

## A Study to Investigate the Obstacles of Educational Technology in Curriculum; University Students' Perception

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Received for publication: 14 September 2020.

Accepted for publication: 18 November 2020.

### Abstract

This study was aimed to take the students' perceptions about the leading obstacles in the way of using educational technology in the Curriculum. The sample size consisted of 99 students who were from one of the University of Southern Punjab, Pakistan. The age ranges of participants were 20-40, and the level of qualifications were Bachelor-PhD. The quantitative survey method was used in this study for initiating the data collection. The scale was developed to take the student's perceptions that were consisted of 47 items. The descriptive, One-Way ANOVA, independent t-test and Pearson Correlation analysis were used as statistical techniques through SPSS. The findings specified that there is a significant relationship between the leading obstacles in the way of using educational technology in the Curriculum.

**Keywords:** Leading Obstacles, Educational Technology, Curriculum, Students' Perception.

### Introduction

Education considers the basis for the social, economic, and political progress of each nation. It makes awareness of other's beliefs among the individuals. Based on education, individuals understand their obligations and expertise to accomplish their public, cultural and singular rights. One of the most prominent aims of education is to empower individuals by upgrading their general awareness concerning their nation and worldwide situation as global residents. This acknowledgement makes a climate of trust and collaboration in the general public. It also endorses development economically and therefore masses become successful and contribute to the country's development (Zaki, 1989). The information and communication era has advanced in manners never utilized in the public arena, work situations, establishments, and individuals' carries through the iPhones, laptops, and iPods. It has driven an enlivening for students to become more severe in the worldwide commercial centre, expanding the request for advanced technology.

The sound use of educational technology system is necessary for each country of the globe. Each state builds up its young generation based on excellent preparation and education on economic, social, ideological, and political. When technology use for knowledge, it creates an effective learning practice for both teachers and students. Globalization has prompted an expansion in the utilization of innovation inside education; this doesn't imply that it has immensely affected students. But there is not sufficient indication of the influence of schooling based technology on learners (Schrum & Glassett, 2006). The use of technology in education and information, innovation in communication all advance for learning by utilizing technology, distinguishes online learning, e-learning; learning innovation; blended learning; pervasive learning, and versatile learning as the various kinds of

learning innovation, each with their highlights Catherall (2005), and these kinds of technological ways of learning straight involve in Curriculum and also play significant roles in students learning at a higher and lower level (Rogers, 2000).

However, the system of instruction in Pakistan did not depend on uniform standards. Various frameworks of pedagogy are all while working in the nation. The educational plan is likewise not formally dressed, which has brought forth multiple schools of musings. For instance, there is a massive improvement between the mentalities of understudies coming out from the instructive public foundations, Deeni Madaris, and barely any private well-established institution. This pattern has quickened the movement of polarization in the general public (Iqbal, 1981). Education technology stays significant in this globalized world and technology era. There is an urgent need for students to equip with educational technology. Because technology will keep on ruling numerous parts of human presence, and whenever incorporated ideally, it can just further guarantee to make better instruction and education for the learners.

#### ***Statement of Problem***

Literature indicated that technology in education plays a vital role in the students learning as well as in teacher's instruction strategies. But unfortunately, Pakistan is an underdeveloped nation and has confronted fundamental issues of teaching since its initiation. In this manner, the arrangement of education has neglected to convey as per the aspirations of the country. There can be different factors answerable for this circumstance. It is essential to explore why Pakistani students guarantee not to have enough technology in their public universities and what are the reasons behind it.

#### ***Objective of the Study***

The objective of the study is to know the student' perceptions about the most prominent and leading causes in the way of using educational technology in the Curriculum in Pakistan.

#### ***Research Question***

There are the following research questions in this study

1. Are the absence of financial resources making the causes in the way of using educational technology in the Curriculum
2. Are the economic obstacles making the causes in the way of using educational technology in the Curriculum
3. Is the failure of electricity making the cause in the way of using educational technology in the Curriculum
4. Is the deficiency of inspiration making the cause in the way of using educational technology in the Curriculum

#### ***Literature Review***

Technology in education is an examination and practice which encourages learning to make, organize, and use innovation to improve learning and teaching (Pacetti-Donelson, 2018). Learning technology, e-technology, and education innovation have become a significant perspective on skills improvement worldwide. As such, technologies for education have various hindrances for all partners included. Once conquer, technology will be a more prominent effect in the educational Curriculum instead of just being a subject all alone, without clear instruction targets and with student approaching it always. The innovation can be utilized for joining and change purposes. The integration of technology guarantees that technology upgrades current learning, though change considers innovation to show students things that were not educated until an invention was found (Su, 2009).

As per Suleimen (2019) the innovation should be utilized to change instruction, further keeping up the instructor-student experience; this will be helpful for all. The idea of learning has devel-

oped and doesn't hold a similar significance it held before. According to Feldstein and Gower (2015) technology guarantees learning objectives; recognizes needs; make important input; displaying methodologies; task commitment and execution; giving guided and free practice; furnishing students with control of their learning, and evoke understudy work to make comprehension of language and ideas

Earle (2002) and Davies and West (2018) revealed in their examination. They indicate to 15 cases where technology in education a curriculum inside institution has affected ultimately in a satisfactory at, language writing and reading abilities and composing aptitudes, better learning; better learning demeanor and confidence; accomplishment in subjects, communication, and commitment. Kozma (2003), directs in an investigation of 174 contextual analyses of inventive educational acts of technology in more than 28 countries. The finding reveals positive feedback when technology has been used in the traditional method of instruction, mostly in the Curriculum.

Tuttle (2012), led qualitative research in the US to decide whether the appropriation of technology by instructors influenced their educating, life and work. He interviews with 20 educators and found that the majority of the instructor's embraced innovation since they were either incited by the organization or because they accepted innovation would upgrade the learning experience of students. They explored that innovation improves the learning cycles and makes it more proficient. It was additionally discovered that the faculty utilized a wide scope of educational innovation.

Another relative investigation was directed by Çelik and Keskin (2009) who explored that student learning output in classroom instructed with and without instructive innovation. Findings indicated that utilizing technology adequately in class decreased instructing time. Of the apparent multitude of elements affecting combination of innovation by instructors, the highly significant is the improvement of educators' positive attitude towards the incorporation and execution of technology.

As indicated by Rogers' Theory of Diffusion of Innovations, those early innovation users will in accepting innovation quicker than those late innovation users. At the point when the students and instructors are presented to new instructive technologies, their convictions and comprehension of innovation decide the level of their acknowledgement of the innovation. At the same time, the school or other institution introduces latest highlight and element of another instructive innovation to students and teachers (Sahin, 2006).

### **Materials and Methods**

The quantitative survey method was used in this study for initiating the data collection to know about the obstacles in the way of using educational technology in universities. The scale was developed to take the student's perceptions that were consisted of 47 items.

#### ***Population***

The population was contained the students from Bahauddin Zakariya University Multan, Punjab, Pakistan. The participant had different age and education level and consisted of 99 (Male and Female) in numbers. The age range of participants was 20-40, whereas the education ranges were bachelor-PhD.

#### ***Data Analysis***

After getting the data, the data was further transmitted to the Statistical Package for Social Sciences (SPSS) for descriptive analysis, One-Way ANOVA, and independent t-test that can be seen in the results section.

## Results

**Table 1. Demographic Variable (Gender)**

Gender	N	M	SD
Male	63	64.76	25.33
Female	36	70.78	23.59

N = number of participants; m = mean of the participant; SD = standard deviation

Table 1 confirms the demographic variable about Gender, 63 male with the mean scored (M=64.76 SD=25.33), whereas 36 female with the mean scored (M=70.78, SD=23.59) and 99 total in numbers were taken part.

**Table 2. Mean and Standard Deviation in Different Age Groups**

Age	N	M	SD
20-25	29	70.34	23.07
26-30	33	68.73	24.97
31-35	28	61.43	23.05
36-40	9	66.67	34.64
Total	99	66.95	24.76

N = number of participants; m = mean of the participant; SD = standard deviation

Table 2 explains the mean and standard deviation in different age groups, and the age ranges were 20 to 40. There were four groups, and different in numbers like the first range 20-25, (N=29, M=70.34, and SD= 23.07), the second range 26-30, (N=33, M=68.73, and SD=24.97), the third range 31-35, (N=28, M=61.43, and SD=23.05), and the forth range were 36-40 (N=9, M=66.67 and SD=34.64).

**Table 3. One-Way ANOVA between Different Age Groups**

Age	Sum of Sq.	df	Mean Sq.	F	Sig.
Between Groups	1292.793	3	430.931	.696	.557
Within Groups	58789.954	95	618.842		
Total	60082.747	98			

Table 3 shows the ANOVA analysis between different age groups. The results indicate that there were non-significant differences between groups statistically, according to their age variable with the F-value .696, and p=.557.

**Table 4. Mean and Standard Deviation in Different Groups of Academic Qualification**

Qualification	N	M	SD
Bachelor	13	64.62	20.25
Master	40	68.70	25.54
PhD	46	66.09	25.60
Total	99	66.95	24.76

N = number of participants; m = mean of the participant; SD = standard deviation

Table 4 shows the mean scores and standard deviation of the participants according to the academic qualification variable in which participants with Bachelor degree scored (M=64.62, SD=20.25) participants with Master degree scored (M=68.70, SD=25.54) and the participants with PhD degree scored (M=66.09, SD=25.60)

**Table 5. One-Way ANOVA between Different levels of Qualification**

Qualification	Sum of Sq.	df	Mean Sq.	F	Sig.
Between Groups	227.618	2	113.809	.183	.833
Within Groups	59855.129	96	623.491		
Total	60082.747	98			

Table 5 confirms the ANOVA analysis between different levels of academic qualification groups. The results reveal that there were non-significant differences between groups statistically, according to their qualifications variable with the F-value .183, and p=.833.

**Table 6. Independent t-test between Leading Obstacles**

Leading Causes	t	df	Sig. (2tailed)	Mean Difference
Absence of Financial Resources	-1.099-	97	.275	-1.42063-
Economic Obstacles	-1.121-	97	.265	-1.44841-
Too Much Failure of Electricity	-1.249-	97	.215	-1.61508-
Deficiency of Inspiration	-1.187-	97	.238	-1.53175-
Total	-1.165-	97	.247	-6.01587-

Table 6 elaborates the independent t-test between leading causes in the way of using educational technology in curriculum. The results revealed that there is non-significant difference between leading causes like; (1) Absence of Financial Resources (t 97 = -1.099-, p=.275), (2) Economic Obstacles (t 97 = -1.121-, p=.265), (3) Too Much Failure of Electricity (t 97 = -1.249-, p=.215), (4) Deficiency of Inspiration (t 97 = -1.87-, p=.238).

**Table 7. Pearson Correlation between Leading Obstacles**

Variables		Absence of Financial Resources	Economic Obstacles	Too much Failure of Electricity	Deficiency of Inspiration
Financial Resources	Pearson Correlation	1	1.000**	.994**	.998**
	Sig. (2-tailed)		.000	.000	.000
	N	99	99	99	99
Economic Obstacles	Pearson Correlation	1.000**	1	.995**	.999**
	Sig. (2-tailed)	.000		.000	.000
	N	99	99	99	99
Failure of Electricity	Pearson Correlation	.994**	.995**	1	.999**
	Sig. (2-tailed)	.000	.000		.000
	N	99	99	99	99

Variables		Absence of Financial Resources	Economic Obstacles	Too much Failure of Electricity	Deficiency of Inspiration
Deficiency of Inspiration	Pearson Correlation	.998**	.999**	.999**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	99	99	99	99

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows the Pearson Correlation between leading obstacles in the way of using technology in education. The results confirmed that there was the Positive Correlation between the variables (1) Absence of Financial Resources ( $r = .998$ ,  $n = 99$ ,  $p = .000$ ), (2) Economic Obstacles ( $r = .999$ ,  $n = 99$ ,  $p = .000$ ), (3) Too much Failure of Electricity ( $r = .999$ ,  $n = 99$ ,  $p = .000$ ), (4) Deficiency of Inspiration ( $r = .999$ ,  $n = 99$ ,  $p = .000$ ).

### Discussion

A better system of education is fundamental for each country of the universe (Stromquist & Monkman, 2014). Each country builds up its generation based on strong education and training on political, financial, philosophical and social grounds, because, use of technology in education save the teachers times during instruction and enhance the student learning experience. The Curriculum is also that instrument through which the objectives of instruction are accomplished. The educational Curriculum of instruction in Pakistan doesn't satisfy the needs of the current occasions. It is an old and conventional educational curriculum without technology, which constrains the students to retain certain statistical data points without taking consideration of the truth that instruction is the comprehensive improvement of a person. The targets of training must be built up the mental, sociological, and philosophical establishments of instruction. The present instructive educational Curriculum of Pakistan doesn't satisfy these advanced guidelines of research and education (Moeed, 2019).

Because, Pakistan is confronted with numerous issues, for example, poverty, sectarianism, insecurity and psychological warfare (Rashid, Rabia, Mubarak, & Saleem, 2019). The explanations behind these issues are the absence of resistance, lack of general awareness and illiteracy by an incapable instruction framework. The prominent function of education has been dismissed in Pakistan, which has prompted low advancement in all fields of life. Instruction has been dealt like a stepchild in Pakistan. Since the foundation of Pakistan lowest budget has been given to the education sector, which has made the reason for weak quality in the system of education.

Hence the system of education, has neglected to raise the country financially, strategically and socially. After passing the half-century, and adopting 25 different policies, still, the system of education has gravely neglected to remove the country from the expanding financial, political and social entanglement (Rehman & Khan, 2011). The obstacles connected with the system of education in Pakistan are lack of policy enforcement, lack of teacher quality, lack of technological tool, outdated Curriculum, directionless education, political interference, poor management and research (Memon, 2007). The current study results also indicate that the obstacles of educational technologies in Curriculum have significant correlations which need to be improved if we want to make better our education system with technology.

### Conclusion

Education is a nourishing power. It empowers individuals to work for their turn of events and development. It is a helpful factor for the society of every nation. But the Pakistani new and future generation is aimless because of damage system of education which has neglected to raise the country on sound financial, political, social and moral grounds. The aimless arrangement of education is delivering powers of degree holders who are insufficient in high request live abilities, for example, creativity and research. The training framework rather has focused on giving the student with ancient (outdated) knowledge and information which is less applicable to the current quick evolving world. Students emerging from the Pakistani instruction system are hypothetically solid; however, they have no abilities to apply whatever they gain from their educational institutions because of the conventional techniques for educating and learning. Lastly, this study concludes that there is an urgent need to reform the education system and also eliminate the leading causes in the way of using technology in the education sector. For this purpose this research proposes four main recommendations.

### Recommendations

1. Leading obstacles in the way of using technology in education should be solved by the formulation of rigid plan and policies and by ensuring proper implementation of the policies.
2. The curriculum should be revised from conventional to digital and should be evaluated on an annual basis.
3. There should be no political interference as possible. In this way, the system will progress smoothly, without any discrimination.
4. Capital is considered as the backbone of any system. Unfortunately, Pakistan used to spend 2.5% of the total budget for the education sector, which is insufficient for the educational needs of the country in the current changing circumstances. It should be higher to compete with the global community.

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