# Challenges and Problems Faced by Pakistani Virtual University's Students in Web-Based Learning

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**Abstract:** The study concerned with the identified the problems and challenged Web Based Learning faced by master and graduation level students of Virtual University in Pakistan. The main purpose of this study was to know the problems faced by male and female students from different background and difficulties of web browsing among the web based learners of different semesters. The participants of the study were One hungered (100) students enrolled in graduation and master level in Virtual University Lahore, Pakistan. A Questionnaire consist of thirty eight (38) items was developed and validated through experts to collect the data and the reliability of the questionnaire was calculated by Cronbach Alpha i.e. 0.946 a high internal consistency of the items.

The findings of the study shows that there is no significant difference of facing problems in web based learning between Male and Female. There is no significant difference of facing problems in web based learning between graduation and master students. The significant difference exists between Internet Explorer and Netscape, Internet Explorer and Opera. The mean differences between Internet Explorer and Opera are 20.431(*) and 24.859(*) respectively which are significant at $p<0.05$. The other three browsers do not differ from each other significantly. The mean differences of quality = 3.7887 and design = 3.7683 is bigger than mean of access = 3.5089.

**Key Words:** Web Based Learning, Virtual University, Graduation and Master

## INTRODUCTION

Technology plays a vital role in improving teaching learning process. It change the traditional ways of teaching and make teaching learning process more attractive and interesting. In recent years, internet become a powerful tool for enhanceing learning because it is considered as easiest, friendlu user and popular approach in learning at higher education level ( Pacheco, 2005). Scholars have defined WBL as "a hypermedia-based educational program which utilizes the attributes and resources of the World Wide Web to create a meaningful learning environment where learning is fostered and supported" (Khan, 1997)

Maddux (1996) identified that there are two main features of web as 1) information available on World Wide Web (www) are example of two communication and, 2) there is use of different technological devices such as Multimedia, graphics and sound etc.

There are many universities worldwide offering virtual education programs. Virtual Universities offering different online courses such as distance education, virtual classes, cyber courses and interactive learning. There are also many web sites that are providing learning material to fulfill the learner needs in form of Word documents, lecture notes and PowerPoint presentations and etc. Whereas some proving advantage of hypertext and collaborative technologies. These dissimilar environments are clearly not useful.

Recently due to frequent use of information technology majority of teachers in educational

institutions are using computers and internet in their teaching learning process. As explained by Pennington(1996) "Technology in language education can increase the variety or diversity of learning opportunities and the quality of the learning experience in making input of more varied kinds learnable and accessible to each individual learner" (p.89).

Technology plays a significant task in all educational intuitions. It is well thought-out to be the gesture of the future, so naturally teachers are affirmative to clinch it. But the question that arises is whether all teachers can use technology in their classrooms (Emhamed and Krishnan, 2011). Houtz and Gupta (2001) reported that gender (male and female) used computer in significantly different manner.

Information technology creates problems for e-learners, e-teachers and e-trainers due to unawareness and lack of skill of its use. There is need to use proper tools of information technology while delivering lectures through satellite TV channels and internet. E-learners are not facilitated properly regarding the online help of concerned teachers. The campuses of the distance education are not fully prepared with the update information Technology resources. It is necessary for Web-based learning environments to expand the opportunities for students so that they can they meet the challenges. (Collis, 1997).

It is proved by the Hong et al. (2003) that continue support and guidance from the concerned teachers or peers help to increase the performance of the students and same time the satisfaction with the web base learning of these students are high as compared to others. As there is old Chinese saying: "Tell me and I will forget; show me, and I may remember; involve me and I will understand" (Hernandez-Ramos, 2005, p.47) which focuses on student engagement in the learning process.

The Virtual University of Pakistan is first university which is offering education by using advance tools of information technology;

broadcast television and the Internet. VU courses were developed by experts in concerned field. Lectures are then prepared and recorded in a specific environment. Course lectures are broadcast over free-to-air television and are also made available in the form of multimedia CDs. They can also be made accessible from the Virtual University's servers. There are different formats available where students can get benefits and information in 24-hour period. (**http://www.vu.edu.pk/default.aspx?body=http://www.vu.edu.pk/pages/HowVuWorks.aspx**)

Pakistan is developing countries. There is shortage of resource as compared to advanced countries. There is dire need to receive the feedback from such programs so that timely review and remedy help to continue these unique services. This study focused on issues related to student and the use of technology in Virtual University. The main objectives of the study were ; 1) to encourage the students to learn how to use web-based learning tools, 2) to make the usability of the web based learning tools for both instructors' and students' perspectives, 3) to ensure the students' perceptions of how this web based tools impact their learning, 4) to analyze the competencies essential for web based Instructional Designers and, 5) to find out the background information of the web based learning.

### *Hypothesis*

1.      There is no significant difference in the difficulties of web browsing between Male and Female web based learner.

2.      There is no significant difference in the difficulties of web browsing between Graduation and Master web based learner.

3.      There is no significant difference in the difficulties of web browsing among the web based learner of different semester.

4.      There is no significant difference in the difficulties of web based browsing among the web based learner of different level of computer skills.

5.      There is no significant difference in the difficulties of web based browsing among the web

based learner who used different places for web browsing.

6.　　　There is no significant difference in the difficulties of web based browsing among the user of different web browser.

# REVIEW LITERATURE

Web based learning is called online learning or e-learning for the reason that it includes online course content. conversation forums via email, videoconferencing, and live lectures (video streaming) are all possible through the web. Web based courses may also provide static pages such as printed course materials (McKimm et al, 2003)

Jiang and Ting (1998) investigated that conducive environments effects positively and increase the performance of students It all depend upon the skill and master over the subject of instructor.

Nichols (1995) identified that: "The potential benefit from formulating evaluation methodologies for the Web [for instructional materials] depends on whether or not the Web will become a permanent medium or a passing fad? In fact, the Web Page will likely soon become the most popular medium for the delivery of distance education type materials." (p.369)

The literature supports that WBI is an increasing trend. The ultimate success of WBI is its integration in development process.　　Boling and Sousa (1993) state that: "If people cannot use what is being delivered to them, or if they will not use it because it fails to support them in crucial ways, the promise of technology is subverted before it can begin to be fulfilled...training groups with direct responsibility for learning outcomes cannot afford to lose a measure of learner motivation to poor interface decisions, or to a lack of awareness that these design issues must be addressed." (p.54)

Although web base learning have advantages but at the same time there some problems which can be ignored for example installation expenditure, training of staff, maintenance cost, upgrading and availability of instructional technologies.

Every child is different from other child. Students are coming from different background and having different abilities as well. So it is a big challenge address the individual needs, this is challenge in web base learning (Chen, Lee, & Chen, 2005).

"Usability issues in the design of WBI include: lack of interest in interface design since authoring systems are expected to provide attractive and easy to user interfaces" (Squires and Preece, 1996). There is need to share and replicate the best practice of classroom environment by taking benefit of Web capabilities (Welsh, 1997).

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Defining the full range of generic and transferable skills that are useful (or essential) for students is an exhaustive process. The term generic skills to describe the transferable skills that are considered to be essential life skills for people both in and out of the workforce.

Finn Report (1991) which introduced this concept into Australia. The Finn Report used the term key competencies to describe 'certain essential things that all young people need to learn in their preparation for employment'. The subsequent Mayer Committee (1992) further clarified the concept of employment related key competencies in compulsory education and training.

# METHODOLOGY

The study was descriptive in nature as it addressed the prevailing situation of using web based learning system and encountering with problems.

*Participants*

This study involved 100 students from Virtual University by convenient sampling technique to from the students of Virtual University in Lahore district. The age range of the students was from 20 to 23 years old. 10 experts in the field of computer science were involved for validation of research instrument.

*Instrumentation*

The questionnaire was developed and validated through experts opinion under the guidance of Supervisor and Member of the master's research project. Thirty eight items were included in the questionnaire; the reliability of the questionnaire was calculated by Cronbach Alpha i.e. 0.946 a high internal consistency of the items. After the selection of sample and development of the questionnaire, the questionnaires were distributed. The questionnaire was administered personally to the respondent and filled questionnaire collected back. The return rate of the questionnaire was 100% due to personal administration. To analyze the data means, standard deviations, independent sample t test, one way ANOVA and bi-variate correlation was calculated with the help of Statistical Package for Social Sciences(SPSS).

## RESULTS & DISCUSSION

The mean shows the little bit difference between male and female that is accepted at assumed p-value (0.05). The computed value of t (98) =1.262 is non significant at computed value of p=0.210>0.05. Therefore, there is no significant difference of facing problems in web based learning between Male and Female. The mean of graduation is 128.67 and mean of master is 137.85 in Virtual University. The mean values for master and graduate students about problems faced in web based were not significantly different. The computed value of t (98) =-1.917 is non significant at p=0.058>0.05.Therefore, there is no significant difference of facing problems in web based learning between graduation and master students. The computed value of F ratio = 0.516 is non significant at p = 0.672>0.05. Therefore, there is no significant difference of mean score of students studying in different semester. The means of the independent variable (the students of different level

of computer skills of University) were not statistically differ to each others. The findings also did not support the results of Collins (2000) that students were satisfied with web based learning.

The computed value of F ratio == 2.197 is non significant at p = 0.117>0.05. In other words, the students in different level of computer skills have same problems of using web based learning. The students that used different places for web browsing have same problems of using web based learning. The computed value of F ratio = 4.418 is significant at p = 0.006>0.05. In other words, the students in different used different web browsers have same problems of using web based learning.

Table No. 1 Factor analysis of Web Brower

| (I) All the web based learning students of VU used the following browser | (J) All the web based learning students of VU used the following browser | Mean Difference (I-J) | Sig. |
|---|---|---|---|
| Internet Explorer | Netscape | 20.431(*) | .014 |
| | Opera | 24.859(*) | .008 |
| | Mozilla | 10.181 | .159 |
| Netscape | Opera | 4.429 | .703 |
| | Mozilla | -10.250 | .315 |
| Opera | Mozilla | -14.679 | .183 |

The significant difference exists between Internet Explorer and Netscape, Internet Explorer and Opera. The mean differences between Internet Explorer and Opera are 20.431(*) and 24.859(*) respectively which are significant at p<0.05. The other three browsers do not differ from each other significantly. The mean differences of quality = 3.7887 and design = 3.7683 is bigger than mean of access = 3.5089. Therefore, the problems of access are faced by students more than the quality and design issues.

The inter correlation between the design and access is (r = 0.804**) and p=0.000<0.05 that shows

the high correlation between both categories. In other words, the both constructs are supporting each other and contributing in total score. The inter correlation between the design and quality is r = 0.852 and p=0.000<0.05 that shows the high correlation between both categories.

The inter relationship between Access and Quality is significant (r = 0.831**). Similarly, the Access problem significantly was correlated with design and total score as well as with (r = 0.804**) and (r = 0.910**) respectively. The design is significantly correlated with quality and total score. In other words, all constructs were significantly supporting and contributing in total score.

# CONCLUSIONS AND RECOMMENDATIONS

The independent sample t = 1.262 which is non significant for Male and Female students. Therefore, there is no significant difference of facing problems in web based learning between Male and Female. The independent sample t = -1.917 which is non significant. Therefore, there is no significant difference of facing problems in web based learning between graduation and master. The F ratio = 0.516 which is non significant. Therefore, there is no significant difference of facing problems in web based learning among the students of different semester.

The F ratio = 2.197 which is non significant. Therefore, there is no significant difference of facing problems in web based learning among the students of different computer skills. The F ratio = 1.587 which is non significant. Therefore, there is no significant difference of facing problems in web based learning among the students of different places for web browsing.This also support the findings of Schen, et al (2007) The F ratio = 4.418 which is significant. Therefore, there is significant difference of facing problems in web based learning among the students who used different web browser. The mean differences of quality = 3.7887 and design = 3.7683 is bigger than mean of access = 3.5089. Therefore, the problems of access are faced more than the quality and design issues. The correlation between design and access (r = 0.804)is high. Therefore, there exists high correlation between these constructs and both are supporting to the total score.

The correlation between design and quality (r = 0.852) is high. Therefore, there exists high correlation between these constructs and both are supporting to the total score. The correlation between access and quality (r = 0.831) is high. Therefore, there exists high correlation between these constructs and both are supporting to the total score. Male and Female face the same problems while learning through web. Graduation and Master face same problems while learning through web.

The students that used different places for web browsing have same problems of using web based learning. The students in different semesters have same problems of using web based learning. The design, quality and access are correlating each other measuring the same construct.

The students normally have more problems in accessing the system as compared to design and quality issues. University should choose simple, functional and used such tools that are easy for the students. University should recommend the design of the tools which are usable for the students. University should provide (updated) online access to information and activities for everyone. University should provide integrated, standardized, flexible and accessible in tool/program choices, and university should ensure/provide training and support to instructors and students in tool application, implementation.

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