A STUDY ON PROBLEMS AND CHALLENGES OF VIRTUAL EDUCATION AMONG RURAL STUDENTS IN INDIA WITH SPECIAL REFERENCE TO ERODE DISTRICT

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ABSTRACT

Education is the fundamental rights in our constitution. Every citizen has sole rights to educate without any discrimination on the basis of caste, religion, gender, class of the people. In our country, after the independence, the government gives at most priority to the education and as a result there is a gradual increment in the ratio of the literacy. India is basically agricultural oriented country. So, large number of population belongs to the rural area. It is generally difficult for the government to attain full potential from rural area owing to its vast reachability. During Covid 19, Education is one of the fields that get affected noticeably, especially rural education which affects unfavorably. There are 6,38,000 villages in India among that 1303996 or more than one million rural schools are operable. Urban students are inclined to ICT (Information Communication Technology) facilities than rural students. The school education in rural India is largely sagging on Government and Government aided schools. The journey of education in rural India is oppressive; rural whelps are facing numerous challenges till they finish their tutelage. In March 2020, when all educational institutions athwart India carted to virtual and distance learning modes to assent with nationwide complete lockdown, the rural students are already having significant downsides are now exacerbated by virtual mode of education. This paper enumerates the problems and challenges faced by the rural students in virtual education and suggest some of the possibilities in ensuring the utilization of ICT tools and facilities among rural students.

Key words: Education, Rural, Virtual Education, Information Communication Technology.

INTRODUCTION AND DESIGN OF THE STUDY

INTRODUCTION OF THE STUDY

Right to Education is the foremost right of every resident of India. We are still floundering to hit Universal enrolment, retention and quality education. There are 6,38,000 villages in India which has morethan one million rural schools. Government tends to boost the educational level and literacy rate in India.

Our regime had taken lot of initiatives to increase the literacy rate of rural people by providing adequate infrastructure, road facilities and qualified mentors to support the students. India's higher learning belt is being metamorphosed by marvelous grasp in Internet facilities and the openness of devices like computers, mobiles, etc. Multiply reach can be made possible by technology and its utilization in large byrural population.

Internet plays a vital role in all domains due to its reachability at anytime and anywhere. Virtual learning is drifting rapidly in the world of Internet. E-Learning is a composite of learning benevolences and technology to deliver eminent values. Due to Covid 19 pandemic, modern means of education become theneed of the hour for all educational institutions since the end of March 2020.The uncertainty of resuming normality for school, universities and colleges at normal capacity is still puzzled. The challenge can be overcome by E-Learning initiative. Virtual learning penetration in rural India becomes a tough task and our government is taking lot of efforts for its reach and quality.

STATEMENT OF PROBLEM

Virtual Learning doesn't get well for rural students as it lacks proper digital infrastructure, no access for supplemental education, computer education, network connectivity, etc. Another pitfall of e-learning is assessing the students by conducting assessments. The possibility of understanding level and interaction level of students through e-learning is highly at stalk. Rural families those rely on mid-day meal scheme to feed their children lack financial privilege to support their children's education. Moreover, the failure of technical skills to cope with virtual schooling is a big challenge for rural students.

The purpose of this research is to study the challenges and problems faced by the rural students towards virtual education.

OBJECTIVE OF THE STUDY

1) To study in detail about the problems that hindrances rural people (with special relevance to Erode) from getting virtual education.
2) To find out the barrier that prevents rural people from getting accustomed to the concept learning Via Virtual Education.
3) To provide possible means of ideas for overcoming challenges in e-learning faced by rural people .
4) To Have an Inclusive view on the affordability of Rural people to switch between modes of Learning (i.e. online and offline).
5) To assess the amount of knowledge possessed by rural students in accessing Internet.

SCOPE OF THE STUDY

In our new and changing world digital learning act as an eye-opener to bridge the gap between education and employment by digital learning. It knocks all loop of the life, for the school students, youths in the universities, working people, those who willing to have a startup. Without limitations it creates impact of our future. Though this medium, the students can explore their knowledge and shall have better understandings. Also it encouraged youth towards application based learning. Many online courses and government initiatives like Swayam, MOOC, etc., are now available for access which empowers the rural youths and develop their employability skill.

LIMITATION OF THE STUDY

The study was conducted only in Erode district. This may not give a generalized conclusion. The time period of the study was also limited. As the study is restricted with a small number of students mainly belonging to a particular area, generalization of the findings without additional research will not be free from flaws. The result may or may not be applicable to other places.

RESEARCH METHODOLOGY

Descriptive Research is used in this study. The sample size of this study is taken as 110. Non-Probability Convenience sampling techniques is preferred for this study. Primary data was obtained from the respondent's through personal interview which is widely used and well-known method of survey, through a well-structured questionnaire. Secondary data is either published data or unpublished data collected from the internet is used. In this survey, the questionnaire which is used consists of multiple choice questions, close ended and open ended questions.

STATISTICAL TOOLS

The data gathered for the study were consolidated in relevant table and classified under relevant headers. Statistical Techniques such as Percentage analysis, Chi-square Analysis and Weighted average ranking analysis were used to analyze the data.

REVIEW OF LITERATURE

As Said by Deepali Pande and others in 2016, regarding E-Learning is that "Major Barrier to the Growth and adaptation of virtual education is the poor quality acquisition Practices" particularly in public sectors. So thereby arises a compulsion on the E learners to make a complete and thorough assess on the E learning Software to have a desirable outcome in the Development of knowledge, learning outcomes, performance outcomes and also in order to make the money spent on E learning to be Fruitful. In Accordance with Hardik Patel and others (2014), learning process can be tremendously improved with the usage of E learning tools and also promotes learn earn in a Bother free surrounding. Carrying the Learning process wherever you go without any hesitation is considered as one of the major benefits of e learning concept as E learning cannot be Cramped at any environment. All you need to Do is just you have to join a group or community of people with common fellowship which helps you get all update.

DATA ANALYSIS AND INTERPRETATION

Table 1: Respondent's demographic profile

Demographic profile	Classification	Average Respondents	Percentage(%)
Gender	Male	78	71
	Female	32	29
Educational Qualification	Up to 5th standard	01	01
	6th to 9th standard	04	04
	10th to 12th standard	24	22
	UG	74	67
	PG	07	06
Age Group	Below 10 Years	01	01
	11 to 17 Years	16	15
	18 to 21 Years	87	79
	Above 22 Years	06	05
School/Institution	Government	08	07
	Private	102	93
Family Income Per Year	Below 10000	25	23
	10001 to 20000	37	34
	20001 to 30000	22	20
	Above 30001	26	24

From the above mentioned Demographic Profile it is inferred that majority of the respondents were Male which holds 71% in Total respondents, 67% were educationally qualified as UG, 87 respondents out of 110 lie between age category of 18 to 21 years were 93% of the respondents were educated in Private institutions and 34% of people earn Rs 10,001 to Rs 20,000 per year.

Table 2: Connectivity details and accessibility

Connectivity detail and accessibility	Classification	Average respondents	Percentage(%)
Network connectivity in your area	Available	97	88
	Not Available	13	12
Strength Of the Network connectivity in your area	Weak	10	09
	Moderate	72	66
	Strong	28	26
Data Preference Per Day	500 MB	05	05
	1 GB	28	26
	1.5 GB	48	44
	2 GB	29	26
Your familiarity with Technology	Not So Familiar	17	16
	Moderately Familiar	66	60
	More Familiar	27	25
Selection of the Applications whichare familiarly using the virtual Education	Gmeet	64	58
	Gmeet, Zoom	23	21
	Ms Teams	02	02
	Gmeet, Zoom, Webex	01	01
	Zoom	14	13
	Gmeet, Ms Team	02	02
	Gmeet, Zoom, Ms Team	03	03

	Zoom, Ms Team	01	01
Availability of the Internet Café InYour Area	Yes	49	45
	No Device	61	56
Device using for the online Class	Desktop	03	03
	Mobile	86	78
	Laptop	12	11
	TV	06	06
	No Device	03	03
Usage of Education TV offered bythe Government	Yes	20	18
	May be	14	13
	No Device	76	69

As shown in the above mention table 97 respondents out of 110 were provided with Network availability in their area whereas 66% of them has a moderate, 26% of them has a strong and 9% of them has a weak Strength when it comes to network connectivity. Mostly 60% of the respondents were moderately familiar with technology and are more familiar with the application Gmeet were 78% of them Mobile phone for Online classes.

Table 3: Quality of virtual education

Quality of virtualeducation	Classification	Average respondents	Percentage(%)
Quality of E-Content in Virtual Classes	Very Good	41	37
	Good	49	45
	Fair	12	11
	Poor	08	07
Student and Teacher interactionLevel during virtual education	Extremely effective	12	11
	Effective	42	38
	Moderately Fair	38	35
	slightly Fair	09	08
	Not at all Effective	09	08
Level of Doubt Clarification inonline Education	Good	23	21
	Fair	66	60
	Not so Good	21	19
Awareness of Online material availability	Yes	87	79
	No	23	21
Understanding Level of e-content	Good	16	15
	Fair	74	67
	Not so Good	20	18

As inferred in the Above table 45% rate the quality of E-Content as good, 38% of them say that Student and teacher interaction Level is effective and 66 out of 110 Respondents say that the level of doubt clarification is Fair in Online classes and 79% of them were aware and 21% are not aware of available online material.

Table 4: Environmental distractions during online class

Environmental Distractions	Respondents	Percentage (%)
Family Distractions	29	26
Surrounding Noise	36	33
Social Media	40	36
Others	05	05

As Inferred in the above table mostly 36% of the respondents were Distracted by social media whereas 33% by surrounding noise, 26% by Family and 5% by Random Factors.

Table 5: Knowledge incurred and understandability

Knowledge incurred and Understandability	Classification	Average respondents	Percentage(%)
Knowledge and skillsincurred using virtualEducation	25% Below	12	11
	50%	48	44
	75%	41	37
	100%	09	08
Understandable level of online material	25% Below	09	08
	50%	65	59
	75%	30	27
	100%	06	05

As shown in the above Table it is possible to conclude that 44% of them incurred 50% and 8% of them incurred 100% of knowledge and skill development via virtual education and 59% of the respondentsstate that understandable level of online material is only 50% .

Table 6: Problems in online education

Ranking of the Problems/Problems	Virtual Class Engagement (%)	Health Issues (%)	Technical Issues (%)	Time Management (%)	Distractions (%)
Highly Satisfied	12	16	29	17	28
Some What Satisfied	16	24	25	19	15
Moderate	41	29	26	39	35
Less Problem	11	12	07	11	11
No Problem	12	19	12	14	12

Above shown are the Various Problems acts to happen during online Education were 41% of them lack Virtual Class Engagement and only 12% of them has less health issues and 35% of them were Distracted Moderately during virtual education.

Table 7: Level of satisfaction towards online class

Level of satisfaction	Average Respondents	Percentage (%)
Highly Satisfied	22	20
Neutral	70	64
Somewhat dissatisfied	10	9
Highly Dissatisfied	08	07

When it comes to Satisfaction level, that 64 % of the respondents are neither satisfied nor dissatisfiedwith the online classes, only 20% of the respondents are satisfied with the online classes.

RANKING ANALYSIS

Table 1.8: Difficulty during virtual classes

S.no	Factors	Score	Rank
1	Digital Infrastructure	503	I
2	Communication	349	III
3	Material Accessibility	339	IV
4	Level of Understanding	351	II
5	Adaptability	324	V

From the above table it is found that, the respondents rank security that digital infrastructure is the foremost difficulty they are facing in virtual classes, level of understanding is ranked as second difficulty level, communication is stated as third rank in difficulty, material accessibility ranked fourth while adaptability ranked five in the level of difficulty during virtual classes.

CHI SQUARE ANALYSIS

NULL HYPOTHESIS:

There is no significant relationship between Strength of Network Connectivity and Average Hoursattended per day by students during virtual class.

ALTERNATIVE HYPOTHESIS:

There is significant relationship between Strength of Network Connectivity and Average Hours attendedper day by students during virtual class.

Table 9: Relationship between network strength and average hoursattended per day

Strength of Network Connectivity	Average hours attended per day				
	1hr	2hrs	3hrs	4hrs	5hrs
Strong	6	1	6	7	8
Moderate	7	7	11	15	32
Weak	3	2	2	1	2

CHI SQUARE TEST

Factor	Calculated value	Table value	Degree of freedom	Level of significance
Strength of Network Connectivity	35.180	15.507	8	0.05

It could be observed from the above table that the 35.180 is greater than the 15.507. Hence, the null Hypothesis is rejected and it is concluded that there is significant relationship between Strength of Network Connectivity and Average Hours attended per day by students during virtual class.

SUGGESTIONS

Government has taken many initiatives to encourage students by providing many online portals and educational websites to empower the students and their knowledge, the rural students can have a better utilization of that. The digital infrastructure and network connectivity strength has to improvise for the better penetration of virtual education in rural areas. Introducing multimedia teaching tools like digital teaching system, digital content, digital lab, digital library, etc. will enhance the education level in rural areas. Providing proper training to teachers will support digitalization of education in rural area and will reduce the dropout rate. Students should be encouraged to have interactions with teachers during online classes.

CONCLUSION

Access to Information technology and digitalization pave way for the development of any society which is applicable for rural areas too. The socially marginalized community can attain their appropriations with the help virtual learning. Present scenario welcomes

the Digital India Programme, which aids in many ways. E-learning intercede in the rural areas will assuredly pave way for sustainable growth of rural areas.

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