Future Prospects of Virtual Education in Pakistan: Opportunities and Challenges

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Abstract

Like other parts of the world Pakistan is a country where internet and communication technologies are being used rapidly in every walk of life particularly in education grace of increasing awareness about these technologies among nation. Keeping in view the interest of the people in technology; government has launched virtual education with the beam of hope to provide quality education and cost effective academic opportunities to its citizens. There were two main objectives of this study. The first objective was to explore the future opportunities of virtual education in Pakistan and the second objective was to identify the problems associated with the virtual learners in national perspectives. Those who were enrolled in the master of business administration (MBA) were considered as the population of the study. Convenient sampling technique was adopted for data collection. A monkey survey technique was adopted and a self-prepared questionnaire on five point likert scale with 8 indicators was considered as the tool of data collection. The data was collected virtually by converting the research tool into google.doc. It was found that virtual education will be a suitable mode of education as it is embodied with the features of quality education, low cost and with the slogan of education for all (EFA). The problems faced by the virtual learners are: isolation, time management and technology related hurdles.

Key words: Trends in education, virtual education, future education in Pakistan.

Introduction

Virtual education is an innovative instructional paradigm supported with advanced applications of internet and instructional technologies i.e. Learning Management System, You Tube, Video conferences and virtual television etc. (Hussain, 2012). Virtual education is defined,

"Instructions in a learning environment where teacher and students are separated by time and/or space and the teacher provides course content through ICT based methods such as Internet, multimedia resources, and videoconferencing. Students get the content and communicate with the teacher via the same media" (Tavakol, 2012). It is also viewed that virtual education is an active and intelligent learning that makes teaching and learning process effective (Ghorbani, 2012). Virtual education is also taken as intentional acquisition of knowledge, skills, attitudes and competencies (Hussain, 2007). It welcomes self-motivated, committed to study learners who actively participate in constructive, collaborative and intentional teaching learning activities (Jonassen, 2006). It allows learners to create learning environments that are flexible, dynamic, and capable of responding to the individuals' learning needs by using advanced media techniques. Moreover, emerging instructional technologies are used in education and training to improve teaching learning process. These technologies develop interest and concentration of virtual learners in creative learning that makes learning effective (Hussain, 2005).

The main trademarks of virtual education are: quality education, cost effectiveness and education for all. The wide use of instructional technologies in virtual education has put its impact on the quality of teaching and learners' access to latest knowledge and research in education (Moore, 2013). Internet and technologies are low cost, remarkable and familiar. Information and communication technologies provide opportunities for learners, teachers and staff for effective communication in teaching and learning processes (Michael, 2011). By using educational technologies knowledge and skills are transferred to large number of people with ease and comfort (Smith, Collins & Clark, 2005). Virtual education facilitates virtual learners to participate in educational activities 7/24 hours any time and any place. They manage time and sources to study independently and are allowed to make convenient study schedule to participate in organized educational activities according to their own time and place. In this way their daily routines and jobs are not suffered. Hence, virtual education is regarded as a suitable educational model in the current age of technology revolution.

LITERATURE REVIEW

Virtual education contains greater involvement of synchronous and asynchronous means of modern educational technologies i.e. internet, recorded video lectures, satellite TV and CD-ROM, etc. Instructional material is delivered via these technologies. The technologies develop much like face to face educational set ups and provide opportunities that are improving the ways in which knowledge can be accessed, harnessed and shared in better ways (Johnson, Suriya, Yoon, Berrett & Fleur, 2002). Some of these are following:-

Flexibility

Many critics claimed virtual education is characterized by time and place independence (Downing & Chim, 2004; Farrell, 2001; Donoghue & Singh, 2001; Barbera, 2004). It gives satisfaction level to students. Virtual education has the advantage for virtual learners to participate in educational opportunities at anytime and anywhere; at home, at the office, on the road and 7/24 hours. Learners like virtual education because it accommodates a variety of learning styles. In service people can participate in educational activities at their convenient time and place. Virtual education is flexible to meet the individual needs of the

learners. Flexibility is a prime benefit of virtual education (Mishra, 2011). It is noted that as continuous learning comes to be seen more and more as a necessity for almost everyone in our rapidly changing and increasingly global society, the demand for more flexible educational environments increases accordingly (Chen, 2003).

Cost Effectiveness

Virtual education is cost effective and efficient agent of delivering education to masses (Neill, Singh & Donoghue, 2004). Virtual education with the help of educational technologies allows large number of people to participate in learning activities as like face to face educational environment whether they are sitting at home or at campus. Virtual learners do not need to travel to educational institutions on daily bases. Much of their study cost and time is saved and their jobs and routine works may also not disturb. Flexibility of time and pace, large capacity of enrollment and lower cost are the benefits of virtual education (Chen, 2003). Virtual education is a cost effective model of education from the institutional perspectives by reducing institutional cost as well (Ercan, 2010). A single virtual university with the help of limited employees can provide educational facilities to the wide range of virtual learners. The online technology gets prosperous; the classroom method will appear less and less appealing (Gladeieux, 2000). Virtual education is more cost effective than traditional education because it can be done in any geographic location and there are very less need to travel, less time and money is spent on traveling while virtual learners can utilize this time in learning and earning as well (Adedara & Onwuegbuzie, 2014; Ash, 2009; Abulrub & Attridge, 2011).

Learner Centeredness

Virtual education model promotes learner centered approach in education (Ercan, 2010; Ruiz, Jorge, Mintzer, Michael, Leipzig & Rosanne, 2006; Barbara & Vakili, 2005 & Neill et al., 2004). Virtual learners set their educational schedule to attend tutorials, make assignments, participate in organized learning activities i.e. moderated discussion board, quizzes, exams according to their own convenient times and dates. Course material, handouts and tutorials of virtual programs are specially developed in bilingual to easily comprehend by the virtual learners. Students are motivated intellectually and technologically in virtual world (Quitana & Fernandez 2015). Virtual education facilitates virtual learners to follow the study schedule according to students' need and not the preset educational institutions (Yin, Urven, Schramm & Friedman, 2002). It is hoped in near future that higher education will be much more topic-based instead of teacher based (Capper, 2001).

Equity

Virtual education facilitates the learners to overcome their physical disabilities and make them equal in comparison with normal learners. Virtual education can eliminate gender discrimination (Deloitte, 2004). According to him one important advantage of virtual education is that it "prevents the learner from being treated unequally by peers or instructors". Conferencing will be used in education to join isolated virtual learners in teaching learning process and to teach the students equally (Ali, 2003).

Job Opportunities

Due to technological involvements, virtual graduates are enriched with creative and innovative work environment. Virtual learners are appreciated and proved skilled manpower in any organization. Virtual education can contribute to all the Government's objectives for education to improving quality; raising standards; removing barriers to learning; preparing for employment and up skilling in the work-place (Roussas, 2006). This is true because more students are doing virtual internships and more employees are working vigilantly than ever before. Virtual education promotes skills for independent living, enhance cognitive performance and improve social skills (Stadon & Brown, 2005). Businesses organizations, government and private sectors appreciate virtual graduates to work in their organizations as virtual graduates prove them more skillful and proficient in using modern communication technologies.

Collaboration

Important features of virtual education include computer-based/web based learning, virtual classrooms and digital collaboration (MacKeogh, 2001). Virtual education helps virtual learners to attend the requisite lectures and they are able to interact with their tutors, mentors and fellows through technologies. It is online learning that is, in fact highly interactive (Kearsley, 2000). Virtual education maintains the higher level of interactivity and collaboration among large number of learners (Garten, 2000). Instructional Management System in future will be the motherboard into which all educational components will be integrated. It will be operated by the course instructor who will manage course delivery for each student. Students' collaboration and interaction is controlled by software applications known generically as Learning Management Systems.

Virtual Education in Pakistan

Opportunities

Virtual university of Pakistan was established in 2002 based completely on modern information and communication technologies with its clear missions, 'not for profit': to provide extremely affordable and world class education to aspiring students in all over the country (http://vu.edu.pk/AboutUs/AboutVU.aspx). Virtual university of Pakistan works with the agenda of, 'not for profit' and 'education for all' (Hanna, 2016). It is chartered by federal government of Pakistan. Using free to air satellite television broadcast and internet, the virtual university allows its students residing in Pakistan as well as overseas Pakistanis to join its rigorous programs regardless of their physical locations (Hussain, 2007). Virtual university of Pakistan has established about 164 virtual campuses around the country with the association of private sector in education for providing virtual education facilities, infrastructure support and study guideline to virtual learners without any extra dues. (https://en.wikipedia.org/wiki/Virtual University of Pakistan). Virtual university of Pakistan

provides educational services in several short courses, graduate, post graduate, M. Phil and Ph. D. level programs. Virtual university of Pakistan allows students to get education in available fields even if the student has not studied the specific desired subject during his previous education. In this case such a student will have to attend a zero semester in that course so to be familiar with its basic concepts. Virtual university of Pakistan uses the services of best available faculty in all over the country to develop handouts, to design course material and tutorials (Malik, Belawati & Baggaley, 2005). Virtual university of Pakistan facilitates its learners to participate in educational activities 7/24 hours while sitting at home or at campus.

Challenges

Virtual education is student-oriented one rather than the instructor driven approach of the traditional classroom (Dastijerdi, 2013). In designing online courses, it is important to identify the individual learning styles of the students and to adapt materials to accommodate them. Creating online learning programs is more time-consuming than designing a face-to-face course and faculty who design and develop these courses need to be compensated adequately for their time (Siddique, 2013). In addition with the increase of students' enrollment and class size, the demand of teachers' time increases. When teachers are overwhelmed, the quality of instruction suffers. The most serious problem in online assessment is unauthorized help during and assessment; how can the instructor confirm that the student is actually who he or she claims to be? There are three individual factors that affect student success in online learning; (1) motivation, (2) self-efficacy and (3) technological confidence (Simonson, Smaldino, Albright & Zvacek, 2012). Virtual learners need to feel engaged and trained for the technology of the online learning setting. Other challenges for virtual learners include technology hurdles, financial difficulties and time management problems due to multiple demands on their time. These problems are genuine in nature which needs to be addressed for enhancing the effectiveness and efficiency of virtual education in the country. People in Pakistan have lack availability and also have lack of trend of using instructional technologies for education. Virtual learners face some physical problems like eyesight problem, headache, anxiety and drowsiness (Hussain 2005 & 2007). The study also revealed students' joint pain and backache problems due to long sitting. Similarly, virtual learners in Pakistan face problems associated with job assignments and infrastructure including lack of its back-up, electricity failure, time management, low bandwidth of the internet and internet connections (Hussain & Rahmani, 2009). The virtual learners reported such problems cause their study difficulties, depression and sometimes drop out as well.

Rationale of Study

The connection between education and desired future is "immediate and direct". How future Pakistanis will live i.e. (the quality of their lives, the resources of employment available and the political system to be) will ultimately be determined by the quality of their education. The World Bank survey report represents that only less than 3% Pakistani youth is enrolled in higher educational institutions. This is alarming situation for wellbeing of Pakistan. Virtual education model is a beam of hope to provide affordable and quality education of international standards to large number of people. As compared with other developing countries in the region; Pakistan is stepping ahead in the formulation and adaptation of virtual education model in the country. The growing popularity and increase in the number of virtual learners elaborate that virtual university

of Pakistan is working efficiently in meeting educational needs of its students. So, there should be talk on virtual education in the country. The present study is an effort to study the present status of virtual education in Pakistan. The existing hindrances are also tried to be found so that virtual education opportunities in Pakistan may be made more effective, reliable and proficient.

RESEARCH OBJECTIVES AND METHODOLOGY

The present research study was conducted with two research objectives. First, to explore the future opportunities of virtual education in Pakistan and second research objective was to identify the challenges of virtual education in Pakistan

Keeping in view the academic, cultural and geographical similarities the study was delimited to the province Punjab and virtual learners of MBA program only. The population of the study was consisted on 4000 male and female virtual learners. 351 virtual learners were considered a suitable sample size for this population (Gay, 2005). Convenient sampling technique was adopted for data collection from the respondents.

The survey approach was adopted for data collection. For this purpose, a questionnaire was prepared on five-point Likert scale consisted of 8 indicators was used after applying proper pilot testing and reliability. As the sample could only be found virtually so the research tool was converted into google.doc for data collection. Data was collected through monkey survey data collection approach.

The collected data was coded and analyzed through SPSS 20 in terms of percentage and mean scores. After calculating mean score strongly disagree and disagree while agree and strongly agree levels were combined in following tables. That data was tabulated in tables to clear view the results. Discussion and conclusion were made on the results of the data analysis.

RESULTS AND DISCUSSION

Table 1: Academic programs of virtual education

Statements	SDA + DA	%	Und	%	A + SA	%	Mean Score
Short courses	87	24.8	31	8.8	233	66.4	3.83
Graduate level programs	11	3.1	7	1.99	333	94.87	4.56
Postgraduate level programs	15	4.3	6	1.7	330	94.02	4.57

The data in table No. 1 showed that virtual university offered programs for short courses, graduate and post graduate level programs. The data showed that majority i.e. 66.4% respondents viewed that virtual university offered short courses. Mean score was 3.83 inclined towards agree. Huge majority i.e. 94.87% respondents viewed that virtual university offered graduate level programs. Mean score was 4.56 inclined towards agree. Huge majority i.e. 94.02% respondents viewed that virtual university offered post graduate level programs. Mean score 4.57 inclined towards agree.

Table 2:
Disciplines of Virtual Education in Pakistan

Statements	SDA + DA	%	Und	%	A + SA	%	Mean Score
Humanities	115	32.8	36	10.3	200	56.98	3.46
Engineering	129	36.8	26	7.4	196	55.9	3.38
Social sciences	44	12.5	35	9.97	272	77.4	3.95
Applied sciences	138	39.3	42	11.97	171	48.7	3.14
Business administration	6	1.7	1	0.3	344	98.01	4.71
Computer and information technology	7	1.99	1	0.3	343	97.7	4.76

The data in table 2 showed that virtual university of Pakistan offers virtual education in various disciplines. The data showed that more than half i.e. 56.98% of the respondents agree that virtual university offered admissions in humanities. Mean score 3.46 inclined towards agreed. More than half i.e. 5.9% of the respondents agreed that virtual university offered admissions in engineering. Mean score 3.38 inclined towards agreed. Majority i.e. 77.4% of the respondents agreed that virtual university offered admissions in social sciences. Mean score 3.95 inclined towards agreed. Less than half i.e. 48.7% of the respondents agree that virtual university offered admissions in applied sciences. Mean score 3.14 inclined towards agreed. Huge majority i.e. 98.01% of the respondents agreed that virtual university offered admissions in business administration. Mean score 4.71 inclined towards agreed. Huge majority i.e. 97.7% of the respondents agreed that virtual university offered admissions in computer and information technology. Mean score 4.76 inclined towards agreed.

Table 3:
Salient features of virtual education

Statements	SDA + DA	%	Und	%	A + SA	%	M Score
Access to higher education	18	5.1	8	2.3	325	92.6	4.59
Access to continue education	10	2.8	20	5.7	321	91.5	4.57
Easy migration of campus	20	5.7	33	9.4	298	84.9	4.29
Online education	2	0.57	13	3.7	336	95.7	4.74
Active learning	14	<i>3.98</i>	29	8.3	308	87.8	4.37
Education for all	25	7.1	54	15.3	272	77.5	4.11
Learner centered education	13	3.7	5	1.4	333	94.9	4.68
According to individual differences	56	15.95	27	7.7	268	76.4	4.08
Meeting new trends and issues	34	9.7	54	15.4	263	74.9	4.05

The data in table 3 showed that virtual education stands with variety of features which are vital in future education. The data showed that huge majority i.e. 92.6% of the respondents viewed that virtual education was a source of higher education. Mean score 4.59 inclined towards agree. Huge majority i.e. 91.5% of the respondents viewed that virtual education was a source of continuing education. Mean score 4.57 inclined towards agree. Vast majority i.e. 84.9% of the

respondents viewed that virtual education facilitated learners for easy migration of campus. Mean score 4.29 inclined towards agree. Huge majority i.e. 95.7% of the respondents viewed that virtual education was a source of online education. Mean score 4.74 inclined towards agree. Vast majority i.e. 87.8% of the respondents viewed that virtual education promoted activity based learning. Mean score 4.37 inclined towards agree. Majority i.e. 77.5% of the respondents viewed that virtual education promoted motto 'education for all'. Mean score 4.11 inclined towards agree. Huge majority i.e. 94.9% of the respondents viewed that virtual education was a learner centered education. Mean score 4.68 inclined towards agree. Majority i.e. 76.4% of the respondents viewed that virtual education took care of individual differences and psychology of learners. Mean score 4.08 inclined towards agree. Majority i.e. 74.9% of the respondents viewed that virtual education provides educational opportunities while meeting new trends and issues in education. Mean score 4.05 inclined towards agree.

Table 4:

Cost effectiveness aspect of virtual education

Statements	SDA + DA	%	Und	%	A + SA	%	M Score
Travel cost	14	3.98	29	8.2	308	87.8	4.37
Training cost	55	15.7	52	14.8	244	69.5	3.84
Labour cost	69	19.7	38	10.8	244	69.5	3.82
Printed material cost	77	21.9	43	12.2	231	65.8	3.68
Accommodation cost	50	14.3	60	17.09	241	68.7	3.85
Classroom and facilities cost	117	33.3	52	14.8	182	51.9	3.33

The data in table 4 showed that majority i.e. 87.8% of the respondents viewed that virtual education reduced travel cost. Mean score 4.37 inclined towards agree. Majority i.e. 69.5% of the respondents viewed that virtual education reduced training cost. Mean score 3.84 inclined towards agree. Majority i.e. 69.5% of the respondents viewed that virtual education reduced labor cost. Mean score 3.82 inclined towards agree. Majority i.e. 65.8% of the respondents viewed that virtual education reduced printed material cost. Mean score 3.68 inclined towards agree. Majority i.e. 68.7% of the respondents viewed that virtual education reduced accommodation cost. Mean score 3.85 inclined towards agree. More than half i.e. 51.9% of the respondents viewed that virtual education reduced classrooms and facilities cost. Mean score 3.33 inclined towards agree. *Table 5:*

Learning material of virtual education

Statements	SDA + DA	%	Und	%	A + SA	%	Mean Score
Innovative	26	7.4	40	11.4	285	81.2	4.00
Need based	28	7.9	39	11.1	284	80.9	4.09
Objective oriented	21	5.9	30	8.5	300	85.5	4.12
Caring cultural values	12	3.4	77	21.9	262	74.6	4.04
Using tables and diagrams	31	8.8	44	12.5	276	78.6	4.01
Meeting new trends and issues	49	13.9	55	15.7	247	70.3	3.78
Theory plus skill oriented	28	7.9	39	11.1	284	80.9	4.09

The data in table 5 showed the quality of learning material in virtual education. The data showed that vast majority i.e. 81.2% of the respondents viewed that learning material was innovative. Mean score 4.00 inclined towards agree. Vast majority i.e. 80.9% of the respondents viewed that learning material was need based. Mean score 4.09 inclined towards agree. Vast majority i.e. 85.5% of the respondents viewed that learning material was objective oriented. Mean score 4.12 inclined towards agree. Vast majority i.e. 74.6% of the respondents viewed that learning material was caring cultural values. Mean score 4.04 inclined towards agree. Vast majority i.e. 78.6% of the respondents viewed that learning material was developed by using proper tables and diagrams. Mean score 4.01 inclined towards agree. Vast majority i.e. 70.3% of the respondents viewed that learning material was meeting new trends and issues. Mean score 3.78 inclined towards agree. Vast majority i.e. 80.9% of the respondents viewed that learning material theory plus skill oriented. Mean score 4.09 inclined towards agree.

Table 6:
Tutor learners' interaction in virtual education

Statements	SDA + DA	%	Und	%	A + SA	%	Mean Score
E-mail	243	69.2	54	15.4	54	15.4	2.17
Telephones	178	50.7	58	16.5	115	32.7	2.76
Team viewer	132	37.6	38	10.8	181	51.6	3.21
Adobe Connect	127	36.2	51	14.5	173	49.3	3.16
Video conference	93	26.5	53	15.1	205	58.4	3.50
Moderated Discussion Board	54	15.4	36	10.3	261	74.4	3.88

Tutor student interaction is very important in any educational institution. Table 6 showed that virtual participants used various means of online interaction. Data showed that majority i.e. 69.2% of the respondents were not using e-mail in virtual education. Mean score 2.17 inclined to disagree. Half i.e. 50.7% of the respondents were not using telephones in virtual education. Mean score 2.76 inclined towards disagree. More than half i.e. 51.6% of the respondents were using team viewer. Mean score 3.21 inclined towards agree. Less than half i.e. 49.3% of the respondents were using adobe connect. Mean score 3.16 inclined towards agree. More than half i.e. 58.4% of the respondents was using video conference. Mean score 3.50 inclined towards agree whereas majority i.e. 74.4% of the respondents were using moderated discussion board. Mean score 3.88 inclined towards agree. It was found that virtual participants rarely used e-mail and telephone for mutual interaction.

Table 7:
Learners' perception about educational technologies

Statements	SDA + DA	%	Und	%	A + SA	%	Mean Score
Facilitative	5	1.4	27	7.7	319	90.9	4.45
Motivating	11	3.1	27	7.7	313	89.2	4.32
Easy to use	11	3.1	40	11.4	300	85.5	4.32
Sources of fresh knowledge	41	11.7	29	8.3	281	80.06	4.05
Sources of social interaction	28	7.9	39	11.1	284	80.9	4.07

Modern educational technologies are of vital significance in virtual education. Their effective use makes virtual education successful. Table 7 showed participants' general perception about using educational technologies. Data showed that huge majority i.e. 90.9% of the respondents found educational technologies facilitative. Mean score 4.45 inclined towards agree. Huge majority i.e. 89.2% of the respondents found educational technologies motivating. Mean score 4.32inclined towards agree. Majority i.e. 85.5% of the respondents found educational technologies easy to use. Mean score 4.32 inclined towards agree. Majority i.e. 80.06% of the respondents found educational technologies sources of fresh knowledge. Mean score 4.05 inclined towards agree. Majority i.e. 80.9% of the respondents found educational technologies sources of social interaction. Mean score 4.07 inclined towards agree.

Table 8: Problems of virtual learners in Pakistan

Statements	SDA + DA	%	Und	%	A + SA	%	Mean Score
Isolation	67	19.08	102	29.05	182	51.85	3.54
Time management	77	21.93	48	13.67	226	64.38	3.61
Electricity failure	96	27.35	39	11.11	216	61.53	3.53
Technology hurdles	98	27.92	69	19.65	184	52.42	3.26
Medium of instruction	108	30.77	55	15.66	188	53.56	3.38
Results remain pending	160	45.58	52	14.81	139	39.60	2.96
Being drop out	150	42.73	78	22.22	123	35.04	2.90

Every system has to encounter with its week points. The study found that virtual learners in Pakistan were facing some problems. The table No. 8 showed that 51% respondent agreed with the statement that virtual learners faced problem of isolation. Mean score 3.54 inclined towards agreed. Majority i.e. 64.38% of the respondent viewed that virtual learners faced problem of time management. Mean score 3.61 also inclined towards agreed. Majority i.e. 61.53% of the respondents viewed that virtual learners faced problems of electricity failure. Mean score 3.53 also inclined towards agreed. About half i.e. 52.42% of the respondents viewed that virtual learners faced problems of technology hurdles. Mean score 3.26 also inclined towards agreed. About half i.e. 53.56% of the respondents viewed that virtual learners faced problem medium of instruction. Mean score 3.38 inclined towards agreed. However, 45% respondents viewed that results of virtual university do not remain pending. Only 39.60% respondents viewed agreed. Mean score 2.96 towards disagreed. 42.73% respondents viewed that virtual learners do not face problem of being drop out. Only 35.04% respondents viewed agreed. Mean score 2.96 towards disagreed.

DISCUSSION

Change is one of the principal characteristics of this world and education works as an agent of change. When education becomes an agent of change, it also changes and improves itself according to the needs and resources of the society. Virtual education is a part of a digital revolution, a paradigm shift that can expand the educational horizons in a "virtually unlimited" manner (Memon, 2007). Virtual education is growing by leaps and bounds in both developed and developing countries. It may not solve all economic and social problems, but it directly increases the proportion of the population who are empowered to contribute to the solution of those problems. Virtual education appeals due to wide ranging acceptance of information and

communication technologies, cost effectiveness, flexibility and education for all (Berns, Pardo & Camacho, 2013). It eliminates the need for expensive infrastructure and the human cost. High speed internet access and online education applications dramatically decline the cost. It is easy to develop, update and deliver a unified course and need based course material in virtual settings. The results of the study supported the views by Dam, (2004) the virtual education provides educational opportunities without gender discrimination and without shaking the cultural norms. It promotes activity based learning which enhances the learning outcome level among virtual learners. Virtual education is a cost effective and flexible system of education from learner side as well. Virtual learners do not need to travel to educational institutions on daily basis. They can virtually attend tutorials and participate in educational activities anywhere and anytime. Virtual learners can easily migrate their campus whenever and wherever they need. Secondly, virtual learners can continue their earning potential while studying because virtual education allows virtual learners to continue their jobs while learning. In Pakistan the traditional mode of education both in public and private sectors are found insufficient to cater the higher educational needs of citizens. Vast majority of literate population cannot access to higher education due to high cost, tight institutional restrictions and uninteresting course materials. At the same time virtual education model is rapidly flourishing in all over the world and has bright opportunities of flourishing in Pakistan as well. Virtual university has set up about 164 virtual campuses in Pakistan which provide infrastructure facilities and academic support to virtual learners. To help, motivate virtual learners and prevent feeling of isolation; the tutors need to create an online learning community that is social, engaging, cooperative and collaborative. So on the basis of above discussion; there is the hope that virtual education will provide such an education system that suite the future requirements of education system in Pakistan.

CONCLUSION

Virtual education in Pakistan has opened a new horizon for learners as well as teachers. Virtual education provides cost effective and quality education to large number of people which otherwise not possible. It is alternate to formal system of education and owes activity based, need based, learner centered, skill based, cost effective, flexible in time and pace and as like face to face interaction with the help of modern communication technologies. The study also concluded that virtual education determines to be a sunbeam of education for all as large number of student may get equal amount of chance to get their desired amount of education. The study also revealed that virtual learners were facing some problems. Some major problems were isolation, time management, technological hurdles and drop out problems. If the complex issues of virtual learners are addressed in Pakistan, the virtual education in future will surely and certainly pave great paths of success for the students of Pakistan. The formal universities apart with the traditional education may accept and promote the global trends in virtual education.

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