A STUDY OF USAGE OF E-LEARNING AMONG STUDENTS IN ENGINEERING COLLEGES

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Abstract: Information and communication technologies (ICT) have become commonplace entities in all aspects of life. Over the past twenty years, the use of ICT has fundamentally changed the practices and procedures of nearly all forms of endeavor within business and governance. Technology has found its way into every aspect of our culture today. Within education, information and communication technologies such as e-learning have begun to have a presence but the impact has not been as extensive as in other fields. Education is a very socially oriented activity and quality education has traditionally been associated with strong teachers having high degrees of personal contact with learners. An attempt has been made in this study to assess the learner’s expectations for introducing e-learning methods and implementing ICT in engineering colleges.

Keywords: e-learning, Instructional strategy, ICT, Web Based Learning

INTRODUCTION

The use of ICT in education and e-learning lends itself to more student-centered learning settings and often this creates some tensions for some teachers and students. But with the world moving rapidly into digital media and information, the role of ICT in education is becoming more and more important and this importance will continue to grow and develop in the 21st century (Ron Oliver, 2002). Technological advances are significantly changing and shaping our world. Undergraduate students, who are the focus of this study, perceive technology’s persistence in their lives. Engineering and business students use more technology especially for spreadsheet and graphics editing and males are more likely to spend extreme amounts of time online. 70\% of students said that Information Technology helps them to do research (Judith Borreson, 2007). The way we learn and teach has transformed a lot due to the advancement in educational technology and changing audience profile. The approach towards learning has transformed a lot as a student learns and imbibes knowledge in various easy means in their day to day life when compared to the classroom education. Web based Training and it’s newer and more general synonymous term e-learning are two of today’s buzz words in the Academic and Business worlds. Decision makers associate with them new ways of learning that are most cost efficient than traditional learning strategies and which allow students to better control the process of learning because they can decide when, where and how fast to learn. There is a very little research done in this area to find out the usefulness of e-learning process and implementation of the innovative teaching methods using ICT. An attempt has been made in this study to find out the existing gaps in the field of research especially among engineering college students.
OBJECTIVES
The primary objectives of this study are listed as given below:
• To find out the need for e-learning in engineering and polytechnic college students
• To study the effectiveness of e-learning process compared to traditional class-room teaching.
• To manage and study the effect of the online resources to engineering college students for learning

METHODS
Seven hundred engineering college students and seven hundred polytechnic college students in Tamilnadu, India were selected. Gender, age, level of schooling and type of schooling are the independent variables. The knowledge and skill of the student towards the usage of ICT and e-learning are the dependent variables. The study was conducted through descriptive survey research method. Ex-post-facto research design was used to carry out the present study. Rating Scale was used to collect the data from the students. The rating scale is used to identify the level of awareness of the students towards the usage of ICT and e-learning. The rating scale was divided into Part A, Part B and Part C. Items in Part A is used to identify the demography of the students. It is of concern on student’s gender, age, type of disability, level of schooling, type of schooling and the monthly income of the parents. An item in Part B is used to find the extent of the usage of e-learning and ICT Tools. Part C is used to find the skill of the students. The respondents gave the answer of research questions by responding to all the questionnaire items in term of weight of scale.

RESULTS
The collected data was analyzed by descriptive statistical approach in order to get the answer to the research questions. The data that collected from Part B and Part C rating scale are presented in the form of mean score and standard deviation. The research finding shows that students acceptance towards e-learning and ICT usage in learning process is at a moderate level. The student’s level can be improved by providing laptop and other ICT devices to the students in their respective Colleges. The detailed analyses have been discussed and remedial suggestions were listed in this study.

CONCLUSION
The findings revealed that more students were in favor of the e-learning procedure and web based learning environment as compared to conventional methods and other learning preferences on the respective scales. Only few students are coming forward to use the e-learning techniques and ICT devices. The awareness level of the female students should be improved. The conclusions of this study are that e-learning teaching methods are not different with traditional teaching methods with respect to their learning achievement especially for the fresher in the college. Also, e-learning teaching strategy is superior to traditional teaching methods with respect to learning motivation of the students.

REFERENCES