

## Student's Perception Towards Effectiveness of E-Learning

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### ABSTRACT

E-learning provides access to an ample variety of courses and competency-based education and helping to achieve career goals. E-learning allows ease of access to self-paced courses, allowing students to determine when and where they can learn. With options of varying lengths and levels, students can personalize their learning experience; construct a learning path that directly addresses their areas of interest. This paper explores the student's perception towards e-learning which is an alternative to traditional classroom learning. The study has been conducted using a descriptive research design. Questionnaire is circulated among 200 students for the study. T-test and correlation analysis are used for data analysis. From the analysis it is concluded that e-learning improves student learning outcomes. Flexibility and convenience are two main reasons which make E-learning more effective.

**Keywords :** E-Learning, Online Learning, Internet Learning, Student Perception Learning.

### INTRODUCTION

Technology and internet revolution have led to outstanding changes in accessing, discussion and sharing of contents. Unlike traditional learning, the content can be accessed unlimited times in online learning. With the help of E-learning system a teacher can teach quickly delivery of lesson. This shows that the time needed to learn is decreased by 25%-60% which is necessary in traditional learning. As comparison with traditional learning's, E-learning is cost effective because quickly and easily a learner can learn. A learner or trainer can save lots of time of travelling, course material and accommodation. Organizations profitability can be enhanced by cost effectiveness of E-learning.

A traditional system based on formalized teaching whereas E-learning is based on electronic resources. The use of electronic devices and internet is major components of E-learning. E-learning is a network enabled system where a teacher shares his/her knowledge with large number of students at the same or different time and place.

In corporate sector where training programs are conducted by professionals across the world and audience are scattered at different places, E-learning system has provided effective and efficient way of teaching. The educational institutes which use e-learning system are one step ahead of those institutes which uses traditional learning system. Still in India lots of educational institutes uses non-electronic teaching methods with the help of books, notes and lectures. Reason behind that could be not availability of technology or the teachers are not familiar with electronic resources. It is common tendency that humans can easily understand and remember things by watching picture and videos rather than verbally talk by persons. It shows that E-learning system is more effective than traditional system. Various industry and organizations of different sectors like pharmaceutical, agriculture, government, business and education are incorporating concepts of E-learning.

### LITERATURE REVIEW

Deny A. Kwary, S.F. (2018), the study describes demand of e-learning has increased in higher education in past several years. The government of Indonesia encourages institutions to implement E-learning system.

The study discusses on E-learning system implementation in Airlangga University, in Indonesia. The university having E-learning system and it follows few principles of practices for undergraduate students. University uses AULA (Airlangga University e-Learning Application) platform for E-learning. The study used t-test calculation to find out difference between E-learning outcome and classroom learning outcome. It is concluded that there is no significant difference between the outcomes of E-learning and classroom learning. The study shows that maximum students (85%) are satisfied with E-learning system in the university. E-learning system makes easier to understand subject.

Noesgaard S. S. and Ørngreen R. (2015), in this research it is found that the usefulness of e-learning has increased in the last five years. The results revealed that, the lots of authors find out that effectiveness and usefulness in multiple directions. Also progressively it is being asked to public and private professional institutions to provide their initiatives towards effectiveness of learning and development. This paper used integrative reviews to investigate the effective of e-learning. This paper answers How to define and measure effectiveness of e-learning and what thing makes e-learning effective? The authors find out 19 different ways to define effectiveness and learning outcome is most common. Also with the help of quantitative pre and post test effectiveness of e-learning can be measured. The study shows that it is very difficult to apply e-learning to increase teaching performance because teacher can use different strategies to avoid their working practices. The research provides an approach for self-assessment and its validation. With the use of qualitative survey approaches participants can take report of their practices.

Arun Gaikwad, V.S.R (2015), concluded that rapid growth in internet connectivity is a catalyst of the popularity of E-learning. The development level of education, literacy and economic has raised due to E-learning in developing and underdeveloped countries. It is found that E-learning adoption will help to develop higher education system and government. Literacy percentage of population in India is increased by E-learning system. The study suggested that if India and Malaysia work together on challenges and opportunity related to E-learning, it will be advantageous for both the countries educational system. Also E-learning system should be used in agriculture industry and defiantly growth rate will increase.

Valentina Arkorful, N.A. (2014), has done research in tertiary institutions on effectiveness of E-learning in teaching. And it is found that utilization of modern technology is very important in higher education institutes. The data is collect through survey and observations and it is unveil that peoples and educational institutions are adopting E-learning system and incorporating modern technology in higher education.

Hong-Min Lin, W.J.C, S.F.N (2014), the study is about to find out achievements and motivation of e-learning methods used by first year students of accounting course. In this study quasi experimental design is used where groups are divided into two parts, one is experimental group assigned for e-learning strategy and another one is control group assigned for traditional learning strategy. Pre-test and Post-test are used to evaluate learning effectiveness. Result shows that, there is no significant difference in achievements of first year students by e-learning strategy and traditional learning strategy. And there is significant difference in motivation of learning by e-learning strategy and traditional leaning strategy. E-learning strategy motivates students to learn accounting course compare to traditional learning strategy.

Ekta Srivastava, N.A.(2013), this paper defines the impact of E-learning on performance of employees and students. It shows the difference among E-learning practices and traditional way of learning. The paper present the facts that shows the E-learning practices are grown in recent years. E-learning advantages like cost & time saving and flexibility increases its utilization. This study concluded that use of E-learning in education institutions are increasing and companies are also using E-learning method to provide training to employees.

Sangeeta Kakoty, M.L., S.K.S (2011), this paper analyses the recent e-learning practice and presenting the

new aspects of research on e-learning. It also analyses the benefits of e-education system and current trends in e-learning procedure. The study shows that learning mechanism enhanced due to the development of technology. There are number of available electronic media for online programs which includes internet, intranet, extranet etc which makes learning process more user friendly and more flexible. The study shows that popularity of e-learning is increasing in education institutions and new emerging area in e-learning standards. The securities of services and messages are important point of consideration in e-learning systems environments. It is concluded that, development in technologies will continue in improvement of e-learning environment. Emerging new trends in technology will make more interactive for learners to use in e-learning environment.

Omamerhi Ebojoh, H.X. (2007), this study is about effectiveness of online learning over the traditional way of learning. The popularity of e-learning is increasing over the traditional learning methods. This study focuses on how effectiveness of online program can be improved using delivery methods and assessment. The study investigates the views and practices of teacher and students about online program at Higher Educational Institution. The various factor studied that affect the efficacy of online program. Also it discusses the major challenges, advantages and limitations of e-learning.

#### **RESEARCH DESIGN:**

The study has been conducted using a descriptive research design. The research focused on the perception of students towards effectiveness of e-learning. College students of management streams are taken as population for the above study. From population samples are selected with the help of convenient random sampling. Survey for obtaining perception of students was done by using a self-structured questionnaire consisting of various dichotomous questions, open ended questions and some questions based on likert scale. Questionnaire is circulated among 200 students out of which only 187 responses are considered for the study and 13 responses are deleted due to ambiguous information. Data analysis is done on the basis of one sample t-test, independent t- test and correlation analysis.

#### **OBJECTIVES:**

- I. To study the perception of students towards effectiveness of e-learning.
- II. To study the difference of perception about effectiveness of e-learning on the basis of gender.
- III. To find out the e-learning as a better option for achieving learning objectives.

#### **HYPOTHESIS:**

H01: There is no significant positive perception of students towards e-learnings.

H02: There is no significant difference between the male and female perception about the effectiveness of e-learning.

H03: E-learning is not better than traditional teaching for achieving learning objectives.

#### **Data Analysis and Results:**

Hypothesis1 is tested on the basis of sample t-test, hypothesis 2 is independent sample t-test is used to test hypothesis 2 whereas correlation is used to test hypothesis 3. Reliability test is also performed to check the reliability of questionnaire and obtained Cronbach Alpha is 0.716, which reflect high reliability of data.

6.1 Hypothesis Testing

**Ho1: There is no significant positive perception of students towards e-learnings.**

T-Test

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Total	187	14.42	3.190	.423

**One-Sample Test**

Test Value = 18						
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Total	-8.470	186	.000	-3.579	-4.43	-2.73

Interpretation: From the calculation of descriptive statistics it is found that the mean is 14.42 when sample size taken as 187, the value of standard deviation obtained is 3.190. Value obtained for one sample t-test is 8.470 with 186 degrees of freedom at 5% level of significance. The p- value obtained is 0.000, which results into the rejection of hypothesis. Hence there is a positive perception of students for effectiveness of e-learning.

**Ho2: There is no significant difference between the male and female perception about the effectiveness of e-learning.**

T-Test

**Group Statistics**

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Total	Male	95	47.61	3.190	.603
	Female	92	46.24	3.237	.601

**Independent Sample Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (two tailed)	Mean difference	Standard Error Difference	95% Confidence Of Difference	
									Lower	Upper
Total	Equal Variance Assumed	0.012	.914	.430	185	0.669	0.366	.851	-1.341	2.072
	Equal Variance. not Assumed			.430	184.976	.669	.366	.851	-1.340	2.072

Interpretation: For obtaining the perception difference according to gender independent sample t-test is applied and found the mean value for male 47.61 is and for female is 46.24 with the standard deviation 3.190 and 3.237. The t-value obtained at 185 d.f. from independent t-test is 0.430 with p-value 0.669 > 0.05. Hence hypothesis is accepted at 5% i.e. there is no significant difference between the perception of male and female for effectiveness of e-learnings.

**Ho3: E-learning is not better than traditional teaching for achieving learning objectives.**

**Correlations**

		e-learning better than traditional learning methods	e-learning program helped you to achieve your academic objectives
Spearman's rho	e-learning better than traditional learning methods	Correlation Coefficient 1.000	Correlation Coefficient .577**
		Sig. (2-tailed) .	Sig. (2-tailed) .000
		N 187	N 187
	e-learning program helped you to achieve your academic objectives	Correlation Coefficient .577**	Correlation Coefficient 1.000
	Sig. (2-tailed) .000	Sig. (2-tailed) .	
	N 187	N 187	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Interpretation: The value of correlation obtained is 0.577, with the p-value 0.000 which shows a positive correlation between the perception that e-learning is better than traditional teaching and it is more effective to reach learning objectives. Hence Null Hypothesis that e-learning is not better for achieving learning objective is rejected.

#### **FINDINGS AND CONCLUSIONS:**

Present study tries to identify the perception of graduate students toward effectiveness of e-learning. Study found that there is a positive perception of students towards effectiveness of e-learning. Students are agreed that e-learning is the better option for studies in terms of effectiveness of pedagogy. E-learning provide opportunity to students to study from anywhere in the world, and so professed as useful. Most of the students found it comfortable because of the same reason. Students are very much comfortable with computers and web technologies which provide them a platform for e-learning, as comfort level with tools is necessary for learnings (Lee & Witta, 2001). Students consider e-learning as an innovative idea of learning. It is also obtained from the results that students are agreed with the fact that e-learning is more effective for achieving learning objectives rather than traditional learnings. No gender effect was found for the perception of effectiveness, i.e. male and female both students are equally comfortable with e-learning, without any gender biasness towards e-learning. Hence it is concluded that availability, flexibility and convenience are the key features of e-learning which make it important suggested tool for learning.

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