



# **iJRASET**

International Journal For Research in  
Applied Science and Engineering Technology



---

# **INTERNATIONAL JOURNAL FOR RESEARCH**

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume: 8      Issue: VIII      Month of publication: August 2020**

**DOI: <https://doi.org/10.22214/ijraset.2020.31207>**

**[www.ijraset.com](http://www.ijraset.com)**

**Call:  08813907089**

**E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)**

# Awareness and Challenges Faced by Students to Adopt E-Learning in their Education

Rejitha R S<sup>1</sup>, Dr. Radhika R<sup>2</sup>, Meena Zenith N<sup>3</sup>

<sup>1,3</sup>Research Scholar, <sup>2</sup>Associate Professor, Noorul Islam Centre of Higher Education, India.

**Abstract:** *E-Learning is learning anything with the help of electronic media, usually through the internet. The population for the study comprised of the 1075 students out of which 283 were sampled and used for the study. The instrument for data collection was a 78-item self-constructed questionnaire titled, "Awareness towards e learning technologies". It was validated by experts and the Cronbach's alpha is .988 and it's a highly reliable scale. The data collected were analyzed using percentages and statistical tools such as chi square, paired t test, correlation and regression. The findings showed that, most of the students are ignorant or unaware about majority of the e-learning technologies. only 12 % of the respondents are extremely aware about advanced e learning technologies. Also, the result on usage indicated that the students are not using majority of the e-learning technologies.*

**Keywords:** *E learning, challenges, students, awareness.*

## I. INTRODUCTION

E learning helps the students to study their lessons easily and interactively and also helps to develop their skills such as, Communication skills that contribute to productive and harmonious relations between employees and customers. Team work skills that contribute to productive working relationships and outcomes. Problem-solving skills that contribute to productive outcomes. Initiative and enterprise skills that contribute to innovative outcomes. Planning and organizing skills that contributes to long-term and short-term strategic planning. Self-management skills that contribute to employee satisfaction and growth. Learning skills that contribute to ongoing improvement and expansion in employee and company operations and outcomes. Technology skills that contribute to effective execution of tasks. But most of the students are ignorant about the advanced e learning technologies available for skill enhancement. and self-studying. Also, colleges are not providing so many opportunities to explore the advanced e learning technologies.

## II. REVIEW OF LITERATURE

SHAIKH FARHAT FATMA (2013) studies about the topic "e learning trends issues and challenges" This paper concentrates on the education scenario, eLearning content preparation and presentation tools, application of e Learning to spread education to the remote areas, pros and cons of eLearning and way forward for eLearning. This article also talks about the newest trends in e learning. A few suggestions are made to use e learning for casual and vocational education, which is very effective for a developing country like India where a majority of population lives in rural/ remote areas and has received almost negligible formal education.

Donahue and Glodstein (2013) explains the present challenge for academics in an e-learning environment is to know the various learning sorts of different students for better learning outcomes. The traditional method of learning might not be adequate within the modern-day classroom where e-learning technology is playing a serious role within the delivery of education. In principal the key to knowing the scholar needs is to understand the range within the virtual class

Naresh B, Dr. BhanuSree Reddy (2015) studies about "Challenges and Opportunity of E-Learning in Developed and Developing Countries- A Review". This paper discussed about the e-learning environment in both the developed and developing countries, which incorporates their approaches, practices, challenges and opportunities they face. They conclude that E-learning is getting more scope since the demand of higher education studies has been increased. E-learning gives flexible and straightforward environment to the scholars less cost and convenient time and place to review. Rather than technology and other skills, the user perception and readiness play a crucial role in e- learning effectiveness in both the developing and developed countries. Apart from these factors support from government, motivation of scholars and well-trained tutors are the key factor of the successful implementation of E-learning. The challenges and opportunities also vary from country to country supported the infrastructure and therefore the stockholder.

Nuru IIslam, Martin Beer, Frances Slack (2015) studies about "E-Learning Challenges Faced by Academics in Higher Education: A Literature Review". This paper concludes that E-learning has become a necessity in education institutions and is being deployed in educational establishments throughout the planet. Researchers have made much emphasis on its benefits but not much is discussed on the disadvantages of e-learning technology.

This paper references some of the research work on the limitations of e-learning technology, categorizes it in five challenges that teachers are faced with and suggestions for a successful e-learning outcome. This paper also discusses the utilization of e-learning technology in Middlesex University and a few of the challenges they face. Lastly this paper identifies gaps in e-learning literature and involves further works on this subject.

Dalton Kisanga and GrenIreson (2015) study about “Barriers and strategies on adoption of e-learning in Tanzanian higher learning institutions: Lessons for adopters”. Tanzanian Higher learning institutions (HLIs) are faced with challenges of adopting e-learning in education.

This study involved experts in e-learning to look at barriers of adopting e-learning and therefore the best strategies to deal with them. Data were gathered from a series of semi-structured interviews with e-learning experts from two HLIs in Tanzania. Five major barriers were identified: poor infrastructure; financial constraints; inadequate support; lack of e-learning knowledge and teachers’ resistance to vary.

The study further describes best practice approaches employed by the 2 HLIs to deal with each of the challenges. It is recommended that training in e-learning must be provided to teachers and administrators; provide financial, technical and managerial support geared towards adoption. Successful adoption of e-learning requires a strategic approach that factors out barriers identified during this study and, which involve all education stakeholders.

#### A. Statement Of Problem

E learning is anything delivered enabled or mediated by electronic technology for the specific purpose of learning. Thus e-learning includes technologies such as chats, podcasts, video conferencing, wiki, collaboration, simulations, instant messaging, text chat, simple interactive lessons etc. to enhance the various skills of students such as team skills, problem solving skills, communication skills, enterprises skills etc. Though e learning skills of students can be developed and also helps to study using interactive methods. But the problem is that, most of the students are ignorant about most of the advanced e learning technologies that helps in skill enhancement and self-studying. Also, the students are not getting proper availability of resources for understand and learn more about e-learning technologies.

#### B. Objectives of The Study

- 1) To identify the challenges faced by students to adopt e learning in their education.
- 2) To appraise the association between awareness towards e learning technologies and usage of e learning technologies in education.

#### C. Pilot Study

Pilot study was conducted with 40 respondents and the results were tested. Reliability test was done with SPSS software using Cronbach’s Alpha method and its value is 0.77%. Since the Cronbach’s alpha value is high, the variables used in the questionnaire are considered to be highly reliable. Researcher was able to find the feasibility of the study with the help of pilot study. Also, it helped in formulating the hypothesis, developing adequate plan for analysis, and shows whether the available sampling frame is accurate and adequate.

### III. TOOLS FOR ANALYSIS

Based on the theoretical and observational study on the skill development programmer under DDU-GKY scheme, data were collected and tabulated in an organized manner. The data were analyzed using Statistical Package for the Social Sciences (SPSS). For the descriptive as well as inferential analysis, various statistical tools were used such as Percentage Analysis, chi square test, paired t test, correlation and regression.

Percentage analysis is used to obtain a contingency table from the frequency distribution and to represent the collected data in terms of percentage. Percentage analysis is used to describe the socio-demographic variables of the sample respondents.

Chi-square test is a non-parametric test, which tests the significance of difference or association between the observed frequencies and corresponding theoretical frequencies. The chi square test is used to find relationship between genders of students, locality of students, age group of students with respect to awareness about e learning technologies

A paired t-test is used to compare two population means where you have two samples in which observations in one sample can be paired with observations in the other sample. Here it is used to find relationship between place of stay of students and specialization subjects with respect to awareness about e learning technologies

# A. Percentage Analysis Of Awareness About Elearning Technnnologies

Awareness about traditional e learning technologies in the college

Variable	Not at all aware	Slightly aware (%)	Moderately aware (%)	Very aware (%)	Extremely aware (%)
Text chat	-	4.2	23.7	56.5	15.5
Google search	-	3.9	31.1	45.6	19.4
Social media	-	3.9	30.4	45.2	20.5
Online magazines	-	3.9	21.2	40.6	34.3
e-mail facilities	-	4.2	30	44.9	20.8
Multimedia presentations	-	3.5	24	39.6	32.9
Percentage	100				
Total	283				

- 1) *Inference:* The results from the awareness about traditional e learning technologies shows that all of the respondents are very aware with each of the traditional e learning, technologies and none of the respondents are not at all aware about the technologies. But very few of the respondents are extremely aware with these technologies.

Awareness about advanced e learning technologies

Variable	Not at all aware (%)	Slightly aware (%)	Moderately aware (%)	Very aware (%)	Extremely aware (%)
Video streaming	4.9	11.7	33.6	39.2	10.6
Audio streaming	5.7	27.6	35	25.8	6
Simulations	29.3	22.6	21.2	19.1	7.8
Collaborations	39.6	20.5	23.3	11.7	4.9
Web log	10.2	44.5	19.4	17.7	8.1
Social book marking	17	33.6	24.4	18	7.1
Wikipedia	4.6	16.6	13.8	51.6	13.4
White boarding	24.7	31.4	19.4	14.5	9.9
RSS	39.2	28.6	19.1	7.8	5.3
podcasting	19.8	41.3	27.9	7.4	3.5
Application sharing	12.4	49.1	13.4	13.8	11.3
Instant messaging	6.7	11.3	18	47.7	16.3
YouTube	4.9	11.3	15.5	41.3	26.9
Internet forum	6.4	11.7	18.7	38.9	24.4
Audio conferencing	8.8	11.7	11.3	44.9	23.3
Video conferencing	5.3	20.8	26.9	37.5	9.5
Web conferencing	14.1	38.9	21.9	16.6	8.5
Percentage	100				
Total n	283				

- 1) *Inference:* Above table depicts that most of the respondents are not at all aware about the advanced technologies such as simulations(29.3%),RSS(39.2%),collaborations (39.82%).Respondents are only slightly aware about most of the advanced e learning technologies(web log(44.5%),application sharing (49.1 %),web conferencing (38.9%).Most of them are very aware about technologies such as text chat (41.3%),instant messaging(47.7 %),internet forum(38.9%),audio conferencing (44.9%) and video conferencing (37.5 %).



### B. Percentage Analysis Of Challenges Of Elearning Adoption

External challenges to adopt e learning

	Never (%)	Rarely (%)	Sometimes (%)	Often (%)	Always (%)
Lack of internet facilities	32.2	23	21.9	15.2	7.8
Inadequate computer laboratories	31.8	17	21.6	18.4	11.3
High cost of computer, laptop, smartphones etc.	14.1	15.9	17	34.6	18.4
Poor electricity supply	8.8	12.4	36	20.8	21.9
Lack of technical skills	2.8	2.8	24.7	56.2	13.4
Lack of computer literacy	3.5	32.2	25.4	17.7	21.2
Lack of time	14.1	11	20.8	30	24
Changing technology	3.5	7.1	23.7	26.5	39.2
Lack of encouragement	10.6	13.4	17	39.9	19.1
Attitude of teachers	17.7	21.9	31.4	14.8	14.1
Lack of institutional support	19.1	25.1	34.3	14.5	7.1
Lack of training programs	12	12	21.6	36.4	18
Low esteem of public for e learning	8.8	13.4	24.4	38.9	14.5
Social relations	23	21.9	13.4	20.8	20.8
Percentage	100				
Total	283				

- 1) *Inference:* The table shows that most of the respondents have Many external challenges such as attitude of teachers (31.4 %), lack of institutional support (34.3 %), low esteem of public for e learning (38.9 %) to adopt e learning technologies.

Internal challenges to adopt e learning

	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)
Lack of awareness about e learning technologies	3.5	7.1	20.5	32.9	36
Lack of interest	38.5	31.1	14.8	7.1	8.5
Lack of confidence	41.6	32.2	13.4	8.8	4.9
Lack of motivation	6.4	9.9	10.2	47	26.5
percentage	100				
Total	283				

- 1) *Inference:* The table reveals that 68 % of respondents are not using e learning technologies because of their unawareness. Also 69 % respondents are very interested to use e learning technologies in their education.

#### IV. FINDINGS

- A. Most of the respondents are very aware (45.4 %) and extremely aware (23.9 %) about traditional technologies of e learning. No respondents are unaware about the traditional technologies of e learning.
- B. But most of the respondents are unaware or slightly aware about most of the advanced technologies of e learning. Only 12 % of the respondents are extremely aware about advanced e learning technologies.
- C. Male respondents (mean = 3.24) are more aware about e learning technologies when compared to female respondents (mean = 3.14). Respondents from urban area (mean = 3.94) are more aware about e learning technologies when compared to rural area respondents (mean = 2.35).
- D. Hostellers (mean = 4.09) are more aware about e learning technologies when compared to day scholars (mean = 2.51).
- E. Respondents belonging to age group 26 – 30 (mean = 4.32) are more aware about e learning technologies when compared to age group 21- 25 (mean = 2.68). Most of the respondents (45.4 %) are always using traditional technologies of e learning in their education.
- F. Majority of the respondents are not using and rarely (25 %) using most of the advanced e learning technologies.
- G. Most of the respondents have a very positive perception towards e learning technologies adoption in their education.

#### V. SUGGESTIONS

On the basis of the analysis, the following suggestions are made to encourage the use of e learning technologies in their education. They are

- A. Colleges must provide training programs for students and teachers as to provide knowledge about the use of e learning technologies.
- B. Colleges must provide seminars, workshops etc. related to e learning technologies.
- C. Colleges must provide e learning infrastructures and resources to impart quality education.
- D. Students must be motivated to use e learning technologies by teachers and parents.
- E. Students must be trained about the various skills acquired through adopting e learning in their education.

#### VI. CONCLUSION

The usage of latest technology will make them curious about searching and upgrading their knowledge. So, this study throws light on various e learning technologies which can be used by students for their knowledge up gradation and skill development and also it's a great deal to the colleges to evaluate their e learning infrastructure.

Now with the increasing complexity of modern times, education face ever-changing new demands, the students and colleges have to bear the brunt of the changes. Hence, the students and colleges need to be sensitive and has to be ready for the future changes. Students have to possess awareness, knowledge and skills with regard to e learning technologies and colleges must provide good e learning infrastructures to adopt e learning technologies in their education.

#### REFERENCES

- [1] Dalton Kisanga and Gren Ireson (2015), Barriers and strategies on adoption of e-learning in Tanzanian higher learning institutions: Lessons for adopters, International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2015, Vol. 11, Issue 2, pp. 126-137
- [2] Naresh B, Dr. Bhanu Sree Reddy (2015), Challenges and Opportunity of E- Learning in Developed and Developing Countries, International Journal of Emerging Research in Management & Technology ISSN: 2278-9359 (Volume-4, Issue-6)
- [3] Nurul Islam, Martin Beer, Frances Slack (2015), J E-Learning Challenges Faced by Academics in Higher Education: A Literature Review, Journal of Education and Training Studies Vol. 3, No. 5; September 2015 ISSN 2324-805X E- ISSN 2324-8068 Published by Red fame Publishing.
- [4] Shaikh farhat fatma (2013), e-learning trends issues and challenges, International Journal of Economics, Commerce and Research (IJECR) ISSN 2250- 0006 Vol. 3, Issue 2, Jun 2013, 1-10 © TJPRC Pvt. Ltd.



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)