

A Study On Utilization Of Ict Facility In School Administration In Secondary School Of Assam With Special Reference To Kamrup District

¹Alpana Das and ²Prof. Jonali Chetia

¹PhD Research Scholar, USTM.

²PQSE, USTM.

ABSTRACT

A school is an institution where education is imparted to students. School administration goes hand to hand with teaching process. ICT plays a major role in present time to run school administration smoothly. In this research paper the researcher has tried to find out how ICT has been used by the school administration. Descriptive survey method had been adopted by the researcher. The population of the study is 250 school administrators and sample of the study is 80 school administrators of Kamrup district. These administrators are Head Master/Mistress of the school, who is also head of the administration of that school. The researcher has constructed a semi structured interview schedule to collect the data. The reliability of the Interview schedule has been checked by test-retest method. The result of the study found that all the all-school administrator uses ICT for their smooth running of school activities and they are benefited by ICT use.

Keywords: ICT, Secondary School, Administration, Head of the school.

INTRODUCTION

School administration is a most important part of whole schooling system. Both teaching and administration process in a school goes together. To make teaching process fruitful, the entire environment of the school should be holistic. All other activities that promote healthy teaching-learning should be adopted perfectly in school. School administration include all official works related to school and school staff. To run the school smoothly, an administrator should be well skilled. The head of the institution has to maintain a balanced relation with school staff, teaching staff, students, parents, SMC members and higher officials. As a community leader the school administrator has to be sincere in his work.

The school administrator should be responsible for manage scheduling of class periods, events, meetings, admissions, record keeping, reporting, budget, logistics, school's assets maintenance, execution of various educational programmes as per

the plan of the government, arranging parents' students meet, School Management Committee (SMC) members meeting, resolving problems relating to students and many more.

According to the father of administrative management, Henri Fayol (1841-1925) administrative work refer to process of managing information for the members of an organization. It is about storing, maintaining and distribution of files, sending and receiving information etc. Managements activities includes half of the works communicating with other people. And since last 3/4 decades use of ICT has changed the communication process. Communication becomes faster with the use of ICT.

ICT refers to Information and communication Technology. So, utilization of ICT in school administration means use of modern information and communication technology tools and services in school administration and management process. ICT is used in different sector of education. From primary

to highest level of education. Education system has been influenced by the use of ICT.

REVIEW OF LITERATURE

Simin, G., Mojgan, A., Seadah, S., and Seger, K. (2013) attempted to paint a picture of the importance of ICT in improving the quality of education, including school administration and management, in their review paper, 'ICT Application for Administration and Management: A Conceptual Review.' The researcher's goal in this paper is to review ICT applications for school administration and management, different application tools used by school administration and management, and the effectiveness of ICT applications for school administrative and management activities. The research paper sheds light on the importance of teachers' and administrators' knowledge of ICT use, laying the groundwork for successful ICT implementation in schools, from teaching and learning to the school administration process. In this regard, the government should priorities capacity building and ICT literacy. The researcher discovered that ICT applications benefit school administrators, teachers, students, and school staff.

Temu, H.H. (2018) in the research article "Computer in primary education administration in Government school Tanzania" tried to give a picture how primary schools of Tanzania using computer in primary school administration. The result of the study showed that 88% of primary education schools have no computers department for performing primary school examinations, keeping data, keeping school records, keeping students record of attendance etc. 74% of schools do not have in their office to do daily tasks. The researcher also suggested that government should increase the primary education budget to provide computer facilities to primary schools and provide training to teachers to use computers.

J. Gerick, J. Tulowitzki & B. Eickelmann (2022) in their research paper "The role of ICT for school leadership and management activities: an international comparison " focused on school leadership and management activities in relation to ICT and related challenges. This research paper work also tried to analyse how German school principals

use ICT in compared to principals in other countries. The researchers used mixed method of qualitative and quantitative methods. As the study was international the investigators collected qualitative data from 12 Principals of different countries like Chile, Denmark, Finland, Korea, Luxemburg, Portugal, Uruguay and United States. As a result of the study the researchers found that German Principals uses ICT for leadership and management activities same level or in same frequency comparing to the other principals use in different countries. Only one thing the research revealed that German principles use ICT more in communicating educational authorities.

L. Makewa et al. (2013) investigated whether there was a significant difference in teachers' and administrators' perceptions of the importance of ICT in secondary school administration and evaluated the extent to which it was used by administrators in their research paper, "ICT in secondary school administration in rural southern Kenya: An educator's eye on its importance and use." It was discovered that both teachers and administrators valued the use of ICT in secondary school administration. Teachers and administrators thought the use of ICT in student administration was equally important, but administrators thought it was more important in supervision of instruction and in student administration.

A. O. OLAYEMI and K. OMOTAYO (2012) investigated ICT adoption and effective secondary school administration in Ekiti-state in their work, "ICT adoption and effective secondary school administration in Ekiti state." The study discovered that secondary school administrators had a low level of ICT awareness. The study also revealed that many of the secondary schools understudied lacked ICT facilities. The study also discovered a link between ICT adoption and effective secondary school administration. Gender differences in administrators' attitudes toward ICT and effective secondary school administration, on the other hand, have no effect. It was therefore recommended that governments and private individuals provide adequate ICT facilities in secondary schools. Secondary school administrators

should also be encouraged to be ICT driven in order to increase their productivity between ICT adoption and effective secondary school administration.

Need & Importance of the Study:

ICT is a major factor in determining the country's socioeconomic status. In India, the use of ICT in various aspects of education has become a necessity. Several studies have been conducted on ICT and secondary school education to identify the key challenges to integrating ICT in school education, as well as ICT facilities and ICT utilization in various aspects of school education. After reviewing various research papers, research articles, and thesis, the researcher discovered that very few studies have been conducted on the use of ICT facilities in school administration. Taking these into account, the researcher attempted to determine how ICT facilities are used in the administration of secondary schools in Assam, with a focus on the Kamrup district. This study will also investigate the benefits of using ICT facilities in school administration, as well as the suggestion from the head of the school.

De-limitation of the study

The present study is de-limited to the administrators. i.e. Head of the School (Head Master/Head Mistress/Principal) of Government and provincialized co-educational, Assamese medium secondary schools of Kamrup district (both Urban and Rural) of Assam affiliated under Board of Secondary Education, Assam, having ICT facilities. It includes both the genders without any age bar.

Objectives of the study:

To study the utilization of ICT in school administration in secondary school of Kamrup district of Assam.

Methodology

Method: The researcher has adopted descriptive survey method.

Universe: The population of the study consists of all the schools administrators (Principal/Headmaster/Headmistress) of Assamese medium secondary schools including boys, girls, and Co-ed schools having ICT facility. The

researcher has collected the list of secondary schools having ICT facilities from Office of Inspector of School (IS) of Kamrup district (Both Metro and Rural). The total number of schools such school is 266 and hence the population of the study is 266 Principal/Headmaster/Headmistress of those schools.

Sample: Out of 266 school administrator, 80 (30% of 266) school administrators are the taken as sample of the study. Simple random sampling technique has been adopted to select the school administrators as a sample from entire population and lottery method considered.

Tools: The researcher has constructed an interview schedule to collect the primary data from the school administrators. Interview schedule considered as an important and reliable tool for data collection as it provides immediate feedback from the respondent. It provides opportunity to the researcher to establish a good rapport with the respondent. Interview can provide more in-depth information. The interview schedule is semi structured in its type. There are 27 close end and 03 open end questions in the interview schedule. All the 27 close end questions are Yes/No type and score of 2 is given to Yes and score of 1 is given to No, during analysis. The reliability of the interview schedule has been checked by test-retest method and the researcher observed same result.

Procedure of Data Collection: The researcher visited each and every sample school and meet the school administrator. Before collecting data, the researcher explains the purpose of data collection and interview procedure was carried out in a smooth manner. Desirable environment was created to make feel ease by the interviewee to provide information. It was also said that their data would be kept as secret.

Data Analysis and Interpretation

General Information about Headmasters are as follows:

- a) 50% of the headmaster respondents are from urban area and rest from rural area.

b) 37.5% of the headmasters are females and rest 62.5% is male.

c) 11.25% of headmasters are found to be Graduates; 38.75% are trained graduates; 13.75%

are post graduates and rest 36.25% are trained post graduates.

Trained Graduate and Trained Post Graduates means Graduate with some training on applications ICT in school administration.

Table 1: General Information about Headmasters

Particulars	Options	No. of Headmasters	%
Area	Urban	40	50.0
	Rural	40	50.0
Gender	Female	30	37.5
	Male	50	62.5
Qualification	Graduate	9	11.25
	Trained Graduate	31	38.75
	Post Graduate	11	13.75
	Trained Post Graduate	29	36.25
Received Training on ICT	Yes	56	70.00
	No	24	30.00

Fig. 1: Location of Schools

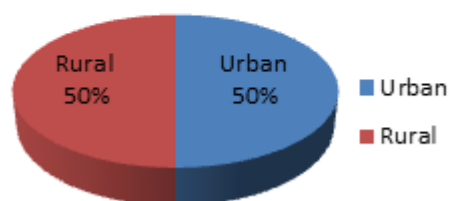


Fig. 2: Gender of Headmasters



Fig 3: Qualification of Head of the School

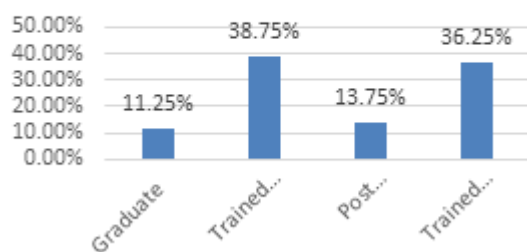
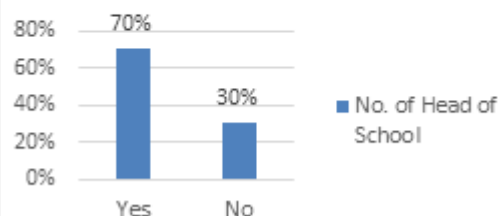


Fig 4: Training on ICT received by Head of the School



The obtained data were analyzed as per objectives of the study considering its various dimensions. It is illustrated below:

Dimension (i): To explore the availability of ICT facilities used for school administration

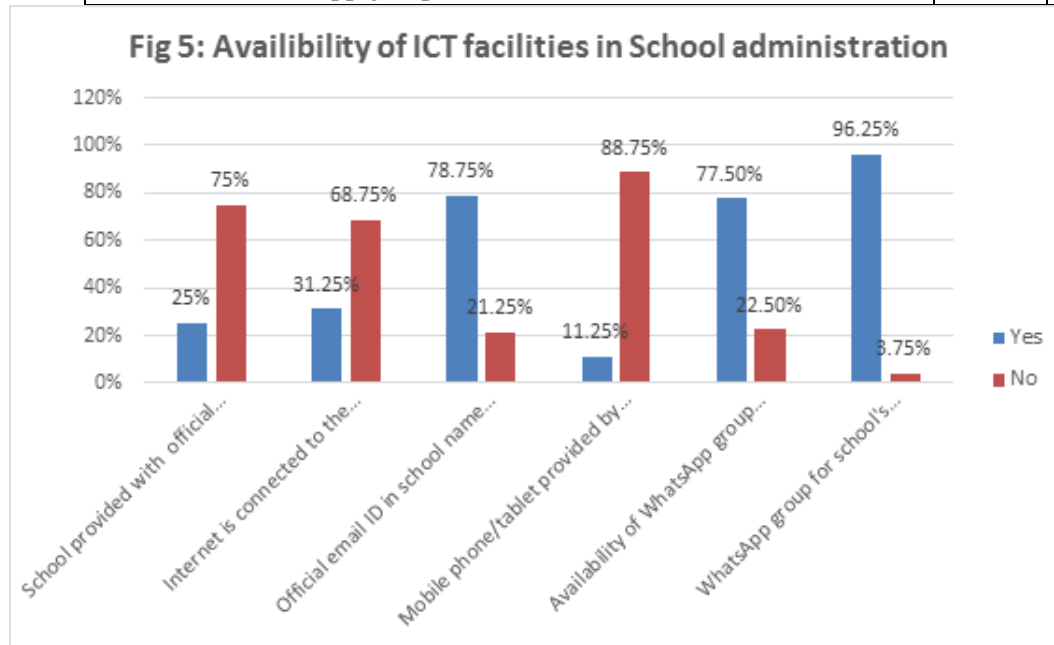
In relation to ICT facilities available for school administration, following are revealed:

- Only in 25% school computer/laptop were provided to official for administrative use.
- In 31.25% of the schools Internet connection exists.

- c) Official email ID is available in 78.75% of the schools
- d) Around 11.25% of the schools offered Mobile phone/tablet
- e) In 77.50% of the schools, WhatsApp group was available among the members of school management committee
- f) WhatsApp group for teacher is available in nearly 96.25% of the schools.

Table 2: Availability of ICT facilities in School administration

Statements	Total No. of Respondents = 80			
	Yes	%	No	%
School provided with official computer/laptop for administrative use	20	25.0	60	75.0
Internet is connected to the computer	25	31.25	55	68.75
Official email ID in school name available	63	78.75	17	21.25
Mobile phone/tablet provided by school	9	11.25	71	88.75
Availability of WhatsApp group among the members of school management committee members	62	77.50	18	22.50
WhatsApp group for school's teacher available	77	96.25	3	3.75



Thus, it follows that only a certain percentage of schools were able to avail ICT facilities such as computer/laptop; Internet connection; Mobile phone/tablet for school administration. In more than 75% of the schools ICT facilities available were with respect to Official email ID; WhatsApp group among the members of school management committee; WhatsApp group for teacher. Physical facilities available in relation to ICT are inadequate in schools.

Dimension (ii): To reveal the various uses of ICT facilities in school administration

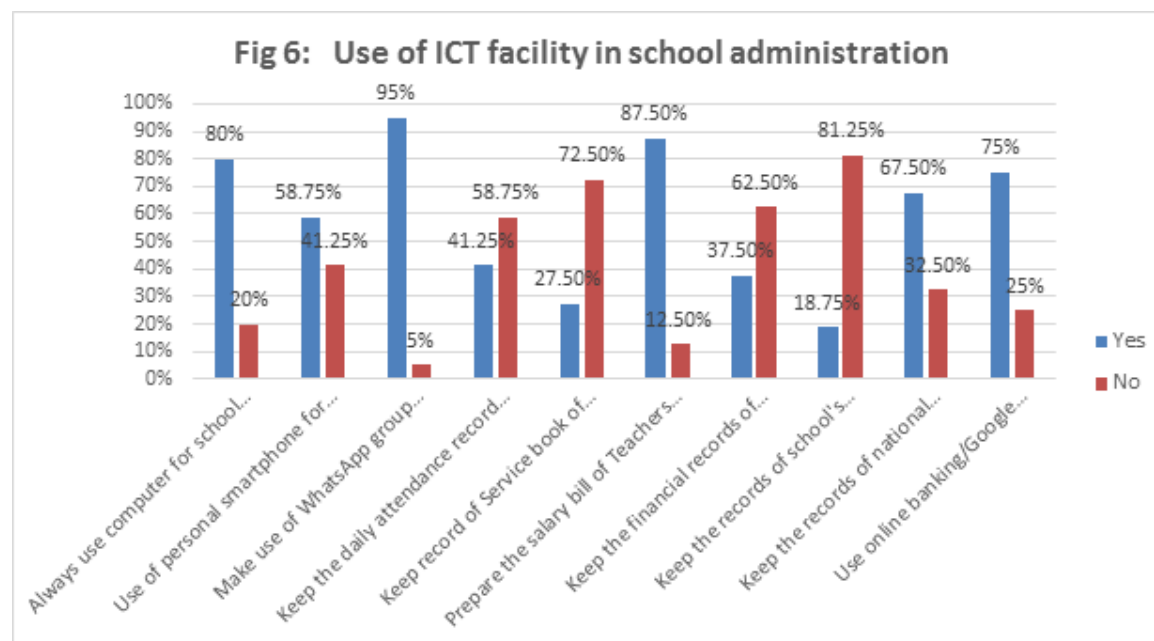
Regarding use of ICT facility in school administration, it is found as follows:

- a) 80% of the head of the schools always use computer for school management work
- b) 58.75% of the head of the schools make use of personal mobile phone for school related work
- c) 95% of the head of the schools make use of WhatsApp group always for school purpose
- d) 41.25% of the head of the schools keep the daily attendance record of Teachers in ICT based system (punching system/bio-metric device etc.)

- e) 27.50 % of the head of the schools keep record of Service book of Teachers in computer
- f) 87.50 % of the head of the schools prepare the salary bill of Teachers & other staff in computer
- g) 37.50% of the head of the schools keep the financial records of schools in Computer
- h) 18.75% of the head of the schools keep the records of school's property (asset) in Computer
- i) 67.50% of the head of the schools keep the records of national day/festivals celebrated at school in computer
- j) Around 75% of the head of the schools opines that use of online banking/Google pay/Paytm/phone pay etc. for various payment like electricity bill etc. incurred for school

Table 3: Use of ICT facility in school administration

Statements	Total No. of Respondents = 80			
	Yes	%	No	%
Always use computer for school management work	64	80.0	16	20.0
Use of personal smartphone for school related work	47	58.75	33	41.25
Make use of WhatsApp group always for school purpose	76	95.0	4	5.0
Keep the daily attendance record of Teachers in ICT based system (punching system/bio-metric device etc.)	33	41.25	47	58.75
Keep record of Service book of Teachers in computer	22	27.50	58	72.50
Prepare the salary bill of Teachers & other staff in computer	70	87.50	10	12.50
Keep the financial records of schools in Computer	30	37.50	50	62.50
Keep the records of school's property (asset) in Computer	15	18.75	65	81.25
Keep the records of national day/festivals celebrated at school in computer	54	67.50	26	32.50
Use online banking/Google pay/Paytm/phone pay etc. for various payment like electricity bill etc. incurred for school	60	75	20	25



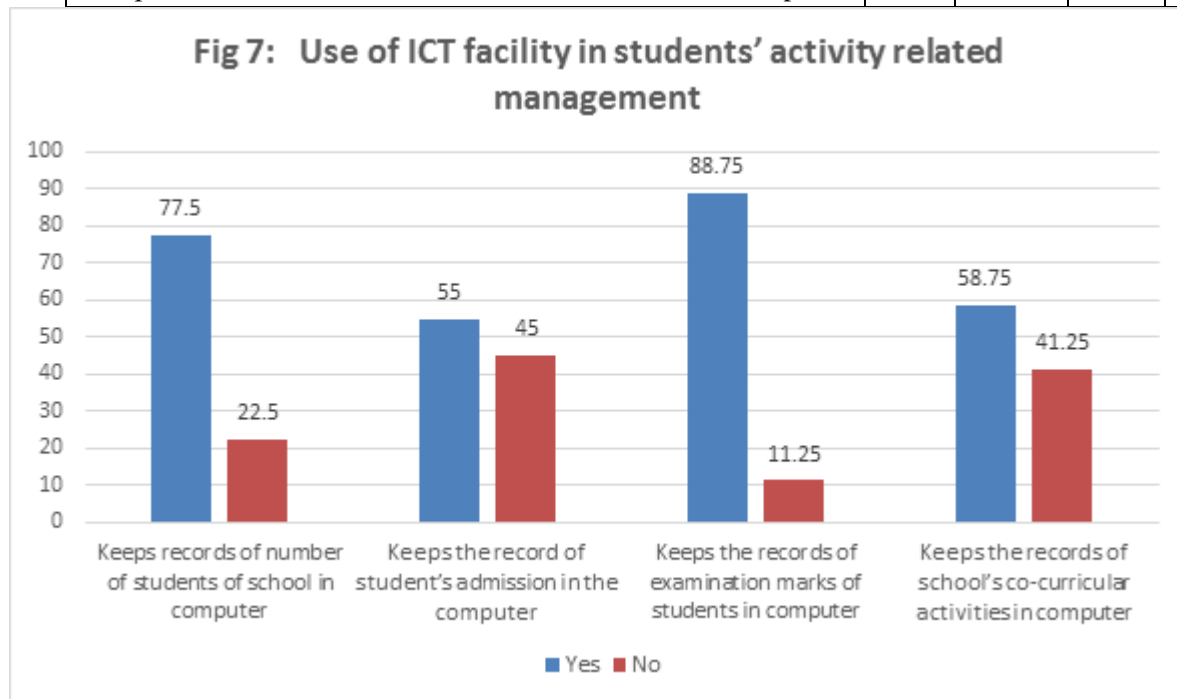
Dimension (iii): To know the uses of ICT facilities in students' activity related management

For students related activity related management, followings are the findings:

- a) 77.50% of the head of the schools keep records of number of students of school in computer
- b) Nearly 55% of the head of the schools keep the record of student’s admission in the computer
- c) 88.75% of the head of the schools keep the records of examination marks of students in computer
- d) 58.75% of the head of the schools keep the records of school’s co-curricular activities in computer

Table 4: Use of ICT facility in students’ activity related management

Statements	Total No. of Respondents = 80			
	Yes	%	No	%
Keep records of number of students of school in computer	62	77.50	18	22.50
Keep the record of student’s admission in the computer	44	55.00	36	45.00
Keep the records of examination marks of students in computer	71	88.75	9	11.25
Keep the records of school’s co-curricular activities in computer	47	58.75	33	41.25



Dimension (iv): To look into the uses of ICT facilities for school related communicational purpose

For various school related communicational purpose, the ICT facilities is found to be used in following manner:

- a) 92.50% of the head of the schools opines that use ICT services (call/SMS/WhatsApp message/e-mail) for communicating to Staff member for school work
- b) 82.50% of the head of the schools opines that use ICT services (call/SMS/WhatsApp message/e-

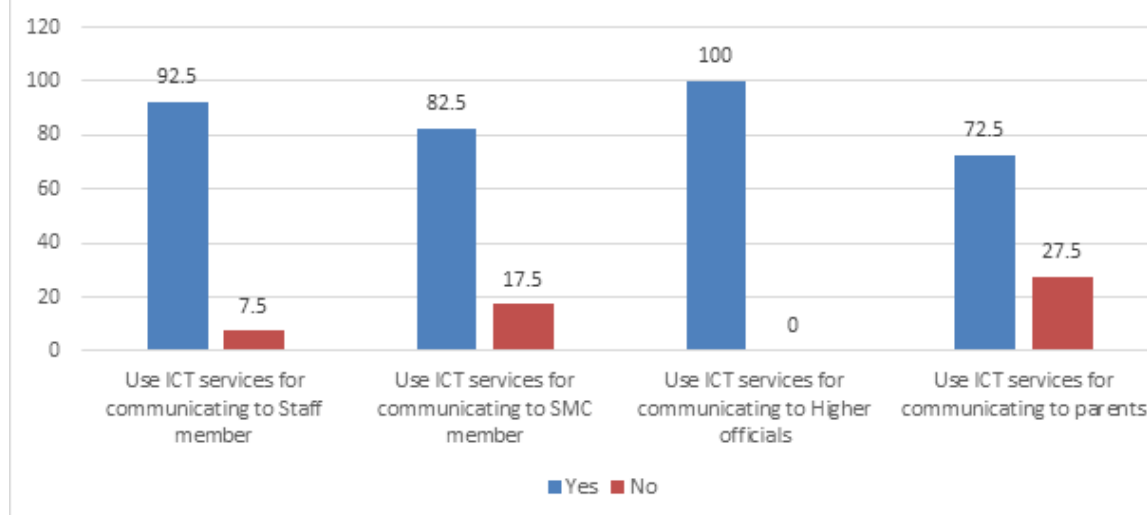
mail) for communicating to managing committee members for any meeting

- c) 100% of the head of the schools opines that use ICT services (call/SMS/WhatsApp message/e-mail) for communicating to Higher officials for school matters
- d) 58% of the head of the schools opines that use ICT services (call/SMS/WhatsApp message/e-mail) for communicating to parents for school matters

Table 5: Use of ICT facilities in various communication

Statements	Total No. of Respondents = 80			
	Yes	%	No	%
Use ICT services (call/SMS/WhatsApp message/e-mail) for communicating to Staff member for school work	74	92.50	6	7.50
Use ICT services (call/SMS/WhatsApp message/e-mail) for communicating to managing committee members for any meeting	66	82.50	14	17.50
Use ICT services (call/SMS/WhatsApp message/e-mail) for communicating to Higher officials for school matters	80	100	0	0
Use ICT services (call/SMS/WhatsApp message/e-mail) for communicating to parents for school matters	58	72.50	22	27.50

Fig 8: Use of ICT facilities in various communication



Dimension (v): To find out the benefits of ICT application in school administration and suggestions from head of the school on ICT applications

As per the responses obtained from the Head of the schools, 69% of them opined that ICT has helped in school administration. Following were the benefits derived by using ICT in school administration:

- ❖ Using ICT proved to be highly beneficial
- ❖ Using ICT all official works became easy
- ❖ Using ICT students' data can be kept easily
- ❖ Using ICT marks of students can be sent to higher official
- ❖ Communicating with teachers
- ❖ Lots of benefits were derived by using ICT for keeping and sending data

- ❖ Using application software such as excel or spreadsheet for making bills became easy task
- ❖ Application of ICT has helped in communication
- ❖ Application of ICT has helped keeping records of official documents

Regarding academic achievement of students, 68% of the head of the schools opines that ICT has helped the students to get better academic achievement.

Suggestions for effective use of ICT facility in school administration:

Following suggestions were offered by the Head of the schools in effective use of ICT facility in school administration:

- Need of more computer for Administration
- Internet should be provided to the schools.

- ICT infrastructures should be strengthened
- Laptop should be provided to every teacher
- Regular ICT training required for staff administration

Suggestions for effective use of ICT facility in teaching process:

Suggestions put forward by the Head of the schools for effective use of ICT in teaching process were as follows:

- More computers to be provided in ICT lab
- More projectors and interactive white board required
- Need of funds for maintenance of ICT tools
- Adequate ICT infrastructure should be provided to overcome the problems faced
- Availability of timely ICT service technician is necessary
- Training should be provided to teachers to use ICT
- Application of Computer should be known by all the teachers

FINDINGS

Following are the some of the important findings of the present study:

- a) In more than 55% school, head of the school uses their personal mobile phone and uses ICT facility for communication to parents for school matters also keeps records of student's admission and records of co-curriculum activities of students in Computer.
- b) More than 65% head of the schools opined that ICT has helped them in school administration and helped the students to get better academic achievement. 65% school uses to keep the record of celebration of national day/festivals in computer.
- c) In more than 75% school, email ID, WhatsApp group available for communication; uses online banking/Google pay/Paytm/phone pay etc. for various payment like electricity bill etc. incurred

for school; keeps records of number of students of school in computer; uses ICT facility for communicating to parents for school matters.

- d) More than 80% of the head of the schools always use computer for school management work and uses various ICT facility for communicating to managing committee members for any meeting.
- e) More than 85% of the head of the schools keep the records of examination marks of students in computer and prepare the salary bill of Teachers & other staff in computer.
- f) More than 95% of the head of the schools opines that they uses ICT facility for communicating to fellow teacher, staff and Higher officials for all school matters

It is found from the study that the most of the head of the school wishes to have 02 dedicated computer for administration, one for himself and other for the office assistant. As most of the head of the school are using computer from computer lab, this action reduces the number of computers in the lab. And some of them are even going to lab and doing administrative work in lab computer, where very less computers are in working condition sometimes and this affect the student learning. The headmasters also suggested to provide laptop for them because laptop is portable and they can take it for maintenance, no need to wait for technician to come which will not hamper their daily activities. Most of the school administrator are using their own internet through mobile hot spot. Because in most of the schools, no internet connection is provided to school administrator. They are using personal internet dongle too. The School Management Committee (SMC) members also found it convenient to communicate among themselves and head of the school over WhatsApp group to provide suggestion in taking school related decision. The administrator also said that with the use of ICT, it become easy for the school administrator to communicate with the higher officials. School assistant had to run to head office for small details or things which presently done within minutes using emails. And moreover, all the head of the school have WhatsApp group created

by the Higher officials where they can put their school related information and also can report problems to the get solution/suggestions. Use of ICT has brining school administrator closer to the parents. Before parents use to come on parents meet or they had to take appointment but presently both parents and head of the school both are benefited by use of ICT to share their problems regarding students.

DISCUSSION

The research work reveals that in present time the school administrators are using ICT to a great extent. The govt run school doesn't have lots of facilities but whatever they have, they are using it, best out of this. The head of the schools are in view of that they are benefited by the use of ICT. Keeping of data of student's admission, exam marks of students mark etc. become easy with the use of ICT and with a single click all the data can be retrieved. Secondly communication with others teachers, parents are become easy with ICT facility. School Management Committee (SMC) members are now always in touch to give advice. Present time all the schools are making salary bills in computerised way, which give relaxation to administration section. Presently all schools both in rural and urban area, are paying electricity bill, telephone bills etc, using ICT means. All the school have WhatsApp group to pass any kind of information among groups. It is also learnt that the head of the schools are facing some problems regarding the ICT facilities provided by the government. It is revealed that most of the head of the school used computers which are provided in the ICT lab. Some of them used it in the lab itself or some of them kept one of them in their room. Very few head of the school got computer for administration purpose. One laptop was provided to very few head of the school, out of which, most of them are not in working condition. They are not having any internet connection. If needed, internet is availed by hots-spot using their personal mobile. Administrator point out that they need laptop which they can carry with internet facilities. Most of the headmaster also suggested that government should enhance the overall ICT facilities in schools from computer lab to head of the school's room.

CONCLUSION

ICT plays an important role in enhancing the quality of education. ICT can bring discipline in administration process as well as it can make whole administration process well planned. The administration process become easy with the use of ICT. As the administrator job is to keeping data and maintain communication with others personals regarding school management, use of ICT encourages and brings perfection to this activity. It provides speed to all the administrative task and use of ICT simplify the administration process. Use of ICT brings transparency and accountability in administrative work. The research will be beneficial for the government machinery because it has depict the picture how ICT has been used in school administration. The facilities provided by the government are not justified if it is not used by school administrator. And if it used, it will enhance the organization capacity of school administrator, as observed.

REFERENCE

1. Ghavifekr, S., Afshari, M., Siraj, S., & Seger, K (2013). ICT Application for Administration and Management: A Conceptual Review. *Procedia - Social and Behavioral Sciences*, 103, 1344 – 1351.
2. Temu, H.H. (2018). Computer in Primary Education Administration in Government Schools Tanzania. *International Journal of Scientific Research in Education*, 11(1), 147-153.
3. Tulowitzki, P., Gerick, J., & Eickelmann, B. (2022). The role of ICT for school leadership and management activities: an international comparison. *International Journal of Educational Management*, 36 (2), 133–151.
4. Makewa, L., Meremo, J., Role, E., & Role, J. (2013). ICT in secondary school administration in rural southern Kenya: An educator's eye on its importance and use. *International Journal of Education and Development using Information and Communication Technology*, 9(2), 48-63.

5. Olayemi, A.O. & Omotayo, K. (2013). ICT adoption and effective secondary school administration in Ekiti state. *European Journal of Educational Studies*, 4(1), 2012 653
6. Afshari, M, Abu bakar, K., Wong, S. L., & Afshari, M. (2010). Principal's level of computer use and some contributing factors. *International Journal of Educational and Information Technologies* 2(4), 121
7. Maki, C. (2008). Information and communication technology for administration and management for secondary schools in Cyprus. *Journal of Online Learning and Teaching*, 4(3), 18-20.