Utilization Pattern of Internet among Secondary School Students

Sunita Singh¹ and Jyoti Bala²

¹Assistant Professor, Faculty of Education Banaras Hindu University, Varanasi, India ²Research scholar, Faculty of Education Banaras Hindu University, Varanasi, India sunitasingh.bhu@gmail.com

Date Received: August 5, 2014; Date Revised: November 29, 2014

Abstract - Information and Communication technologies can provide better opportunities for extending the access of education to our society. The objectives of Present paper are to find out the utilisation pattern of internet by the higher secondary school students, to estimate the use of internet in reference to scholastic and non-scholastic purpose further it include a comparative study of the pattern of use of internet by higher secondary school students of government school and private schools. 130 higher secondary students of Varanasi city, India gave their responses. Questionnaire was used as a research tool. The main findings of the study are students used the internet mostly for scholastic purpose, private schools students access more information through internet in comparison to government school students.

Keywords: Computer, Internet, Information Technology, Secondary School

I. INTRODUCTION

Information Communication Technology (ICT) is one of the important buzzwords of today. Internet is one of the most important parts of ICT. Throughout the developed world, changes in technologies permitting the more extensive use of electronics and telecommunications to access information. It is a powerful means of communication, dissemination retrieval of information and educational course delivery. Internet is fast becoming a basic feature of global civilization, so that what has traditionally been called "civil society" is now becoming identical with information technology society as defined by Internet use.It has been integrated in every walk of our life.It has changed our way of life and haspenetrated in everywhere and its makes our life comfortable and easy. Its impact has also been evident in railway, air reservations, banking and insurance sectors, postal services, biotechnology, bioinformatics, biomedical sciences, health care sector, telemedicine, media and communications, teaching -learning, library and information services, printing technology, e-resources, digitization of documents, digital library, library networking, e-commerce, & trade, entertainment.It is used to enhance social life, academic work, social skill, group relation (Mishra, Yadav, & Bisht 2005, Majid Zerofi et al. Satyanarayan, 2003). It is playing a significant role in the field of education. Students and teachers are using it make their teaching learning process more flexible and easy (Rehman&Ali 2010, Mishra, Yadav & Bisht 2005, Oskouei Choudhari, 2010). In educational institutions favorite place to use internet is library(Rajeev Kumar & AmritpalKaur, 2004; AviGoldfard Jeff Prince 2008).

The National Curriculum Framework (NCF) has the continuous watch on the organisation of the curriculum as per the changing scenario and the need of the society. The policy also keeps an eve on the advancement of the educational technologies and their availability in the education system. Internet is revolutionizing the way of imparting education. Introduction to the use of ICTs in teaching learning process is now getting popularity. Internet is becoming an essential tool to fulfil the educational needs of both teachers and students. Researchers observed that students spend more time in surfing internet. This situation arises few question in our mind like what type of content are being access by students, how much type being devoted by the students and what are the access points of surfing internet etc. To find out the answer of these questions following objectives were framed.

II. OBJECTIVES OF THE STUDY

The study aimed to find out the utilisation pattern of internet by the higher secondary school students of Varanasi. A comparative study of the pattern of use of internet by higher secondary school students of government school and private schools.

P-ISSN 2350-7756 | E-ISSN 2350-8442 | Volume 2, No. 6 | December 2014

III. METHODOLOGY

For the present study researchers adopted the survey method to collect the data relevant for achieving the objectives of this study. The descriptive approach was used for interpretation of the utilisation pattern of internet of the students of higher secondary school. The students of class XI and XII of all the government and private school of Varanasi city of Uttar Pradesh, India comprised the population for present study. Sample of this study constituted the students studying in the government and private schools of Varanasi. Sample of 130 students(70, private school students and 60, government school students) were selected for the study by purposive sampling technique.

TOOL USED:

In order to get the utilisation pattern of internet of students of higher secondary school a self made questionnaire was prepared. It was divided into two sections. In the first section twenty one items were framed. Each item tries to know the opinion of students regarding accessibility of internet as well as how much time is devoted by them for surfing the information. There were two options for accessibility of information i.e. Yes or No and four option for getting information about the time devoted. For each items the student were to mark tick($\sqrt{ }$) on the given options. For example If the student used internet to prepare assignments then he/she will mark out the opinion "YES" and for the amount of time devoted he/she will tick($\sqrt{\ }$) out any one of these options (2-4)hrs, (4-6)hrs, (6-8)hrs or (more than 8hrs). The second section of the tool contained five open ended questions to get more information regarding pattern of use of internet. For this purpose question framed like "what type of software you download?"

IV. RESULTS AND DISCUSSION

Utilisation pattern of internet cover accessibility, access points, purpose and time spend on accessing internet services. The detail information regarding these are presented in following tables.

Table 1. Accessibility to Internet

Schools	Yes		No		Total	
	F	%	F	%		
Private	58	83%	14	17%	70	
Government	47	78%	11	22%	60	
Total	105	81%	25	19%	130	

Referring to table-1 More than 80% of private school students used internet and they are more in

number as compared to government school students. The researcher found that conditions of the ICT facilities in the private schools are better than those of the government school. Parental income may be another cause of such differences. Pew internet and American Life Project survey found that there has been a growing pattern of internet users in America. In India also the access of inter has been growing till 1990 to 2010. Study of Sinha (2012), Mishra et al(2005), Kumar et al(2006) supports the obtained result.

Table 2. Internet Access Points

Internet access points	Percentage		
School	12%		
Cyber Café	52%		
Home	33%		
Mobile Phones	3%		
TOTAL	100%		

Above table reveals that more than 50% of students' accessed internet at cyber cafes. Researcher observed that Unavailability of computers at home for most of the students may be the reason for such findings. Mobile phones have got the least percentage as a internet access point. Some of the researchers have found that school is the most common area where internet is accessed by the students; it is basically the findings in America. The researches done by Rajeev Kumar in 2006 interpreted that the college and the work place were the most accessed points for using internet by the teachers and the students.

Table 3.Purpose of Using Internet

Table 3.1 at pose of Coing Inter	iict
Entertainment	20%
Communication	27%
Educational	40%
Chatting	12%
To pass time	1%
Total	100

The above table shows that internet is mostly being used for educational purpose. The students gave their response in the open ended question that they keep on searching about the scopes and, medicals, and some competitive examinations. They also responded that for communication purpose most famous site was Facebook and Gmail. Only 1% students used it to pass time. Some of them use it for chatting. The findings of (Mishra, Yadav and Bisht, 2005) support the above findings. They conducted a research study to learn the Internet utilization patterns of undergraduate students at

P-ISSN 2350-7756 | E-ISSN 2350-8442 | Volume 2, No. 6 | December 2014

the G B Pant University. The findings of the study indicate that a majority of the students (85.7%) used the Internet. The findings of the study also showed that 61.5% of the males and 51.6% of the females used the Internet for preparing assignments. A majority of the respondents i.e. 83.1% male and 61.3% female respondents indicated that they faced the problem of slow functioning of Internet connections. Majority of the male students(72.31%) and female(61.29%) use internet to satisfy their electronic mail needs followed by information (49.23% ,38.71%), educational (46.15%, 41.94%), chatting (43.08%, 32.26%) communication with others (32.31%,38.71), and news (30.77%,22.58%) for male and female respectively.

Table 4. Time Devoted in Accessing Internet

Time devoted (in hours weekly)	f	%
(2-4)	82	78
(4-6)	13	12
(6-8)	6	6
(8 and above)	4	4
Total	105	100

It is observed from the table that more than 75% of the total student use internet for (2-4) hours weekly. Only 4% of them use it for more than 8 hours in a week. Researcher got that unavailability of computer and internet at home may be one such reason for such less time devotion in accessing internet. Earlier researches like of Mishra, et al. (2004) and Kumar (2006) shows that mainly the college going students, the working people and the researchers use internet for long hours. Study done by (Biradar and others, 2006) in Kuvempu University supports the finding. Their finding included, 42.1 % students use internet twice a week and 31.25% faculties use it every day. The majority of students as well as faculties use Internet for study/ teaching purpose.

To estimate the use of internet in reference to scholastic and non scholastic purpose whole item of questionnaire was categorised as the scholastic and non-scholastic purposes. The items included under the scholastic area and the data found for that are tabulated in the following table.

Table 4 shows the scholastic use of Internet.

Table 4. Scholastic Use of Internet

	YES	NO		
Internet services	No. of students	%	No. of students	%
Download books	60	46%	70	54%
Online Dictionaries	52	40%	78	60%
Online Libraries	32	25%	98	75%
Online Shopping	24	18%	106	82%
E-News Papers	71	55%	59	45%
Educational Software	61	47%	69	53%
Videogames	62	48%	68	52%
Assignments	107	82%	23	23%
Course Syllabus	86	66%	44	34%
Enrol In Courses	56	43%	74	57%
Update Operating System	62	48%	68	52%
Virtual Classes	37	28%	93	72%
Competitive Examinations	100	77%	30	23%
Information For Colleges And Universities	88	68%	48	32%

From the above table, it is inferred that students are knowledge of the scholastics services of the internet. The internet is mostly being used for preparing assignments. The search engines like the Google, yahoo, ask.com and msn.com help them to get an easy access to information. 46% of them use internet to download the books. Type of books being downloaded are text books of their syllabus, magazines, story books, novels and biographies. They also access internet to download

some of the software like Bluetooth software, multimedia players, video converters, and internet browsers, computer languages like C++, JAVA, and FORTAN. Only 18% of them used to do online shopping. Seventy Seven percent of students used internet to access information regarding competitive examinations. They replied in open ended questionnaire that they used internet to search for examinations related to their respective courses, to fill online forms

P-ISSN 2350-7756 | E-ISSN 2350-8442 | Volume 2, No. 6 | December 2014

and face online examinations. The researches done by the Pew Internet and American Life Project Survey reported that teens use internet for school research, to prepare school projects and to down load study aid.

Following table shows the data for the access to non-scholastic services of internet.

Table 5. Non scholastic use of internet

Services of internet	YES		NO	
	F	%	\mathbf{F}	%
Videogame	61	47%	69	53%
Download songs	81	62%	49	58%
Download movies	59	45%	71	55%
Social networking sites	89	68%	41	32%
Blogging	26	20%	104	80%
Chatting	85	65%	45	35%

Referring to above table it is interpreted that for non scholastic services of internet it is social networking sites which is being accessed most. It was found in replies of students in open ended question that the social networking sites like, face book is used mostly. Earlier it was Gmail and orkut which were more famous. It was found that 84% of the total students have got the e-mail IDs and they use it for communication. These sites are generally used for chatting purpose. The researches done by (Robert Krout et. all, 1995) also reveals at that time it was only used for pleasure, basically for electronic mail. Services like blogging and twitting is not famous among the students and has got the least percentage i.e. (20%). These are basically used by professionals. Playing videogame, and downloading movies and songs are used on an average rate. The student responded in open ended question that they use to download romantic, thriller, Hollywood, Bollywood, fiction and suspense movies however they don't devote more time in downloading these.

To compare the pattern of internet use by higher secondary school students of government school and private school data was obtained with reference to Access to internet, purpose of Using Internet and Scholastic and non-Scholastic purpose of internet.

To get the pattern of purpose of use of internet services by the government and private school students, the data calculated in Table 6:

The table 6 shows that users from government schools are more than user of private schools for communication and educational purpose. Both groups mostly use internet for educational purpose. The educational purpose may be preparing assignment, downloading books, seeking information for competitive examinations etc.

Table 6. Purpose of Use of Internet by Government and Private School Students

Purpose	Government school students (in %)	Private school students (in %)
Entertainment	22%	24%
Communication	28%	27%
Educational	45%	40%
Chatting	5%	9%
Total	100%	100%

For chatting, the percentages of private school students are higher. Researches carried out by National Centre for Education statistics gave the same interpretation that mostly students use internet for the educational purpose. Study by Kumar et al(2006) support the result. He found that for teachers and college students it was educational purpose for which internet is being used most.

In order to show the comparison of the use of services(scholastic and non- scholastic) between the students of government schools and private schools the data was collected in terms of following internet services as tabulated in the table.

The table shows that private school student use internet in large amount than those of the government school student. Both the groups have got highest users for preparation of assignment using internet. The low percentage in government school student may be due to the ill maintenance of the computer labs and unskilled teachers pertaining to them. Very few students are there who access internet for virtual classes (30%, 27%) blogging (17%, 23%) and to do online shopping (17%, 22%) in both the group. More than half of the total students use internet for chatting, search for course syllabus, to seek information about colleges and universities, to know about competitive examinations in both the groups. For playing video games both groups are equal in percentage (47%).

Many researchers have been done to compare certain groups like a research was carried by Amanda Lenhart in 2002, ethnically the percentage of internet user was white(55%), black(36%), Asian (13%) and Hispanic or Latino(6%). Such comparison also shows that what may be the reasons responsible for such differences here the percentage is high in developed those of developing countries. countries that Developing countries lack in having proper infrastructure and the proper spread of techniques to a large extent, which leads to weak enhancement of information and communication technology. Basically the use of ICTs has been confined to commercial and

P-ISSN 2350-7756 | E-ISSN 2350-8442 | Volume 2, No. 6 | December 2014

professional purposes in these countries. To a certain extent the study of ICTs has been included in the school curriculum and the theoretical introduction of it is done.

but still we lag in practical aspect due to developing economy.

Table 7. Utilisation Pattern of Internet services By Government And Private School Students

SL.NO.	Internet services	Government sc	hool students	Private school students	
		Frequency	%	Frequency	%
	SCHOLA	ASTIC PURPOSE			
1.	Download books	33	47%	28	47%
2.	Online dictionaries	43	61%	38	54%
3.	Online libraries	31	44%	28`	47%
4.	Online shopping	54	77%	35	58%
5.	E-news papers	12	17%	14	23%
6.	Educational softwares	47	67%	38	63%
7.	Videogames	30	42%	30	50%
8.	Assignments	29	41%	23	38%
9.	Course syllabus	18	25%	17	28%
10.	Enrol in courses	12	17%	13	22%
11.	Update operating system	42	60%	29	48%
12.	Virtual classes	31	44%	30	50%
13.	Competitive examinations	29	41%	33	55%
14.	Information for colleges and universities	59	84%	48	80%
	NON- SCHO	DLASTIC PURPO	SE		
15.	Videogame	46	66%	40	67%
16.	Download songs	26	37%	30	50%
17.	Download movies	34	49%	28	47%
18.	Social networking sites	21	30%	16	27%
19.	Blogging	53	75%	47	78%
20.	Chatting	50	71%	38	63%

V. CONCLUSION

It can be concluded from the above discussion that more than half sample of students have accessibility to internet. Cyber cafes are most visited place to use internet and basically it is being used for educational purpose. About ¾ of total samples accessed internet for about (2-4) hrs weekly and few of them used it for eight hours weekly. More than 34 of sample accessed internet to prepare assignments. Under non- scholastic, interest of samples lies in accessing social networking sites. On comparing samples on basis of government and private schools it is found that private school students have more accessibility to internet. It may be due to the reason that mostly these students belong to high income group family and the condition of ICTs in private school may better as compared to the government school. In both the groups more than half of the total samples responded for scholastic use of internet. This shows that both groups have knowledge about the scholastic services of internet. Under non scholastic purpose most of the samples of both group used internet for chatting. Further it can be said that teachers should help the students to have the knowledge of proper sites from where authentic matter can be accessed by the students. Parents should have a proper watch on their children that they are accessing proper material from the internet. It is the responsibility of the schools that they should provide with the best quality of internet server, computer system, and other essentials of ICT so that students should not face difficulty in accessing internet with proper speed and within proper time. The scholastic services of internet should be made more interesting introducing additional by some programming with it. It can be done by introducing some play way techniques with it. There can be some training programmes for the schools teachers for the best use of ICTs.

Educational Implications

The study shows that student lack in having knowledge of some of the internet services so there should be skilled teachers in the computer labs who can teach the

P-ISSN 2350-7756 | E-ISSN 2350-8442 | Volume 2, No. 6 | December 2014

students about the technology of using the services of internet. It was found that the government school lack in having such facilities as compared to the private one so there is a need that the policy framers of education should consider this problem and should try to contribute to expand the access to computer labs with internet connections in government schools also. Study shows that internet is basically being used for academic purpose but still there is a need to create more awareness about the academic services of the internet rather than the non academic one because the easy learning of non academic services make the internet as a medium of entertainment for the students.

REFERENCES

- Biradar, B.S et.al. (2004), A Study of Internet Usage by Students and faculties in Kuvempu University. *Library Herald*, 44 (4): 283-294.
- Chandra, Ramesh(2005), Web Based Education New Delhi:Kalpaz Publication satyawatinagar
- Goldfarb, Avi and Jeff Prince. 2008. Internet adoption and usage patterns are different: Implications for the digital divide. *Information Economics and Policy* 20(1): 2-15.
- Kanaujia, S., &Satyanararayana, N.R. (2003). Status of awareness and demand of web-Based learning environment among the S&T information seekers. *International Conference on Mapping Technology on Libraries and People*, Organized by INFLIBNET, 13-15 February 2003, Ahemdabad, p.587-593
- Kraut, R., V. Lundmark et al.(1995). Why People Use the Internet. Carnegie Mellon University. Pittsburgh Retrieved on 12-12-2012 from http://homenet.hcii.cs.cmu.edu/progress/purpose.html
- Lenhart, A.(2002), A digital Disconnect: The Widening Gap Between Internet Savvy Students And

- *Their Schools* retrieved from http://Internet journals. Org/IRJLIAS/pdf. on 16-01-2012
- Mishra, et at(2005), Internet Use By Teachers And Students In Engineering College of Punjab, Haryana, and Himachal Pradesh States Of India. University news
- Oskouei R. J. et al. (2010).Differential Impact of Web Technology on Various Dimensions of Students Academic and Non-Academic Activities (a Case Study). *Indian Journal of Science and Technology*. Computer Science & Engineering Department, Motilal Nehru National Institute of Technology, Allahabad, U.P
- Perry. David. K. Theory and Research in Mass Communication Content and Consequences. New Jersey Lawrence Erlbaum Associates, Inc. Publishers, Mahwah
- Pew Internet Project data from June 26-July 26 survey .U.S. Department of Commerce, Economics and Statistics Administration, National Telecommunications and Information Administration (February 2002). A Nation Online: How Americans Are Expanding Their Use of the Internet. Washington
- Pew Internet & American Life Project (September 2001), *The Internet & Education: Findings of the Pew Internet & American Life Project*, by Amanda Lenhart, Maya Simon, and Mike Graziano. Washington, DC.
- Pew Internet & American Life Project (June 2001), Teenage Life Online: The Rise of the Instant-Message Generation and the Internet's Impact on Friendships and Family Relationships, by Amanda Lenhart, Lee Rainie, and Oliver Lewis. Washington, DC.; U.S. Department of Commerce (February 2002)
- Shrinivasan, T. M. (2002), *Information and Communication Technology Teaching Skills* .Jaipur: Aavishkar Publishers