

Web Based Skills Assessment for Tertiary Level Learners

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Abstract: Internet has experienced phenomenal growth in higher education. Computer technology has become ingrained in every aspect of the society. Students use computers and electronic devices such as tablets and Smart phones, to communicate with their peers and professors. Internet is used for many different activities including shopping, communicating, learning, and distributing information. Many college courses require students to check their e-mail regularly for communication and tutorial purposes. Social networking websites have also become a popular avenue for college students. In fact, college organizations have utilized these platforms to promote academic and social events. College students who do not have Internet access may miss out the important news posted through the college's website and e-mail system. Use of the World Wide Web to teach information retrieval skills to college students is rather new phenomenon. Word processing is a basic skill that involves typing and formatting documents. Many courses in college require to present information in a word processed report format. It is not only important to gather and process information, but it is also important to present information in a readable and attractive layout. Many instructors give students guidelines for essays or reports specifying margin set-up or line spacing. Knowing how to manipulate word processing software will save the time when preparing college essay or reports. When it comes to general internet access, college students of all stripes are much more likely than the general population to go online. Online learning offers a number of advantages for students. Findings of the present study revealed that Internet use is thoroughly woven into a college student's life.

Keywords: Web based skills, assessment, tertiary Level.

I. INTRODUCTION

In the past few years, networked and Web resources, has been increased and help users sort through the information readily available from any computer connected to the Internet (Nancy O'Hanlon & et al., 1999). The system of education has also been impressed by repercussions of dizzily developing technology world (Deniz Kaya & et al., 2012). The place of the Internet in an era that has been described as information and communication age cannot be overemphasized. This is because people have today seen the competitive edge that easy access to current and accurate data and information gives to its users. The web offer great opportunities that students can take advantage of to develop themselves within the seeming competitiveness of world (Arthur Charles, 2013). Using technology and the web helps students get excited about their learning, become more active and involved (Mangala Gowri ,P & et al., 2013). Internet is used increasingly for educational purposes. Many educators are incorporating the Web into their curricula (Gunaratne & et al., 1996). One of the most basic uses of the Internet by students is to search for sources and information to complete course assignments. The web is to provide students quick access to government documents, scholarly listservs, and databases located at geographically removed institutions makes it a valuable information source for students (Benson, 1994). The phenomenal

International Journal of Novel Research in Humanity and Social Sciences

Vol. 2, Issue 5, pp: (93-98), Month: September-October 2015, Available at: www.noveltyjournals.com

growth in the Internet has led to research examining the role of this technological innovation in higher education (Daughtery & et al., 1998) In the light of the above present study therefore attempts to assess the level of web based skills among tertiary level learners in order to evolve useful suggestions.

Rationale of the study:

With the rapid development of information diffusion technologies, students can use the Internet and other digital instruments to acquire new knowledge with ease (Chun-Yi Shen & et al., 2011). In nearly all aspects of today's world, the ability to use such technologies as the internet, email programs, word processors, presentation software, databases, digital video, wireless communication, and so forth is no longer an exceptional ability (River Parishes Community College 's QEP,2009).

The roles of the information technologies, which are used in education environments are as follows:

- To sensitize students to informatics
- To facilitate scientific terms to be learned
- To develop cognitive talent of students
- To create educational materials

One of the opportunities that technology offers is the opportunity of utilization from education technologies via the internet (Pekdag, 2005). The Internet has become a very important part of our world. More and more people are choosing to share messages and pictures through email and social networks (such as Facebook and Twitter). The role of web is an essential part of online courses in tertiary education. Activities in discussion forums help learners to share and gain knowledge from each other. In fully online courses, discussion forums are often the only medium of interaction. However, merely setting up discussion forums does not ensure that learners interact with each other actively and investigation into the type of participation is required to ensure quality participation (Dip Nandi & et al., 2011).

Objectives of the study:

The following are the objectives of the present study

1. To assess the level of web based skills among tertiary level learners.
2. To find out the difference, if any in the Web based skills among the tertiary level learners with respect to the demographic variables like gender and locality.

Research Questions:

- (i) Is there any relationship between the locality and web based skills among tertiary level learners?
- (ii) Is gender plays any role in the assessment of web based skills?
- (iii) Do the students doing for their assignments?
- (iv) Are the students interested to develop their web based skills?

II. METHODS AND MATERIALS

Survey method was adopted in this study in order to find out the level of web based skills among the chemistry. Undergraduate students 77 final year chemistry under graduate students from the academic year 2015-2016 were taken as sample for the study. Out of this sample, 32 Chemistry students were from Government College, and 45 Chemistry students were from a private college. Web based skills assessment for tertiary level learner's questionnaire (WBSATLL) with three point scale (i.e.) almost, sometimes and rarely. The responses were counted and percentage analysis was done was developed by the investigators with 20 items to find out the level of web based skills.

Analysis and Interpretation:**Table1: Percentage analysis of web based skills assessment**

S. No	ITEMS	Percentage of response					
		Male (18)			Female(59)		
		A	B	C	A	B	C
1.	Do you like to go through online websites related to chemistry?	32	38	30	27	42	31
2.	Do you visit online forums to get help for studying chemistry subject?	24	48	28	36	36	28
3.	Do you participate actively in online forums related to the chemistry subject?	31	39	30	30	33	37
4.	Do you e-mail other students to get clarification of your doubts?	60	28	12	48	32	20
5.	Are you able to provide feedback to peers through online?	33	46	21	31	27	42
6.	Do you convert a Microsoft Word Document to PDF Format?	72	21	7	67	24	9
7.	Are you able to access multiple sources of information through web?	60	28	12	31	43	26
8.	Are you able to search and evaluate information?	39	42	19	30	39	31
9.	Do you search bibliographic details in the web?	56	19	25	41	32	27
10.	Do you download different software related to your subject from the internet?	39	33	28	39	29	32
11.	Do you know how to install software to support your learning?	65	19	16	34	36	30
12.	Do you use the internet for doing college work?	64	16	20	43	33	24
13.	Do you find books using online book search from different libraries?	34	24	42	34	38	28
14.	Do you make a presentation using power point and post in the web?	65	28	7	45	31	24
15.	Are you comfortable move around web pages and printing required material?	46	26	28	33	43	24
16.	Do you use e-mail skills such as logging in, sending and receiving e-mail and attaching or downloading files?	88	12	-	62	24	14
17.	Can you develop a web page?	38	32	30	34	32	34
18.	Have you participated in the online discussion forms?	25	29	46	34	28	38

Note: A-Almost B- Sometimes C-Rarely

From above table 1: it is clear that maximum no. of male (88%) and female students (62%) reported that they use e-mail skills such as logging in, sending and receiving e-mail and attaching or downloading files almost, male (12%) and female students (24%) sometimes, 14% of students rarely. While minimum number of 24% of male and 36% of female students said visit online forums to get help for studying chemistry subject almost, 48% of male and 36% of female sometimes, 28% of male and female students expressed rarely. In the present study, it was found that there is an assessment of web skills of urban and rural tertiary level chemistry students. Urban students were found to have better web skills as compared to rural area students. It means that the education or the learning environment of the students is more concentrating on facilities of the students who are learning in urban college.

Research question.1:

Is there any relationship between the locality and web based skills among tertiary level learners?

International Journal of Novel Research in Humanity and Social Sciences

Vol. 2, Issue 5, pp: (93-98), Month: September-October 2015, Available at: www.noveltyjournals.com

Table II. Tertiary level learners’ assessment on web based skills by urban and rural area male and female students.

Urban(32)						Rural(45)					
Male(11)			Female(21)			Male(7)			Female(38)		
A	B	C	A	B	C	A	B	C	A	B	C
50	30	20	45	35	20	47	29	24	33	33	34

A- Almost B - Sometimes C- Rarely

Table no II. shows that as many as 50% male students and 45% of female students responded almost, 30% of male and 35% of female students Sometimes , 20% of male and 24% of female students expressed rarely in urban area. But 47% of male and 33% of female students reported almost in rural area, 29% of male 33% of female students sometimes, 24% of male and 34% of female students expressed rarely in rural area. With these responses it is concluded that there is small difference found between the male and female in urban and rural area students towards the assessment of web based skills.

Research question.2:

Is gender plays any role in the assessment of web based skills?

Table III. Usage of web based skills by male and female tertiary level learner

Sample	Usage of web based skills based on gender in %					
	Male(18)			Female(59)		
	Almost	Sometimes	Rarely	Almost	Sometimes	Rarely
77	48	30	22	38	34	28

Table no III. shows that as many as 48% of male and 38% of female students said almost, 30% of male and 34% of female students sometimes towards the assessment of web based skills. While 22% of male and 28% of female students revealed that they rarely have assessment of web based skills. With these responses it is concluded that there is much difference found between the male and female students towards the assessment of web based skills.

Research question.3:

Do the students for doing their assignments?

Table IV: Use of web by tertiary level learners for doing assignments

Sample	Use of web in %			
	Male (18)		Female (59)	
	Yes	No	Yes	No
77	62	38	52	48

Table IV: shows that 62% of male and 52% of female students said that they use web for their assignment. While 38% of male and 48% of female students revealed that they did not use web for assignment. *With these responses it is concluded that there is much difference between the male and female students towards use of web in learners of chemistry. It means that the boys are utilizing the web more than the girls students.* The opportunities should be created to use the web for doing the assignments by all the students.

Research question.4:

Are the students interested to develop their web based skills?

Table V: Heterogeneous chemistry learner’s interest in web based skills

Sample	Interest on web based skills in %			
	Male (18)		Female (59)	
	Yes	No	Yes	No
77	76	24	70	30

It can be seen from the table V: that as many as 76% of male and 70% of female students responded that they interested for their developed web based skills. While 24% of male and 30% of female students revealed that they did not developed

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Vol. 2, Issue 5, pp: (93-98), Month: September-October 2015, Available at: www.noveltyjournals.com

web based skills. *It is concluded that there is much interest between the male and female students towards developing web based skills.*

Major findings of the study:

The following are the major findings of the study

- Male tertiary level learners have more web skills compared with female students.
- It is observed that female tertiary level learners have less interest in developing web based skills
- Urban area male and female students were better than rural area male and female students in terms of their usage of web.

Discussion:

Laura J. Dixon & et al., (2014) revealed that the male students were better than the female students in the use of internet. In the present study also it was found that male students use web better when compared with female students. It is observed from the study done by Amutha.S & et al., (2015) that female students have less computer access than the male students. Present study also goes in line with this result. Thanuskodi.S (2013) revealed that the female students were better than the male students in use the internet. In this study different results were obtained regarding the usage of internet.

Recommendations for Policy Making:

Based on the findings, the study recommends the following:

- Tertiary institutions must therefore ensure that the available bandwidth is properly used with documented policies that spell out the kind of applications that can be run on its network, time allocation.
- The institutions in the Municipality should also consider teaming up in a consortium to collaborate and lobby for cheaper bandwidth packages from Internet Service Providers.
- Teachers should provide opportunities for the students to do their own projects to explicit their web based skills.
- The educational institutions in the Municipality should also continually review their training programmes in computer and Internet user skills.
- Instructors and students in tertiary institutions must be encouraged to interact on the Internet platform in terms assignments, enquiries, lecture notes and discussions.
- Government should support and encourage private sectors as well as Internet Service Providers to invest in communication and information technologies.

III. CONCLUSION

Online technologies are changing and challenging in the higher education. Colleges of education are facing the challenge of using technology effectively while maintaining a commitment to academic quality. Web –based learning offers colleges an important tool for reaching new students, interacting with current students in new ways, reducing costs, and making better use of limited resources. In order for web-based learning to be used most effectively in higher education, faculty must assume leadership roles in its design, use and evolution. Plans for implementation of web-based learning in higher education that ignore the central role faculty plays in the implementation process are doomed to failure (Daniel W. Surry, 2009).

Scholars and students use the Internet for several facets of college work, such as for working on their homework, finding information for projects or talks, and communicating with classmates. Internet skill is generally believed to contribute to better learning outcomes (Kuhlemeier & et al., 2007). Online learning systems have been described as web based learning environments consisting of digitally formatted content resources via the use of the World Wide Web (Zhu & et al., 2008).

Tertiary level learners who realize the imperative nature of learning the basics of computers will succeed in their future endeavours. Using the Internet can also save time, money and effort.

International Journal of Novel Research in Humanity and Social Sciences

Vol. 2, Issue 5, pp: (93-98), Month: September-October 2015, Available at: www.noveltyjournals.com

Hence it is mandatory for the tertiary level learners to enrich themselves with the web based skills for their betterment.

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