

Digital Skills Research

Enamul Munim Ludhi (2008932)

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To identify impacts of virtual learning environment on students' learning

INTRODUCTION

Virtual learning can sometime be known as distanced learning or learning that is being developed through computers as well as internet both outside and inside of the educational organization. It can be developed within organization or educational place or at home as well. It plays a vital role in some specific situation (Govindarajan and Srivastava, 2020). This study will discuss some impacts that this learning style and environment has on students learning in both positive and negative manner. It will also discuss importance of data collection and data analysis as it helps researcher in making better decision as well as accomplish goals. In regards to virtual learning it is found that it motivates students because in this type, feedbacks are being given to them in a timely manner and on the basis of reviews and feedbacks they can improve learning accordingly.

Aim and objectives

Aim: to discuss impacts that virtual learning environment can have on students' learning

Objectives:

- To discuss the main concept of virtual learning.
- To identify problems faced by tutor in distanced learning.
- To explore critical impacts of distanced learning environment on learning of students.

Rationale

To continue learning and teaching is one of the main reasons of selecting this topic because in this current covid-19 situation, students get affected the most. So, by identifying impacts, better ways can be developed that can help both teachers and students in increasing learning. To make students able to adapt changes and becoming flexible is other main reason. B developing

virtual learning environment in better way and identifying impacts, students can be made aware about its effectiveness and encouraged them in participating in it (Vergara and et.al., 2019).

LITERATURE REVIEW

Concept of virtual learning

As stated by Govindarajan and Srivastava, 2020 Virtual learning is a learning experience in which learning is enhanced through utilization of computer or internet. Virtual learning is used both inside and outside facilities of educational organization. This learning involves giving instruction and teaching or learning with help of technology and takes place in online environment. This means that teaching and learning practices are carried out online in which teachers and learners are physically separated. There are several forms of virtual learning that includes computer-based in which instructions are provided by software installed in computer. Internet-based learning in which instruction are provided by remote server. Remote teacher online in this instructions are provided by teacher but without being physically present with students. Blended learning, this is learning that involves virtual learning with computer based, internet based or remote teacher online. Facilitated virtual learning is also a virtual learning in which instructions are facilitated by a human facilitator. These are different types in which virtual learning takes place but one of the important is use of technology for the learning.

Problems faced by teachers in distanced learning

According to Alea and et.al., 2020 distance learning has facilitated continued learning when teacher and students cannot learn at the same place. But this form of learning and teaching has several challenges and teachers face several problems in distance learning. This involves problem in detailing. This means that learning and teaching is already complex in distance learning but this difficulty is added by detailing. This means in distance learning teacher faces problems while detailing concepts. In addition to this teachers also face problems in quality of instruction, this means that face to face learning was easier and it was easy to provide quality instructions. Technical difficulties with online teaching tools, this means that distance learning is significantly based on technology and online teaching tools and difficulties with these tools also create difficulty and problem for teachers. Lack of motivation in online learners is also a problem

for online learners in which motivation of students is very low compared to situation when they are learning face to face.

Critical impacts of virtual learning on students' learning

In words of Huang and et.al., 2019 virtual learning have significant impact on students' learning. Virtual learning has had significant impact on satisfaction and recall of students. There are several elements of this learning that has made positive impact of students learning, in which element of anywhere, anytime is one of the impacts. This means that students can learn and join their learning session regardless of time and place they are at. Other than this, virtual learning also has a positive impact in which there is a combination of structure and freedom. This means that there is a structure that students require to follow in virtual learning but it also gives freedom from traditional and conventional classroom learning. Immediate feedbacks on test are also an positive impact where immediate test results help students in better assessing themselves. But because this is different from conventional teaching and learning and this is why students and their motivation get affected and this has negative impact on their learning.

RESEARCH METHODOLOGY

Research type

It refers a form in which researcher gathers data and it may be either in numerical form or in non-numerical form. When researcher gathers data in words form or non numerical form then it is considered as qualitative research. Whereas, data gathered in numerical form is known as quantitative research. Selection of data analysis tools also depend on this element so, it is important for researcher to follow this element (Salimi and Maknoon, 2018). For this study, scholar has selected qualitative research and it gathers data in non-numerical form.

Data collection

Data collection is other main elements that can help researcher in accomplishing goals. With the help of data they can know that what people think related to the topic and why they think like this. There are mainly 2 types of data collection such as: primary and secondary. In primary data

collection, researcher gathers all new data that may never be used before by others. In other secondary type of data collection, they gather second hand data that has already been published. For this research study for knowing impacts of virtual learning environment for students, researcher has made use of both primary and secondary data. The reason behind it is to make better decision and knowing actual views of students. Sources of primary data are: questionnaire, interview, survey and others. Books and journals, internet, literature are sources of secondary (Gnann and et.al., 2018). By conducting literature and questionnaire, all data has been gathered by researcher via internet or online.

Data analysis

For making better use of data, it is important for researcher to analyze them or molding them for making changes in them. It makes gathered data accurate and authentic. Qualitative and quantitative are 2 data analysis tools. It is stated that selection of data analysis tools depend on type of research as this study is qualitative research so, researcher had made use of qualitative data analysis tools. Thematic analysis has been selected as qualitative data analysis tools for making gathered data accurate (Lowe and et.al., 2018).

Sample

Sample refers target people that are being selected by researcher for gathering information. Selection of target people also depends on the topic. Process of selecting people is known as sampling that is divided into 2 types such as random and non random (Wang, Gao and Li, 2018). In random sampling, target people are being selected randomly and in non-random they are being targeted as non random or on the basis of some criteria. 30 students are being selected as target people.

KEY FINDINGS AND ANALYSIS

Theme 1: virtual learning is better than normal learning?

Answers	Frequency
Yes	10
No	20

Interpretation 1: On the basis of above data it can be said that there are several differences between virtual learning and normal learning. The main reason behind a lot of differences between these 2 types of learning is normal learning does not require making use of internet and digital tools. Virtual learning is all about teaching with internet or making use of mobile, laptop, Tablet and others. In this regard out of 30 random students, 20 students believe that virtual learning is not better than normal learning because there is lack of face to face communication. Whereas, 10 students believe that virtual learning is better than normal learning as it increases their technical knowledge along with normal learning.

Theme 2: Problems do you face while learning online by making use of laptop in virtual learning?

Answers	Frequency
Noise at home	17

Interrupting internet	13
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Interpretation 2: In regards to virtual learning it is found that developing this environment is not an easy task as students and teachers both face some problems. In the context of problems in virtual learning, 17 students said that noise is one of the main problems if they learn from home via making use of laptop and other tools. They also said that noise and lack of peaceful environment leads to distractions and it affects their learning in a negative manner as they miss some important things that are being taught online. 13 students said that internet disruption is one of the main problems that they face either learning inside education organization or from home. Due to this, students miss some important things or points in learning.

Theme 3: what skills are required in making virtual learning successful?

Answers	Frequency
Communication	10
Time management	8
Technical	12

Interpretation 3: On the basis of above graph it can be said that skills play a vital role in making virtual learning effective and successful. In this context, 12 students said that technical skill is must for improving this environment for both students and teachers. 10 other students said that they feel that communication plays a vital role because interaction and ability to listen can make students able in understanding things and improving learning. Teachers also require this skill for making students understand about topic of study in an effective manner. 8 students interpret that time management skill plays a vital role because in virtual learning students procrastinate that may affect their learning in negative manner.

Theme 4: What impacts does virtual learning have on your behavior and learning

Answers	Frequency
Increases independency	6
Errors in practical subjects	7

Distraction or lack of discipline	8
Improves technical skills	9

Interpretation 4: From above graph it can be interpreted that virtual learning has both positive and negative impacts on overall learning on students. Out of 30 students, 8 students said that virtual learning distracts them due to several factors and other apps that run in background of students. 6 students said that virtual learning can increase independency among students because they know that due to lack of face to face communication, they have to learn at their own. They do not have any other option to solve so many queries and they try to find solutions at their own that increases independency. 9 students said that it helps students and teachers both in increasing technical skills they can better use technical in virtual learning. Remaining 7 students said that it increases errors in practical subjects such as math and others because it is not possible for students to understand all things at once. It can affect their learning and create barriers in getting higher marks.

CONCLUSION

It has been summarized from the above study that virtual learning plays a vital role as it has several positive impacts on learning of students. It has also shown some negative impacts of this virtual learning environment on overall learning as teachers also face some problems while teaching in this environment. Further, it has discussed some elements of research methodologies such as research strategy, data collection and data analysis. All these elements play a vital role in research project and helps researcher in making decision and accomplishing pre determined goals of research study. It has shown reasons of developing virtual learning environment such as: motivating students, continuing learning in critical situation such as climate change: Covid 19 and others. Some problems that teachers face in this virtual learning include: such as focusing on each student individually, distracted learners.

RECOMMENDATIONS

From the above study it is found that students and teachers face some problems so in this regard it can be recommended to educational organizations that they should focus o providing training to students. By providing training they can make them aware and train them about ways of making use of internet and tools via which virtual learning is being developed. It can increase their skills and knowledge. It can also be recommended to teachers that they should focus on making a group of students if there are numbers of students because it is not possible for teachers to teach to all students at one time so, by making groups they can take session in this virtual learning.

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APPENDIX

Questionnaire

1. Do you feel that virtual learning is better than normal learning?
 - Yes
 - No
2. What problems do you face while learning online by making use of laptop in virtual learning?
 - Noise at home
 - Interrupting internet
3. According to you what skills are required in making virtual learning successful?
 - Communication
 - Time management
 - Technical
4. What impacts does virtual learning have on your behavior and learning?
 - Increases independency
 - Errors in practical subjects

- Improves technical skills
- Distraction or lack of discipline