

A STUDY ABOUT ICT USES IN CHANGLANG DISTRICT, ARUNACHAL PRADESH

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ABSTRACT

The purpose of the study was to examine the uses of ICT tools in the Educational Institutions of Arunachal Pradesh with special reference to Changlang District. This study mainly focused on whether the educational institutes in Changlang District have enough ICT tools or not.

A descriptive method was followed in which 30 participants (schools) completed a questionnaire, the participants were the teachers and the students from various schools under the Changlang District. The result shows that the majority of the schools do not have enough ICT tools along many schools do not have internet facilities, which results in a lack of ICT tools. Most of the school teachers were also not very familiar with the use of ICT tools in the classroom due to a lack of proper training programs. However, the integration of ICT with academics needs proper planning considering the factors that would influence students' acceptance and use of such technologies.

KEYWORDS: ICT, Changlang, Arunachal Pradesh, School

INTRODUCTION

Information and Communication Technology (ICT) is the use of computing and telecommunication technologies, systems, and tools to facilitate the way information is created, collected, processed, transmitted stored, shared, or exchanged. It includes the internet, wireless networks, computers, laptops, data projectors, email, DVDs, smartphones etc.

Conducting a School Survey on the uses of ICT in Changlang District schools was a beneficial and important source of accurate information to evaluate the school's performance. New education depends on new technologies that are changing every single day. As well as the education system is also changing continuously therefore, it is important for teachers to change and update their methods in teaching. Every school should provide all the tools, and resources and make it accessible for all the students. So, the students learn in an effective way.

ICT has most directly been involved recently, in improving the quality of education. India has used ICT in the broadest definition of the term to enhance education quality since 1972 when educational radio broadcasts were produced as part of the central government's five-year plan since 2000, these efforts have ranged from direct promotions of computer usage in rural classrooms to launching a satellite to broadcast quality content to marginalised schools.

OBJECTIVES:

1. To investigate the uses of ICT in different schools in Changlang District.
2. To find out the number of students who have access to ICT in Changlang District.

3. To investigate whether schools in Changlang District have access to internet connectivity.

REVIEW OF LITERATURE

Nimodiya & Ajankar (2021), conducted a study on ICT in rural development: Application and challenges- A Review.

The findings of the study show that rural people need to know the importance of ICT for the faster improvement of the rural sector this will also help ICT to work more efficiently. This paper mainly focused on the different applications of ICT in various sectors to improve the condition of rural areas and the challenges faced by ICT to develop rural areas.

Bingimlas(2009), conducted a study on Barriers to the successful Integration of ICT in teaching and learning environments. The findings of the study show that the use of ICT in the classroom is very important for providing opportunities for students to learn to operate in an information age. Studying the obstacles to the use of ICT in education may assist educators in overcoming these barriers and becoming successful technology adopters in the future.

Ghavifekr & Rosdy (2015), conducted a study on Teaching and Learning with Technology: Effectiveness of ICT integration in schools

The findings of the study showed that ICT integration has great effectiveness for both teachers and students. Findings indicate that teachers 'well-equipped preparation with ICT tools and facilities is one the main factors in the success of technology-based teaching and Learning. It was also found that professional development training programs for teachers also played a key role in enhancing students 'quality learning. For future studies, there is a need for consideration of other aspects of ICT integration, especially from a management Point of view in regard to Strategic Planning and policy making.

Saha (2023), conducted a study on The Role Of ICT In Education: Challenges And Issues.

The findings of the study show that ICT plays a vital role in improving our education system, although ICT has great potential to improve the education system of a nation, this is not the case in developing countries. There are major issues and challenges which our educational institutions are facing in the implementation of ICT in education. An inadequate infrastructure, lack of teacher training, digital divide, and ensuring appropriate content and online safety persist, lack of insufficient Govt. Fund, weak Govt. Policies.

Singh, Dubey & Sonkar (2022), conducted a study on the Role of Information and

Communication Technologies (ICT) In the Education Sector in India. The findings of the study show that Information and Communication Technologies (ICT) have aided in the promotion of education. It has a significant impact on the learning process by providing new options for students and teachers as well as improving the student's performance. Education is the fundamental right of every child and it is the responsibility to provide better education for them. ICT has gradually transformed educational society into a knowledge and information society.

Fu (2013), conducted a study on ICT in education: A critical literature review and its

implications. The findings of the study show that ICT is being applied successfully in instruction, learning, and assessment. ICT is considered a powerful tool for educational change and reform a number of previous studies have shown that an appropriate use of ICT can raise educational quality and connect learning to real-life situations.

Ghavifekr & Rosdy(2015) conducted a study on teaching and learning with technology: Effectiveness of ICT integration in school. The findings of the study show that ICT integration has great Effectiveness for both teachers and students. Teacher's well-equipped preparation with ICT tools and facilities is one of the main factors in the success of technology-based teaching and learning and professional development training programs for teachers also play a key role in enhancing students' quality learning. There is a need for consideration of other aspects of ICT integration, especially from a management point of view in regard to strategic planning and policy-making.

METHODOLOGY

We have adopted the method of survey using questionnaires both by visiting the schools physically and via online platforms. The study is based on both Primary and Secondary data.

SAMPLE

This study has been conducted in various schools in Changlang District of Arunachal Pradesh - Both Govt. & Private schools. A total of 30 schools have been taken as a sample for conducting the survey, regarding the use of ICT tools in teaching and learning. Both the teachers and the students from these 30 schools have responded.

DATA COLLECTION :

The following table represents the status of uses and availability of ICT tools in the selected 30 sample schools of Changlang District. The data here collected is mainly based on primary sources.

Table 1. Name of the schools and their responses.

NAME OF THE SCHOOL	NO. OF STUDENTS	NO. OF TEACHERS	NO. OF ROOMS	NO. OF PROJECTORS	INTERNET CONNECTION	NO. OF COMPUTER	NO. OF SMART BOARD
PM SHRI GSS GAUTAMPUR	349	8	10	3	No	13	0
GOVT.P PRIMARY SCHOOL, MANABHUM	27	2	5	0	No	0	0

NEW RISING ENGLISH ACADEMY	575	17	20	0	Yes	3	0
KARUNA VIDYA NIKETAN , MAITRIPUR	142	11	10	0	No	0	0
SNEHA SCHOOL , AVOIPUR, DIYUN	365	17	14	1	Yes	9	0
SAN BONAVENTURE SCHOOL ,DUMBA	550	15	13	0	No	8	0
GOVT. SEC.SCHOOL,SOMPOI	251	10	9	4	No	0	0
MAHABODHI SCHOOL ,JYOTIPUR,DIYUN	690	32	30	1	No	30	0
DONBOSCO SCHOOL ,GALENJA - BORDUMSA	700	25	16	2	Yes	25	2
GOVT.UPPER	133	8	7	1	Yes	5	1

PRIMAR Y SCHOOL CHANGL ANG							
DON BOSCO SCHOOL MIAO	193	27	18	1	Yes	18	8
GUPS, ALUBARI	84	5	5	3	No	0	0
GOVT. PRIMAR Y SCHOOL ,INNAO SINGPH O	40	3	2	0	yes	0	0
GOVT. PRIMAR Y SCHOOL S,CHAN GLANG	30	2	3	1	No	0	0
DIYUN VALLEY SCHOOL ,MADHU PUR	130	12	8	0	Yes	0	0
GHSS, BORDU MSA	700	25	0	1	Yes	10	0
DONBOS CO SCHOOL ,RAJANA GAR -2	500	16	13	1	No	12	0
MILAN PUBLIC SCHOOL	400	8	8	0	Yes	2	2

,BIJOYP UR							
MILAN ENGLISH SCHOOL ,BIJOYP UR	600	27	15	0	No	5	0
HIGHER SEC.SC HOOLIN G,CHAN GLANG	80	20	15	4	Yes	20	8
GOVT.S EC. SCHOOL ,DUMPA THER	333	7	13	1	No	8	10
2ND IRBN SCHOOL ,DIYUN	241	8	7	7	Yes	7	2
KGBV SCHOOL ,CHANG LANG	150	10	8	5	No	4	0
STEP BY STEP FOUNDA TION SCHOOL ,CHANG LANG	239	13	8	0	Yes	5	0
GUPS, CHANGL ANG	87	5	5	1	Yes	3	1
GOVT.P RIMARY SCHOOL ,UDOIPU R 2	128	6	8	0	No	1	0

GOVT. UPPER PRIMAR Y SCHOOL ,UDOIPU R 1	150	9	10	0	No	2	0
INTELLO GLOBAL SCHOOL ,UDOIPU R 1	260	12	8	1	Yes	20	1
GOVT PRIMAR Y SCHOOL , AVOIPU R	110	5	7	0	No	0	0
GOVT. UPPER PRIMAR Y SCHOOL ,DUMPA NI	200	8	8	0	NO	1	0

DATA ANALYSIS

The portion of data analysis shows the systematic arrangement of responses of the 30 selected schools of Changlang District. The data analysis vividly shows the status of schools in Changlang District regarding access to ICT tools.

Table 2. The systematic arrangement of the responses

SCHOOL HAVING PROJECTOR		SCHOOL HAVING INTERNET		SCHOOL HAVING SMART BOARD	
YES	NO	YES	NO	YES	NO
17	13	14	16	8	22

Fifty-seven percent of schools use a projector (Figure 1).

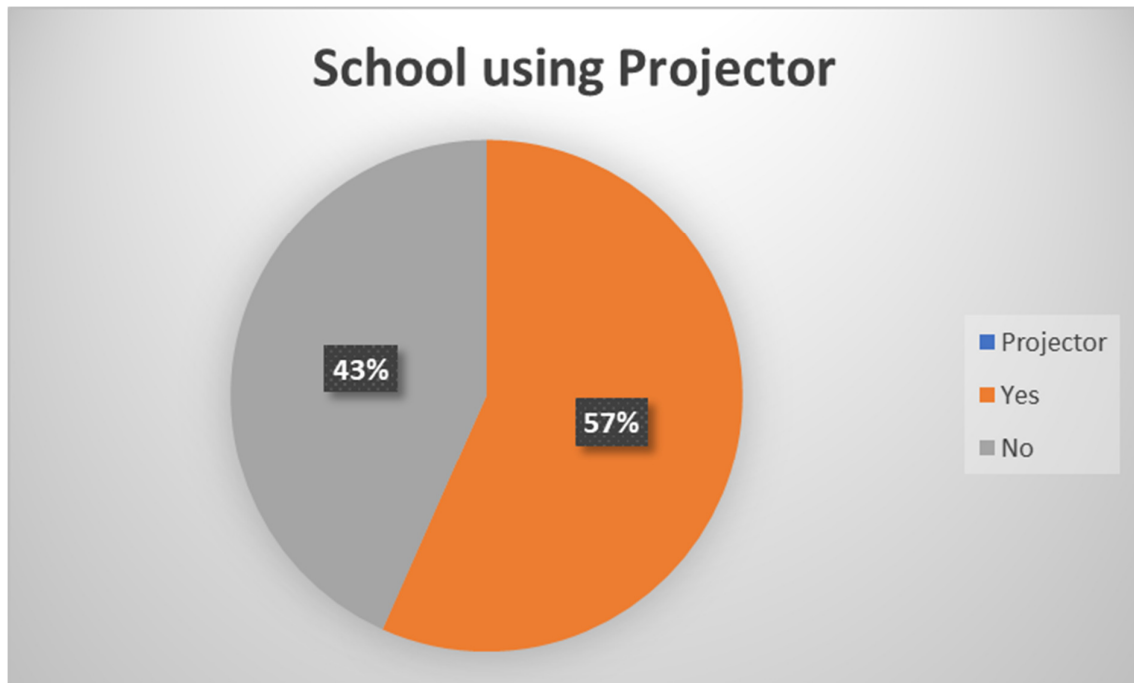


Figure 1. Pie chart representing schools using projectors.

Forty-seven percent of Schools use Internet Connection (Figure 2)

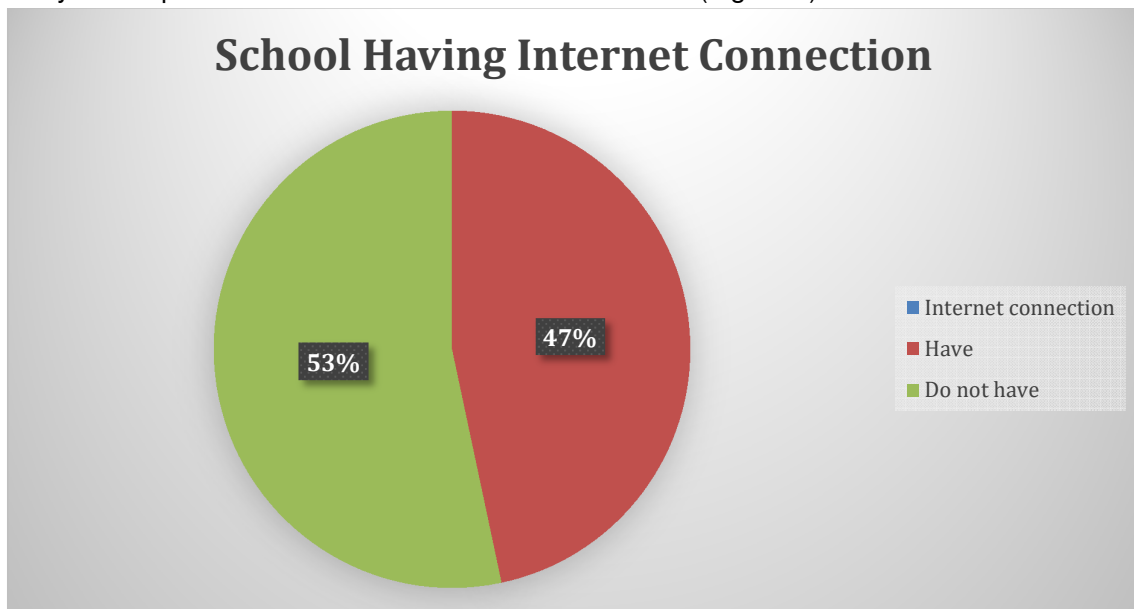


Figure 2. Pie chart representing School having internet connection.

Twenty -seven percent of Schools use Smart Board(Figure 3)

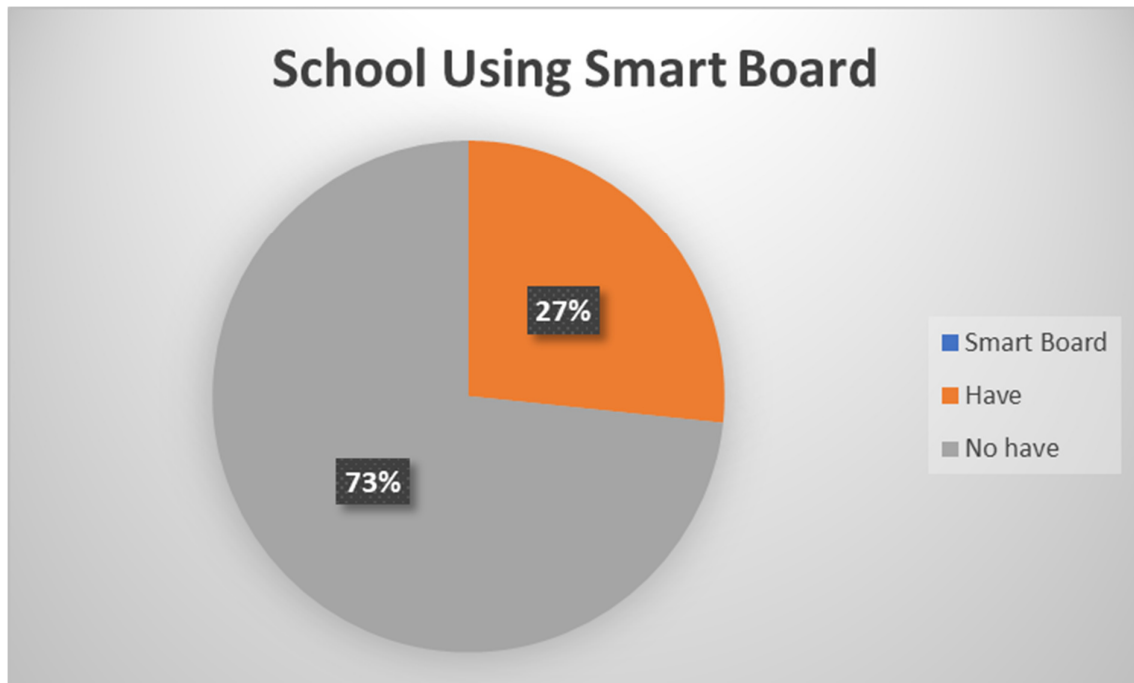


Figure 3. Pie chart representing School using Smart Board.

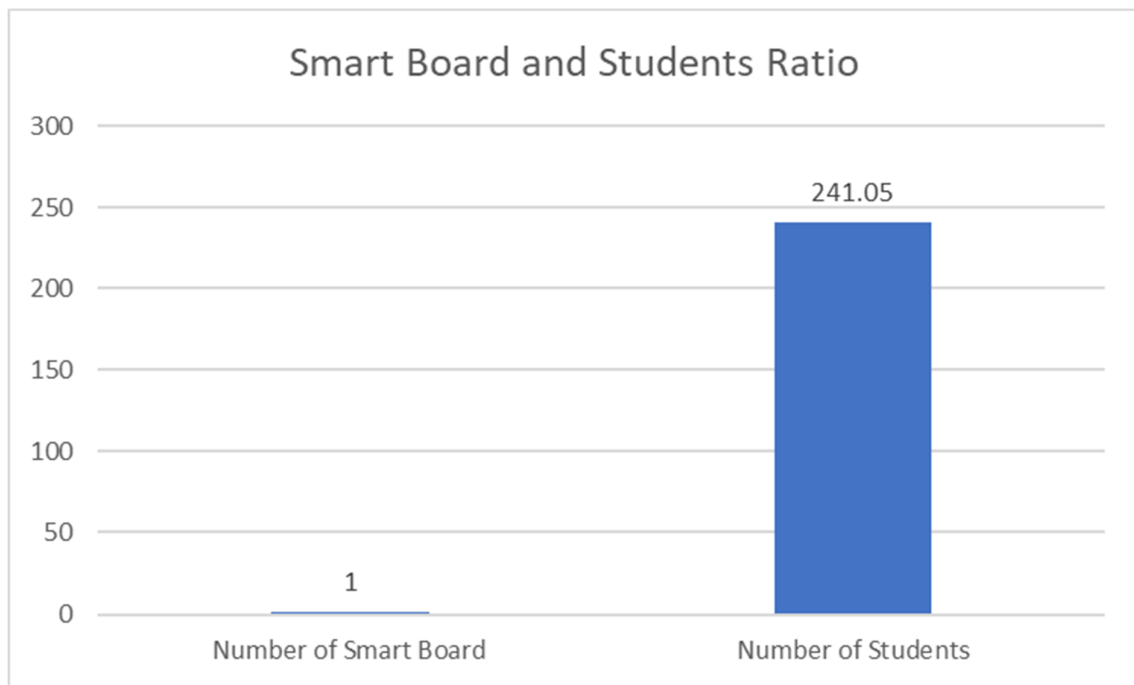


Figure 4. Bar graph representing Smart Board and Students Ratio

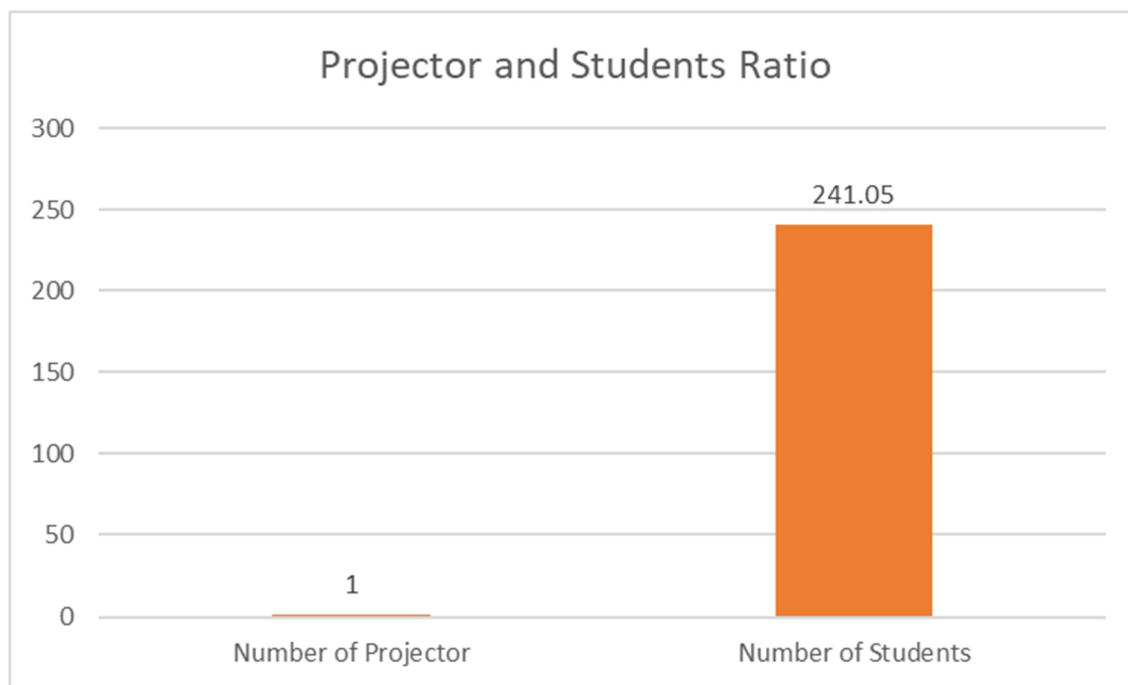


Figure 5. Bar graph representing Projector and Students Ratio

FINDINGS

The major findings of the ICT survey conducted in 30 schools of Changlang District of Arunachal Pradesh show that the educational institutes of Changlang District are still lagging behind in the field of integration of ICT tools with academics. The study has found that out of a total of 30 schools, only 17 schools i.e. 57% of the total number of schools have projectors, and the rest 13 schools i.e. 43% of the total number of schools do not have projectors which is a matter of concern as the projector is considered as one of the most important ICT tools to be used in the teaching-learning process. In this study, it has also been found that a large number of schools do not have access to internet connectivity. The finding shows that only 14 schools i.e. 47% of the total 30 schools have access to internet connectivity and the remaining 16 schools i.e. 53% of a total number of schools do not have access to internet connectivity which impedes the teaching-learning process significantly. Regarding the availability of Smart Boards, only 08 schools i.e. 27% have agreed to have used the smart boards, and the rest 22 schools i.e. 73% of the total number of schools expressed their agony for not having smart boards in their schools. The study has also found below average student & ICT tools ratio in these 30 schools. The smart Board and student ratio is 1: 241.05 and the projector and student ratio is also the same i.e. 1: 241.05 projectors.

DISCUSSION

We are living in an era of technology explosion where more or less every aspect of our life has been influenced by technology. From time to time stakeholders, academicians, and policymakers have emphasized the integration of ICT with education to improve the performance of students and to equip them with greater skills to stand with the world. The Indian Government has also taken some prominent steps to make India a digital India. But it

has been found that this initiative of the Indian Government has failed to influence the education sector on a large scale.

Dr.S.M.Tariq Zafar (2022) in his article “Role of ICT in Education and its Relative Impact” found that the impact of ICT in education is found to be slow and low in comparison to other sectors due to insufficient funding for technological adoption and upgradation, lack of infrastructure, training, etc. especially in rural areas. This finding is also reflected in our ICT Survey conducted in various schools across the Changlang District of Arunachal Pradesh. This study has evaluated the access to ICT tools, and internet connectivity of various schools in Changlang District. It has been found that a large number of schools do not have access to ICT tools. Which significantly impedes their growth and development. There are several reasons behind this like the indifferent attitude of the Arunachal Government towards this area, corruption, lack of infrastructure, hilly and remote areas, technical illiteracy, lack of funding, etc.

If we look into the data collected from 30 schools we will find that the schools which have some ICT tools and internet connectivity are mostly private schools. Moreover, even if some government schools have some ICT tools these are not enough according to the numbers of students enrolled in their schools. In general, we can say that Changlang District overall is still lagging far behind in the matter of uses of ICT tools which is directly and indirectly affecting the teaching-learning process and thereby the growth of the educational sector in this area. This might be one of the reasons for Arunachal Pradesh and within Arunachal, Changlang District being at the bottom of the school education quality index published by NITI Aayog in 2019.

CONCLUSION

ICT plays a crucial role in schools by enhancing teaching and learning experiences, improving communications between teachers, students, and parents, and providing access to a wealth of information and resources. However, there are still challenges such as limited access to technology and inadequate training for teachers. It is important for schools in Changlang Districts to continue investing in ICT infrastructure and providing professional development opportunities for educators to fully harness the benefits of technology in education.

SUGGESTIONS:

The State Government should take the initiative for the appointment of at least one ICT-trained teacher in schools. Sudden inspection should be done by the school inspector to check the availability and uses of ICT in schools. An independent mechanism should be formed by the Central Government to check corruption and the funding mechanism. For electricity problems, solar panels can be installed in the Schools. The schools having problems with internet connectivity because of being in hilly regions could be provided with broadband facilities by the Government.NITI Aayog in 2019.

REFERENCES:

Nimodiya,A.R. & Ajankar,S.S.(2021). ICT in rural development:Application and challenges- A Review. International Journal of ScientificResearch in Science and Technology.8(6).464-472.

Bingimlas, K. A. (2009). Barriers to the successful Integration of ICT in teaching and learning environments.Eurasia Journal of Mathematics,Science and Technology Education.5(3).235-245.

Ghavifekr, S. & Rosdy,W.A.W.(2015).Teaching and learning with technology: Effectiveness of ICT integration in schools. International Journal of Research in Education and Science.1(2).175-191.

Saha,T.(2023).The Role of ICT in Education:Challenges and Issues. Journal of Emerging Technologies and Innovative Research.10(2).794-801.

Singh,V.,Dubey,A. & Sonkar,C.(2022).Role of Information andCommunicationtechnologies (ICT) in Education sector in India. International Journal of Creative Research Thoughts(IJCRT).10(1).131-149.

Fu,J.S. (2013).ICT in education: A critical literature review and its implications.International Journal of education and development using information and communication technology.9(1).112-125.

Ghavifekr,S. & Rosdy,W.A.W.(2015).Teaching and learning with technology:Effectiveness of ICT integration in schools.International Journal of research in education and science.1(2).175-191.