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A STUDY ON STATUS OF UTILIZATION OF ICT BASED TECHNOLOGY IN DIFFERENT SCHOOLS OF UNAKOTI DISTRICT TRIPURA

Dr. Uttam Kumar Das

Assistant Professor (Physics)
College of Teacher Education, Kumarghat,
Unakoti (Tripura, India)
E-mail: uttamsir.physics@gmail.com

Mr. Sukhlal Prasad

Guest Faculty(Education)
College of Teacher Education, Kumarghat,
Unakoti (Tripura, India)
E-mail: sukhlalprasad32@outlook.com

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Abstract:

Information and communication technologies (ICTs) in all facets of life have become ubiquitous institutions. Over the past twenty years, the utilization of ICT has profoundly altered the processes and procedures of almost all aspects of business and governance effort. Education is a highly socially-focused practice and quality education has historically been connected to strong teachers with high levels of personal interaction with learners. Proper Utilizing ICT in higher education lends itself to more learning environments focused on students. With the world rapidly evolving into digital media and information, however, the role of ICT in higher education is becoming increasingly important and will continue to grow and evolve in the 21st century. Efficient utilization ICT in Higher Education, along with the use of ICT in the teaching and learning process; consistency and accessibility of education; encouragement to learn. About learning. Besides, a description of ICT and scholastic achievement.

Keywords: Computer, ICT, Research Design, Digital media.

INTRODUCTION:

Acquiring knowledge is one of the primary conducts of human beings and sharing those acquired knowledge to other proved itself as an important tool for the development of society. With the advancement of time the ways of acquiring knowledge have expanded its edges. Education is at the core of all knowledge. In the 21st century digital era the world is moving faster to using computers and internet, leaving behind all the traditional ways of pen and paper for acquiring knowledge. And in such sense the including 'Information and Communication Technology' (ICT) in education system has paved a smoother way to gain knowledge. The modern education system is more focusing on child rather than a teacher-centered one. So, changing in approach of teaching is very much important in order to deliver more meaningful lesson to the students. ICT in 21st century has become an important topic for study and research in education field. The study on ICT status in

education is very much important for identifying the difficulties found in incorporating the digital technology in present time as well as in future usage.

In the context of Unakoti District of Tripura the usage of ICT in schools is very rare. The study looks out for the dynamic utilisation of ICT in the schools of the district. The study does not only focus on the barriers that the schools find in using ICT in daily teaching learning process but also the remedial measures that can be taken to curtail the barriers. ICT technology provides an enormous potential to serve the people who are connected with both the process and product of education. But in our country, it is seen that the usage of ICT in daily classroom and for other purpose in school is very limited and even the difference in the ratio of usage between urban and rural schools has also large gap. The gap has been created due the reasons like lack of infrastructure, untrained teacher etc. But the use of ICT in school is very much needed to compete the updated educational system of today's world. Thus, the study is conducted to identify the challenges and the measures through which they can be minimized on the basis of the evidences that were found during the survey.

OBJECTIVE OF THE STUDY:

1. Status of ICT equipment in sample schools of unakoti District of Tripura
2. To identify the accessibility to the ICT tools among the students in school.

REVIEW OF LITERATURE:

Incorporating ICT in teaching learning is a difficult task. It faces different challenges in its implementation. It is glorifying to think that India, which is one of the largest education systems in the world moving faster to use the technology but it also a matter to assess how much the education infrastructure is able to incorporate the technology. But different literature is providing a greater hope that India can increase its education potential by using maximum advantages of ICT with providing updated improved lesson and better access to all its students and teacher as well. Following are some benefits as well as the challenges that have been identified in the literature regarding the study of status of ICT utilisation in the schools of Unakoti.

According to Good, Bar Scates,

“The competent physician must keep abreast of the latest discoveries in the field of medicine. Obviously, the careful student of education, the research worker and investigator should become familiar with location and use of services of educational information”.

According to John W. Best,

“Practically all human knowledge can be found in books and libraries, unlike other animals that must start a new with each generation, man builds upon the accumulated and recorded knowledge of the past, his constant adding to the vast store of knowledge makes possible progress in all areas of human endeavor”

Skill and experience are two basic parameters in a teacher to teach the students about the ICT and incorporating the ICT tools in daily classroom. Studies by Arnab Kundu found that there's a lack of quality training that were imparted to the teacher to make them skilled about ICT. (**Kundu, Arnab** “**Barriers to Utilizing ICT in Education in India with special focus on Rural Areas**”, March, 2018.)

Rajakumaran, Soureche and Viswanathan (2010) examined a study to assess the “**Role of ICT in teaching and learning Mathematics**”. It was found that ICT enable the students to manipulate diagrams dynamically and it encouraged them to visualize the geometry as they generate their own mental images. It is also enhanced opportunity for students to be introduced to interesting problems and associated mathematical subject matter much earlier than before possible.

Neeraj and Anitha (2010) did a study on “**Computer and Internet awareness in school going students**”. The study found that the required level of awareness about computer and the internet is not there. The real power of the computer is revealed in the internet. But the penetration of computer and internet is still far from desired.

Kmalanayan (2008) designed a study on “**Implications of Information Technology for teacher education and research**”. It was pointed out that information technology in education is created the need for all teacher education faculties to be proficient in the use and integration of ICT into mainstream teacher education programme delivery.

Krishnaveni and Meenakumari (2010) focused on “**Usage of ICT for information administration in higher education institutions**”. Results revealed that a comprehensive set of functional areas of information administration. It was found that current level of usage indicated a clear integration of ICT for managerial or information-based administration in higher education institutions. Enhancing the usage of ICT on these functional areas and especially for general administration will enable enhancement of overall information administration in higher education institutions of global environment. It is serving as a base for education planers to deploy technology-based administration in higher education institutions.

Shazia Mumtaz (2000) conducted a study on “**Factors affecting teachers use of Information and Communication Technology**”. This study found that successful implementation of ICT needs to address three interlocking frameworks for change, the teacher, the school, and policy makers.

Several studies shows that lack of infrastructure and resources create the main barrier win adopting ICT in daily educational journey in many schools in our country. A study found that “**class size, school infrastructure and administrative support are also likely barriers**” (**Erik, 2014**)

Rosnaini and Ismail (2010) examined the “**Impact of training and experience in using ICT on in-service teachers’ basic ICT literacy**”. The study found that majority of the teachers had

moderate basic ICT knowledge and skills, and perceived ICT positively. Formal ICT training and ICT experience influence the teachers’ knowledge, skills and attitude. Therefore, teachers especially the older ones and normally with more teaching experience need to be identified, and provided with specially designed training programs, in various forms of ICT courses and workshops.

Philip, Oluwatolani and Oluwaranti (2010) did a study on “**An evaluation of the impact of ICT diffusion in Nigeria higher educational institutions**”. They found that ICT is becoming a driving force for educational reforms and those ICTs have become an integrative part of national education policies and plans in Nigerian tertiary institutions.

Yasemin (2008) did a study on “**ICT usage in Higher Education: A case study on pre-service teachers and instructors**”. Results revealed that teacher education programs fail to provide appropriate instructional technologies and computer facilities for both in and out of class activities.

POPULATION AND SAMPLE OF STUDY:

All the secondary schools of unakoti district have been selected as population for this study. Researcher selected 140 students from class IX and X by the using of purposive sampling method.

METHOD ADOPTED FOR THE STUDY:

Researcher has conducted descriptive survey method to collect data for this study. Questionnaire was tested on students as well the teacher of the concerned schools. The questionnaires were based on personal data, Yes and No, 5 point ranging scale (a. Strongly Agree b. Agree c. Disagree d. Strongly disagree) one word answer, and choosing the answer from given options.

TOOLS USED FOR THE STUDY:

The tool is main ordnances for data collection. Tools are dissimilar in nature on numerous studies such as open questionnaire, multiple choice questionnaires. To collect data, we prepare two types of schedules, one is for students and other is for teachers.

DATA ANALYSIS AND INTERPRETATION:

Objective-1: Status of ICT equipment in sample schools of unakoti District of Tripura

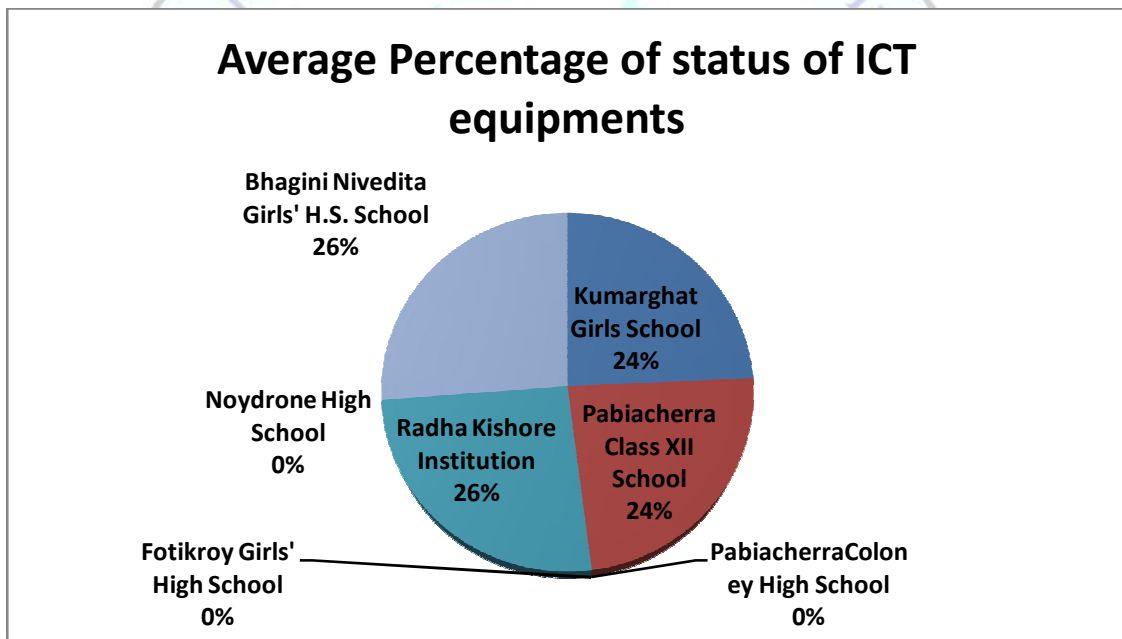
TABLE: 1

Status of ICT equipment in sample schools

| Sample school | Computer | | | Smart Board | | | Projector | | | Average Percent age |
|------------------------------|----------|---------|-------------|-------------|---------|-------------|-----------|---------|-------------|---------------------|
| | Tot al | Acti ve | Percent age | Tot al | Acti ve | Percent age | Tot al | Acti ve | Percent age | |
| Kumarghat Girls School | 11 | 7 | 63.64% | 1 | 1 | 100% | 1 | 1 | 100% | 87.88% |
| Pabiacherra Class XII School | 14 | 8 | 57.14% | 1 | 1 | 100% | 1 | 1 | 100% | 85.71% |

| | | | | | | | | | | |
|---|----|----|--------|---|---|------|---|---|------|--------|
| Pabiacherra Coloney High School | 10 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0.00% |
| Fotikroy Girls' High School | 10 | 0 | 0% | 1 | 0 | 0% | 1 | 0 | 0% | 0.00% |
| Radha Kishore Institution | 10 | 8 | 80% | 1 | 1 | 100% | 1 | 1 | 100% | 93.33% |
| Noydrone High School | 10 | 0 | 0% | 0 | 0 | 0% | 0 | 0 | 0% | 0.00% |
| Bhagini Nivedita Girls' H.S. School | 13 | 11 | 84.62% | 1 | 1 | 100% | 1 | 1 | 100% | 94.87% |

Graph:1



Interpretation of Table 1 and Graph 1 :

- i. **Kumarghat Girls School** has 11 nos. of computer, 1 smart board, 1 projector. Out of 11 computers 7 are active, condition of smart board and projector is good. So, the utilization of ICT equipment in this school is 87.88%
- ii. **Pabiacherra Class XII School** has 14 nos. of computer, 1 smart board, 1 projector. Out of 14 computers 8 are active, condition of smart board and projector is good. So, the utilization of ICT equipment in this school is 85.71%
- iii. Government of Tripura provides 10 computers for **Pabiacherra Coloney High School** but due to the lack of proper computer faculty none of them is in workable condition.

So, the utilization of ICT equipment in this school is 0%

- iv. **Fotikroy Girl’s High School** has 10 nos. of computer, 1 smart board, 1 projector. Out of 10 computers none of them is active, also condition of smart board and projector is not well.

So, the utilization of ICT equipment in this school is 0%

- v. **Radha Kishore Institution** has 10 nos. of computer, 1 smart board, 1 projector. Out of 10 computers 8 are active, condition of smart board and projector is good.

So, the utilization of ICT equipment in this school is 93.33%

- vi. Government of Tripura provides 10 computers for **Noydrone High School** but due to the lack of proper computer faculty none of them is in workable condition.

So, the utilization of ICT equipment in this school is 0%

- vii. **Bhagini Nivedita Girls’ High School** has 13 nos. of computer, 1 smart board, 1 projector. Out of 13 computers 11 are in function, condition of smart board and projector is very good.

So, the utilization of ICT equipment in this school is 94.87%

Objective-2: To identify the accessibility to the ICT tools among the students in school.

TABLE: 2

| Sample wise accessibility of ICT tools by the students | | | | |
|---|---------------------------------------|----------------------------------|--------------------------------------|--|
| Key Point | Very good (3) (Percentage) | Good (2) (Percentage) | Moderate (1) (Percentage) | Don't know (0) (Percentage) |
| Ability of Power on-off | 52 (37.14%) | 12 (8.57%) | 14(10%) | 62 (44.29%) |
| Knowledge of MS-OFFICE | 26(18.57%) | 28(20%) | 12 (8.57%) | 74(52.86%) |
| Computer painting | 13 (9.29%) | 38 (27.14%) | 16 (11.43%) | 77 (55%) |
| Knowledge of Internet | 22 (15.71%) | 19 (13.57%) | 14 (10%) | 85 (60.71%) |
| Knowledge of e-library | 4(2.86%) | 12(8.57%) | 9(6.43%) | 115(82.14%) |

Interpretation:

- i. From table 2, row 1 show that out of 140 students 78 student responses in favour of ability of power on-off and 62 students are not able to turn on-off the computer.
- ii. From table 2, row 2 showed that out of 140 students 66 student have knowledge about MS Office and other 74 student are don’t have knowledge about MS Office.
- iii. From table 2, row 3 showed that out of 140 students 63 student use painting while they use computer and 77 students are not able to use painting.

iv. From table 2, row 4 showed that out of 140 students 55 students have knowledge about how to use internet in computer and 85 students are not able to use internet in computer.

From table 2, row 5 showed that out of 140 students, 25 students are having knowledge about e-library and other 115 students have not knowledge about e-library.

FINDINGS AND DISCUSSIONS:

The most remarkable quality of any study is that it must contribute something new to the improvement of area of concern. The investigation for school management, teacher, students and the entire instructive framework by and large. The results of the present study have wider implications in the field of education.

1. The present study highlights the importance of ICT at various level of education, particularly at secondary level. There is a need of ICT in school curriculum for innovative and effective teaching learning process.
2. The study analyses the various running projects based on ICT and highlights the important features and its process of implementation. Thus, it can be helpful in drafting best suited ICT based projects for school.
3. The study provides a detailed account of various ICT projects and encourages its incorporation in the present system of education.
4. The study draws the attention of the teacher by pointing out the drawbacks in the strategies of curriculum transaction required for proper use of ICT. Hence it is clear that there is necessity to bring about a change in teaching strategies for proper use of ICT.
5. The study also recommends the regular arrangement of proper in-service training for teacher on technology and computer literacy.
6. The study also focuses on the frequency of the use of ICT in the classroom to create interest among learners and also develop a favorable attitude towards ICT. It implies that there should be a regular and justified use of ICT by the teachers.
7. The present study focuses on the teacher awareness about the present technology and hence the value of importance of its regular updating and incorporating into their classroom.

CONCLUSION:

In conclusion, the very first stage of ICT implementation must be effective to make sure that, teachers and students are able to make the best use of it. Thus, preparations of a technology-based teaching and learning begin with proper implementation and supports by the school top management. If the implementation process of technology integration in schools take place appropriately from the very beginning stage and the continuous maintenance are adequately provided, ICT integration in schools will result in a huge success and benefits for both teachers and students. The use of ICT especially in teaching and learning is more about practicality as compared to theories and that is why

teachers must be given time to learn and explore it, face the “trial-and error” phase before they are completely comfortable with its usage and able to make use of it for teaching and learning.

This study is more related to identifying the perceptions in implementing ICT tools in teaching and learning in the classroom among school teachers. Furthermore, it examines the challenges of using ICT tools in teaching and learning in the classroom among school teachers and recognizes the effectiveness of the extent of ICT tools in supporting classroom teaching and learning. Based on the study the findings indicate that average level of the perceptions in implementing ICT tools in teaching and learning in the classroom among school teachers, high level of challenges of using ICT tools in teaching and learning in the classroom among school teachers and recognizing the effectiveness of the extent of ICT tools in supporting teaching and learning in the classroom.

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