



The IOT Revolution in Education: Balancing Technological Advancement and Interpersonal Growth

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Abstract

Educational institutions in India have gone through the traditional methods of learning, i.e. delivering face-to-face lecture in class rooms and few of the academic institutions have gone through the blended learning. Still today a lot of educational institutions restrain themselves to the old procedures. The deadly disease wave called Covid-19 caused by Corona Virus shook the entire world and W.H.O declared it as a pandemic. The global education system was put to the test by this issue, and educators were abruptly obliged to switch to an online form of instruction. Many academic institutions were forced to completely switch to online teaching-learning.

Keywords: E-Learning. Impact. Interpersonal skills. Traditional methods.

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1 Introduction

Over the past ten years, there has been a noticeable increase in the number of people pursuing online learning as people have been able to acquire new skills through backend support of internet (Kamraju et al., 2024). People's lives now revolve around online learning to update their skills. Online gain the immense popularity as a result of the pandemic forcing colleges, institutions and businesses to adopt the remote work policies. Research and Markets predicted the online education industry would arrive \$350 billion by 2025 (Koksal, 2020; Mittal, 2020). The purpose of this chapter is to know about how the online platforms rise due to the impact of Covid-19 and how does learning in e-platforms will effect in the interpersonal skills of the student or the user. Online learning has been more and more popular lately since it is affordable, flexible, and accessible. Traditional educational institutions have been impacted by the digital transformation of education, which has brought up both new opportunities and challenges.

1.0.1 Pros of E-Learning

- Covid-19 pandemic, the tough situation not permitted the students to attend to the physical classes there by the educational institutions, corporate have gone through the means and ways to conduct the classes they arrived for a common conclusion that only the way to educate the student through Online (E-Learning) and getting things done by the employee through online (Selvaraj et al., 2021).
- E-Learning is a boon for the few girl children and differently-abled children are not attending to school or colleges due to the poor facilities there. In some rural areas students faced the network problems.
- One advantage is there for the E-Learning. If we miss the class, we can listen it later the recorded information. Few of the student have optimally utilized this benefit of flexibility in E-Learning during covid-19 Pandemic.
- Student can have a great opportunity to watch the E-content for more number of times until to understand the concept.
- Teachers can have the great opportunity to educate the student through technology i.e explain the concept by connecting the online videos, animations there by the student can understand the concept easily.

1.0.2 Challenges of E-Learning

- Physical learning, we can control the students through face to face interaction. Controlling the students became difficult i.e when asking questions students are not responded, in online mode it showing that they are present, if you ask question or attendance they won't respond (Hollister et al., 2022). Faculty can have a great confusion to give at-

tendance or not. Whether student understood the lesson or not these problems faced by the faculty.

- Continuously looking at the screen cause for eye and ear strain (Kaur et al., 2022).
- Class room environment is live in nature whereas getting it through online is boring.
- Class room integration is live and great opportunity to the student to develop their personality whereas scope is negligible through online.
- Some students do not have the internet facility so e-learning deepens the inequality between the rich and poor in 21st century.
- The rule like regularly attending the class to maintain 75% of attendance to allow the students to appear for the end semester examinations Due to the network problems, due to their poor financial capacity few students are suffered allot to buy smart phone to grab the network signal speed.
- E-Learning may not generate seriousness as classroom learning. So, students may not be motivated enough to listen to the class.
- The student or the parent should be the technical savvy to clear the technical issues if it happens. In most of the families' parents are not technologically educated to help their children in case of technical issues.
- It is the foremost responsibility of the parent to supervise their child when he attends to the online class because they are get addicted to the YouTube and the other apps. Keep an eye on them he/she listens the class and responding to the queries of their professor.

1.1 About the Market

Millions of people are using the different online learning sites which includes Udemy, Coursea, Lynda, Skill share and Udacity basing on their interest (Bankovska, 2023). The many user vertical are also shaping these platforms. Skillshare platform offers workshops and classes on variety topics like design, photography, writing and business for the students of all skill levels. Users can take the classes in a variety formats, including video lessons, interactive projects. One of the unique feature of Skill share is its community aspect, where students can interact and engage with their peers, ask questions, share feedback, and learn together (Rumiantsev, van der Rijst, & Admiraal, 2023). While Coursera primarily serves academics by providing access to university courses. Reputable universities are also democratising education by offering online courses. Online courses in the fields of computer science, engineering, mathematics, business, art, and personal development are available from Stanford University and Harvard University. From the end of the learners it's a big challenge to find what skills are emerging, how to cope up in global market. Even learned the skill set, they have to update themselves according to the changes in the external environment. Online learning is becoming a huge catalyser to the companies and

for the people to help them to adapt of this rapid change in the world (Besser, Flett, & Zeigler-Hill, 2022).

2 Objectives and significance of the Study

- To know about the awareness of E-learning platform
- To know about the usefulness of E-learning.
- To find out what type of problems student or user are facing related to service delivered by the E-learning platform.
- Effects of E-leaning on student's interpersonal skills.
- To find out the level of student's satisfaction from the e- learning platforms.

3 Research Questions

- The services provided by the E-learning platforms is useful for the future of students or not.
- Students are facing any problems while using the E-learning platforms.
- Is there any improvement in the interpersonal skills of students while using the platforms?
- Is the content explained in the platforms are easily understandable or not?

4 Conceptual Framework

Figure 1 shows the conceptual framework of the hypothesis.



Figure 1. Conceptual Framework

5 Analysis and Discussion

From the observational study it is clear that male percentage is 85.7 and female is 14.3%. 96.1% respondents are aware about E-learning Platform and 3.9% are not aware about E-learning platforms.96.1% respondents are aware about the login process of E-learning Platform and 3.9% are not aware about the login process of E-learning platforms. 52.4% Respondents are using Coursera, 12.8% respondents are using Unacademy, 6% respondents are using Udemy and 28.8% users are using other platforms (see table 1).A descriptive stastitics is given in Table 2.

Table 1. Types of courses

Courses	Frequency	Percentage	Cumulative Percentage
Coursera	53	52.4	52.4
Unacademy	13	12.8	65.2
Udemy	6	6	71.2
Others	29	28.8	100
Total	101	100	100

Some of the important key findings are:

- Is e-learning platform are useful for this statement 4.9% respondents stated strongly disagree, 10.8% stated disagree, 9.9% were neutral, 58.4% were agreed to this statement and 15.8% were strongly agreeing.
- Is the certificate provided by the E-learning platform is useful in future for this statement 5.9% respondents stated strongly disagree, 8.9% stated disagree, 10.8% were neutral, 57.4% were agreed to this statement and 16.8% were strongly agreeing.
- The content provided through E-learning platform is updated for this statement 3% respondents stated strongly disagree, 6.9% stated disagree, 13.8% were neutral, 66.3% were agreed to this statement and 10.8% were strongly agreeing.
- Is the e-learning platform requiring high bandwidth for this statement 1.9% respondents stated strongly disagree, 13.6% stated disagree, 41.5% were neutral, 37.6% were agreed to this statement and 4.9% were strongly agreeing.
- Did the platform is asking money for the certificate of completed course for this statement 3% respondents stated strongly disagree, 23.7% stated disagree, 24.7% were neutral, 45.5% were agreed to this statement and 4% were strongly agreeing.
- Are you able to manage both the education and courses in time for this statement 2% respondents stated strongly disagree, 14.8% stated disagree, 34.6% were neutral, 43.5% were agreed to this statement and 4.9% were strongly agreeing.
- Did you get improvement in your interpersonal skills from E-leaning Platforms for this

Table 2. Descriptive Statistics

Item	N	Minimum	Maximum	Mean	Std. Deviation
1. Are courses provided on the e-learning platform useful?	101	1	5	3.69	1.027
2. Is the certificate provided by the e-learning platform useful in the future?	101	1	5	3.70	1.044
3. Is the content provided through the e-learning platform updated?	101	1	5	3.77	0.811
4. Does the e-learning platform require high bandwidth?	101	1	5	3.29	0.852
5. Does the platform charge money for the certificate of a completed course?	101	1	5	3.23	0.958
6. Are you able to manage both education and courses in time?	101	1	5	3.35	0.865
7. Did you get improvement in your interpersonal skills from e-learning platforms?	101	1	5	3.63	0.946
8. Are the interpersonal skills you gained from e-learning platforms useful for your future career?	101	1	5	3.47	1.073
9. Do you enjoy learning through e-learning platforms?	101	1	5	3.48	1.092
10. Are the courses provided on the e-learning platform easily understandable?	101	1	5	3.59	1.002
11. Is the instructor of the course highly knowledgeable?	101	1	5	3.76	1.041
12. Are students able to interact with the instructor or trainer for any doubts?	101	1	5	3.66	0.993
Valid N (listwise)	101				

statement 3.9% respondents stated strongly disagree, 8.9% stated disagree, 18.8% were neutral, 60.3% were agreed to this statement and 17.8% were strongly agreeing.

- The interpersonal skills you gained from the E-learning platforms is useful for your future related career for this statement 8.9% respondents stated strongly disagree, 8.9% stated disagree, 17.8% were neutral, 55.4% were agreed to this statement and 8.9% were strongly agreeing.
- Do you enjoy learning through e-learning platforms for this statement 7.9% respondents stated strongly disagree, 10.8% stated disagree, 18.8% were neutral, 56.4% were agreed to this statement and 11.8% were strongly agreeing.
- Is the courses provided in e-learning platform is easily understandable for this statement 6.9% respondents stated strongly disagree, 5.9% stated disagree, 21.7% were neutral, 54.4% were agreed to this statement and 11.8% were strongly agreeing.
- Did the instructor of the course is highly knowledgeable for this statement 7.9% respondents stated strongly disagree, 4.9% stated disagree, 8.9% were neutral, 66.3% were agreed to this statement and 17.8% were strongly agreeing.
- Are the students are able to interact with the instructor or trainer for any doubts for this statement 4.9% respondents stated strongly disagree, 8.9% stated disagree, 17.8% were neutral, 54.4% were agreed to this statement and 14.8% were strongly agreeing

Hypothesis H0: There is no significance association between courses offered by E-learning platforms and students interpersonal skills(H0)

From the above correlation dependent variable is overall rating and independent variable are usefulness, problems faced by students, effects on interpersonal skills and level of satisfaction. Correlation is significant at 0.01 and 0.05 level. There is a significance between between courses offered by E-learning platforms and students interpersonal skills. So we can accept the alternative hypothesis (H1) and reject the null hypothesis (H0)

6 Conclusion

Online education is here and is highly likely to stay and grow. The review of its history clearly shows online education has developed rapidly, fuelled by Internet connectivity, advanced technology, and a massive market. It has evolved from 19th century correspondence programs to the 21st century's vibrant and well-designed institutional online offerings. We can well anticipate that online education will continue to increase its presence and influence higher education through a vigorous process of reshaping, refining, and restructuring. It is unlikely, however, to replace traditional higher education but merely to be an alternative. But, owing to its flexibility, accessibility and affordability, online education is gaining in popularity, especially for people who are otherwise unable. To enhance the performance of the online platform and address issues with slow loading times, it is crucial to implement optimizations that improve overall efficiency. Additionally, offering free

courses with certificates can attract a wider audience and encourage user engagement. By focusing on these improvements, the platform can provide a better experience for learners while simultaneously expanding its reach and reputation in the e-learning market.

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