

# Virtual Education: The Voices of Learners in Pakistan

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## Abstract

Virtual education is one of modern means of education. It adopted Modern Information and Communication Technologies to provide as like face to face educational opportunities. It is an alternate to formal system of education for those who feel difficulty in attending educational institutions regularly. In Pakistan, Virtual University was established in 2002 with the clear mission “education for all” and “not for profit education”. It has availed about fourteen years for its development but virtual learners still face certain problems in Pakistan. The present study was entitled “Virtual Education: the Voices of Learners in Pakistan”. The aims of the study were (1) to study the virtual paradigms in Pakistan, and (2) to identify the problems of virtual learners in Pakistan. A research tool; questionnaire was developed and used to collect data from the respondents. Total sample size was 451 virtual learners. The major findings of the study were virtual education worked with the agenda of education for all, convenient and low cost education. The study also found certain problems faced by virtual learners; isolation, technology hurdles and high dropout rate. These problems were serious in nature and must be addressed to ensure the efficiency and effectiveness of virtual education in Pakistan. The study also suggested some recommendations to improve the virtual education system in Pakistan that the government of Pakistan should promote virtual education facilities in the country. These facilities must be accessible and affordable for the common public. The government should launch various kinds of scholarships for the virtual learners to meet their study expenses.

**Keywords:** trends in education, virtual education, problems of virtual education in Pakistan.

## 1.1 Introduction

With increased popular access to online information, the relationship between education, society and technology have become more dynamic than ever (Adedara & Onwuegbuzie, 2014). The use of emerging instructional technologies generated new educational settings and replaced classroom instruction by ‘virtual education’ environments (Hussain, 2007). Virtual education will not only improve the standard of Higher Education but can also become the center of academic and research activities in Pakistan (Naveed, 2006). By using synchronous and asynchronous means of communication technologies virtual education promises to provide world class quality education at learners’ door steps. Alam (2010) describes that we are moving towards a major institutional reform that will enable us to provide humanistic and social incentive to match the technological advances. If this succeeds it would open a new road to the development of individual potential and deliver at last the equality of opportunities for the people of Pakistan. But having lots of knowledge and skill virtual learners in Pakistan are also facing a number of certain problems. Hussain (2005, 2007) found that virtual learners face some physical problems like blurred vision, headache, giddiness, and drowsiness. Similarly, the study conducted by Hussain & Rahmani (2009) depicted that virtual learners in Pakistani context faced problems associated with infrastructure including electricity failure and lack of its back-up. Virtual learners also reported some problems like technology hurdles, bandwidth of the internet, access to the cable network and job assignments. These problems need to be addressed for enhancing efficiency and effective of virtual education in the country.

## 1.2 Literature Review

The great growth of virtual education motivates many universities in all over the world to compete and offer better education for their students. Alam (2010a) describes virtual university collects the scattered intellectual resources on a single platform and then makes their expertise available to students across the length and breadth of the country as well as to students. According to Aspillera (2016) the significance of virtual education is recognized by its appealing characteristics: flexibility, cost effectiveness and convenience that enables students to participate in educational activities whenever and wherever they want. These features give the employees an opportunity to pursue their education in their free time without affecting their jobs. Moore & Kearsley (2011) pointed out that the evidence of progress made in distance education in Asia with respect to access, equity, and cost-benefits. Virtual education is economical than the formal system (Hussain, 2007). Virtual learners can attend the recorded lessons as many times as they need. Virtual Education almost like face to face education is making it possible for those who cannot afford a regular university degree due to high cost or lack of time. Synchronous sessions help e-learners feel like participants rather than isolates (Hrastinski, 2008).

Virtual education “prevents the learner from being treated unequally by peers or instructors” (Damm, 2004). E-learning allows the learner to overcome their physical and disabilities, and make them equal in comparison with other learners. Virtual education accommodates younger to old age students evenly and removes geographical differences and gender biasness. Virtual education without shaking the traditional values

and norms of culture, gives women an opportunity to get them enlisted in lists of educated and skilled people (Ranbo, 2001). Thus, women can manage their household responsibilities as well as they manage time and resources for study. This gender welfare approach makes more and more people literate. Fotourehchi, (2003) describes that virtual education is promoting access to higher education and transforming the world into a knowledge society: “education for all and all for education”. Virtual education welcomes self oriented, self motivated and ambitious students who participate in instructional process through constructive, collaborative, intentional and reflective activities (Jonassen, 2006; Gerami, 2003).

On the other hand, Behrouzian (2012) points out that many learners have no access to the necessary information and communication technologies such as computers, internet and televisions. Watson & Ryan (2007) found that growing numbers of students are adopting virtual courses but they almost always reflect students’ failure and higher dropout rates as compared with traditional courses. Zukar and Kozma (2003) pointed out that virtual school courses always reflected higher dropout rate and students failure. Fyodorova (2005b) stated that virtual education is developing from the technical point of view but very inefficiently in the field of cognitive sciences and psychology of learning. Moreover, lack of proper guidance is prevalent in virtual education due to it many students make wrong choice of course. As a result they fail to complete their studies. The studies conducted by Roblyer and Marshall (2003); Roblyer, Davis, Mills, Marshall and Roblyer, Freeman, Mason and Schneidmiller (2007); Watson and Ryan (2007) pointed that virtual educational institutions provide access to educational opportunities not locally available. Hartley and Bendixen (2001) pointed out that virtual educational access does not equate to traditional educational quality. Moreover, cognitive problems are also found among virtual learners e.g. lack of self-regulation could determine low performance in distance education environments. According to survey of Florida Tax Watch Center for educational Performance and Accountability (2007): students tend to enroll less but drop out is more in virtual schools. Frankola (2001), Willgin and Johnson (2004), Santaovec (2004), Bocchi, Eastman and Swift (2004) founded that issues of isolation, disconnectedness, and technological problems were the major factors of drop outs in distance courses. Some critics like Berge and Clark, (2005) points out that virtual education is providing educational facilities to already advantaged and self motivated learners. Moreover, they also claim that some skills cannot be better taught in virtual setup than in formal setups.

Russell (2001) pointed out that though it has been acknowledged that distance education has the capacity to provide educational opportunities equivalent in quality as in face to face educational courses but higher failure and dropout rates in distance environments is a problem. Oblender, (2002) & State of Colorado (2006) founded that despite real benefits of virtual schooling, usually virtual schools report from 40-70% dropout rate. Rouse (2005) points out one reason of high dropout rate in virtual education that some virtual institutions forced students to repeat a course again and again in order to improve the grade. Pape (2008) revealed that virtual education opportunities tend to benefit mostly already-advantaged learners.

### **1.2.1 Virtual Education in Pakistan**

In Pakistan virtual university was established in 2002. The project proved to be a wonder and lifted up the standards of distance education. Virtual University of Pakistan is the Pioneer University in virtual education based on the Modern Information and Communication Technologies in Pakistan. It was established by the federal Government with the clear mission ‘not-for-profit’, public sector institution for the provision of world class education to students. Within a short span of time it has established about 23 its own and 186 private affiliated campus in all over the country. It is providing education facilities to people at graduate level, master level and M. Phil level programs in various disciplines. Virtual learners have their LMS (Learning Management System) accounts where they find their course material, audio video lectures, assignments, quizzes and exams etc.

Virtual learners in Pakistan face problems which need to be addressed for enhancing the effectiveness and efficiency of virtual education in the country. Hussain and Rahmani (2009) depicted virtual learners in Pakistan face problems associated with job assignments and infrastructure including lack of its back-up, electricity failure, low bandwidth of the internet and internet connections. Similarly, Hussain (2005a, 2007b) found that virtual learners face some physical problems like eyesight problem, headache, anxiety and drowsiness, students’ joint pain and backache problems due to long sitting.

### **1.3 Objectives of the Study**

The objectives of the study were as following:-

- 1) To study the virtual paradigms in education.
- 2) To identify the problems of virtual learners in Pakistan.

### **1.4 Research Methodology**

The study was conducted with the main focus on virtual education and its problems in Pakistan. The study adopted survey approach of descriptive research for data collection. The population of the study consisted of

learners of Master of Business Administration Program of the Virtual University of Pakistan. Total population size was 4100 virtual learners. The population was scattered in all over the country as well as in overseas. Therefore convenient sampling technique was found suitable for data collection. Total sample size was 451 virtual learners. A research tool-Questionnaire on five points rating (Likert) scale was developed to elicit the opinions of the respondents. The research tool was developed to cover the basic parameters of virtual education such as access, quality, accreditation, cost effectiveness, students' satisfaction, involvement of learners in learning process and problems of virtual learners.

The researcher validated the research tool through its pilot testing at virtual university campus in Multan. Necessary amendments were incorporated to make it easy and comprehensive. Keeping in view the sample size online data collection technique was adopted to collect data from the samples. The finalized research tool was converted into google.doc and was sent to the respondents through e mails. Each learner was restricted to submit only one response. Therefore, 451 responses complete in all respect were received. The data was coded and analyzed through SPSS in terms of percentage, mean scores and standard deviation. The scale values assigned were highest 05 strongly agree (SA) to lowest 01 strongly disagree (SDA).

### 1.5 Findings

Table 1: Virtual University provides education at

Statements	Responses = f (%)					Mean	SD
	SDA	DA	UND	A	SA		
Undergraduate level	79 (17.5)	110 (24.4)	52 (11.5)	68 (15.1)	142 (31.5)	<b>3.19</b>	<b>1.525</b>
Graduate level	1 (.2)	2 (.4)	9 (2)	135 (29.9)	304 (67.4)	<b>4.64</b>	<b>.570</b>
Postgraduate level	4 (.9)	9 (2)	15 (3.3)	103 (22.8)	320 (71)	<b>4.61</b>	<b>.729</b>

It was found that virtual education model crafts it an alternate to formal system of education in Pakistan as it provides educational opportunities at under graduate level, graduate level and post graduate level academic programs. Above table highlighted that less than half (46.6%) of the respondents agreed while 41.9% respondents were disagreed with the statement that virtual university offered admissions at under graduate level of academic programs. On the other hand, the data highlighted that huge majority (97.3%) of respondents agreed with the statement that virtual university of Pakistan offered educational opportunities at graduate level programs. Mean score 4.64 and standard deviation .570 supported the statement. Similarly, the data also highlighted that huge majority (93.8%) of respondents agreed with the statement that virtual university of Pakistan offered educational opportunities at post graduate level programs. Mean score 4.61 and standard deviation .729 supported the statement. The overall data in table 1 indicated that virtual education is alternate to formal education but virtual university needs to improve its advertisement strategy so that the public can be fully aware of virtual programs as sufficient number of virtual learners was not aware of under graduate programs of virtual university.

Table 2: Virtual University offers academic programs in disciplines of.

Statements	Responses f (%)					Mean	SD
	SDA	DA	UND	A	SA		
Humanities.	90 (20)	98 (21.7)	70 (15.5)	100 (22.2)	93 (20.6)	<b>3.02</b>	<b>1.437</b>
Engineering.	78 (17.3)	100 (22.2)	59 (13.1)	108 (23.9)	106 (23.5)	<b>3.14</b>	<b>1.441</b>
Social sciences.	26 (5.8)	37 (8.2)	42 (9.3)	188 (41.7)	158 (35)	<b>3.92</b>	<b>1.134</b>
Pure sciences.	81 (18)	109 (24.2)	60 (13.3)	124 (27.5)	77 (17.1)	<b>3.02</b>	<b>1.386</b>
Business administration.	1 (.2)	1 (.2)	1 (.2)	108 (23.9)	340 (75.4)	<b>4.74</b>	<b>.487</b>
Information technology.	00 (00)	00 (00)	1 (.2)	75 (16.6)	375 (83.1)	<b>4.83</b>	<b>.383</b>

Virtual education model of Pakistan can rightly be regarded as alternate mode of formal education as it offered educational opportunities in disciplines of humanities, engineering, social sciences, pure sciences, business administration and computer sciences as well. It can share the load of formal education. Above table highlighted that less than half (42.8%) of the respondents were agreed and 41.7% were disagreed with the statement that virtual university offered admissions in humanities. Again less than half (47.4%) of the respondents were agreed and 39.5% of the respondents were disagreed with the statement that virtual university offered admissions in discipline of engineering. On the other hand majority e.i. 76.6% of the respondents were agreed while 14% of the respondents were disagreed with the statement that virtual university offered admissions in social sciences. Mean score 3.92 and standard deviation 1.134 supported the statement. Moreover, less than half (44.6%) of the respondents were found agreed while 42.2% respondents were disagreed with the statement that virtual university offered admissions in pure sciences. However, huge majority (99.3%) of the respondents were agreed with the statement that virtual university of Pakistan offered admissions in disciplines of business administration. Mean score 4.74 and standard deviation .487 supported the statement. Huge majority (99.7%) of the respondents were agreed with the statement that virtual university of Pakistan offered admissions programs in disciplines of information technology. Mean score 4.83 and standard deviation .383 supported the statement.

Again it is clear that virtual education is an alternate to formal education but virtual university needs to improve its advertisement scheme so that people should be more aware about virtual programs.

Table 3: *Virtual education provides opportunities for*

Statements	Responses f (%)					Mean	SD
	SDA	DA	UND	A	SA		
Higher education.	9 (2)	5 (1.1)	9 (2)	81 (18)	347 (76.9)	<b>4.67</b>	<b>.754</b>
Continuing education.	1 (.2)	8 (1.8)	20 (4.4)	106 (23.5)	316 (70.1)	<b>4.61</b>	<b>.678</b>
Easy migration of campus.	11 (2.4)	8 (1.8)	41 (9.1)	139 (30.8)	252 (55.9)	<b>4.36</b>	<b>.902</b>

Virtual education model in Pakistan claimed to provide higher educational opportunities to citizens beyond the gender, cultural and geographical issues. It removed geographical boundaries, gender biasness and cultural issues. It was also a source to continue education for in service, physically defected and persons living in boundaries or in remote areas. It had flexibility in place and timings. With the help of educational technologies, people had opportunity to continue education by setting their own schedule so that their regular routine might also not suffer. Virtual education model of Pakistan was a flexible mode of education. It gave candidates an option to have university in their bag. If candidates had to shift to other city or even in other countries they had facility to migrate their campus as well. Actually virtual education was not campus based study. It was technology based education. Internet and communication technologies facilitated the virtual learners to continue their study in any virtual campus of their choice instead of some specific campus.

Table above highlighted that virtual education model of Pakistan provides higher education opportunities, continuing education and easy migration of campus facilities to virtual learners. According to the data; huge majority e.i. 94.9 % respondents agreed and only 3.1% respondents were disagreed with the statement that virtual university of Pakistan facilitated the students for access to higher education. Mean score 4.67 and standard deviation .754 supported the statement. Huge majority e.i. 93.6 % respondents agreed and only 2% respondents were disagreed with the statement that virtual university of Pakistan facilitated the students for continuing education. Mean score 4.61 and standard deviation .678 supported the statement. Majority e.i. 86.7 % respondents agreed and only 4.2% respondents were disagreed with the statement that virtual university of Pakistan facilitated the students for easy migration of campus. Mean score 4.36 and standard deviation .902 supported the statement.

Table 4: *Virtual education aims for*

Statements	Responses f (%)					Mean	SD
	SDA	DA	UND	A	SA		
Education for all.	1 (.2)	13 (2.9)	7 (1.6)	81 (18)	349 (77.4)	<b>4.69</b>	<b>.666</b>
Low cost education.	21 (4.7)	42 (9.3)	34 (7.5)	108 (23.9)	246 (54.5)	<b>4.14</b>	<b>1.181</b>
Learner centered education.	8 (1.8)	28 (6.2)	63 (14)	153 (33.9)	199 (44.1)	<b>4.12</b>	<b>.988</b>

Virtual education system was initiated in Pakistan with two big aims and mottos e.i 'education for all' and 'cost effective education'. It was an agent to realize this dream of providing higher education facilities to maximum people with ease and comfort. In formal education establishing higher education institutions in all big and small cities and in remote areas in Pakistan requires huge expenses. Furthermore most of the citizens cannot afford continuing their study in formal sector universities.

The virtual system was regarded low cost for its flexibility in time and pace. Virtual learners need not to travel to institution on daily basis. Hence it saved their travel cost. Majority of the learners were found doing some job while continuing their study. Moreover, most of the work was carried through educational technologies so there was saving of print material cost. Virtual education model reduced infrastructure cost, training cost, travel cost, print material cost, labour cost and accommodation cost. Virtual learners are facilitated to participate in teaching learning activities sitting at home. They only needed to visit regional examination centers just to take part in the examinations.

Virtual education was cost effective from the government point of view as well because virtual university needs not to establish hundreds of educational institutions. It runs its programs with the collaboration of private sector. Private colleges affiliated with virtual university provide virtual educational facilities to learners to participate in educational activities in virtual settings. Virtual education needs short number of faculties. Hence the cost at the trainings for staff development would automatically be reduced. Virtual education did not bound learners to attend their classes at campus. So it saved travel and infrastructure cost. Less need of text books, helping books and notebooks saved enough expenses for the virtual students. Learners did almost all the work on computers. Virtual education was cost effective model of education in matter of meeting running expenses and labour cost in educational institutions. Virtual education institutions did not require hostels for learners' accommodation because learners participate in teaching learning activities staying at home or attending any nearby virtual campus. Virtual education model was learner centered model. Learners were facilitated with learning material 7/24 hours. They can participate in teaching learning activities according to their time and space. They are also facilitated in submitting quizzes, assignments and setting their date sheet themselves.

The data in the above table proved that the principal aim of virtual education is education for all. According to the data; huge majority (95.4%) of the respondents were agreed and 3.1% respondents were disagreed with the statement that virtual education works with the agenda of education for all. Mean score 4.69 and standard deviation .666 supported the statement. Majority of the respondents (78.4%) were found agreed and 14% respondents were disagreed with the statement that virtual education was a cost effective model of education. Mean score 4.14 and standard deviation 1.181 supported the statement that virtual education is cost effective education. Moreover, vast majority (78%) of the respondents were found agreed and 8% respondents were disagreed with the statement that virtual education model of Pakistan was learner centered model. Mean score 4.12 and standard deviation .988 supported the statement.

Table 5: *Virtual learners face problems of*

Statements	Responses f (%)					Mean	SD
	SDA	DA	UND	A	SA		
Isolation	1 (.2)	18 (4)	18 (4)	162 (35.9)	252 (55.9)	<b>4.43</b>	<b>.770</b>
High drop out	6 (1.3)	38 (8.4)	36 (8)	183 (40.6)	188 (41.7)	<b>4.13</b>	<b>.969</b>
Electricity failure	16 (3.5)	33 (7.3)	33 (7.3)	139 (30.8)	230 (51)	<b>4.18</b>	<b>1.079</b>
Time management	21 (4.7)	36 (8)	48 (10.6)	167 (37)	179 (39.7)	<b>3.99</b>	<b>1.116</b>
Old dated material	54 (12)	73 (16.2)	19 (4.2)	169 (37.5)	136 (30.2)	<b>3.58</b>	<b>1.376</b>
Technology hurdles	6 (1.3)	13 (2.9)	34 (7.5)	189 (41.9)	209 (46.3)	<b>4.29</b>	<b>.831</b>
Medium of instruction	22 (4.9)	118 (26.2)	67 (14.9)	156 (34.6)	88 (19.5)	<b>3.38</b>	<b>1.202</b>

Virtual education model is appreciated in all over the world. However, it is relatively a new phenomenon in Pakistan. Therefore, virtual learners were found raising their voices in order to cover the loop hole in this system. Above table pointed out some of their problems which are necessary to be solved to increase efficiency and credibility of virtual education in Pakistan. According to data huge majority (91.8%) of the respondents were found agreed while 4.2% were disagreed with the problem that they were feeling isolation in this system. Neither virtual learners nor faculty was properly in touch with one another. Mean score 4.43 and standard deviation .770 approved the statement. Vast majority (82.3%) of the respondents was found agreed while 9.7% were disagreed with the statement that virtual learners faced high dropout problem. Mean score 4.13 and standard deviation .969 supported the statement. Majority (81.8%) of the respondents were agreed while 10.8% were disagreed with the problem that they faced the problem of electricity failure. Mean score 4.18 and standard deviation 1.079 supported the statement. Majority (76.7%) of the respondents were found agreed while 12.7% were disagreed with problem that they faced the problem of time management. Mean score 4.09 and standard deviation .998 supported the statement. Majority e.i. 67.7% of the respondents was agreed and 28.2% were disagreed with the problem that they were facing problem of old dated material. Mean score 3.58 and standard deviation 1.376 supported the statement. Vast majority e.i. 88.2% of the respondents was agreed and 4.2% were disagreed with the statement that they were facing problem of technology hurdles. Mean score 4.29 and standard deviation 831 supported the statement. More than half e.i. 54.1% of the respondents was agreed and 31.1% were disagreed with the statement that they were facing problem of medium of instruction. Mean score 3.38 and standard deviation 1.202 supported the statement that virtual learners faced problems medium of instruction.

### 1.6 Discussion

Virtual education is an innovative instructional paradigm mediated by modern communication technologies. It focuses on intentional acquisition of knowledge, skills, attitudes and competencies. Peter et al., (2000) claims VU aims to provide quality education to a very large number of students. In this regard virtual university of Pakistan was developed as a public sector university in 2002 with the clear mission: “education for all” and “not-for-profit institution” to provide extremely affordable and world class education to aspiring Pakistani students in the country and overseas. It provides educational opportunities through educational technologies without the student needing to attend educational institutions regularly. It was an effort to cover most of the problems of distance education but indeed being relatively a new phenomenon in most of the developing countries where virtual learners still facing several troubles that impede virtual education from thriving more. The major troubles are isolation, lack of technological and electrical facilities, high dropout rate and some personal limitations of virtual learners as like time management and medium of instruction etc. All these problems are very critical and need to be addressed to ensure the credibility, efficiency and effectiveness of virtual education and to enhance virtual education trends in Pakistan.

### 1.7 Conclusion

The study concluded that virtual education is an alternate to formal education in delivering quality education. Virtual education of Pakistan is necessary mode of education to enhance higher education opportunities to people. Especially in Pakistan it is highly important where majority of the population is living in remote areas or

facing cultural issues to continue their education. While facing difficulties to access higher education opportunities they have to cut off their education. Government should promote sound virtual education model in Pakistan beside the formal education system in Pakistan. More and more public sector universities should also start virtual education to share the load of formal education sector as well as the virtual university of Pakistan. The study also concluded that besides many advantages of virtual education there are some disadvantages that hamper virtual education in Pakistan. Virtual learners of Pakistan are suffering many problems which are serious in nature. Some major of them are: isolation, high drop out from the course as well as program, electricity failure, time management, old dated study material, technology hurdles and medium of instruction. These issues are highly necessary to be solved to promote virtual education trends in Pakistan.

### 1.8 Recommendations

On the basis of research findings, discussions and conclusion the researcher suggested that virtual institutions should maintain comfortable study environments and appoint expert instructors that can give complete guidelines to learners about their studies. The virtual university should maintain quality education standard to compete the world. Apart from this Virtual university should facilitate educational experts to find out the voices of virtual learners, their root causes and finally suggest their remedies. The government should satisfy virtual learners by ensuring sound virtual facilities and ensure these facilities for the public on economic grounds so that more and more people can be benefited with virtual education. The success story of virtual education starts, in our view, when these obstacles are overcome. Then and only then the road would be ready to embark on a journey that plus the pieces prepared. The need of the hour is to make absolute investments, attempts, a comprehensive plan, a sincere cause, a firm decision and courage to move ahead. These will be more fruitful ways to make virtual education a more reliable mode of education in Pakistan.

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