

Internet as learning Tool: Indian Engineering student's perception

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Abstract

Our global economy now relies on brainpower and innovation rather than manual labor and raw material as a generator of wealth and good education has become the key element in determining the success of the countries. Over the last decade, the IT revolution has brought in advancement that shows increasingly visible effects on the education with the birth of online education. Students were among the first to realize the impact of the internet on their education. Invention of internet has removed all the barriers to learning. The scope of this paper is to analyze the north Indian engineering student's perception about internet as learning tool and effects of internet on them in perspective of their relations, education, entertainment and socialization. Technology can have both positive and negative consequences on people in different walks of life at different times. The need is to understand the true impact of it so that everybody gathers benefits that yield a healthy mind. In this paper, an empirical study is conducted to examine whether the contacts via e-mail, online chatting and availability of information through Internet would lead our students in a better learned and connected individual. Study also examines the kind of learning mode students prefer. These issues are explored in detail and suitable solutions are proposed to counter the negative effects of internet on students.

Keyword: Internet, education, learning tool

Introduction

Internet is a tool for the advancement of learning. A textbook which was a traditional learning tool are now out of date as internet moves quickly and provides up to date information and includes a wide variety of international sources. Now learning has a greater reliance on information gained from the internet rather than from textbooks. Reliance on this tool has increased exponentially and incredibly. Social, geographical, economical barriers are disappearing as students interact worldwide. As technology improves, the technological revolution has a quicker and deeper impact on more and more lives. Venkatesh [1] surveyed in his paper that all technologies create an impact of some sort. For example, the television technology has had an impact on the media habits of the public, their attitudes and behavior towards entertainment and the interaction between family members. Cole [2] assessed the need of Internet as a mainstream medium that may soon be as pervasive as television although speed of its diffusion seems much faster. Kraut et.al. [3] conducted a longitudinal study on the effects of Internet on social involvement and psychological well-being. It is shown in their findings that the greater use of the Internet was significantly associated with decreased community within the family, a decreased local social network and loneliness and depression. In a report of SIQSS, N. Nie [4] has sustained the negative consequences of the Internet that are consistent with the findings of the Kraut group. Katz and Aspden [5] made a survey using 2500 respondents, out of which 8 percent were Internet users. Comparing users with non-users, they found no evidence of Internet use reducing people's membership in social and religious organizations. Among users, greater use of the Internet was associated with increased contact with family members and an increased participation in online communities. This survey contradicts the findings presented in [4] and [5]. Wellman [6] made a survey on "the National Geographic Society website" and

came out with the suggestions that the Internet is increasing interpersonal connectivity and organizational involvement. Not only can expose people to more contact and more information, it can reduce commitment to community. However, this increased connectivity and involvement. In 2009 there were nearly 81,000,000 users of internet in India. There are many studies available at global level about the impact of internet on students but studies about Indian engineering students are not available.

Internet in education

There are several key advantages of using internet for education [7]

A. Flexibility and Variety

The flexibility of the internet is perhaps the greatest advantage for online education. Websites, interactive activities, lecture notes, videoconferencing, webinars, chatrooms, and blogs, online education students and their professors can interact in ways that are familiar to them. Internet provides user friendly interface to user and new users also feel more comfortable with time

B. Ease and Low Cost of Access

Internet has defeated the distance barrier for learning. Students need not to move to gain knowledge. It has become easy and affordable for everyone from a rural area student to a working professional. For the purpose of interactive courses and videoconferencing rural students are facing problem and this still requires attention

C. Ease and Low Cost of Putting Information Online

Email, chat and interactive online meeting has become new way of learning. Information regarding a course is all available online. This is not only accessible but is affordable for institutes also. Records are available for 24X7 for any time use.

D. Ease of Updating Information

Online Information updation is easier than revising a textbook. Results can be displayed just after an exam. A new course is easy to add. New research or finding can become part of syllabus instantly.

In [8] Aytekin ISMAN, Fahme DABAJ studied students-teachers' perceptions and attitudes towards internet based on various parameters. It was concluded that at education cycle of students concentrate more to learn internet alternatives and functions for getting great positive benefit their future life by adapting contemporary trends. In [9] Hong et al. studied 'Students' attitudes toward the use of the Internet for learning at a university in Malaysia and showed that it is important that students should be exposed to this web based learning so that they could benefit from Web-assisted and Web-based courses conducted in their field of specialization by the various faculties.

Purpose of the study

The purpose of this research survey was to gather information about the impact of internet on learning of engineering students. This study is aimed to answer following questions:

- What is the attitude of students towards using internet for their course contents?
- Do the students prefer using internet over books?
- Does internet builds confidence in students by helping them in presentations etc.?

Methodology

The research instrument in this study was a questionnaire. There were total of 20 questions in this

questionnaire each with five choices of response from “Strongly Agree” to Strongly Disagree”. Questions were divided into four categories. In first category questions were framed to measure student’s attitude toward the use of internet for their course purpose. Sample question for this category is “With the help of internet I am able to collect more study material “. Second category asks students about their preference of internet over books. Sample question for this statement is “For study purpose I prefer spending time on internet surfing rather sitting in a library “. Third category measures the student’s attitude for internet as a tool of confidence builder. Sample question is “Internet has boosted my confidence as I am able to present my reports, seminars etc. in better way“. In the last category miscellaneous questions were asked to get student opinion about group learning through internet using blogs and discussion forums, their time spent on internet etc. As all students were engineering students, questions were not asked to measure their basic knowledge and skills of the internet. Population under investigation included 100 students of Computer Science & Engineering of a Wifi enabled engineering institute campus. All students use Laptop and Internet on daily basis.

Result and Discussion

A. Student’s attitude towards using internet for their syllabi

There were four questions under this category. For each statement responses were coded 2 for “Strongly disagree “to 5 for “Strongly agree” and 1 for “No opinion”. Thus the scores for each student on the statement ranges from 8 to 20. Scores from 8-10, 12-16 and 17-20 were classified as having “negative” ,”neutral” and “Positive” attitude towards the use of internet for learning. Table 1 shows the result.

Table1. Student’s attitude towards using internet for learning.

Scores	Attitude	Frequency
8-10	Negative	2
12-16	Neutral	58
17-20	Positive	40

B. Student’s preference of internet for study material over the books

For each statement responses were coded for 2 “Strongly disagree “to 5 for “Strongly agree” and 1 for “No opinion”. Thus the scores for each student on the statement range from 10 to 21. Scores from 10-14, 15-17 and 18-21 were classified as “do not prefer using internet “,”no preference” and “prefer use of internet” over books. Table 2 shows the result of student’s preference of internet over books

Table2. Student’s preference of internet over books

Scores	Preference	Frequency
10-14	Do not Prefer	15
15-17	No preference	48
18-21	Prefer	37

C. Student’s attitude towards internet as a confidence builder

For each statement responses were coded 2 for “Strongly disagree “to 5 for “Strongly agree” and 1 for “no opinion”. Thus the scores for each student on the statement range from 2 to 10. Scores from 2-4, 5-7 and 8-10 were classified as having “Negative “,”Neutral” and “Positive” attitudes towards the use of internet for

learning. Table 3 shows the attitude of students toward internet as confidence builder.

Table3. Student's attitude towards internet as a confidence builder.

Scores	Attitude	Frequency
2-4	Negative	11
5-7	Neutral	31
8-10	Positive	58

Despite of the fact that the students in this survey were from computer science & engineering stream half of them find it difficult to understand all the terms on WebPages.90% students spend 1-5 hours on internet. 66% students use blogs and discussion forum for the solution to their technical problems. Only 8% students disagree that internet can be helpful in group learning.79% students consider that mixture of online course and classroom course will be better for learning process.84% students feel that internet helpful to prepare them for examination.71% students do not find internet adding to laziness.51% students believe that the use of internet has decreased the verbal communications among themselves. Internet has positive impact on learning domain but has negative impact on social aspects of a student's personality. Though students realize this they should indulge more in social interactions and activities. Institutes should hold seminars time to time to make students aware about the importance of internet as learning tool. Institutes should encourage group learning through internet and should promote the use of blogs for learning purpose. Courses should be designed in blended format of classroom and online teaching. As result of this survey showed that more Indian students are opting online books as compare to paper book so use of online book reading devices should be promoted. The use of such devices is user friendly.

Conclusion

In this paper result of the survey of use of internet as learning tool by engineering student has been presented. Engineering students are using computer and internet on daily basis. Maximum students find internet a very useful tool for their studies. Students prefer online books and study material. They find internet helpful to boost their confidence for presentations and reports. Engineering institutes should promote the use of internet as a learning tool and should provide infrastructure to facilitate the students. Students also feel that excess use of internet may cause some socialization problems.

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