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E-Learning: Analysis of rural youth's problems impeding accessibility

Kawita Bhatt and Rajshree Upadhyay

Abstract
The present study has analysed the process of e-learning in the rural areas done by the youths and investigated the problems that impede the accessibility. It was conducted in randomly selected Seven Senior Secondary Schools of the Udaipur district of Rajasthan. A sample of 140 rural youth was selected for the study. Findings of the study revealed that the majority of the respondents' mothers were illiterate (70%) whereas respondents' fathers were educated up to the primary level (34.29%) and secondary level (20 %). It was observed that 92.85 per cent of the respondents possessed smartphones. It was reported that while accessing e-learning respondents always faced the problem of difficult vocabulary and content not being available in the preferred language (29.28-33.57%). Respondents also mentioned that they always get stress on their eyes, increased fatigue levels due to e-learning and neck muscles were affected adversely by continuously studying via e-learning.

Keywords: Mobile learning, distance education, online learning, social media, media in education, Udaipur

1. Introduction

We need to bring learning to people instead of people to learning – Elliott Masie

India is an old country but a young nation where more than half of the country's population is under 25 years of age and the future of the country is in their hands. Youth is the time when innovative and creative thoughts and ideas pop up in mind and which shape up the community and the nation we live in, so the contribution of youth is important in structuring the nation. Young population has immense potential that can be utilized only if their they are educated and their skills are honed, but it is demoralizing to mention that India's adult literacy rate is about 71—64 per cent in rural areas as compared to 84 per cent in urban areas (Economic Times 2015) [3].

The advancement of internet technologies has been significantly observed in past decades and is proved most utilitarian in the educational sector. Internet is a global linking of computers that allows information and communication transfer. Information and Communication Technology (ICT) carry serious implications for the development possibilities in the contemporary world. In the context of student-teacher ratio and other factors affecting the quality learning of students, ICTs find a unique place to bridge the challenge. The Internet has immense potential to improve the quality of education, which is one of the pillars of sustainable development. It can improve the quality of education in many ways. It opens doorways to a wealth of information, knowledge, and educational resources, increasing opportunities for learning in and beyond the classroom.

ICT is an umbrella term used for sharing any type of information using the internet but if the internet is being used for educational purposes only then it is termed as e-education. E-education involves e-teaching, e-learning, e-registration, e-communication, online examination, and e-evaluation. Markus (2008) defined e-learning as a learning process created by interaction with digitally delivered content, network-based services, and tutoring support. Applications and processes of e-learning include computer-based, web-based, technology-based learning, and virtual education opportunities.

With the spread of novel coronavirus in India, state governments across the country decided to shut down the schools and colleges for indefinite time as a measure to control the widespread. Nobody knows when the colleges and schools will re-open; in such a situation shifting to online teaching seems a very viable alternative. Teachers and school administrators have been directed to come in touch with students through virtual lectures or platforms like Massive Open Online Courses, online classes through Google meet, zoom etc.

However, in the absence of physical classrooms and proper digital infrastructure, teachers as well as the students are facing exceptional challenges. These challenges worsen if the learners reside in rural areas. To make education available to every learner, the government of India is investing a number of resources and the quality time for promotion and implementation of e-learning. These initiatives are making difference in rural areas too but not reaping effective and noticeable results. To make the initiatives worth the investment, it is necessary to make the implementation of any project in a way to meet the needs of the target group. So it becomes imperative to analyze the real-life situation and the challenges that the beneficiaries face while accessing e-learning.

2. Materials and methods

The present study was conducted in Udaipur district of Rajasthan. There are 17 panchayat samities in Udaipur district out of which one panchayat samiti i.e. Badgaon was selected purposively as it is easily accessible. In view of the objectives and sample of the study information regarding the government Senior Secondary Schools in Badgaon Panchayat Samiti was gathered from nodal office of the Department of Education, Badgaon. From each selected school, list of students studying in 11th and 12th class was procured from the school office. A separate list of male and female students was prepared for each school. A sample of 10 students was selected from each list of male and female students drawing 20 students from each school. Thus, the sample of the study comprised of 140 youths (70 female and 70 male) from the 7 selected schools. Considering the nature of the study, objectives, and respondents to be surveyed, the questionnaire was selected as the most appropriate method for collection of data. To elicit required information, questionnaire was developed by the investigator after an extensive review of the literature and in consultation with experts. The questionnaire included both, closed-ended as well as open-ended questions. The information related to the extent of problems faced was recorded on a three-point continuum i.e. always, sometimes and never.

2.1 Mathematical formulae

For the analysis of data following simple statistical tools like frequency, percentage and Mean Per cent Scores were used:

1. **Frequency and Percentage**: This method was used to analyse the data regarding background information, availability of internet, availability of e-learning tools at home and school.
2. **Mean Per cent Scores (MPS)**: MPS were calculated to compare the extent of problems and constraints faced by male and female respondents.

$$\text{Mean Per cent score} = \frac{\text{Total score of the respondents}}{\text{Maximum score}} \text{X } 100$$

Categories of extent of problems and score range (MPS)

S No.	Extent	Mean Per cent Score
a)	Low	0-33.3
b)	Medium	33.4-66.6
c)	High	66.7-100

2.2 Results and discussion

The findings of the study revealed that from the total respondents that were included in study three fourth (75 %) were in 17-18 years of age group followed by 17.85 per cent respondents who were in the age group of 15-16 years and 6.42 per cent were in age group 19-20 year.

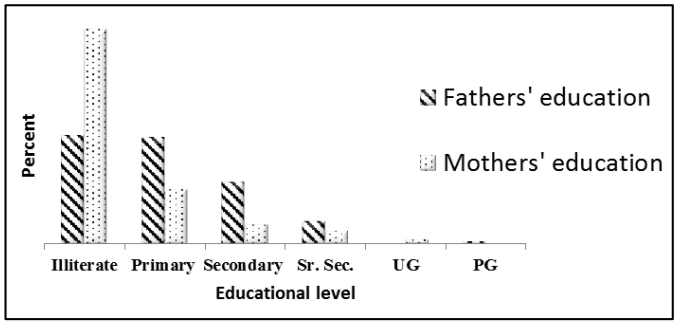

Fig 1: Percentage distribution of respondents' parents' education level

Perusal to figure 1 clearly depicts that one-third of the respondents' fathers were illiterate (35%) it is demoralizing to mention that 70 per cent of the respondents' mothers were illiterate. To explore the uses of new technology, the guidance of the elders at home as well as at schools and colleges is of utmost importance, but the situation of rural India can be contemplated where most of student's mothers are illiterate.

It is evident from table 1 that 89.29 per cent respondents family income was below 1 lakh whereas only 7. 14 per cent respondents had their family income between 1.1 lakh - 2 Lakh INR.

Table 1: Respondents distribution on the basis of family income (INR/ annum) Total (n=140)

S No.	Family Income (INR/ annual)	f	%
a)	36000- 1 lakh	125	89.29
b)	1.1 -2 lakhs	10	7.14
c)	2.1-3 Lakhs	2	1.43
d)	3.1- 4 Lakhs	1	0.71
e)	4.1-5 Lakhs	0	0.00
f)	5.1-6 Lakhs	0	0.00
g)	6.1 Lakhs and above	2	1.43

As Possession of the e-learning tools is imperative to access the e-learning material available on the web and in that family income can directly affect the purchasing power, it was observed that 92.85 per cent of respondents were employing smartphones to access the online available material. This may be because most of the respondent's family income was between 36000- 1 lakh INR per annum and smartphones these days are available at reasonable prices. It is important to note that 87.14 per cent of the girls were using the internet and on the contrary, all the boys (100%) were using the internet. The majority of the respondents (87.85%) used internet on their smartphones which makes e-learning more portable and easy to use.

2.3 Problem Faced By Rural Youth In E-Learning.

E-learning's time and place flexibility attracts many learners for online education. However, few problems are still encountered while accessing various e-learning tools such as adaptability struggle, technical issues, computer literacy, time management, distraction issues and motivation problems. Major problems that were faced by the rural youths were as follow:

2.3.1 Personal problems: Data in Table 4.2 clearly flashes

that 29- 43.57 per cent always faced the problems like cyber café was far away from their homes, lack of internet facilities at their homes and lack of access to websites. Nearly one fifth of the respondents (24.28-26.42 %) always face the problems of lack of skill to access internet and difficulty in handling internet whereas 36.42 – 46.42 per cent respondents faced these problems sometimes. Further the data reveals that these problems were faced to an average extent with MPS between 42.50 and 63.57. Total (n=140)

Table 2: Distribution of respondents by problems faced in e-learning

S No.	Problems	Extent of problems (%)			MPS
		Always	Sometimes	Never	
	Personal problem				
1.	Cyber café is far from home	43.57	40.00	16.42	63.57
2.	Do not have internet facilities at home	37.14	41.42	21.42	57.86
3.	Lack of skills to access internet	26.42	44.28	29.28	48.57
4.	Lack of skills to access websites	29.28	46.42	24.28	52.50
5.	Difficulty in handling internet	24.28	36.42	39.28	42.50
	Economic problem				
6.	Limitation of time at café	28.57	37.85	33.57	47.50
7.	Do not have own computer	27.14	37.85	35.00	46.07
8.	Internet plans are expensive	31.42	36.42	32.14	49.64
	Technical problem				
9.	Non-functioning of PC	29.28	43.57	27.14	51.07
10.	Difficulty in handling computer	17.14	57.14	25.71	45.71
11.	Uncertainty of connectivity	30.00	50.00	20.00	55.00
12.	Virus attacks	32.85	46.42	20.71	56.07
13.	Slow speed	32.14	42.14	25.71	53.21
14.	Problem in file downloading	25.00	50.71	24.28	50.36
	Language problem				
15.	Content may not be available in preferred language	33.57	42.85	23.57	55.00
16.	difficult vocabulary	29.28	40.71	30.00	49.64
	Related to authenticity of information				
17.	Overloaded information availability	32.14	48.57	19.28	56.43
18.	Unorganized information	28.57	52.14	19.28	54.64
19.	Difficulty in finding relevant information	27.14	51.42	21.42	52.86
	Health problem				
20.	stress on eyes	37.14	50.00	12.85	62.14
21.	Effect on neck	35.00	49.28	15.71	59.64
22.	Increased fatigue	37.85	48.57	13.57	62.14
23.	Back ache	27.85	57.14	15.00	56.43

2.3.2 Economic problems: Information of table further reveals that 27.14 – 31.42 per cent respondents always faced the problems of not having their own computer, imitated time at café and expensive internet plans. These obstacles were faced to an average extent with MPS ranging from 46.07 to 49 from Table 4.2 that more than one third of the respondents (35-37.14%) mentioned that they always get stress on their eyes, fatigue levels has been increased due to e-learning and neck muscles were affected adversely by continuous access of e-learning materials sitting at a place. Also 27.85 per cent get back ache during e-learning. Further 48.57 – 57.14 per cent respondents faced these health problems sometimes whereas 12.85 - 15.71 per cent never faced such problems. These problems were faced by the respondents to an average extent with MPS ranging between 56.43 and 62.14.

2.3.3 Technical problems: There are few challenges with regard to the use of e-learning as there is a lack of proper infrastructure and e-learning is a little complex system with multiple forms. Nearly one-third of the respondents (30-32.85%) always faced a few technical problems such as virus attack, slow speed, and uncertainty of connectivity. Further, 17.14- 29.28 percent respondents faced problems like non-functioning of devices, the problem in downloading files, pdf (Portable Document Format) files takes too long to open and difficulty in handling computers. Similarly 42.14 to 57.14 percent respondents realised these problems sometimes whereas, 20- 27.14 per cent respondents never faced any of these technical problems.

It can be anticipated that respondents faced these technical problems to an average extent with MPS ranging between 45.71 and 56.07. findings are in line with Kumar *et al*. (2007) [5] that 77.5 per cent of respondents faced the problem of slow functioning, getting distracted from online advertisement (70%), inability to find sufficient data (60%), improper service provided in cyber café (42%), electricity failure (37.5%) and internet-oriented education is not being imparted (35%).

2.3.4 Language problems: Most of the information on internet is available in English language as it is internationally accepted. Rural youth that lacks the grasp on English language sometimes face the problem of understanding it. Not only English but other languages also have similar problems of apprehension and difficult vocabulary.

It is evident from Table 4.2 that similar problems were faced by respondents also. About one third of the respondents (29-33.57 %) mentioned that they always face the problem of difficult vocabulary and content not being available in the preferred language. Further, it was figured out that respondents faced such problems to an average extent with MPS ranging between 49.64 and 55.0

2.3.5 Related to the authenticity of information: There is ample information available online and offline these days but we cannot deny that all the information available is not always authentic.

The validity of the information should be confirmed from multiple sources as the information available is written by so many experts of a particular field. Such problems were faced by the respondents too contemplation of Table 4.2 reveals that 27.14 – 32.14 per cent respondents always faced the problem of availability of overloaded information, unorganised information available on various e- tool and difficulty in finding relevant information. Nearly half of the respondents (48.57 - 52.14 %) faced these problems sometimes whereas 19.28 – 21.42 per cent had never faced any of the problems. These types of problems were faced by respondents to an average extent with MPS ranging between 52.86 and 56.64.

2.3.6 Health problems: There is no doubt to ascertain that e-leaning is incredibly convenient but using e-learning devices for longer can certainly risk the health of the user. It is evident from Table 4.2 that more than one third of the respondents (35-37.14%) mentioned that they always get stress on their eyes, fatigue levels has been increased due to e-learning and neck muscles were affected adversely by continuous access of e-learning materials sitting at a place. Also 27.85 per cent get back ache during e-learning. Further 48.57 – 57.14 per cent respondents faced these health problems sometimes whereas 12.85 - 15.71 per cent never faced such problems. These problems were faced by the respondents to an average extent with MPS ranging between 56.43 and 62.14.

Similar findings were reported by Kumar *et al*. (2007) [5] who revealed that 77.5 per cent of respondents expressed slow functioning, getting distract from online advertisement (70%) inadequate internet facility by university (65%), inability to find sufficient data (60%), improper service provided in cyber café (42%), and internet oriented education is not being imparted (35%).

Further for overall analyse the problems ranking was given to the problems on the basis of overall MPS. The results were derived by calculating overall MPS of the categories of problems containing the statements and then the problems were ranked. From Table 4.3, it can be concluded that health problems were most prevalent and got the first rank with MPS

Table 3: Overall Mean Per cent Score of the problems faced by the respondents in e-learning

S No.	Category	Male	Female	Total	Ranking
1.	Personal problem	55.57	50.43	53	III
2.	Economic problem	50.47	45	47.74	VI
3.	Technical problem	55.10	48.88	51.99	V
4.	Language problem	55.00	49.64	52.32	IV
5.	Related to information	58.33	50.95	54.64	II
6.	Health problem	60.35	59.82	60.08	I

60.08 followed by problems related to information (54.64MPS) and personal problems (53MPS). Language problems (52.32MPS) were ranked fourth followed by technical problems.

Similar results were reported by Fasae and Aladeniyi (2012) who revealed that problem encountered while accessing e-learning content via internet were slow access speed as the leading problem with 96 per cent respondents followed by difficulty in finding relevant information by 82 per cent respondents.

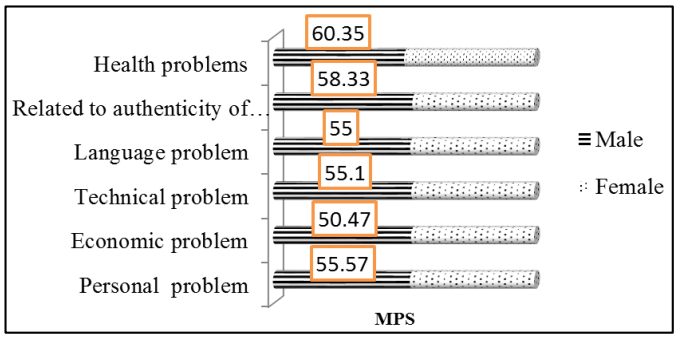

Fig 2: Overall MPS of problems faced by the respondents

2.4 Recommendations

On the basis of results of the study and their thorough analyses following recommendations should be taken into consideration:

i) Similar studies need to be conducted in various states of India to have overall picture challenges faced the rural youth in accessing e-learning and availing various government schemes.

ii) Maximum use of e-learning tools should be incorporated in the course curriculum of schools and universities. More computers, laptops, smart classrooms, and internet facilities should be provided in schools and universities.

iii) Under Corporate Social Responsibility the private organizations needs to make efforts in making e-learning tools available to all the underprivileged youth, as they have the power to lift the country to the zeniths of development in every aspect.

3. Conclusion

After thorough scrutiny of the entire findings of the study, it can be concluded that although e-learning reached India a little late but of course it is being accepted by the user. Rural areas often struggle to achieve the same educational standards as more densely populated regions. Still, the advanced technologies are reaching the rural area but the adoption of e-learning is very low. A gloomy picture of the rural areas of the Udaipur district of Rajasthan state is reflected from the present study and it is heart-wrenching to mention that the population of the rural youth was in darkness as most of the respondents had average knowledge of e-learning. More than half of the respondents (56.42%) were using e-learning tools to a medium extent whereas 19.28 percent were using them to a high extent. the extent of use of e-learning tools was higher for male youths as compared to females. Further, it can be concluded that health problems were most prevalent with MPS 60.08 followed by problems related to information (54.64MPS) and personal problems (53MPS). Economic problems were least faced with MPS 47.74. There should be effective planning and execution of all the initiatives taken by the government to make the education accessible in every corner of the country and make the picture cheerful. It is not only the responsibility of government organizations but various private sectors need to shift the paradigm and anticipate the issues and should start making efforts to promote e-learning among rural youth.

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5. References

1. Anand R, Saxena S, Saxena S. E-learning and its impact on rural areas. International Journal of Modern Education and Computer Science. 2012; 5:46-52.
2. Dudhani M. A comparative study on use internet among PG boys and girls of MPUAT, Udaipur. Masters of Science thesis submitted to Maharana Pratap University of Agriculture and Technology, Udaipur, Rajsthan, 2012.
3. Economic Times. Literacy rate at 71% in rural India, 86% in urban: Survey. https://economictimes.indiatimes.com/news/economy/indicators/literacy-rate-at-71-in-rural-india-86-in-urban-survey/articleshow/47886609.cms. 18 April, 2015.
4. Fasae JK, Aladeniyi FR. Internet use by students of faculty of science in two Nigerian University. http://unllib.unl.edu/LLP/ retrieved. 17.9.2018
5. Kumar S, Jagadeeswary V, Savitha B, Reddy M. Internet utilization pattern of veterinary students- A critical analysis. Indian Journal of Animal Science. 2007; 41:167-169.
6. Sonkar SK, Srivastava P. Use of open courseware by PG Students of Babasaheb Bhimrao Ambedkar University, Lucknow: With special reference to E-PG Pathshala. http://ir.inflibnet.ac.in/bitstream/1944/2088/1/10.pdf retrieved on 5 April, 2015.
7. World Bank. Introducing the online guide to the world development indicators: A new way to discover data on development. http://blogs.worldbank.org/opendata/introducing-online-guide-world-development-indicators-new-way-discover-data-development. 18.12.2017
8. Yadav L. Usage of internet in the teaching and learning process of education in the rural and urban areas. International Journal of Advance Researches, Ideas and Innovation in Technology. 2017; 3:870-875.