

**A STUDY ON EFFECTIVENESS OF ONLINE EDUCATION AND
ITS OPERATIONAL ATTRACTION FROM
STUDENTS PERSPECTIVE**

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ABSTRACT

Conventional teaching methods have been widely used in education. Traditional methods of education, training, and learning are much more context - dependent than ICT-enabled education, training, and learning. Conventional methods are not suitable to enhance their multi-talented personality in certain situations. E-learning is seen as a good answer to the age-old issue of mass education since there are increase engagement searchers and insufficient knowledge producers. Online education includes e-learning. It has grown and evolved in a stunning way in recent years. Unquestionably, this is as a result of the enormous advancements in communications and information technology (ICT). While incorporating e-Content with learning is now a need, UGC innovation has been planned to adapt to the new experimentation and help India become the industry leader in this just-emerging sector. The long-term goal of the UGC e-content initiative is to produce knowledge and high-quality e-content. The Karnataka Government has also take an initiative and released a digital initiation program scheme named Karnataka LMS Scheme (K-LMS) The main aim of this digital initiation is to make the curriculum of colleges online in digital mode. Digital platforms include digital courses in multiple languages as PPT, videos, quizzes, assignments and study material. The Karnataka state government has claimed that this digital initiative will boost e-learning in colleges. This paper focused on level of awareness of students about K-LMS and other platforms. Students' perceived advantages and weakness of online learning, challenges they facing and their opinion on effectiveness of Online classes as compare to physical class are discussed here. Author tested the hypotheses on the relationship between There is no significant difference in mean Awareness across four categories of college students (Rural, Semi Urban, Urban-Private and Government colleges). Study indicate LMS Schemes of Karnataka Government significantly know to all group of students .

Keyword: ITC, E-content, Traditional method, LMS.

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1. Introduction

Education in India is a holistic process for the attainment of continuing values in the life of each and every citizen, and also contribute towards creating a fair, just and equitable society of responsible citizen. The primary teaching methods of educational system are class room lectures, presentations, and workshop experiments. These remain aided by film aids such as projectors, stereo systems, and film projection. In teaching and learning process a teacher is like a supervisor, as he or she leads, guides, facilitates, and mentors students. As a result, teachers have become role models for students, leading them to a brighter future. The traditional education system in India could only serve a small group of people who were wealthy and could afford to be educated. Nevertheless, as internet expertise grows, web-based e-learning systems are increasing in popularity. Previously, information seekers had to physically commute to schools, colleges and libraries, but newer ICTs allow knowledge seekers and students to locate the required information at the tip of their fingers. Since these methods are online, you may take lessons in any subject or course at any time from any part of the world. Saving time, cash, paper, or other resources might be useful and increase accessibility for the both course students and instructors. The importance of e-learning has grown significantly as a result of changing ICT (Information and Communications Technology) trends and the scarcity of time. Yi Yang (2004) quotes that flexibility, cost effectiveness, electronic research availability, ease of connection of internet and well design class interface were students' positive reaction for adoption. Some authors also indicate that Course design of online classes needs to provide all required details for easy understanding Ram Gopal (2021). Students motivation to adopt new education is important M. Same Abou (2014) Students' affected to eye strain from prolonged screen usage, however, provide factual support for Spitzer's findings (2001). Academics, coaches, and students can use the course materials successfully at any time and from any location once they have been digitised that used a Content Management System (CMS) & completely available on the web. (1) Any digital content product that is available to be distributed via microelectronic medium is referred to as e-content. Typical examples are metaphors, music, and information. (2011) Anurag Saxena (2011) Anurag Saxena The National Program for New tech Enhanced Learning (NPTEL) is a project initiated by the Ministry of Human Resources Development of the Government of India with the goal of restoring the excellence of productive education in India through the development of coursework video recorder and online courses. In Karnataka also Government has released a digital initiation program scheme named **Karnataka LMS Scheme**. (LMS is a higher tier of online course stage that instructor can

use to create, host, deliver and sell online courses.) for the first time Government of Karnataka take the initiation and lunched throughout the covid-19 lockdown period as schools and colleges are shutting due to pandemic. The main aim of this cardinal initiation is to make the curriculum of colleges and schools online in digital mode. Digital platforms include digital courses in multiple languages as PPT, videos, quizzes, assignments and study material. The Karnataka state government has claimed that this digital initiative will boost e-learning in schools and colleges. It will be advantage about 4.5 lakh students and 24,000 tutors in the Karnataka state. The budget of the Learning Management System Project in the state of Karnataka comes to about 34.14 crores. Researcher wants to know effectiveness of K-Lms in students learning process during covid lockdown period and what challenges contented developer that is teacher is facing in creating material, PPT, MCQs, and videos. This study attempted to focus on K-Lms, e-content innovation in changing education concepts, and whether it would replace physical teaching.

2. Literature Review

(Petrides, 2002)He stated that the participants revealed that working in team environments in an online course was cooler because there was less need to rearrange every person schedule. Aside from time elasticity, choices associated to the learning experience were also cited as positives. The online education environment excels in footings of flexibility.

Vijayakumari, (2011) The use of technology in the classroom motivates new students and keeps them actively involved in the learning process. A computer is an extension of the mind, hands, and eyes synthesis, just as books are indeed an extension of the intellect, cinema is an extension of the eye, audio is an extension of the ear, audio conferencing is a leeway of the mind and vocal cord, satellite expertise is indeed an extension of human reach, and computer networks are indeed an extensions of the human cooperation. Therefore, we would anticipate that e-content will be able to inspire the beginner in a way that makes the most of its early learning potential.

Nachimuthu Dr. (2011) The most recent format for teaching that has increased awareness of conceptual kinks is e-content. The purpose E-leaning is to eliminate inequalities among beginners through efficient instruction. E-content really makes instructors more effective. It raises the learner's degree of familiarity, which fosters creative discernment, and it offers impending thoughts based on the offered linkages and allusions.

Schirmer and Lockman (2020) In his work to determine" if in-person instruction is more successful than online learning" a research was conducted. The study's conclusions indicate that pupils do more suggestively getting better in online courses than in traditional learning.

UGC (2012) Has given the set of thirteen guidelines and it includes home; objectives; specific topic mapping; summary; text with depictions and animations; video and audio; coursework, quiz, and tutorial; situations, lexicon, and links; case studies; FAQs; download; blog; and contact are necessary, based on the UGC (University Grants Commission, India) mediating factors for e-content expansion. To create the e-content materials, these categories are sorted successively by technical backers and topic specialists.

Mow (2008) Science, math, languages, and programming are just a few of the fields where information expertise, e-learning, and e-contents have been applied in the past. The main goal of that is to make it easier to understand such challenging material and to resolve questions about these kinds of themes.

Zakaryia Almahasees (2021) author made a study on perception of the teachers and pupil on online education final outcome reveals that online education in not effective as regular education because find difficulty to adjust to online mode due to lack of interaction between tutor and learners.

3. Methodology

This survey includes the opinions of 400 degree-seeking students who come from urban, semi urban, and rural institutions affiliated to Bangalore University. To gather demographic data and assess the degree of mindfulness of a e-learning system, a set of inquiry forms has been sent. The question about the circumstantial evidence is covered in the first part. The questions in the second portion are about utilising e-learning to learn and how to do it in a way that is comfortable for you to use while also being beneficial, simple to use, and self-sufficient.

3.1 Objectives:

1. To study the level of mindfulness of students on the road to K-LMS and other e-learning platform
2. To know whether LMS empower learners to manage their own learning
3. To know how do the pupils perceive the effectiveness of online instruction

3.2 Source of Data

The study fundamentally depends upon prime data collected through interview schedule from four hundred students from three academies classification based on Rural, Semi urban and Urban by embracing convenient random sample technique. Data also collected from LMS team of DCE , Articles in the periodicals, monthlies and websites for the secondary sources.

3.3 Sample Design

The researcher selected three spaces like Bangalore city college as Urban,100 Under Graduate students since government college and 100 from city Private college; 100 UG students after Magadi government college as semi urban and 100 students from government college Bidadi as rural college for the determination of the study and places embraces were near to Bangalore city for the convince of the researcher and it embraces both the gender and all three main streams ,arts commerce and science.

4. Result Analysis And Discussions

The goal of this study was to examine students' knowledge of the online learning system and determine if it allows students to complete their own learning based on successful online learning experiences. Investigations have also been made on the variables that affected how those students experienced their online education. Results are presented in the form of table and graphs with interpretation.

4.1 Awareness on e -Learning Platforms

A questionnaire was distributed and sent to 400 students to share their judgments to stimulate e-learning podium, result shows that 92% respondent across all four classifications of college are aware about the e-learning platforms and residual 8 % were not aware of e-learning.

4.2 Awareness About Most Preferred E-Learning Platforms

A study made on students preferred platforms for online learning process, a multiple responses which are collected from total of 400 respondents. and analyzed in the following paragraph with different **platforms wise awareness** shown in chart and graph.

Table 4.1 Shows multiple response on most preferred E-learning platforms

Platforms	FREQ	%	% of Cases
SWAYAM	300	15.78	75.00
UGC-MOOCs	286	15.04	71.50
K-LMS	389	20.46	97.25
NPTEL	213	11.20	53.25
BYJU'S	145	15.78	36.25
UNACADEMY	121	6.36	30.25
VEDANTU	237	12.47	59.25
EDX	86	4.52	21.50
OTHERS	124	6.52	31.00
TOTAL	1901	100	

Graph on students preferred online Platforms

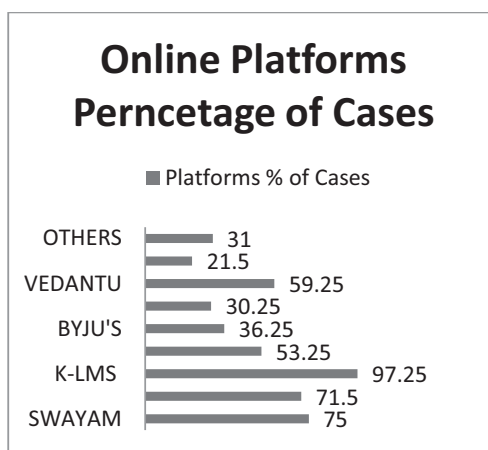


Table 4.1 portrays the awareness of the pupils about the various e-learning platforms. Firstly, Fascinatingly and perchance which look obvious is that fact that more than ninety percent (97.25 percent) of the respondents, i.e., 97.25 percent of the defendants [representing 20.46 percent of the responses] are attentive of K-Lms.

Similarly, 75.00 percent of the respondents [representing 15.78 percent of the responses] are aware of the use of Swayam while 71.50 percent of the respondents [representing 15.04 percent of the responses] are cognizant of UGC-Moocs. It is detected that Vednthu-59.25% (representing 12.47 percent of the responses] While 53.25% aware of NPTEL (expressive 12.25 percent of the responses] Byjus-36.28. Others-31%; Unacademy-30,25% and finally -21.50% awarded edx as most preferred online platform.

4.2 Hypothesis

H₀: There is no significant difference in mean *Awareness* across *four categories of Colleges* students.

In a sense, the mean Awareness score do not significantly differ between the respondents of Rural colleges and respondents of semi urban college students, between the respondents with Urban private college students and students of urban government college students and so on.

Table 4.2 of One way ANOVA

	Sum of Squares	Df	Mean Square	F	p-value
Between Groups	1.176	3	0.392	0.628	0.597
Within Groups	2552.216	409	0.624		
Total	2553.392	207			

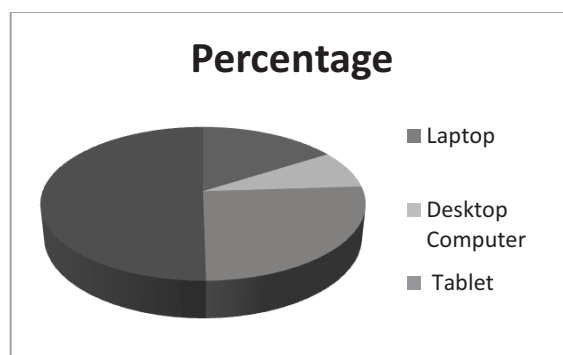
It is gotten from one-way ANOVA result (Table 4.), that there is no momentous (statistically) difference in overall mean score of *Awareness of e-learning platform* [F (3,204) = 0.628, p=0.597, p>0.05] dimension midst students of four group of colleges categories. Hereafter, we accept null hypothesis and reject the alternative hypothesis. In other words, mean *Awareness level* rating recorded not differ significantly amongst respondents with rural students semi rural, urban private assemblage and urban government college defendants.

4.3. Most Used Device in Learning Process

When we asked the students about most preferred and device which is used in online learning procedure and their references are recorded in the following chart and in graph.

Table 4.3: Most used device in learning process and pie chart

Device	Frequency	Percentage
Laptop	64	16.00
Desktop Computer	32	08.00
Tablet	103	25.75
Smartphone	201	50.25
Total	400	100



Results designate more than 50 percent of the students used Smartphone's, this is habitually due to convince and availability. Next preference is use of Tablet in learning process it represent 25.75 percent, this is due to government has provide the free tablet to students who studying in government colleges during covid lockdown time. Next preference is laptops it represent 16 present of total respondents. Finally 8 percent indicated they used computers in e-learning process.

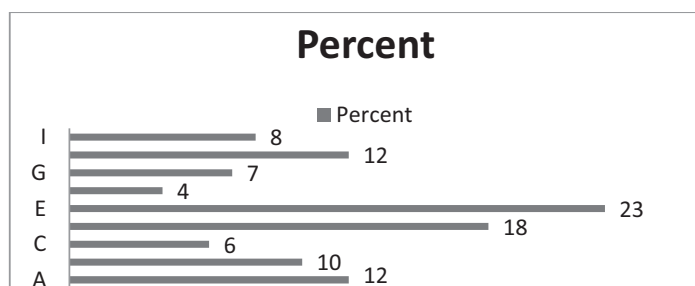
4.4. Learner's Perception Behind the Selection Of Online Learning Platform

Students' superficial metiers of online learning may sanction novices to manage their own learning and learning takes place effectively. To measure this we have prearranged nine points factors chart.

Table.4.4: Factors behind the selection of e-learning platforms

Factors	Code	Frequency	Percent
Every learner can hear the lecture clearly	A	48	12
PPTs are available right in forward-facing of every single student	B	40	10
Students can ask doubt wanting any hesitation	C	24	06
Flexibility, access at any time any where I am	D	72	18
Learning at own pace comfortably	E	92	23
Convince	F	16	04
Cost-effective	G	28	07
They provide study material and MCQ on each topic	H	48	12
They provide video lecture delivered by faculty handling the subject	I	32	08
TOTAL		400	100

4.4 Graph On Factors Behind the Selection of e-learning Platforms



From table 4.4 the consequences has been establish that most of the factors e- Learner's perception behind the selection of online e-learning platforms are - respondents give first preference to learning at unusual pace comfortably -data confirmations 23 percent ;second preference - Flexibility, access at any time any where I am 18 percent ;students give equal weight age two factors that is "all can hear lecture clearly and all study material MCQ availability by 12 percent ; 10 percent indicate PPTs are available right in front of every students; 8 percent indicate that lecture delivered by faculty who regularly handle the subject.7percent responded that online platform are cost effective; 6 percent express that Students can ask doubt without any hesitation; 4 percent give convenience has last preference.

4.5 Study On Students Perception For Not Opting On-Line Classes

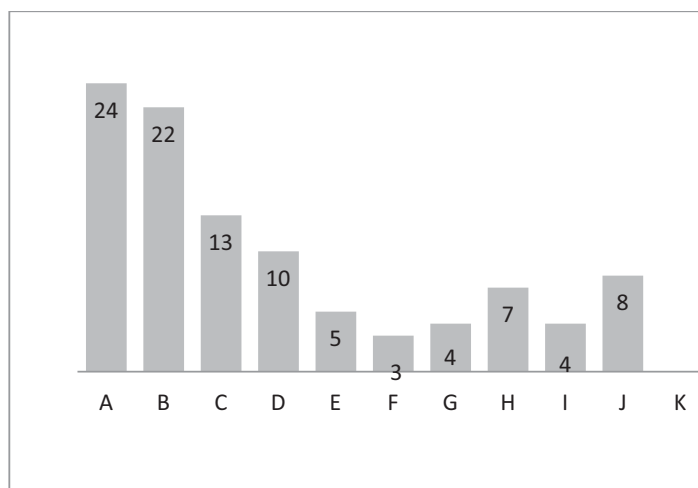
Study is also made an attempt to record the opinion of students about their perception for not opting on line classless with ten statements. Results are show in the following paragraph with chart and graph.

Table 4.5 shows Study on students perception for not opting on-line classes

Statements	Frequency	Percentages
a)They do not create real -class room environment	96	24
b) Peer learning not possible	88	22
c)They are monotonous/stereotype	52	13
d) No Interpersonal relationships	40	10
e) They will not improve writing and creative skill	20	5

f)Quality of the course material provided is not good	12	3
g) Lack of technical knowledge of online tutor	16	4
h) My situational encounters are not suitable like non readiness of devices and net connections	28	7
i) I can learn effectively with uninterrupted network connectivity	16	4
j) I get distracted with other internal disturbances at home viz. house hold work, TV, Chatting etc.,	32	8
TOTAL	400	100

Chart Showing Study on students perception for not opting on-line classes

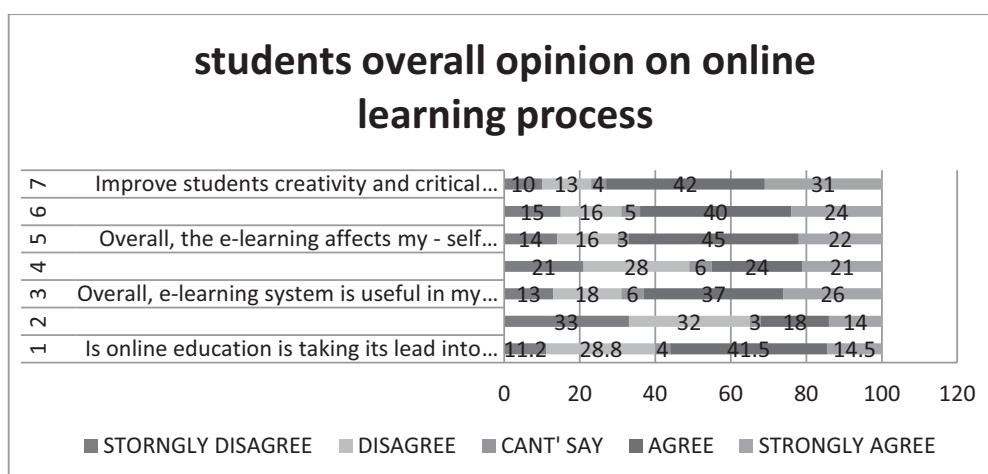


Researcher considered ten dynamics to study whether the online classes are as operative as physical class and to study what students encounter while attending online classes. From the above Table it is found that 24 percent of the students express that Online class do not create real traditional class room atmosphere 22 percent feels that Peer learning is not possible while 13 percent express that online classes are monotonous as same videos and voice are seen and heard, 10 percent express that in online class it is not possible to maintain Interpersonal associations so it does not give pace for sustaining personal connection among the students. 8 percent feels that, they are distracted with various activities at home like TV, conversation, household routine activities so they may be busy with these 7 percent opines that situational

challenges are not suitable like non availability of devices and net connection also, these methodological issues made the students lose their focus. 5 percent feels that online class will not improve writing and creative skill as the soft copies of the material are readily available. 4 percent of students impression is that lack of technical knowledge on the part of the tutor and poor network connection poses problems to learners and they can learn better with never-ending network connectivity, 3 percent sense that Quality of the course material, PPT and videos in case of online classes are not good and they will not support to become academic experts.

4.6 To Assess the Overall Opinion of Students on Online Class we have asked the students to rate statement and their experience on five scales

(a) Strongly disagree (b) Disagree (c) Can't say (d) Agree (e) Strongly agree



- Fig 4.6 Shows a Divergent stacked bar chart of indicators connect to dimension regarding "Is online education is taking its lead into day's middle-of-the-road education system". Firstly It is witnessed that 41.5 percent of the students agreeing ; 14.5 percent strongly agree 11.2 percent of the respondents strongly disagreeing 28.8 disagree to the announcement that "Is online instruction is taking its lead into day's conventional education system" while 4 percent of the respondents stopped neutral.
- Secondly, it is observed that only 18. percent of the defendants harmonizing and 14 percent strongly agreeing to the proclamation that Do you prefer LMS over Traditional University wisdom Process Cumulatively, about 32 percent are in favour of the above statement. On the other hand, 3 percent remained neutral, while 32 % of them are silent or can't say and

- another 33 strongly disagreeing to the proclamation that” Do you prefer LMS over Traditional University learning Process”.
3. Thirdly, it is pragmatic that only 37. percent of the respondents are likeminded and 26 percent of the respondents strongly agreeing to the statement that" Overall, e-learning system is useful in my scholarship "Cumulatively, about (37+26) 63 percent of respondents are in favour of the above testimonial. On the other hand, 6 percent of the respondents remained neutral, while 18. % of them disagreeing and another 13 percent strongly conflicting to the announcement that” Overall, e-learning system is useful in my study”.
 4. Fourthly, it is pragmatic that only 24 percent agree and 21 percent of the respondents strongly supportive to the statement that" Overall, the quality in using e-learning is easy to use "Cumulatively, about 45 percent of accused are in act of kindness of the above proclamation. On the other hand, 6 percent of the respondents remained neutral, while 28.% of them disagreeing and another 21 percent strongly acrimonious to the statement that” Overall, the quality in using e-learning is easy to use ”.
 5. Fifthly, it is pragmatic that only 41. Percent of the plaintiffs agreeing and 32 percent of the respondents strongly well-disposed to the statement that" Improve teenagers ingenuity and critical sophisticated "Cumulatively, about 73 percent of accused are in favour of the above statement. On the other hand, 4 percent of the respondents persisted neutral, while 10. % of them disagreeing and another 13 percent strongly dissenting to the statement .
 6. Sixthly, it is observed from the above swerving stacked bar chart of gauges refer to dimension "Is online education is captivating its lead into day's middle-of-the-road education organization" that 42 percent of the respondents agreeing; 20 percent strongly agree 15 percent of the respondents strongly disagreeing 16 disagree to the announcement that '.while 4 percent of the plain tiffs endured neutral Do you Rate your familiarity in K-LMS learning process the Best.
 7. Finally, it is pragmatic that 45 percent of the plaintiffs agreeing and 22 percent of the respondents strongly agreeing to the proclamation that, Overall, the e-learning disturbs my-self proficiency” Cumulatively, about 69 percent of defendants are in favour of the above your head statement. On the other hand, 3 percent of the plaintiffs persisted neutral, while percent of them 16 acrimonious and another 14 strongly conflicting to the statement Global, the e-learning affects my-self efficiency ”.

Conclusion

Technology is a tool that may and should be used successfully in the planning and delivery of educational processes. However, e-learning can also be utilised in conjunction with in-person instruction in which case the term "blended learning" is frequently employed. E-learning is naturally adapted to detached learning and flexible learning. It allows trainees to some extent to control their own knowledge. Online lessons are the only way to teach kids, especially in situations like the Covid lockdown period. The conformist classroom with blackboards do not appear to be being replaced by the K-LMS or any other e-learning platforms; rather, they appear to coexist alongside the current system. Electronic announcements are not always an effective substitute for in-person conversations because LMS is an excellent platform for both developers and learners to study and gain information, resourcefulness must be displayed in every academic institution through several schemes. The governing classes and organisations that provide online education may believe that most pupils have a reliable internet connection at home. Since most students choose real-time transport networks, which largely rely on solid internet connection, the internet issue we noticed is crucial to students' online learning experiences. Students who failed to properly set up the online learning platforms may lose confidence and enthusiasm for online learning, which would result in an unfavourable learning experience. Therefore, the eagerness of the internet substructure and the methodological abilities of the students continue to be the notable experiments for the widespread adoption of online learning. Researchers recommend that concerned authorities of the educational institutions provide free high-speed Internet access in college campus to facilitate students accessibility.

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