ORIGINAL RESEARCH PAPER

Education

ATTITUDE OF UNIVERSITY STUDENTS TOWARDS ICT IN EDUCATION: AN EMPIRICAL STUDY

KEY WORDS: ICT

Dr. Ajay Kumar Salgotra	Deptt.of Forestry, HNB Garhwal University (A Central University), Srinagar, Uttarakhand.
Kumari Roma	Deptt.Of Education, GDC Kathua.

ABSTRACT

The present world has seen the rapid emergence of ICT in the direction of creating desirable avenues for better education. ICT provide the paths and opportunities by which students can communicate, share information, and create new relationships for their educational benefits. The main concern of this paper was to find out the attitude of university students towards ICT in education. The investigator tried to find out difference in attitudeof university students towards ICT. For the present study self-made questionnaire of Perception towards ICT in education was used. The data were collected from Central university of Jammu by using simple random sampling technique. The present study was confined to only sample of 80 university students. The statistical techniques used for data analysis was Chi-square. The results revealed that no differ significantly in their attitude towards ICT in education.

INTRODUCTION

ICTs can enhance the quality of education in several ways, by increasing learner motivation and engagement, by facilitating the acquisition of basic skills. ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner centred environment. ICTs, especially computers and Internet technologies, enable new ways of learning rather than simply allow students to do what they have done before in a better way. ICT has an impact not only on what students should learn, but it also plays a major role on how the students should learn. Along with a shift of curricula from "content-centred" to "competence-based", the mode of curricula delivery has now shifted from "teacher centered" forms of delivery to "student-centred" forms of delivery.Online web assisted learning activities would aid in the learning process of students because students have positive attitudes towards the use of online web assisted learning. (Paul G. Paris 2014). Online approaches led to changes in learning providing greater stimulation and more opportunities to understand. Online approaches helped to reinforce what was taught/learned in the classroom. Online approaches provided scope for class members to share knowledge more efficiently and effectively(Saunders,G and Pincas,A 2004)

Males were also significantly more inclined to replace traditional teaching activities with ICT resources. A more recent study of Palaigeorgiou et al. (2005) also confirmed that both men and women had similar engagement with computers and held concerns for the future effects of continuous computer use, but women were more anxious about hardware usage, and judged less positively the consequences of computers in personal and social life. Research on gender differences in ICT has shown that in most countries girls and women are often behind in ICT usage and ICT knowledge and skills. In most countries, the participation of females in ICT professional careers and pathways is low and unfortunately continues to depreciate. Finally, a lot of research studies have shown that females and males differ in their preferences for specific computer activities. In the literature there is a controversy among studies on attitudes towards ICT with respect to students' age. Although it is reported that younger pupils have more positive attitudes toward computers than the older (Laguna & Babcock 1997).

Kubiatko,M (2010) conducted a study on attitudes towards ICT used in science education of Czech university students and found that an effective use of ICT could have the additional benefit of improving attitudes and computers skills, which in turn could improve the effectiveness of ICT, thus creating a positive feedback spiral. Edmunds, R., Thorpe, M., &Conole, G. (2012) studied student attitudes towards and use of ICT in course study, work and social activity. The results of this study suggested that usefulness and ease of use are key dimensions of students' attitudes towards technology in all three contexts but that ICT is perceived most positively in the context of work and technology use at work is an important driver for technology use in other areas.

Initiatives in ICT in education under government of India

Union Government has approved the National e-governance Plan comprising of 27 mission mode projects and 8 components on May 18, 2006.The main vision of National E-governance Plan is make all Government services accessible to the common man in his locality ,through common services delivery and reliability of such services at affordable costs to realise the basic needs of common man.

The department of school education and literacy launched National Repository of open educational resources NROER (www.nroer.gov.in) on 13/14 Aug 2013.It is a collaborative platform that endeavour to bring together relevant appropriate digital resources. The resources are available in the form of audio clips, talking books, videos and multimedia.

Also, initiatives for ICT in education are taken by government of India like SWAYAM is a programme initiated by Government of India and designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. This is done through an indigenous developed IT platform that facilitates hosting of all the courses, taught in classrooms from 9th class till post-graduation to be accessed by anyone, anywhere at any time. e-Aaharya the INFLIBNET Centre has developed a web-based interface called "e-Acharya: Integrated e-Content Portal" for all e-content projects, developed / funded under the National Mission of Education through ICT. There are more than 50 projects on e-content under NME-ICT which are developed / being developed in various subject disciplines (science, arts, engineering, social science, etc) through various Indian institutes / universities / colleges.

SIGNIFICANCE OF THE STUDY

The purpose of present study helps to find out the attitude and opinions of university students relating to the use of ICT. Though these study it provide beneficial source of information to instructors using ICT. These technologies become ever more integrated in daily lives during work, study and leisure, so understanding students' attitude of ICT should provide improved performance and acceptance of currently developing technologies.

OBJECTIVES OF THE STUDY

1. To find out the attitude of university students towards ICT.
2. To find the difference in the attitudeof university students towards ICT.

HYPOTHESES OF THE STUDY

1. There will be no significant difference in the attitude of students towards ICT.

DELIMITATIONS
1. This study was confined to only Central University of Jammu students.
2. This study was confined to only sample of 80 students.

STUDY DESIGN
The study focused on attitude of university students toward ICT in education, and whether differences existed in the male and female university students' attitudes toward the study of the subject. The survey design was employed. The design enabled more respondents to be included in the study to achieve the set objectives. A self-made questionnaire were employed for data collection.

POPULATION
The population of the present investigation was university students studying in central university of Jammu.

SAMPLE
The sample of the present study was 80 university students were selected by using simple random sampling technique.

STATISTICAL TECHNIQUES
*   Mean score
*   Standard deviation
*   Percentage
*   Chi-square

ANALYSIS AND INTERPRETATIONS
Table 1. SHOWING THE ATTITUDE OF UNIVERSITY STUDENTS TOWARDS ICT

Sr. No.	Attitude of Students	Male	Female	Total	Percentage
01.	Favorable attitude	15	16	31	39%
02.	Moderate attitude	9	12	21	26%
03.	Unfavorable attitude	18	10	28	35%

x^2(chi square)= 1.98, df=2

The mean scores and standard deviations were used to explain the student's attitude profile. The subjects who scored above M + ̋σ were regarded favorable attitude towards ICT in education. The subjects who scored below M - ̋σ were regarded as unfavorable attitude towards ICT in education. The remaining scores were regarded as moderate. From the above table we can point out that 39% students having favorable attitude towards ICT and that of 35% of students attitude was not favorable towards ICT on the other hand 26% students having moderate attitude towards ICT.

Statistically, not significant difference in the attitude of university students towards ICT in education was observed. As the calculated value of chi square at df=2 was X^2(chi square) = 1.98 which is less than the table value 5.991 at 0.05 level.

So the hypothesis which states that there will be no significant difference in attitude of male and female university students towards was accepted.

CONCLUSIONS
On the basis of the results the investigator reached at the following conclusions:

1. From the results of the interpretation the investigator found that a good percentage i.e 39% students having positive attitude towards ICT in education and 26% having average attitude towards ICT and 35% students having not good attitude towards ICT.
2. There were no significant differences in attitude of university students towards ICT.

IMPLICATIONS
This paper has examined the attitude of university students towards ICT in education. This examination gives rise to the following implications. These recommendations cover only the issues discussed in this paper and are by no means exhaustive:

1. Parents are also encouraged to endeavour to assist their wards and students to have access to computers at home. Finally, the teachers are urged to motivate the male students to improve on their attitudes toward ICT in education to be at par with their female counterparts and indulge them in activities based on ICT like power point presentation and others.
2. Teacher should be use maximum of ICT techniques in their teaching and provide assignment to student which is ICT based.
3. There are so many initiatives for ICT in education are taken by government of India like SWAYAM ,NME-ICT and others as mention in the present paper. So, teachers should be taught about how to use these facilities for effective teaching learning in the various academic streams. This will also improve the students attitude and also positive impacts on student motivation towards ICT facilities in education.

REFERENCE
1. Broos, A. (2005). Gender and information technologies anxiety: Male self-assurance and female hesitation. Cyber Psychology and Behaviour, 8(1), 21-31.
2. Edmunds, R., Thorpe, M., &Conole, G. (2012). Student attitudes towards and use of ICT in course study, work and social activity: A technology acceptance model approach. British journal of educational technology, 43(1), 71-84.
3. Houtz, L. E. and Gupta, U. G. (2001). Nebrasha high school students' computer skills and attitudes.Journal of Research and Computingin Education, 33(3), 316-326.
4. Kubiatko, M. (2010). Czech university students' attitudes towards ICT used in science education. Journal of Technology and Information Education, 2(3), 20-25.
5. http://www.kubiatko.eu/clanky_pdf/czech_university_students_attitudes_towards_ict_used_in_science_education.pdf
6. Laguna, K., & Babcock, R. L. (1997). Computer anxiety in young and older adults: Implications for human-computer interactions in older populations. Computers in human behavior, 13(3), 317-326.
7. Liaw, S. S. (2002). An internet survey for perceptions of computers and the world wide web: Relationship, prediction, differences.Computers in Human Behaviour, 18(1), 17-35.
8. Margolis, J. and Fisher, A. (2002).Unlocking the clubhouse: Women in computing. Cambridge, M.A.: The MIIT Press.National Science Foundation (2000).Science and engineering indicators 2000.
9. http://wwwnsf.gov/srs/seind.
10. Opoku, M. O., &Kuranchie, A. (2014). Understanding Student Attitude Towards Computer Education: A Survey of SHS in the Sunyani Municipality. Academic Journal of Interdisciplinary Studies, 3(1), 11.
11. Palaigeorgiou, G. E., Siozos, P. D., Konstantakis, N. I., &Tsoukalas, I. A. (2005). A computer attitude scale for computer science freshmen and its educational implications. Journal of computer assisted learning, 21(5), 330-342.
12. Paris, P. G. (2004). E-Learning: A Study on Secondary Students' Attitudes towards Online Web Assisted Learning. Internationa Education Journal, 5(1), 98-112
13. http://siteresources.worldbank.org/EDUCATION/Resources/ESSU/4632921290618190826/Background_Note_EducationStrategy2020_ICT_Edu.pdf
14. Saunders, G., &Pincas, A. (2004).Student attitudes towards information and communication technologies in teaching and learning in the UK. International Journal of Instructional Technology and Distance Learning, 1(8).
15. http://www.itdl.org/Journal/Aug_04/article01.htm
16. Shashaani, L and Khalili, A. (2001). Gender and computers: Similarities and differences in Iranian college students' attitudes towardcomputer. Computers and Education, 37(3-4), 41-51.