

## A Case Study of: Internet Access and Usage by Undergraduate Students VEL TECH TECHNICAL University, India

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### Abstract

*This study was carried out in order to determine Internet access and usage by the undergraduate students of Vel Tech Technical University, India. Data was obtained from 180 undergraduate students of the institution with the use of a questionnaire. Information collected showed that majority of the cyber cafe around the university environment were privately owned and despite this, students accessed the Internet from their pocket money. It also revealed that majority of the respondents were Internet literate with 33.33% of the respondents browsing the Internet daily; 38.89% weekly, 11.67% fortnightly and 16.11% monthly. It further revealed that the most used Internet facilities are the e-mails, WebPages, search engines and chatting facilities for communication academic activities and for sourcing of information and knowledge.*

**Keywords:** Internet Access, Undergraduate Students, Vel Tech Technical University

### Introduction

Information and Communication Technology (ICT) is the scientific, technological and engineering discipline and the management technologies used in the handling of information, processing and application related to computers. ICT is also defined as the term used to describe the tools and processes to access, retrieve, store, organize, manipulate, produce, present and exchange information by electronic and other automated means. These include hardware's, software's and telecommunications in the form of personal computers, scanners, digital cameras, handheld/PDAs, phones, faxes, modems, CD and DVD players and recorders, digitalized video, radio and TV and programs like database systems and multimedia applications (Gwary, 1988). Of these, there are the traditional and modern technologies of disseminating information. The traditional ICT products are the printed page, radio, television, films and so on while the modern technologies include the Internet, e-mail, voicemail, facsimile technology, electronic bulletin board, cellular telephones, CD-ROMS

among others. These different tools are now able to work together, and combine to form-networked world, which reaches into every corner of the globe (UNDP Evaluation Office, 1801).

However, the use of ICTs in education process has been divided into two broad categories: ICTs for Education and ICTs in Education. ICTs for education connotes the development of information and communication technology specifically for teaching/learning purposes while the ICTs in education involves the adoption of general components of information and communication technologies in the teaching learning process [Olakulehin, (1807) quoted by Tella, Tella, Toyobo, Adika and Adeyinka (1807)].

### **Background Information about Vel Tech Technical University**

VEL TECH group of educational institutions was established in 1990 by a well known industrialist couple dedicated to public service. Dr.R.Rangarajan and Dr.R. Sakunthala Rangarajan, who by then had 30 years of experience in developing industries and international trade. What took off as a modest school now stands as a monument of glory for “Chennai city”. A student volume of above 12,000 through the various educational institutions of VEL TECH group. Through sheer hard work and principled living, the couple has been able to make these institutions tremendously successful by offering 59 courses including Post Graduate courses. Dr.R.Rangarajan is currently the Syndicate Member of University of Madras and Anna University. The long, dedicated, tireless and passionate journey continues to the cause of nation building. Since 1990, the cluster of following educational institutions was established under their trusts in Avadi,Chennai.

Set up in sprawling campus VELTECH Engineering College was established with the approval of AICTE, New Delhi, for providing high quality technical education. Since then, it has been offering programmes leading to the award of B.E, B.Tech, M.E, M.Tech, M.Sc, MBA degrees of Anna University, Chennai. The high quality of technical education at VEL TECH earned accreditation by the National Board of Accreditation, New Delhi for all the degree programmes. Now VEL TECH has been duly declared as DEEMED to be UNIVERSITY u/s 3 of the UGC Act1956 by the UGC and notified by the Ministry of Human Resource Development, Government of India, New Delhi.

### **Objectives of the Study**

This study aims to determine Internet access and usage by the undergraduate students of Vel Tech Technical University. In view of this, the study is set out to:

- i. Determine the adequacy of provision and access to Internet by the undergraduate Students of this institution.
- ii. Determine the frequency of use of the Internet.
- iii. Which of the Internet facilities are mostly being used?
- iv. Determine benefit of Internet use to these students.
- v. Determine what the undergraduate students are using the Internet for.

vi. Identify and rank problems encountered by the students in their use of Internet.

## Methodology

The questionnaire was designed by the researchers. The questionnaire consisted of two sections. The first section required demographic information while the second section consisted of questions directed to the study. This consisted of fourteen (14) open-ended and close-ended questions. The population used in this study were the undergraduate students of Vel Tech Technical University, India. A total of two hundred (180) copies of the questionnaire were randomly administered to the randomly selected undergraduate students of this institution by the researchers. 180 questionnaires were completed and collected back from the sampled respondents by the researchers giving a 90% response rate. All the returned questionnaires were found usable for the study. The researchers made use of frequencies and the simple percentages in analyzing the data collected.

**Table 1: Faculty Distribution of Respondents**

College	Frequency	Frequency
Science	33	18.3
Social Sciences	28	15.55
Management Sciences	23	12.77
Engineering and Technology	18	10.00
Education	18	10.00
Arts	13	7.20
Music	13	7.20
Nursing	08	4.40
Pharmacy	08	4.40
Medicine		
<b>TOTAL</b>	<b>180</b>	<b>100.00</b>

Table 1 showed that 18.3% (33) of the respondents were from the Faculty of Science; 15.55% (28) were from the Faculty of Social Sciences; 12.77% (23) were from the Faculty of Management Sciences; 10.00% (18) were from the College of Engineering and Technology.

**Table 2: Internet Search Literacy**

Internet search literacy	Frequency	Percentage
Yes	163	90.56
No	15	8.33
No response	2	1.11
<b>TOTAL</b>	<b>180</b>	<b>100.00</b>

Table 2 showed that 90.56% (163) of the respondents were Internet literate while only 8.33% (15) were not Internet literate and only 1.11% (2) did not respond. This showed that majority of the undergraduate students of VTU. Were Internet search literate and thus able to browse/surf the net, e-mail friends, download materials etc.

**Table 3: Ownership of Cybercafés**

Type of ownership	Frequency	Percentage
Sole Ownership	17	73.91
Partnership	3	13.04
University	3	13.04
<b>TOTAL</b>	<b>23</b>	<b>100.00</b>

From the data, it was shown that only 23 Internet access points were available to these students in and around the university campuses environment as at the time of survey. Out of these, 86.96% (20) were privately owned while 13.04% (3) only belonged to the University.

**Table 4: Access to Internet facilities**

Access	Frequency	Percentage
Yes	163	90.56
No	15	8.33
No response	2	1.11
<b>TOTAL</b>	<b>180</b>	<b>100.00</b>

The respondents were asked whether they have access to Internet facilities around them, their responses as depicted in Table 4 which showed that 90.56% (163) of the respondents had access to Internet facilities, 8.33% (15) do not have access to Internet while only 1.11% (2) did not respond.

**Table 5: Frequency of Internet Use**

Frequency of Use	Frequency	Percentage
Daily	60	33.33
Weekly	70	38.89
Fortnightly	21	11.67
Monthly	29	16.11
<b>TOTAL</b>	<b>180</b>	<b>100.00</b>

Table 5 showed the respondents' frequency of use of the Internet. 33.33% (60) of the respondents browsed the net daily, 38.89% (70) surfed the net weekly, 11.67% (21) browsed fortnightly and 16.11% (29) browsed monthly.

**Table 6: Internet facilities used by the Respondents**

<b>Internet facilities</b>	<b>Frequency</b>	<b>Percentage</b>
E-mail	100	55.55
Web pages	92	51.11
Search Engines	70	38.88
Chat facilities	52	28.88
News group	40	22.22
Discussion group	20	11.11

The respondents were asked which Internet facilities are available for their accessibility. Their responses as shown in Table 6 indicated that 55.55% (100) made good use of e-mails, 51.11% (92) made use of web pages like those of academic materials and other University sites, 38.88% (70) made use of search engines, 28.88% (52) made use to chat facilities (as in yahoo chat facility), 22.22% (40) used newsgroups and only 11.11% (20) made use of discussion group facilities. One may infer that the most used of the Internet facilities was the e-mail, followed by webpages, search engines and chat facilities. Newsgroup and discussion group were the least being used.

**Table 7: Duration of Internet Use**

<b>Duration of Use</b>	<b>Frequency</b>	<b>Percentage</b>
0 – 1hr	75	41.67
2 hrs	70	38.89
3 hrs	7	3.89
4 hrs	8	4.45
5 hrs	6	3.33
6 hrs	2	1.11
7 hrs	4	2.22
Above 7 hrs	8	4.44
<b>TOTAL</b>	<b>180</b>	<b>100.00</b>

Table 7 showed the duration of respondents' Internet search time. It was shown that 41.67% (75) of the respondents used the Internet for between 0 – 1hour; 38.89% (70) surfed the net for 2 hours; 3.89% (7) surfed the net for 3 hours; 4.45% (8) surfed the Internet for 4 hours; 3.33% (6) surfed the net for 5 hours, 1.11% (2) browsed the net for 6 hours; 2.22% (4) surfed the net for 7 hours while 4.44% (8) of the respondents indicated night browsing.

**Table 8: Purpose(s) for Browsing**

<b>Purpose(s)</b>	<b>Frequency</b>	<b>Percentage</b>
Sending messages (e.g. E-mail)	120	66.66
Academic activities	89	49.44
Information/knowledge	84	46.66
News	45	25.00
Entertainment/Leisure	30	16.66
	20	11.11

Distance Learning Programmes		
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Table 8 revealed respondents' purpose of browsing the Internet. The data showed that 120 out of the 180 respondents signified that they used the Internet to send e-mails probably to friends, parents, their loved ones, lecturers and colleagues; 89 of them used it for academic purposes; 84 used it in getting information or knowledge; 45 browsed to get or know current happenings all over the world; 30 signified that they used it for leisure or other means of entertainment while 20 signified its use for distance learning purpose.

**Table 9: Benefit of Internet Use**

Benefit	Frequency	Percentage
Other personal communications	170	94.44
Academic/research benefit	150	83.33
Leisure, Relaxation and Entertainment	120	66.66
Communication with lecturers	100	55.55
General Informant/knowledge	80	44.44
Receiving current news	40	22.22
Other Benefits.	40	22.22

Table 9 revealed the benefits respondents derived from the use of Internet. As shown from the data above, 170 out of 180 respondents signified other personal communication to friends, parents and their loved-one; 150 signified academic and research benefits; 120 signified leisure, relaxation and entertainment; 100 signified communication with lecturers; 80 signified benefit for knowledge and information; 40 signified receiving current news around the world and 40 signified other benefits like distance learning programmes, opportunity to know of and access information from foreign universities; pornographic sites etc.

**Table 10: Problems of Internet Use**

Problem	Frequency	Percentage
Frequent loss of signal	140	77.77
Frequent black out/Power outage	132	73.33
High cost of browsing	120	66.66
Slow Internet access speed	100	55.55
Difficulty in judging relevant information	100	55.55
Too long to download/view WebPages	100	55.55
	40	22.22
	20	11.11

Overload of information Few cybercafé Inadequate browsing skill		
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Table 10 showed the problems respondents usually encountered in the use of Internet. The data ranked in decreasing order revealed that Frequent loss of signal 77.77% (140); Frequent power outage 73.33% (132); High cost of browsing 66.66% (120); Slow Internet connection/access speed 55.55% (100); Difficulty in judging relevant information 55.55% (100); Taking long time to view or download WebPages 55.55% (100) and Information overload 55.55% (100); Inadequate number of cybercafés (22.22%) (40) And Inadequate browsing skills (11.11%) (20) Were factors limiting respondent's use of Internet? One can infer that loss of signal, power outage, the high cost of browsing plus printing, the usual slow Internet connection/access speed; difficulty in judging relevant information, long time to view or download WebPages and information overload were major factors that could limit the undergraduate students of V.T.U and likewise other undergraduate students in the Nigerian higher institutions of learning, the effective use of Internet.

### Conclusion

The Internet has emerged as the single most powerful vehicle for providing access to unlimited information. The Internet is an inseparable part of today's educational system. The dependency on the Internet and its services is increasing on a daily basis and the university community are depending more and more on the Internet for their various educational purposes. The Internet facility has enabled the lecturers and students to enhance their academic excellence by providing them the latest information and access to the worldwide information. In order to make the Internet more beneficial, the library staff who have acquired a good deal of efficiency in the collection, organization and retrieval of information should feel duty-bound to see that the users are able to obtain right information at the right time. They should organize and classify the information on a website in such a way that the users are able to find easily the information they need for their studies and research purposes. The library services supplemented by Internet services can be of great assistance to the users in getting the right information at the right time.

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