



EFFECTIVENESS OF USING INFORMATION TECHNOLOGY IN HIGHER EDUCATION: BASED ON DEPARTMENT OF SOCIOLOGY, FACULTY OF ARTS, UNIVERSITY OF COLOMBO

Fathima Sajla Jaufer Sadiq

Abstract

Information technology refers to personal electronic devices such as laptops, handheld computers, smart phones and the institution computers and associate devices. Researchers, business Leaders, professional educators as well as academic Organizations have made rigorous initiatives and efforts to strengthen IT Integration in education. This paper describes and analyzes trends in the information technologies and the impact have on the educational sector as a whole, but the particular on the higher educational sector. The study was conduct in university of Colombo, Faculty of arts in department of sociology. Survey was distributed among 100 students who were attending the different courses between different areas, throughout the questioner the data collected was processed and analyzed through SPSS. Results indicated use an electronic device for course activity that we found as 61.5% of students. And 65.8% used it for blogging 14.49% of the students were using electronic device for computer games, based music and video, and many other entertainment purpose. Interestingly 72% of students are often doing online shopping and 88.6% Often creating read, send e-mail and the instant messages, for the issues arising and increasing from IT in educational system. Communication and the information have become more number of flexibility for students to access in educational levels. Although more number of issues arising from study were included in the conclusion and the implication and IT investigates the usefulness, efficiency and efficacy in higher education system.

Keywords: Educational System, Electronic Devices, Information Technology

Introduction

Information technology refers to an integrated frame work of computers, software application, and multimedia content, the internet, web based applications, learning management system a d other tools that can be used to enhance the teaching and learning process. The benefits of using IT education are supported by research and literature also integrating IT into the curriculum as it helps to improve the quality of education. The subject of IT tops the agenda of almost every college and university today because of the expectations of a technologically advancing society and because aggressive IT utilization is seen as an indicator of a progressive institution. (MILIGAN 2010). The rapid information technology IT advances has extended of all aspects of business including the education. The impacts of dynamic nature of IT on education practices to reform the programmers in order to keep a pace with changes in the profession. IT skills have become another mandatory skill of in education. Besides other generic skills such as a leadership skills, communication skills, and the genre business knowledge. (Robert half 2003). The issue of integrating IT skills in education has been a continuing concern of many parties' professional educational bodies as well as educators in all over the world (AAA 1986: AECC 1990; institution)



Academic and professional organizations have called for IT comments graduates and have a voice of concern over in education can effectively and efficiently for prepare programmers to meet challenges. (AAA, 1986; AECC 1990)

Researchers, business leaders, professional educators have made rigors initiatives and effort of strength IT integration in education. These include (but not limited to) (bhaskar1982).

IT with new technologies serves numbers of functions. Brown (2000). Refers to these functions as that they empower people and open a new possibilities for action, and he describes the situation as the digital shift .because it converts people's thinking. Knowledge and communication to digital and information form.in the field of education. IT is commonly seen as how computers and the internet can be best harnessed to improve the education. It was as potential powerful tool extending educational opportunities greatly facilitated acquisition a d absorption of knowledge.

The paper describes and analyses trends in the information technologies and the impact these have on the education sector as a whole, but particularly on the higher education sector. These technologies can be used address the changing demands. For flexible learning. For extensions of university services to national and international markets For more cost effective delivery of higher education the growing use of information technologies is a part of a inform technology revolution. The increasing use of computers and competition in communication service.The broader public policy environment regarding the learning society and the use of education technology.

➤ **IT in University and Higher Education**

The National Policy on IT made several recommendations to enhance IT in university education. These included providing IT awareness to all undergraduates, establishing campus-wide networks in all universities, providing Internet access to all, and introducing computer science courses. These are being implemented in all universities of including IT courses, ranging from certificate level to master's degrees. Of special note is the Master of Arts in Teacher Education programmer where IT courses are offered to teacher-educators. Steps are also being taken to offer such courses to teacher-educators centers. Internet facility is also provided to students free of charge at these labs and in the main library.

The campus-wide computer network integrates resources such as the library and IT division. Initiatives to integrate e-learning with the existing courses are currently being implemented. Universities. The IT division also conducts IT training sessions division also conducts IT training sessions for staff. The Institute of Computer Technology, an independent institution established within the University of Colombo, is a well-recognized institution with modern facilities.

Providing IT training for students on a large scale, it is also research in IT (ICT 2001).The Sri Lanka Institute of Information Technology (SLIIT) was also recently established by the Government of Sri Lanka to train IT professionals.

Objective

It with new technologies serves number of functions refers and empower people with new possible in education. Specially computers and other information systems have grown tremendously and have permeated in all sites.



According to that this research focus on how the information and technology have become more value in their studies and experience.

1. How communication and information technologies can allow more flexible access to university study
2. How communication and information technologies can enhance choice for students
3. Is the Students ownership of access to computers, software and internet will become a significant component of course cost in an increasing on line study environment.
3. How students contact with lectures and tutors is changing with the use of email and computer based communication
4. How the information technologies has the potential of enhancing the quality of education, teaching and learning changes traditional teaching roles through a new focus on teaching and learning teams and industrial designers; for universities.

Literature review

The need for IT competency Development for undergraduate education acknowledge in literature by educators and practitioners, as they mentioned background to the study in the introduction section. This includes among others Albrecht and sack 2000, Ahamed 2003, chanug and hwang 2003. Most of the students were informed by a quantitative approach based on survey data except Albrecht and sack (2000), which complements the survey data with interviews. Basically they investigate extent to which the skills as outlined by Albrecht.2000. These definitions were developing in many various countries. USA (Albert &sack 2000), china (2005), UK (Ahamed and Egypt (2003).

Kavaik and Caruso (2005) found that students actually support a moderate amount of technology in their courses. They also reported that the students have lower skill levels in course- realtedtecnologies, such as using software and management system, such as black broad (Tyler 2005).

Even though, technology is more available for students now than ever before, many of them are resistant incorporating technology into their classrooms. Cuban (1999) states that the professors and students at the university level have grown comfortable with e-mail band web pages in class rooms.

While studies reveal the agree of the IT skills development relative to the guidelines they fail to discover other important issues, like approaches used to develop skills, awareness of educators guidelines and the reason of developing as well as not developing the skills, IT competencies should be develop and undergraduate student with thaw successefull implementation.

- **Internal Factors**

The most common internal factors that influence in technology and education have individual beliefs (feeling and anxiety, preferences, basement of available research); furthermore the decision to incorporate new system of teaching is attributed to the instructors feeling about themselves and what they have previously learned. They will be more inclined and incorporate into his teaching

These beliefs which are to group of students are often to use technologies for academic functions. Explained that the students they beliefs about technology uses are formed during time spent in class room either as teachers or students. Competency other internal factors determines faculty students using technologies critical in making technology as an organic part of learning environment. Only ten percentages of teachers feel very better use



computers and internet in class rooms. Computer apprehension or anxiety is related to psychological factors which can help with right instruction; they suggest that those take courses which build self –efficacy. The knowledge of computers minimizes the anxiety they feel towards integrating technology into actual class room situation.

Therefore internal factors are important motivating for students use of technologies. If attentions are paid on student’s beliefs competencies and comfort technology, there have a stronger likelihood that they integrate technology successfully in their education

- **External Factors**

External factors include faculty demographics specifically age and gender, class size and Institutional support. In this study university students who are in the middle of the carriers can either be strung opportunities as in their institutes to adjust their competitive levels.as well as they can revise the programmer of their studies.Firstly tenured department students may not be cobbled or motivated to use IT. Second ally junior or senior students may not have good knowledge or training in IT.Another factor is gender differentns.students tent to their knowledge us of IT in higher than they female students.Class size also one of the most important factor. It can negatively influence in Technology. When student use email, hating larger classes can be difficult to manage.specalli online courses.

This survey focus on undergraduate student experience with the opinions about IT.it help to perform leadership to respond to IT needs.

Methodology

The study was conducted in university of Colombo, faculty of arts, and department of sociology. The survey was conducted in English. The questioner was distributed to 160 students a randomly sample of undergraduate students.(N=160) age (20-24) years field in questioner. All participations were asked to complete the questioner measuring all types of experience, usefulness, effectiveness and opinions about information technology.

The questioner including a cover letter was distributing to the participants during the classes. All subjects were asked to respond to the questioner and their responds were guaranteed confidently. The data of this study was gathered by means of a paper and pencil with survey. The survey consists of 13 questions. This question was distributed at the end of the semester in july 2019.the data collected was processed and statistically analyzed with spas.

Table 01; Describes the data of student’s impression of the use of technology.

Variables	Statements	per Semester	Monthly	Weekly	Several times per week	Daily
1.	How often Do you use an electronic device for courses activates	22 (13.7)	28(17.4)	44 (27.3)	55(34.2)	12(7.5)
2.	How often do you use electronic device to access	22(13.7)	45(28.0)	31(19.3)	43((26.7)	17(10.6)



	the library resource in library web					
3.	How do you use electronic device as an in class room	55(34.2)	40(24.8)	27(16.8)	18(11.2)	17(10.6)
4.	How do often you use an electronic device writing documents for course activities	22(13.7)	37(23.0)	39(24.2)	45(28.0)	75(46.6)
5.	How do often you create, read ,send, email and instant messages	8(5.0)	11(6.8)	24(14.90)	32(19.9)	36(22.4)
6.	How do often you download web based music or videos	28(17.4)	33(20.5)	22(13.7)	42(26.1)	31(19.3)
7.	How often are you doing online shopping	76(47.2)	40(24.8)	13(8.1)	6(3.7)	7(4.3)
8.	How often are you blogging	5 (3.1)	8(5.0)	6(3.7)	28(17.4)	16(65.8)
9.	How often do you play computer games	38(23.6)	29(15.8)	24(14.90)	32(19.9)	36(22.4)
10.	How do often use electronic device for presentation(Execl,power point)	63(39.1)	44(27.3)	24(14.9)	17(10.6)	5(3.1)
11.	How often do you use social networks (Face book.com, friends .com)	39(24.2)	13(8.1)	21(13.3)	33(20.5)	45(28.0)



12.	How do you use access a course management system	79(49.1)	29(18.0)	16(9.9)	11(6.8)	8(5.0)
13.	How often do you create web pages	85(52.8)	24(14.9)	12(7.5)	14(8.7)	12(7.5)

Results and discussion

The primary goal of the study was to have a better understanding of student experience with information technology; table 1 and 2 shows the percentage of the descriptive statistics of data for student's impression concerning the use of the information technology.

One of the subjects of use electronic devices for course activity. Q1, from survey we found that 61.5% of these surveyed out of the 160 participants (weekly/ several time per week), have used the electronic device in their course activities. While 13.7% of the remaining students that the only use electronic devices once per semester.

Survey responds (monthly, weekly) often use an electronic device to get access to a library resource. Q2 (74%) and large number of student's blogging IT (daily) (86.9%)

Interestingly 72% percentage of students doing online shopping. (once per month/semester). We found that the majority (87.6%) of the are often to create, read, send e-mail and instant message (daily) (Q5).

When students were asked how often do you use electronic as an requirement?

20.5% or 33 students said they don't use electronic devices in class (daily/several times per week).meanwhile 59% are using electronic devices once per semester/monthly.

However 52.2% of students often use the electronic devices for writing documents for course work (Q4) (weekly/several times per week).only 10.6% remaining participations are using the device daily.

Q13) when students were asked how often do you create a web pages? 52.8% participants electronic created web pages for once a semester and 49.1% students often access a course management system. 5% of students out of 100, daily access management system.

Regarding the use of electronic devices for creating presentations (Q12) 5% of students of the were creating presentations daily. Meanwhile 52% create presentations once per semester. Many times daily doing online activities, for university, work and recreation. The most frequent times use daily (18.26%), a total of 53.33% times per week. There are also those who spent 26.27% for semester. e-mail, writing document of courses has become more. The majority of respondents use email daily and write documents, for their courses at least several times per week. The use of university library web site is not far behind however table 3 gives the results of extracted communalities of all the variables. It shows the proportion of the variance of a variable explained by the common factors. On the other hand how often do you use an electronic device for writing documents for your course work? Has the highest variation 64% Can be accounted for by the other variables.

Factor analysis 13 questioner statements on to three components. These factors contribute to the explanation in student's information technology variable 49.27% of total variance. The items under this group depict the use of IT in playing games, web based music or videos and participations in online social networks (Facebook, YouTube, and.com etc.). The results show that respondents received all types of entertainment as one factor when exposed during use.



Conclusions and Implications

The most important outcome of this study was to understand the importance of use of the information technology in higher education in university of Colombo faculty of arts, department of sociology. We have positive optimistic view about IT value to improve student access and to enhance the quality of learning. The use of information technology can assist encourage universities to address challenges of the information society with changing demands for education and knowledge. Information technologies can also assist universities to be innovative and responsive to changing demands of students and the changing requirements from higher education.

We have identified number of issues arising from the increasing use of information technologies in university, administration, research

1. Communication and information technologies can allow more flexible access to university study barriers of time and place of study.
2. Communication and information technologies can enhance choice for students.
3. Students ownership of access to computers, software and internet will become a significant component of course cost in an increasing on line study environment.
3. Student contact with lectures and tutors is changing with the use of email and computer based communication such as computer conferencing, with implications for students learning and staff learning.
4. Use of information technologies has the potential of enhancing the quality of education, teaching and learning changes traditional teaching roles through a new focus on teaching and learning teams and industrial designers; for universities.
5. The information technology can mean significant savings in resources with a shift from physical to virtual resources (lecture halls and libraries to on line services) and shift in the relative allocation of resources of courses of development and for teaching can.
6. The printed electronic copies in library collection has significant implications for copyright, and universities are already facing significant administrative complexity and anticipate rising costs for access to and use of these information resources.

Reference

Ahamed. A (2003) "The levels of IT skills educational programmers in universities". Management Research Learning.

Albert and sack.(2000)"charting course thorough perilous future". Accounting education series.

Albion pp. & partner. P.A beyond the foundations.(2002)"The role of vision and belief teachers" preparation of integrating of technology.

Bashkir, kind(1982) "use of computers in educational courses. Accounts and business Reserch

Cooper the digital device.(2006) "The special case of gender". journal of computer assisted learning.

Education (AECC). (1990) "objective of education". Issues in Education

Guha,S(2003),Are we all technically prepared? prespective on The causes of comfort and discomfortin using computer".Information Tecnology in childhood Education.