

**A STUDY ON IMPACT OF E-LEARNING RESOURCES ON
ENHANCING THE LEARNING CAPABILITIES OF THE STUDENT
COMMUNITY IN THE BACKDROP OF INFORMATION
TECHNOLOGY AND DIGITALIZATION**

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Abstract

The article primarily focuses on the impact of e learning resources on the students in the information technology and digitization era. Digitalization and information technology has become buzzwords in the recent past. Students can now use technology to improve their skills. The objective of this study is to find out whether E-learning resources are beneficial to all categories of students irrespective of their financial status. IQ levels and their family socio economic background. The paper is and outcome of pilot study conducted on a random sample of 50 respondents form students community from south Bangalore. Collected data form the survey was analyzed, using descriptive statistical tools and inferences are drawn.

Key words: E- Learning resources, Information Technology, Digitalization, Information Age

Introduction

Digitalization is all about the ease with which data or information can be obtained. In the new era, digitalization and information technology has become a cutting edge tool through which common man's life is undergoing radical changes in India, all over the world for that matter. Digitalization basically changes paradigm of the society and also has solution for more or less all the problems. Digitalization and information technology is equipping the students folk to be self-sufficient in their pursuit for excellence in knowledge and skillset. Their will make students more self-sufficient and also help them to gain more knowledge with computer directed programs incorporated into education. Students will become quicker when they have easy access to information. The changing education system should adopt some new changes to enhance the teachers and students knowledge. Technology is bounded to rule our present and future with the changing technology one's should adopt the necessary changes.

Meaning and Definitions

E-learning refers to a learning system that can be obtained through the internet using an electronic device. It is referred to as online learning or online education. The 'E' in E-learning stands for 'Electronic.' Hence, the original term 'electronic learning.'

"Learning that is delivered, enabled or mediated using electronic technology for the explicit purpose of training in organizations" is e learning.

According to the Chartered Institute of Personnel & Development, e-learning is "Any form of learning that utilizes a network for delivery, interaction or facilitation... The learning could take place individually or as part of a class"

E-learning can be defined as the use of computer and Internet technologies to deliver a broad array of solutions to enable learning and improve performance. (1)

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ICT stands for information and communication technologies and is defined, as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information." In other words ICT implies "the technology which consists of electronic devices and associated human interactive materials that enable the user to employ them for a wide range of teaching - learning processes in addition to personal use."

Digitalization is all about changing business operations, business models and even revenue streams and new business opportunities. When learning resources are digitalized, it encompasses both digitizing the learning resources as well as digitalizing the processes and environment of learning.

Transforming business processes by Leveraging digital technologies, ultimately results in increased efficiencies and revenues.

Need for e learning resources:

In the present day scenario of complex and ever changing technology driven socio economic environment, people from all walks of life are recognising the need for updating themselves to the modern world. This has become absolute necessity for their basic survival, even illiterates need to know the technology which invading into their work life as well as their personal and social life. To operate the bank account on a digital platform, to drive a ola and uber vehicle, to adopt themselves industrial processes 4.0 version, to book oyo rooms examples are plenty. People from cross sections of the society are having an urge to keep abreast with the changing occurring around, and the main source of that up gradation process is e learning resources.

Users of E learning resources

- Student pursuing formal or distant education irrespective of their level of study to supplement their classroom learning,
- Faculty members to harness their skills to better their class room management
- Educational institutions to cope up with competition,
- Employees to up skill themselves to stay relevant in their job, to reach better position in their career,
- Business organization to be learning organizations,
- Public to update themselves in the latest trends in technologies so on and so forth

E learning resources can be about technical skills, employability skills, communication skills, language skills, life skills, personality development that are available in various modes of electronic learning.

Various types of e learning resources:

- Adaptive Learning is an online learning resource where it analyses the learner's point of view on the subject and uses the feedback, to analyze understandability of the learner to have effective content delivery.
- E-Textbooks are books, which are available online, which are less expensive and more effective form of learning.
- Learning Analytics is an digital method of learning resource where it is a structured method of learning concepts.

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- Mobile Learning is most popular way of learning and it enables the learning process more interesting .
- Augmented Reality is an interactive class where it enhances certain aspects through real world with the help of computer-generated information.
- Online journals, various online tutorials available on YouTube, research articles and dissertation available online.
- Moocs, NPTEL rich sources of e learning which enables the faculty and students to acquire add on certification courses in the latest technologies, which become handy to the faculty and students.
- E-Libraries
- Data uploaded on websites of regulatory bodies and
- College specific websites etc., with specific learning mobile and tab app.

Benefits of online learning

- ✓ It is very convenient to use as its access is 24/7, from anywhere.
- ✓ Digital learning enhances course of learning content and depth understanding about the content.
- ✓ It also enhances the skills like time management, independence and self-discipline.
- ✓ Digital learning is an innovative method of learning as it can be learner centric
- ✓ Project based and community based learning activities connecting the learners from different fields.

Review of literature

The traditional face-to-face teaching, despite being constantly criticized by the methodologists and ever-emerging modern approaches, has never lost its scope in the (EFL) English as a Foreign Language context. Researchers and pedagogues, in order to get the both ends meet, have converged traditional face-to-face instructions and online activities into the concept of blended learning. By establishing on previous works and contexts, the study aims at investigating Taif University's EFL teachers and learners' positive and negative perceptions and experiences towards the effectiveness of online (CLMS) Cambridge Learning Management System and on-site learning environments. Fahmeeda Gulnaz (2020)

This paper explores the digitalization of teaching and learning processes, which is understood as external processes by government and international trends and as internal processes within the institutions, in Denmark and Norway. These are countries with similarities regarding digitalization and educational systems. In the internal processes, digital technology is used in teaching and learning when initiated from administration including IT-staff, in collaboration with academic leaders. There was little or only limited reported use of technology for teaching and learning, when the processes were initiated by administration together with enthusiasts among faculty staff, who did not have leadership roles or influence on change. There was more reported use of technology in teaching and learning in Denmark than Norway. The paper discusses possible explanations for these findings and thus illuminates how processes of digitalization are influenced by broader governance arrangements, institutional maturity and academic and administration staff Trine Fosslund, Per Olaf Aamodt & Lise Degn (2019)

The extent to which teachers adopt technology in their teaching practice has long been in the focus of research. Indeed, a plethora of models exist explaining influential factors and mechanisms of technology use in classrooms, one of which—the Technology Acceptance Model (TAM) and versions thereof—has dominated the field. Although consensus exists about which factors in the TAM might predict teachers' technology adoption, the current field abounds in some controversies and inconsistent findings. This meta-analysis seeks to clarify some of these issues by combining meta-analysis with structural equation modeling approaches. Ronny Scherer, Fazilat Siddiq, JoTondeur (2018)

The approach of information digitalization era has largely changed the teaching environment on campus. The application of information technology to education has become a concern in modern education. Traditional basic literacy of reading, writing, and algorithm could no longer cope with the demands in information societies, that the information technology ability has become the fourth basic literacy for modern citizens. In face of changes, first-line teachers are in education required for adequate information literacy to integrate information technology equipment into instruction and to be competent for the role of teachers. However successful information technology teaching environments simply with adequate computer hardware and software equipment could not guarantee excellent teaching performance. Xu, Anxin; Chen, Guisong (2016)

The literature focuses on two primary contexts in which technology may be used for educational purposes: (i) classroom use in schools and (ii) home use by students. Theoretically, information and communications technology (ICT) and computer-aided instruction (CAI) use by schools and the use of computers at home have ambiguous implications for educational achievement: expenditures devoted to technology necessarily offset inputs that may be more or less efficient, and time allocated to using technology may displace traditional classroom instruction and educational activities at home G.Bulman R. W. Fairlie (2016)

Purpose of the study

The purpose of the study is to analyze availability of E-Learning resources to the student community in the back drop of information technology and digitalization and also to analyze the impact of E-Learning resources on enhancing the learning abilities of the student community.

Significance of the Study

- The article throws light on E-Learning resources available to student community.
- It opens up scope for further studies to analyze future paradigm shift in the learning ecosystem at the Institutional level
- It provides information to the policy makers to incorporate the e learning resources in the vision mission and objectives of the universities, institutions with the understanding of ground realities as it takes still more time India to adapt to the e-learning ecosystem at the gross root level.

Objectives

1. To study the impact of e learning resources on the learning capabilities of the student community.
2. To find out the impact of the demographic factors like age, gender, income, level of education, his academic performance on his dependency on e learning sources.

3. To analyze student concerns in availing e learning sources
4. To assess the awareness and popularity of various e learning sources among the student community

Limitation of the study

The major limitations of the study are

- Limited Time Span
- Moderate Sample size of 100 students pursuing formal education
- Selection of limited geographical area for survey

Scope of the study

The study is based primary sources of data collected through survey method by administering the questionnaire to randomly selected students spread across south Bangalore city studying various levels like PUC to Research. The questionnaire is constructed in such a way that it collects 14 responses like

1. Demographic information
2. Average weekly time spent by them in availing e learning resources
3. Opinion on the uses of the resources
4. The type of learning resource they use
5. The concerns they come across while accessing, the involvement of faculty using and uploading and guiding the student in accessing etc.,

Research Methodology

The study is on impact of e-learning resources on enhancing the learning capabilities of student community in the backdrop of information technology and digitalization. The paper is the outcome of sample survey conducted on a random sample of 100 respondents form students community from south Bangalore. Collected data form the survey was analyzed, using descriptive statistical tools and inferences are drawn.

Sources of data:

Sources of data comprises of both primary and secondary data. Primary data was collected through questionnaires with a sample size of 100 respondents, student community pursuing formal education in south Bangalore and secondary data was collected from research articles, and other web sources.

Hypothesis: Hypothesis is the intended statement of outcome which will be tested by analyzing the data collected from the survey, and the statistical tools with the SPSS software. The hypothesis will be framed with the objectives the study in the mind.

H₀: There is a positive impact of e learning resources on enhancing the learning abilities of the student community.

H₁: There is no positive impact on enhancing the learning abilities of the student community.

H₀₁The identified e learning resources are equally popular among the student community.

Popularity of Identified e-learning resources among the sample respondents		
Identified e-learning resources	No Of Respondents Availing the Resources	Percentage of Respondents availing the resources
Online Journals	24	24%
Various online tutorials available on you tube	76	76%
Research article and dissertations available online	10	10%
Moocs, NPTL and other website available for add on employable skillset and subject to enrichment program	12	12%
E-Libraries, E-Textbook, Data uploaded on websites of regulatory bodies and college specific, website etc., with specific learning app	10	10%
Any others	04	04%

When data is analyzed , it is observed that the listed online learning resources are not equally popular among the respondents. More than 75%of the respondents are more conversant with online tutorials available on you tube, slide share etc., making it more popular .

H₀₂ Students face zero concerns while availing the e learning resources.

Concerns that Respondents face while accessing the e learning resources		
Concerns the students face while accessing the e learning resources	No Of Respondents facing the listed concern	Percentage
Voluminous information which leads to distraction	32	32%
Lack of personalization	28	28%
Lack of knowledge while accessing the	24	24%
Lack of expert guidance others	8	8%
Network, data and cost and gadget related issues	25	25%

Out of 100 respondents 32% of the students feel that the information online is voluminous,28% opine that they lack personalization ,24% are devoid of lack of knowledge how to access, 8% opined that they do not have expert guidance, 25% quote other technology related and cost related concerns.

However, overall less than one fourth of the respondents are experiencing the listed concerns while accessing the e learning resources.

H₀₃ Male students spend more time e learning resources

Weekly average time spent on online accessing of E-Learning Sources Cross tabulation

Gender/Average weekly time spent on online learning resources	less than 1 hour	1 to 5 hours	5 to 10 hours	10 to 15 hours	Total
Male	47	1	0	0	48
Female	1	39	8	4	52
Total	48	40	8	4	100

Most of the male respondents (47) spend less than 1 hour on an average in a week, in accessing E-Learning sources, Most of the female respondents (39) spend between 1 to 5 hours on an average in a week in accessing E-Learning Sources. Majority of the respondents (86)spend less than 5 hours on an average in availing e learning resources. Weekly average time on online accessing.

Findings

- ✓ There is no association between gender and awareness of e learning resources
- ✓ Not all enlisted e learning resources are equally popular among the respondents
- ✓ There is no association between gender and time spent on e learning resources.
- ✓ Majority of Respondents are not experiences any challenges while availing online resources.
- ✓ Therefor an inference can be drawn that e learning resources are having positive impact on enhancing the learning capabilities of the students community.

Recommendations and Conclusions:

There is a wide scope for educational institutions to digitalize the teaching learning environment in the campus, so that they will be relevant in the education field. The regulatory bodies and the policy makers mandating the same.

Educational Institutions need to build technology infrastructure to facilitate the adoption of e learning resources by the students. Otherwise, formal education will lose its charm in the coming years.

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