

Use of ICT at Schools in Rural Areas in Lower Subansiri District, Arunachal Pradesh

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ABSTRACT

This study aims to determine the use of ICT (information and communication technology) in rural schools in Lower Subansiri District, Arunachal Pradesh. The data collection was done and gathered by emailing the numbers of closed-ended questionnaires in Google Form format to each surveyed school in Lower Subansiri District. A total of nine responses were received from different schools in Lower Subansiri District. The findings of the study showed that 78% of schools have projector facilities, 56% the smart board facilities, 67% the internet connection facilities, and 100% of schools have computer facilities available in the surveyed schools in Lower Subansiri District.

Keywords: Education, ICT, digital, Subansiri, Arunachal Pradesh

INTRODUCTION

In today's world, we can easily access any detail of information in a few seconds. This is due to the availability of technology in today's world. Even a single word means that today we can easily search and google from our smartphone or laptop. Information and communication technology (ICT) is a mode of information we mostly try to use in the education sector to support, enhance, and optimize the delivery of information. The types of devices or technology in ICT in the education sector that we mostly use are projectors, smart boards, digital libraries, wireless network computers, etc.

It has a huge advantage for schoolchildren; hence, it involves all the senses of the students in learning and makes their learning interesting about any subject. In simple words, it enhances the curriculum of the education sector and provides the needs that are required by each student. Even inclusive education helps to meet the needs of those students also who are differently abled. ICT helps those children to access learning in various ways at their convenience. Lastly, it promotes and improves the digital culture in the education sector.

By introducing ICT in the education sector, it converts the hard work of both teachers and students into smart work. Teachers can divert the focus and increase the participation of students more easily in their subject matter. Also, introducing ICT, provides many various ways for students to learn about a topic, which makes their learning fun and interesting.

Moreover, in today's world, our country is trying its best to provide effective communication technology for effective learning, both in urban areas and nowadays in some rural areas too. So that every child can get equal opportunities to access effective learning techniques like information and communication technology (ICT) in general.

OBJECTIVES

The main objective of this study is:

1. To find ICT facilities in the education sector in rural areas like Lower Subansiri district.

LITERATURE REVIEW

Dutta & Hazra (2023) conducted a study on the Use of ICT in Rural Schools of West Bengal: Constraint and Consequences.

The findings of the study showed that there are many opportunities for ICT access with existing resources if it is properly used and utilized. Limited ICT resources, Poor internet connectivity, and a lack of skilled teachers are a few reasons that make it difficult for the proper implementation of ICT in rural schools.

Hans & Hans (2022) conducted a study on the Role of Information and Communication Technology (ICT) in the Indian Higher Education System.

The findings of the study showed that the increasing use of information and communication technologies (ICTs) has brought immense changes to teaching and learning at every level of higher education systems, leading to quality enhancements.

Kumari (2021) conducted a study on Opportunities for ICT initiatives: the biggest challenge for Education during the COVID-19 pandemic.

The findings of the study showed that closure of all educational institutions during the lockdown, there has been a change in the education system. During the lockdown, the e-learning platform was introduced so that everyone could get an education at home. There has been a huge increase in the use of information and communication technology tools or online learning software during COVID-19.

Kumar & Palukuri (2020) conducted a study on the Use of E-Learning Tools in Teaching and Learning English.

The findings of the study showed that ICTs help to learn language skills independently. The ICT tools provide opportunities for motivating students to learn by providing collaborative and new techniques for learning languages.

Tokareva et al. (2019) conducted a study on Innovation and communication technologies: Analysis of the effectiveness of their use and implementation in higher education.

The findings of the study showed that the way to solve the problem of using and introducing innovative technologies in the higher education sector, the main point is to reorganize all aspects, i.e., completeness of education programs, teachers' knowledge of technologies, and technical support provided by universities.

From the above reviews, we can conclude that introducing multiple ICT app resources in the education sector brings an abundance of opportunities for learning in various ways. However, a lack of skilled teachers, poor internet connections, and improper implementation of ICT resources can hinder its effectiveness in schools and at the Higher education level.

METHODOLOGY

This survey has been done by providing closed-ended questions in a Google form regarding the ICT resources to each 9 surveyed schools in Lower Subansiri District, Ziro, Arunachal Pradesh. Both government and private schools have been selected randomly based on the availability of ICT resources in rural areas of the Lower Subansiri District. The results were analyzed based on the data that had been collected through a Google form.

DATA COLLECTION

The data has been collected from a total of 9 schools in Lower Subansiri District, Arunachal Pradesh, i.e., 3 government schools and 6 private schools in total.

Table 1. Showing data collections of ICT tools in various schools in rural areas of Lower Subansiri District, Ziro, Arunachal Pradesh.

School	S1	S2	S3	S4	S5	S6	S7	S8	S9
No.of projector	NIL	2	2	1	6	1	2	NIL	2
No. of smart board	NIL	3	6	6	NIL	NIL	8	4	NIL
Internet Connection	NO	YES	YES	YES	NO	YES	NO	YES	YES
No. Of Computers	15	10	8	12	10	8	6	5	7

Note. School names were kept anonymous and they were represented by S1, S2,..

DATA ANALYSIS

The data analysis was a descriptive statistical method calculating percentages and graphic representatives by using Microsoft Excel 2021.

Total numbers of Projectors in School

Projector is an ICT tool that helps to make lessons more engaging and interesting. It helps students to be more engaged in collaborative learning, better understanding, and more participation in the learning process.

Q5. Total number of projectors in School?

9 responses

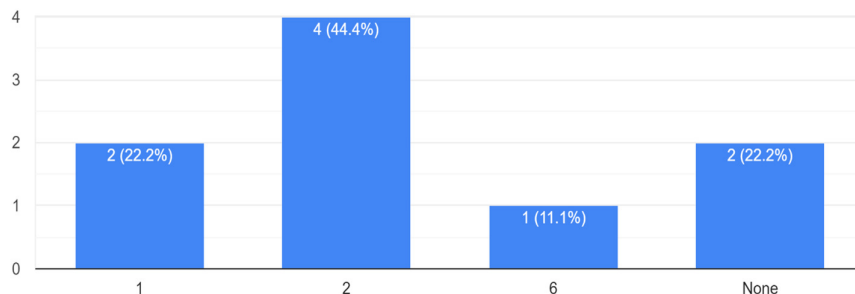


Figure 1. Graph showing the total number of projectors in school.

Data shows that a very limited number of projectors are available in these survey schools. Only one school has been provided with six projectors, two numbers of projectors in four schools, one number of projectors in two schools, and none of the projectors in two schools.

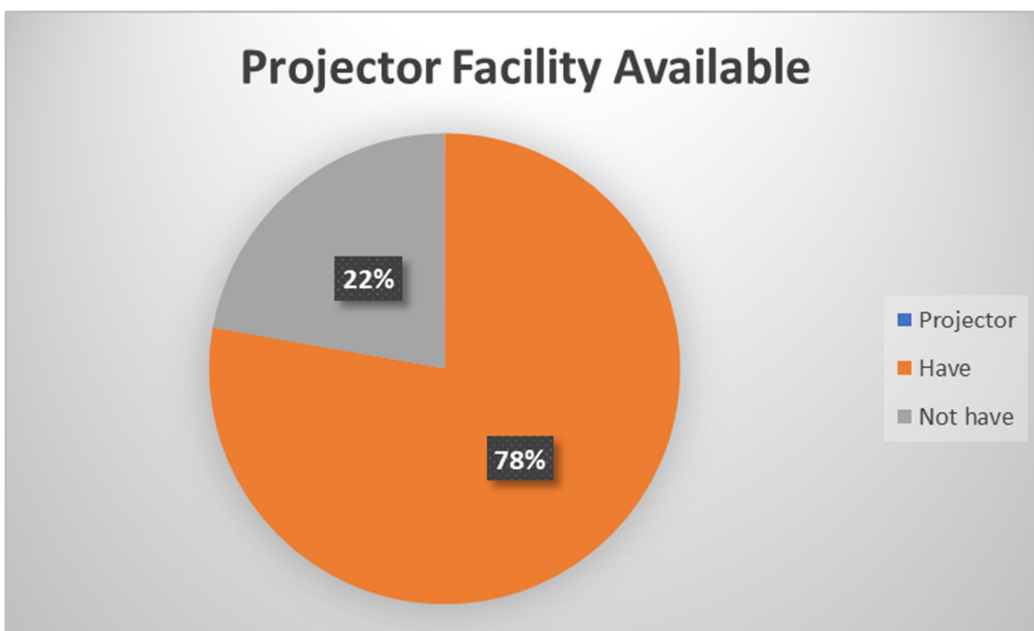


Figure 2. Projector Facility Available at Schools.

Total number of Smart Boards in School

Smartboard is an ICT resource tool that is an interactive whiteboard.

Q6. Total number of smart board in School?

9 responses

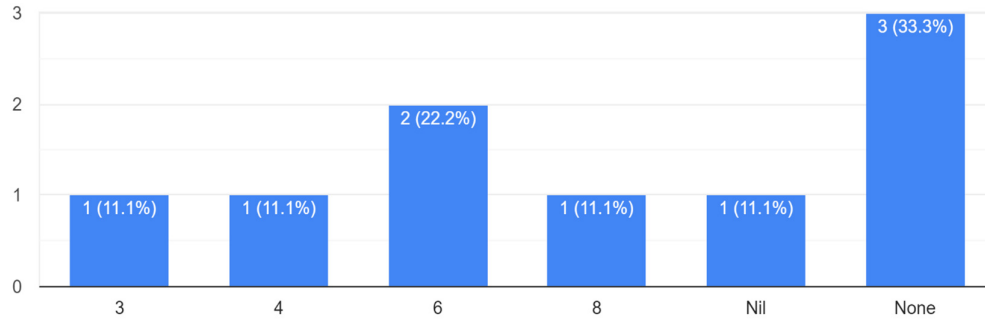


Figure 3. Graph Showing the Total Number of Smart Boards in Schools.

Data shows that most schools do not have smart boards on their campuses. Only a few schools among these can afford to accommodate smart boards in school.

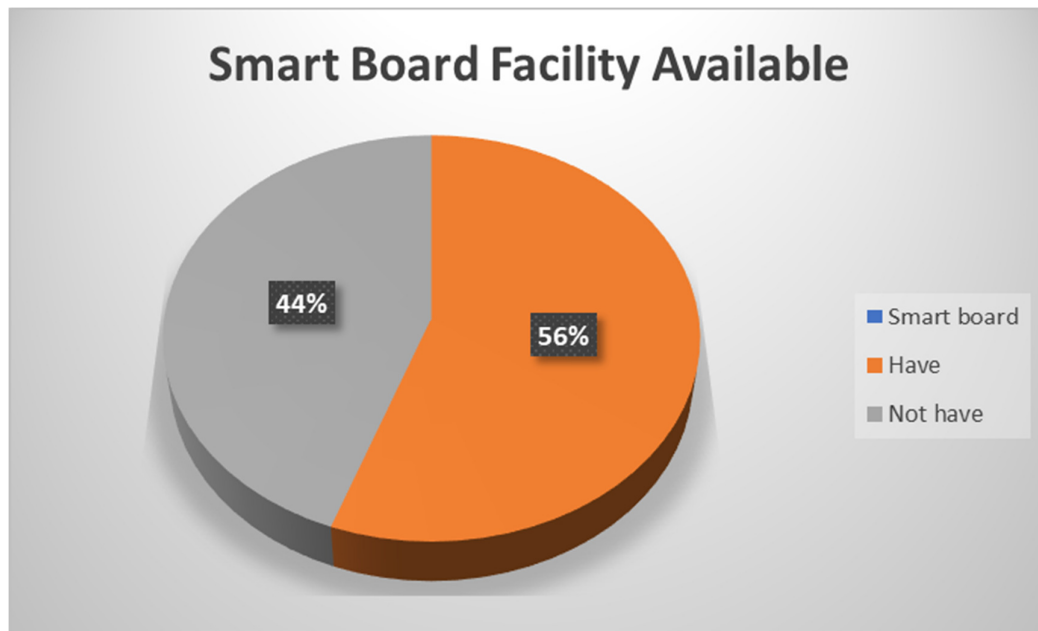


Figure 4. Smart Board Facility Available at Schools.

Internet Connection in School

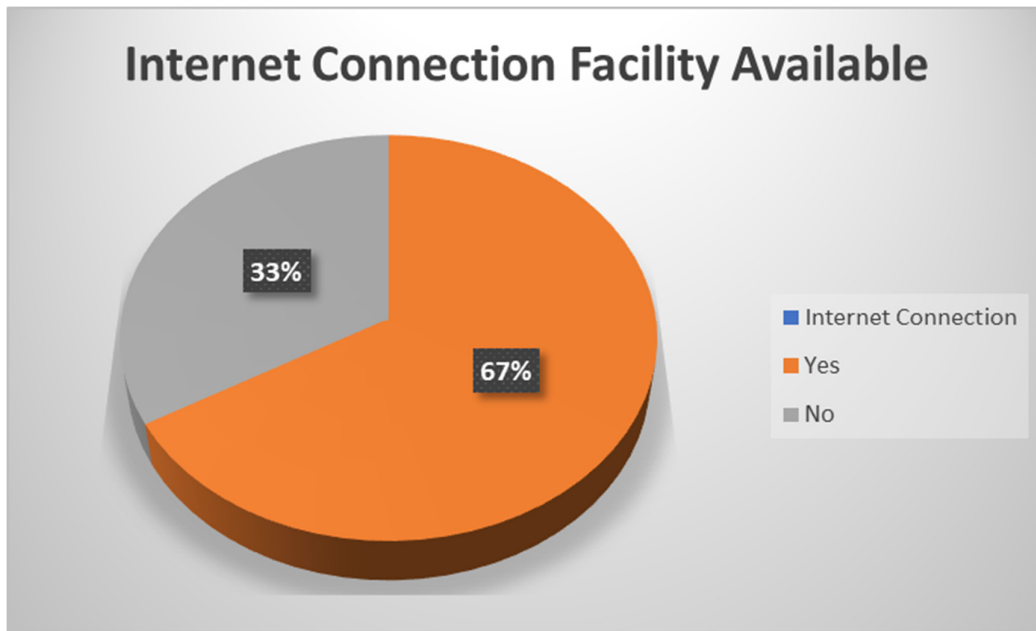


Figure 3: Pie Chart Showing the Internet Connection in Schools

Data shows that there is a good percentage of internet connections in these survey schools, i.e., 66.7% have internet connection in schools and only 33.3% don't have internet connection in schools.

Total number of Computer in School

Q8. Total number of computers in School?

9 responses

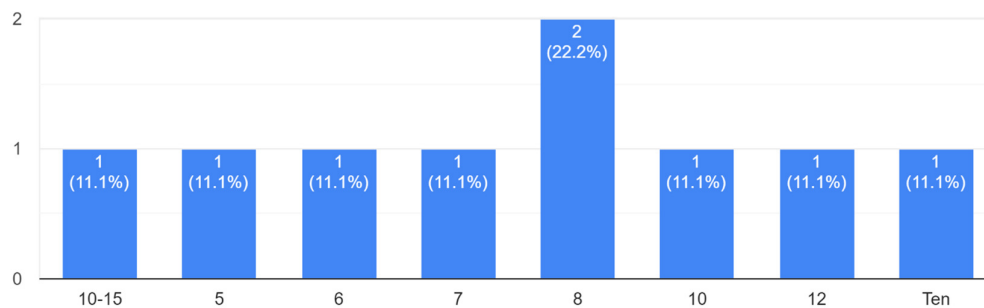


Figure 4: Graph Showing the Total Number of Computers in Schools

Data shows that every surveyed school in the rural area of Lower Subansiri district has been provided with a good number of computers in each of these schools for students to get in touch and get familiar with technology in School.

Findings

ICT facilities were spreading in rural schools in Arunachal Pradesh. Out of nine schools from the Lower Subansiri District of Arunachal Pradesh, 78% of surveyed schools have a projector, 44% have smart boards, and 33% Internet connection. This showed modern facilities are reaching rural Indian schools.

CONCLUSION

In the world of technology today, it is important to make technology a part of our curriculum activities in every school. Whether it is in rural areas or urban areas, both school-going students must have access to technology. Incorporating information and communication technologies (ICTs) into the school curriculum helps provide various ways for students to have access to a variety of learning ways and techniques to motivate them in the learning process. The present study concluded nearly 80% of the schools have projector facilities. However, modern facilities of smart boards and Internet connection are still weak.

SUGGESTIONS

1. A similar study was suggested to be conducted in another district of Arunachal Pradesh.
2. School administrators should improve ICT facilities and Internet connection in school as it helps students to have deeper knowledge related to any subject in detail.

REFERENCE

Dutta, T. & Hazra, A. K (2023). A study on Use of ICT in Rural School of West Bengal: Constraint and Consequences. *International Journal of Science and Research*. Volume no. 12. Issue no. 3. 741-744.

Hans, E & Hans, A. (2022). A study on the Role of Information and Communication Technology (ICT) in Indian Higher Education System.

Tokareva, E. A., Smirnova, Y.V. & Orchakova, L.O. (2019). A study on Innovation and communication technologies: Analysis of the effectiveness of their use and implementation in higher education. *Education and information technologies*.24(3).

Kumar, K.V & Palukuri, V.B. (2020). A study on Use of E-Learning Tools in Teaching and Learning English. *International Journal of Psychosocial rehabilitation*.24(6).18024-18026.

Kumari, A. (2021). conducted a study on Opportunities for ICT initiatives: the biggest challenge for Education during COVID-19 pandemic.