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# Effectiveness On E-Learning System In Higher Education

**K. Maran[1], C. R. Senthilnathan[2], P. Priyadarshini[3],** and **K. Murugan [4]**

*1.Director and Professor, Sri Sairam Engineering college, Chennai-44, India.*
*2. Professor, Sri Sairam Institute of Technology, Chennai-44, India*
*3. Professor, Tagore Engineering College, Chennai.*
*4. Assistant Professor, Sri Sairam Engineering College, Chennai*

**ABSTRACT**

The purposes of the present study focused on analyze and compare the effectiveness of Internet-based e-learning systems and with that of the conventional traditional learning system in higher education institutions in India. This study has attempt to discovery the usefulness of the E-learning system in higher education institution. To analyze the performance of e-learning system, 632 e-learners were selected and their opinion is analyzed. The researcher analyzed the level of satisfaction of the e-learners with the effectiveness in performance and knowledge development of the e-learners in higher education institutions. The study has found that the most of the higher education e-learning students found that there is effectiveness in E-learning system in Indian higher education institution.

**Keywords**: E-learning, e-content, internet education, higher education

## INTRODUCTION

A decade back in India brick and mortar classrooms were the only mode of education system followed in higher education institutions. After the development of the internet technologies across the world has made a drastically changes in the Indian higher education. Of late in India the practice of using technology to deliver the semester courses for the higher education students to gain momentum. ICT has created opportunity for the students to learn not only in the traditional class room but also off the classroom as and when the student feels to learn. ICT has integrated both the internet-based learning as well as the traditional brick and mortar classroom.

Markus (2008) defines e-learning by means of "It is a knowledge procedure developed by interaction with digitally presented content, network-based services and teaching sustenance". E-learning is a collaborative technology using computers remotely or in physical classroom learning setting and it is a change from the old learning system to ICT based students centric, personalized, flexible and self-organized mode of learning. E-learning can be an alternate to enhance the knowledge and performance of the student's using technology. Often E-learning in higher education offer students a control over the course material, practical learning priorities, the stride of learning, period of study, and chose students personal learning goals to manage and access to e-learning resources.

## REVIEW OF LITERATURE

E-learning is a new method for learning an education based on the computer and internet technologies, e-learning consist of all modes and forms of electronically supported learning and teaching methods (Aasha Vanve, et al, 2016). Though the e-Learning is growing world wide but still the other forms of traditional learning also simultaneously exist. The complex nature of the e-learning system has more problems, concerns, issues and approaches (Nayak et al. (2010). Colleen Longstreet and Michelle Winkley, (2011) explored a critically important factor of E- Learning and its impact on employee engagement. E-learning facilitate to reduce the learning expenses when it is compared with regular classroom learning in educational institutions (Judith B. Strother, 2002). There are different ways to validate the effectiveness that a student has demonstrated the relevant competencies due to e-learning. (Borstorff, 2007). The e-learning gives more flexibility to the teachers as well as to the

students (Johan, 2014). Researchers opine that to maintain low cost and wider opportunities for the higher education students to upgrade knowledge in the current education system changing scenario in colleges and universities. (Peled, 2000, in Hafizah and Kamil, 2009).  Based on the effectiveness of E-learning, it is focused on either the e-Learning or traditional face-to-face learning methods should be effectiveness, the students, parents and teachers raised questions to answer either e-learning or traditional classroom learning system is more supporting for knowledge enhancement and value of students. (Noesgaard,et al; 2015).

**PROBLEM STATEMENT**

With the high penetration of internet access across the country, the usage of ICT in higher education has been developed multifold, the contemporary higher education learning system is a collaboration of both the online with digital content and face-to-face in the traditional classroom mode. The learning has become more complex and the students face a lot of challenges. The challenges and complexity make the researcher attempt to find out the efficiency of the e-learning in higher education system in India.

**OBJECTIVES OF THE STUDY**

- To analyze the opinion and attitude of potential learners about e-learning in higher education institution system.
- To analyze the effectiveness of E-learning both positive and negative on the knowledge wise performance for the higher education student.

**METHODOLOGY**

The present research has planned to use descriptive type of research. For the primary data collection, a well-structured questionnaires were used as an instruments for data collection from the (e-learner) respondents.

**SIZE AND DESIGN OF SAMPLE**

The study was conducted across e-learners from various cities in India. The sampling method used was Stratified Random Sampling. The total valid sample for the study was 632 e-learners.

The period of research done within the limited time with the participation of limited members so, the probability and the accuracy analysis of the data may differ based on the number of participants and different methods of approaches and e-learning platforms

**DATA ANALYSIS AND INTERPRETATION**

**Distribution of student's opinion about the E-learning**

| Learners opinion about the E-learning | Frequency | Percentage |
|---|---|---|
| Excellent | 152 | 24.0 |
| Good | 202 | 31.9 |
| Average | 151 | 23.8 |
| Below Average | 89 | 14.0 |
| Poor | 38 | 6.3 |
| **Total** | **632** | **100** |

The respondents opinion about the e-learning shows that 55.9% feel it is good and excellent while 20.3% of the respondents feel that the e-learning is below average and poor.

**Distribution of e-learning helps to reach the learners objectives**

| e-Learning helps to reach the learners objectives | Frequency | Percentage |
|---|---|---|
| Extremely effective | 165 | 26.1 |
| Effective | 222 | 35.1 |
| Neutral | 112 | 17.7 |
| Slightly effective | 101 | 15.9 |
| Not effective | 32 | 5.2 |
| **Total** | **632** | **100** |

35.1 % of the higher studies respondents opine that the e-learning system helps their objectives effectively, while only 5.2% of the respondents feel that the e-learning is not so effective in reaching the respondents objectives.

**Satisfactory level of e-learners about interaction with the instructors**

| Satisfactory level of e-learner about interaction with the instructors | Frequency | Percentage |
|---|---|---|
| Highly Satisfied | 147 | 23.2 |
| Satisfied | 221 | 34.9 |
| Neutral | 126 | 19.9 |
| Dissatisfied | 75 | 11.8 |
| Highly dissatisfied | 63 | 10.2 |
| **Total** | **632** | **100** |

Of the 632 e-learning respondents, 58.1% of them opine that e-learning is either highly satisfied or satisfied while interacting with the instructors. 22% of the respondents feel that interaction with instructor is not satisfactory through e-learning.

**Student's access in e-learning courses**

| Student's access in e-learning courses | Frequency | Percentage |
|---|---|---|
| Always | 153 | 24.2 |
| Often | 211 | 33.3 |
| Sometimes | 151 | 23.8 |
| Rarely | 64 | 10.1 |
| Never | 53 | 8.6 |
| **Total** | **632** | **100** |

57.5% of the e-learners feel that they access e-learning content ether often or always while about 34% opines that they access the e-learning content sometimes or rarely. While 8.6% of the respondents opine that e-learners never access the content.

**Relationship between the satisfactory levels of e-learners and the students' knowledge improvement**

Test to understand the relationship between the satisfactory levels of e-learners and the students' knowledge improvement, a Chi-square test was initiated.

Null Hypothesis ($H_0$): That there is no significant difference between the student satisfactory levels of e-learning and knowledge improvement.

| Students' knowledge improvement | Satisfactory levels of e-learners | | | Total | Chi-Square (p value) |
|---|---|---|---|---|---|
| | Satisfied | Neutral | Dissatisfied | | |
| High | 184 | 28 | 35 | 247 | |
| Average | 158 | 74 | 47 | 279 | 21.014 (.000*) |
| No change | 26 | 24 | 56 | 106 | |
| Total | 368 | 126 | 138 | 632 | |

In the test on the relationship between the satisfactory levels of e-learners and the students' knowledge improvement it is found that the Chi-square value is 21.014 with a significance value of .000 (p value). Since the significance value is less than 0.01, the null hypothesis is not accepted. Hence, that there is a relationship exist among the satisfactory levels of e-learners and the students' knowledge improvement using e-learning methods among the higher education students.

**e-Learning helps to reach the learners objectives**

**Relationship between the satisfactory levels of e-learners and  e-Learning supporting to attain the learners objectives**

Test to understand the relationship between the satisfactory levels of e-learners and e-learning support to reach the learners objectives, a Chi-square test was initiated.

Null Hypothesis ($H_0$): That there is no significant difference between the satisfactory levels of e-learners and e-Learning helps to reach the learners objectives.

| e-Learning helps to reach the learners objectives | Satisfactory levels of e-learners | | | Total | Chi-Square (p value) |
|---|---|---|---|---|---|
| | Satisfied | Neutral | Dissatisfied | | |
| Effective | 268 | 95 | 24 | 387 | |
| Neutral | 81 | 12 | 19 | 112 | 18.244 (.000*) |
| Not effective | 19 | 19 | 95 | 133 | |
| Total | 368 | 126 | 138 | 632 | |

In the test on the relationship between the satisfactory levels of e-learners and e-Learning helps to reach the learners objectives, it is found that the Chi-square value is 18.244 with a significance value of .000 (p value). Since the significance value is less than 0.01, the null hypothesis is not accepted. Hence, there is a relationship exist among the satisfactory levels of e-learners for e-learning support to reach the learners objectives among the higher education students.

**CONCLUSION**

The study explored the influence of the e-learner's mind to effective learning and improved knowledge in the higher education system in India. Though the internet explosion in India happened a decade before, still the rural India faces many connectivity issues and challenges. The existence of the e-learning and the physical classroom learning atmosphere has developed a complex situation in

the college and university situation. In the present context,  the purpose of e-learners found to effectively achieved by the new system.  The overall performance of the higher education students who are using e-learning system found to be more than satisfactory compared to the traditional mode learning. In general, the e-learning system is more effective.

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