## 3. Methodology

### 3.1. Objectives

- 1- to explore the perception of students on usefulness of blackboard and virtual learning
- 2- to find out challenges in using virtual learning mode and blackboard.
- 3-to elicit the attitude of students towards virtual learning and blackboard
- 4- to ascertain the need of training in virtual learning and blackboard

### 3.2. Research Questions

Following research questions are formulated keeping the aims in view:

- 1- What do students perceive regarding utility and use of virtual learning?
- 2- What do students perceive regarding utility and use of 'blackboard'?
- 3- What do the students think about virtual learning's learner friendliness?
- 4- What do the students think about ease and comfort in using blackboard?
- 5-What is the attitude of students towards virtual learning and blackboard?
- 6- What is the intention of students to use blackboard and virtual learning in the future?

### 3.3. Sample

Students sample comprised 4 sections of students ( only boys) studying at the foundation level at Faculty of Applied studies, King Abdulaziz university. All the students range in the age group of 18 to 21 years)

### 3.4 Tool design/selection

An adapted questionnaire (source: Mamattah, 2016) has been used in the study to elicit perceptions of the virtual learning users (students). Other stakeholders are not that important because they may naturally support the distance learning mode of instruction/examination utilized by their institutions.

3.4.1. Questionnaire Preparation/selection & data collection  
 Keeping many factors in view, the investigator decided to adapt an existing questionnaire to study the problem, however a couple of items were modified according to the objectives of the study.

The questionnaire has 20 items. The questions were divided into 4 components. It was 3-point scale questionnaire: Agree; undecided and disagree). The questionnaire has already passed the test of validity and reliability earlier while administration was done by the designer of the tool (Mamattah, 2016).

The questionnaires were mailed/messaged/posted via different modes and responses were collected the same ways.

**Questionnaire (for students): Appendix-A**

**Perceived usefulness of e-learning/virtual learning**

Table-1: perceptions of students (N=93)

statements	agree	undecided	disagree
<b>Category-I: importance of virtual/e-learning</b>			
1	53	8	32
2	62	13	18
3	82	3	8
4	48	18	27
5	49	23	21
<b>Category. II. Personal experience of ‘blackboard ultra</b>			
6	60	9	24
7	63	7	23
8	49	23	21
9	71	5	17
10	57	19	21
<b>Category-III. Personal experience of ‘virtual learning’</b>			
11	70	8	15
12	49	24	20
13	75	11	7
14	55	17	21
15	61	15	17
<b>Category-IV: Attitude Toward virtual Learning and intention to use in future</b>			
16	76	7	10

17	53	26	14
18	64	11	18
19	59	14	20
20	57	16	18

Any feedbacks:  
 .....

## 4. Analysis & Results

Background information has not been formally analysed, however, the researcher kept the data in mind to relate wherever needed.

Following is the analysis of main items and dimensions according to the objectives and research questions of the study.

### 4.1. Category-I: importance of virtual/e-learning

Item wise analysis (statements: 1-5)

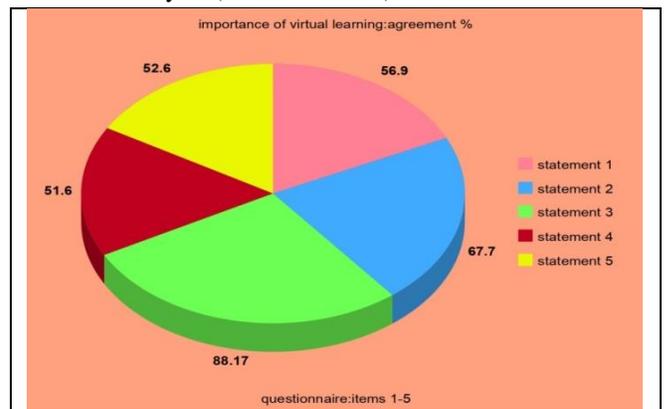


Figure-2 ( students’ responses on importance of virtual learning)

1- 56.9% respondents confirm that e-learning is a kind of learning which is attained at one’s own pace through media. Therefore, it can be added that it’s a kind of self-learning. 2- 67.7% learners are of the opinion that Studying through learning mode provides the flexibility to study at the time convenient to the learner.

3- 88.1% respondents opine that E-learning can enable people to study, irrespective of where they are located in the world.

4- Only 51.6 % confirm that tools are available to enable one to take tests and submit assignments electronically.

5- 52.6 % contends that live lectures are available over the internet, as is done in the classroom.

**4.1.1. Research Question:** 1- What do students perceive regarding utility and use of virtual learning?

**Findings:**

Based on the data analysis above, it can be summed up that virtual learning is an interesting and effective tool for a good number of students. The too/ App development, availability and utilisation of electronic apps will further reinforce the learners in near future.

**4.2. Category. II. Personal experience of ‘blackboard ultra’**

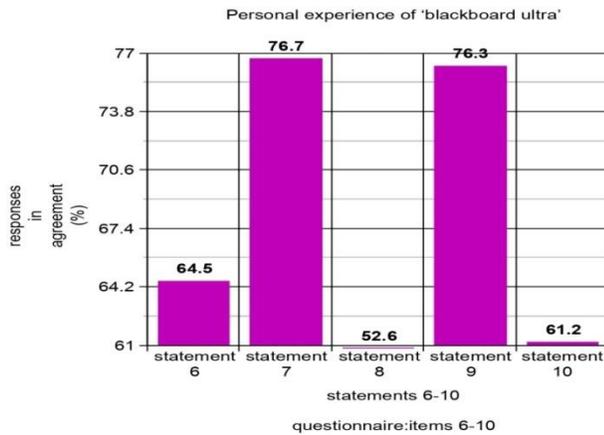


Figure-3 (Personal experience of ‘blackboard ultra’)

**Item wise analysis (statements: 6-10)**

6- 64.5% students agree that ‘Blackboard’ is a very good tool of e-learning. Only 25 % disagree. The reason of disagreement may be different as they might not be able to attend the training sessions or they failed to access well from their homes due to various reasons.

7- 76.7% respondents are in agreement with the statement that Blackboard ultra’ was very efficient in virtual learning.

8- 52.5% say that sharing files and interaction was easy.

9-76.3% students confirm that instructors followed comments via message box too.

10- only 61.2% opine that Audio and videos were clear and audible.

**4.2.2. Research Questions-2:** What do students perceive regarding utility and use of ‘blackboard’?

**Findings:**

According to the responses of the students, blackboard as tool in general is quite effective. However, some of its features have not well been utilized by some students. The reasons might be varied.

**4.3. Category-III. Personal experience of ‘virtual learning’**

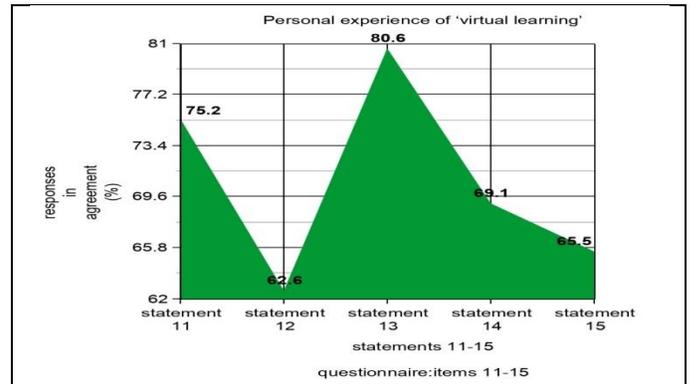


Figure-4 (Personal experience of ‘virtual learning’)

**4.3.1. Item wise analysis (statements: 11-15)**

11- About 75% respondents are of the opinion that they can ask questions and get immediate feedback in a virtual class like a face to face classroom. An addition is required at this point that a virtual class is more systematic and well panned; therefore one person is entertained at a time.

12- Around 62% respondents confirm that the did not experience much challenges in virtual learning. There might be challenges for many reasons; however, these can be managed if tried seriously.

13-80.6% students are in agreement with the statement that Instructors facilitated by study materials (pdf&Ppts) in a virtual classroom.

14-69.1% students are of the opinion that Virtual learning can save time and energy in going to colleges, and at the same time effective to learn from homes.

15- 67.5% respondents support the idea that learning electronically can improve my course performance as I will not need to travel to campus, but study at the comfort of my home.

**4.3.2. Research Questions:** 3- What do the students think about virtual learning’s learner friendliness?

**Findings:**

The general tendency of the responses lead to the conclusion that the learners find virtual learning quite learner friendly and easy to utilize, however, even if one is an expert in e-learning will face challenges if he is not serious and well prepared because it is generally considered as one of the self-learning modes of education.

**4.4. Category-IV: Attitude Toward virtual Learning and intention to use.**

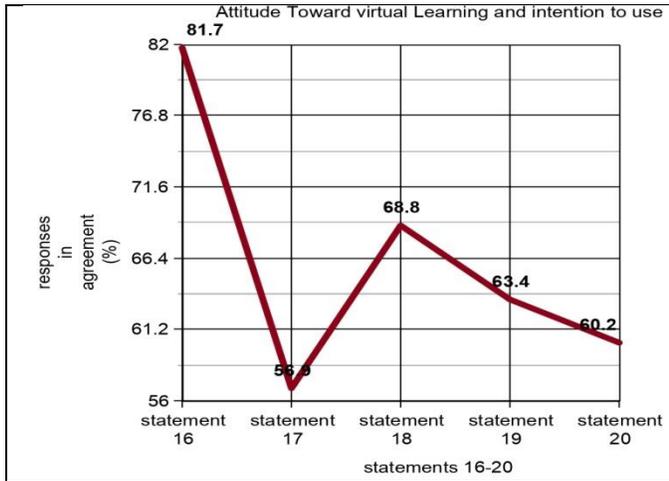


Figure-5 (Attitude Toward virtual Learning and intention to use)

**4.4.1. Item wise analysis (statements: 16-20)**

16- 82% students admit that virtual learning will be enjoyable experience.

17-.Around 55% students agree that Virtual learning can be further productive if tried honestly.

18- Some 68% students are of the opinion that in a COVID-19 like situation, virtual learning the easiest and the best strategy.

19- Around 63% students are of the opinion that Virtual learning ( college run or otherwise) can be more productive as it is participated by a huge number of local/global participants.

20- 60% students confirm that they are comfortable with virtual learning despite some manageable challenges.

**4.4.2. Research Question: 4-** What do the students think about ease and comfort in using blackboard?

**Findings**

It can be concluded that blackboard and virtual learning are very effective, easy to use, learner friendly and manageable. Though some initial readiness is required, the virtual learning can be proved to be the easiest and best teaching strategy in a situation like COVID-19.

**4.5. Specific Analysis (Item -16):** I believe virtual learning will be enjoyable experience.

Table-2

Item:16	Agree	undecided	disagree
	76(81.7%)	7(7.52%)	10(10.7%)

Based on the respondents' perception (in table-2) , following figure shows the findings as under.

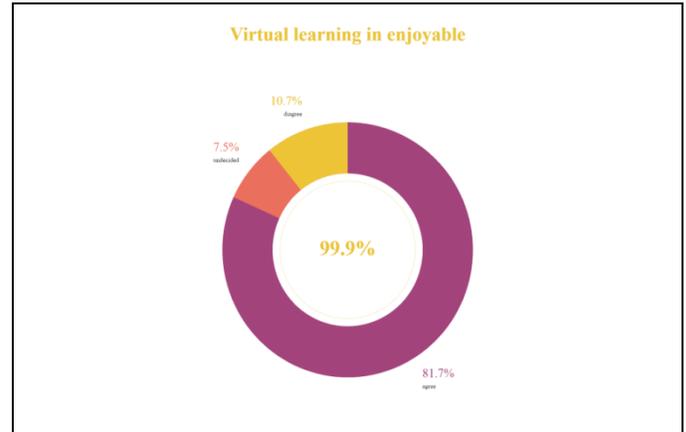


Figure-6 (Students' satisfaction on virtual learning)

**4.5.1. Findings:**

Analysis of statement 16 reveal that good number of students (81.7%) is satisfied the virtual learning experience. This shows that the experiment of virtual learning amidst COVID-19 at the King Abdulaziz University has been quite encouraging despite the fact that the emergency abruptly affected the face to face learning environment. Consequently the university administration switched over to distance/virtual mode in order to cope with the situation and does not let the term/session delay any further.

**4.5.2. Research Question: 5-**What is the attitude of students towards virtual learning and blackboard?

**Findings**

Statements related to effectiveness and learner friendliness of the both blackboard and virtual learning is very encouraging. It is believed that the university administration will further enhance the distance learning mode if the COVID-19 effect continues. The results will be much better as the strategic planning will contribute a lot to the e-learning unit of the university

**4.6. Research Question: 6-** What is the intention of students to use blackboard and virtual learning in the future?

**Findings:**

Keeping the responses in view, it can be concluded that the learners are enthusiastic to learn via distance/virtual learning. It is quite obvious that motivation level will increase if everything is at hand and instant.

## 4.7. Limitations

The study is based on a small sample while other stakeholders have not been included. The data is from only one faculty and one type of students ( foundation year). In addition, gender factor has not been included as well. In addition, the study is of qualitative-descriptive type and sophisticated statistical measures have not been utilized.

## 4.8. Conclusions

Covid-19 has created a situation that is inevitable in educational section as well. Policy makers, pedagogues and institutional managers decided the best possible solution to cope with the learning pandemic too, and recommended already existing virtual learning model. However, it was implemented in bit hurry simultaneously with training and teacher development processes. Students were also oriented with the need and importance of e-learning in general and virtual learning in particular. A study is always crucial in any such case in which a new experiment is being carried out. The present modest attempt was one of the parts of such initiatives. Results of the findings show that most of the learners (the sample) are aware of importance of virtual learning. They attended virtual classes, enjoyed too. However, they encountered some obvious hurdles which can be minimised by and by. Teachers need to be more equipped, professional and dedicated to deal with any virtual learning obstacles or challenges. Management support is also required.

## 4.9. Recommendations & Suggestion for Further Research

### 4.9. 1. Recommendations

Virtual learning can be implemented in a situation like COVID-19, and even can be utilized as a blended learning mode in face to face learning setting.

### 4.9.2. Suggestion for Further Research

In order to further explore some of the findings of this study, the researcher suggests the following studies to be done:

- 1-Opinion of employers on 'e-learning'/virtual learning.,
- 2- Employers' equal considerations for virtual/ e-learning.
- 3- Preparations of educational institutions to welcome expected shift from classroom learning to electronic learning.
- 4- A comparative study of students, teachers, and parents' perception on virtual/e-learning in a covid-19 like situation or otherwise.

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## Questionnaire (for students)

### A: personal information.

- 1- Name (optional):
- 2- Course/program of study:
- 3- Institutions: school/college:
- 4-Do you have a personal computer (laptop or desktop):  
Yes/no
- 5-Do you have: desktop/laptop/mobile/tab: please tick (✓)
- 6-Did you use mobile for virtual learning:
7. I have been using computer(s) for \_\_\_\_\_ years.

### B. Perceived usefulness of e-learning/virtual learning

1	e-learning is Learning at one's own at your own pace through media.
2	Studying through e-learning mode provides the flexibility to study at the time convenient to the learner.
3	E-learning can enable people to study, irrespective of where they are located in the world
4	Tools are available to enable one to take tests and submit assignments electronically.
5	live lectures are available over the internet, as is done in the classroom
6	Blackboard is very good tool of e-learning.
7	'Blackboard ultra' was very efficient in virtual learning
8	Sharing files and interaction was easy.
9	Instructors followed comments via message box too.
10	Audio and videos were clear and audible..
11	I can ask questions and get immediate feedback in a virtual class like a face to face classroom
12	I did not experience much challenges in virtual learning.
13	Instructors facilitated by study materials (pdf&Ppts) in a virtual classroom.
14	Virtual learning can save time and energy in going to colleges, and at the same time effective to learn

	from homes.
15	Learning electronically can improve my course performance as I will not need to travel to campus, but study at the comfort of my home.
16	I believe virtual learning will be enjoyable experience.
17	Virtual learning can be further productive if tried honestly.
18	In a COVID-19 like situation, virtual learning the easiest and the best strategy.
19	Virtual learning ( college run or otherwise) can be more productive as it is participated by a huge number of local/global participants.
20	I am comfortable with virtual learning despite some manageable challenges.

## Authors Profile



Dr Intakhab Alam Khan, an internationally acclaimed educational researcher, educationist, trainer and author is associate professor (Education/Pedagogy) at King Abdulaziz University, Jeddah-

Saudi Arabia. He has served faculty of Education, Jamia Millia Islamia (a central university) New Delhi, India. An author of a 18 academic, reference and research books, and around 75 articles/papers in different international online and print journals, Dr Khan has taught foundations of education, educational planning and administration. Besides teaching methodology papers Dr Khan has also taught applied linguistics, medical, health, business and professional English in India and Saudi Arabia. A recipient of many awards and honors, Dr Khan has developed an online course for teaching of special need learners, currently taught at the online international Islamic university, Gambia.