

**MONITORING REPORT
OF
DIBRUGARH UNIVERSITY
ON
IMPLEMENTATION OF ICT @ SCHOOL SCHEME OF SIX
DISTRICT OF
Assam**

Nodal Officer

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CHEPTER:I

INTRODUCTION:

The Information and Communication Technology (ICT) in Schools Scheme was launched in December, 2004 to provide opportunities to secondary stage students to mainly build their capacity on ICT skills and make them learn through computer aided learning process. The Scheme is a major catalyst to bridge the digital divide amongst students of various socio economic and other geographical barriers. The Scheme provides support to States/UTs to establish computer labs on sustainable basis. It also aims to set up smart schools in Kendriya Vidyalayas and Navodaya Vidyalayas which are pace setting institutions of the Government of India to act as “Technology Demonstrators” and to lead in propagating ICT skills among the students of neighborhood schools.

The Importance of Information and Communication Technology (ICT) in catalyzing economic activities, in efficient governance and in empowerment of the society is recognized not only in India but also universally. In the education sector ICT can provide a practical and enabling solution for improving the quality of education. The current deficiencies within the educational system can be surmounted with the rapid and effective implementation of Information Technology in Schools. However in a vast country like India, IT is yet to penetrate many of the Schools especially in the rural areas. Primary and secondary education eludes most of the rural children, especially the girl children. When it comes to computer education in Government Schools, they still remain untouched of the information technology wave that is sweeping the nation. Thus to help these Schools cross the digital divide, the Government of India has devised the ICT@ Schools scheme which aims at quality improvement in Schools. This can be achieved by not only ensuring adequate hardware deployment but also providing software and educational material in the Schools for assuring the success and effectiveness of this scheme. This can be achieved through Private Public Partnership (PPP) which has an impeccable record of offering solutions to the State Government for the implementation of computer education projects across their respective States.

BACKGROUND:

In Assam the ICT @ School Scheme is designed to build an IT literate Assam. It sets to achieve not only to provide IT Literacy to all the School children of the state but also help in building a new generation of talent that has a changed mindset. With such IT related initiatives taken by the Govt. of Assam, the youth population will engage themselves in

educating themselves in computer related fields and thus create employment opportunities for themselves. It will help Assam to build an immense potential of IT talent –and one day the youth of Assam will prove them in the National IT arena.

Ministry of Human Resource Development (MHRD), Govt. of India launched Information & Communication Technology (ICT)@Schools scheme in the year 2007 in Assam. As a part of this, ICT@ School scheme is being implemented in 641 schools of the State on BOOT Model for a period of 5 (five) years on the basis of MHRD, Govt. of India's Letter No. E 11-40/2007-School-5, New Delhi dated 13th December 2007 from the year 2009. After that during the year 2009-10 under the ICT@ School Scheme schools were implemented as Rajiv Gandhi Computer Literacy Programme in Schools of Assam” in the name of ICT@ School/RGCLP Ph.-V. Because the quantum of deliverables, under ICT@ School scheme was much less than existing RGCLP scheme. The new scheme does not have provision for faculty, courseware, generator set and other related ancillary costs. Therefore, Govt. of Assam has decided to leverage the funding assistance under the ICT@ school scheme to expand the ongoing RGCLP Phase IV model, ensuring delivery of all the components under the ICT@ School scheme along with all the inbuilt benefits of the RGCLP.

Distributions of Schools to the agencies for the ICT@ School/RGCLP Ph-V are given below:

1. NIIT Ltd – 331 High Schools.
2. EDUCOMP Solutions Ltd. – 310 High Schools.

After that in the year 2010-11, Govt. of Assam has placed a proposal to Ministry of Human Resource Development, Govt. of India for inclusion of another 1240 schools under the revised scheme of ICT@ School. Subsequently, Govt. of India has approved the said proposal for implementation of the scheme in 1240 schools across Assam.

In addition to the above, in the PAB held in 1st Dec. 2011, Govt. of India has also approved 969 schools to be covered under the revised scheme of ICT@ School during the financial year 2011-12. The supply of all equipments and infrastructure is completed and education delivery is going on from 1st of July'2012 in the above said schools i.e. 2209(1240+969) schools.

- **NODAL DEPARTMENT:** Planning & Development Department
- **NODAL IMPLEMENTING AGENCY:** AMTRON
- **EDUCATION SERVICE PARTNERS:** NIIT Ltd , EDUCOMP & CMC Ltd

DISTRIBUTION OF SCHOOLS UNDER ICT@SCHOOL SCHEME:

Phase	Tenure of Agreement	Agreement Signing Date			Distribution of schools to the Contractors			Agreement expiry date with Contractors		
		NIIT Ltd.	CMC Ltd.	Educom p Ltd.	NII T Ltd.	CM C Ltd.	Educo mp Ltd.	NIIT Ltd.	CMC Ltd.	Educom p Ltd.
RGCL P Phase-V (ICT @ School Scheme/ RGCL P)	5 Years	29.09.2009	-	29.09.2009	331	-	310	28.09.2014	-	28.09.2014
RGCL P Phase-VI (ICT @ School Scheme/ RGCL P)	5 Years	21.03.2012	23.03.2012	23.03.2012	1054	101	1054	20.03.2017	22.03.2017	22.03.2017

Highlights of revised ICT @ Scheme:

- Schools covered: 2850 High Schools/ Higher secondary School across the state
- Classes covered: V - XII
- LINUX based curriculum
- Students not to pay fee
- Course material supplied to students free of cost
- 5 Year maintenance inbuilt
- Stress on performance & results
- Computer Aided Education on 4 subjects viz. English, Math's, Science & Social Science
- Multimedia Educational Software
- Spoken English Course
- Testing & Certification in Computer Education at the end of every academic year

CHAPTER II: EVALUATION METHOD:

The Evaluation Institution's evaluation on which this report is based took place in both Secondary and Higher secondary schools in the school year 2013/14. This chapter begins by looking at different approaches to evaluating ICT in schools and proceeds by giving an overview of the present evaluation. The purpose and aims of the evaluation are explained, and the research methods used are also described.

OVERVIEW AND AIMS OF THE EVALUATION:

The aim of this evaluation is to assess the impact that ICT is having on education in secondary and higher secondary schools. The evaluation also sought to assess the knowledge, skills, attitudes and beliefs of teachers and students in relation to the use of ICT in the teaching and learning process and in schools in general.

The Major objectives of the evaluation are as follows:

- To evaluate the implementation of ICT in School.
- To evaluate the overall impact of ICT in School.

TOOLS USED: The data for the evaluation is collect in the following ways:

- Different interview schedule (Questionnaire) for various stakeholders such as Students, Teachers, School head, Principal, DEO, State Level Authority etc.

SELECTION OF SAMPLE FOR EVALUATION:

The selected population for the evaluation consisted of 10 schools (both secondary and higher secondary) of each district on the basis of following criteria:

- Covered under ICT school scheme.
- Higher gender gap in enrollment.
- Higher proportion of SC/ ST/Minority/ weaker section students.
- The locality where problem of electricity connection.
- The locality where is problem of no ‘internet connectivity’ or ‘connectivity problem’.
- The schools located in rural areas.

DATA COLLECTION:

The investigators collect data from school head, four teachers (one Teacher in Science, Social, Language and Mathematics in each school), and one ICT teacher, two students (1 Boy and 1Girl in each school).

SELECTION OF DISRICT FOR EVALUATION:

The selections of District were based on following criteria:

- Urban District: Kamrup(Metro)
- Rural District: Nagaon
- District With high tale-density: Dibrugarh
- District With low tale-density: Sonitpur
- District characterized as a backward by state: Dhemaji
- District With electricity problem: Lakhimpur

CHEPTER III: ANALYSIS AND INTERPRETATION OF DATA:

The present interpretations of data were collected from the above mentioned sample and questions in the interview were asked in same sequence. For the purpose of analysis the questions were subdivided under some heading which indicate the evaluation of ICT School scheme. The dimensions of the questions are discuss as follows-

➤ LOCALITY OF SCHOOL SELECTED FOR ICT EVALUATION IN ASSAM:

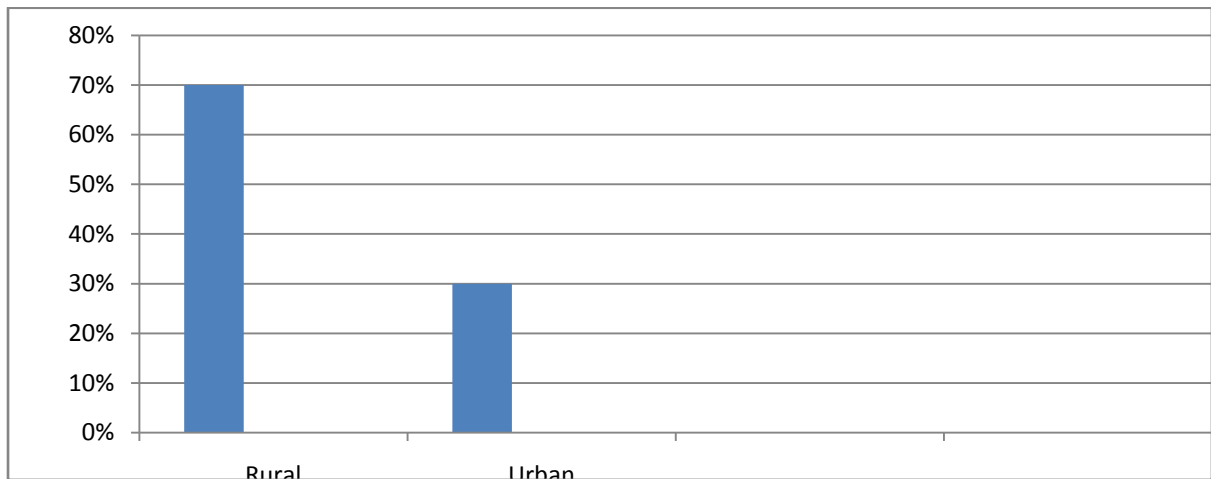
The ICT school scheme in Assam covered various schools in its six districts based on some criteria which included the locality of the schools for evaluation. We have selected six

districts namely Kamrup, Nagaon, Lakhimpur, Dhemaji, Dibrugarh and Sunitpur District. We have taken 10 schools from each district some of them are belonging to rural area some of them are urban.

The schools locality of entire six districts figures shown as below-

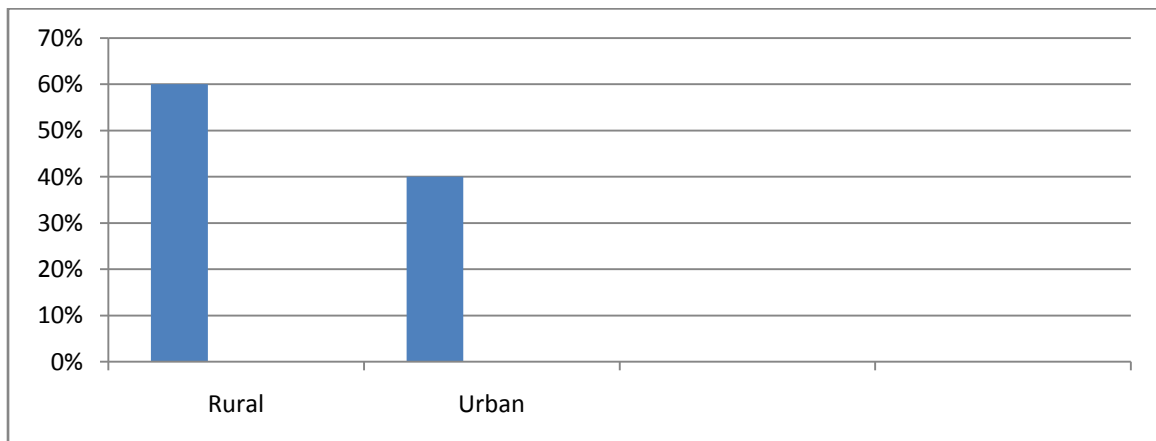
DIBRUGARH DISTRICT:

Rural	Percentage	Urban	Percentage
7	70%	3	30%



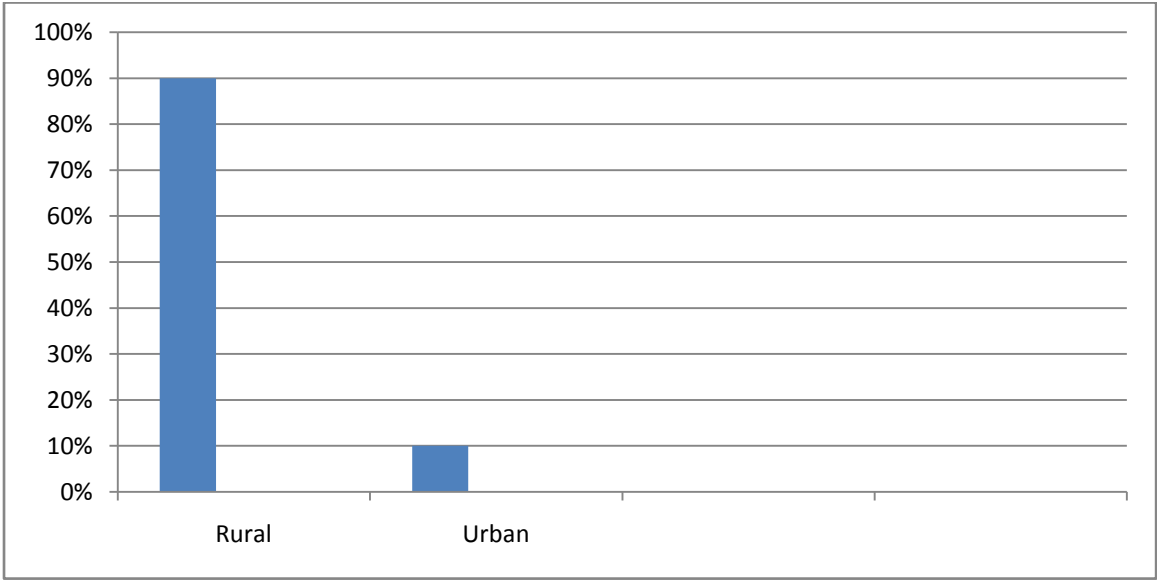
Sunitpur District:

Rural	Percentage	Urban	Percentage
6	60%	4	40%



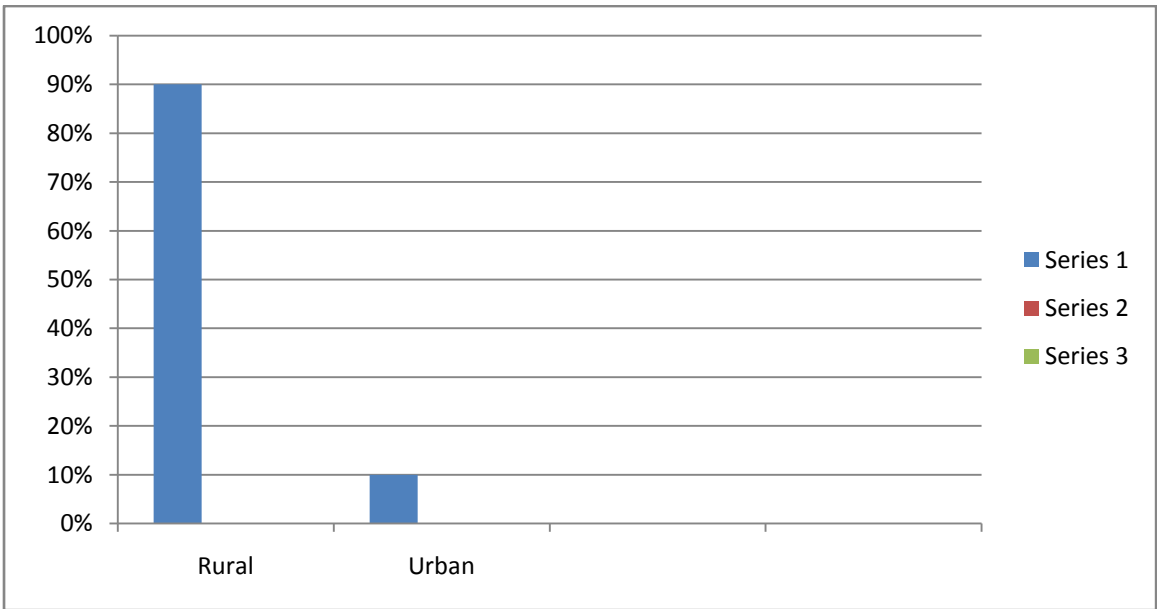
Lakhimpur District :

Rural	Percentage	Urban	Percentage
9	90%	1	10%



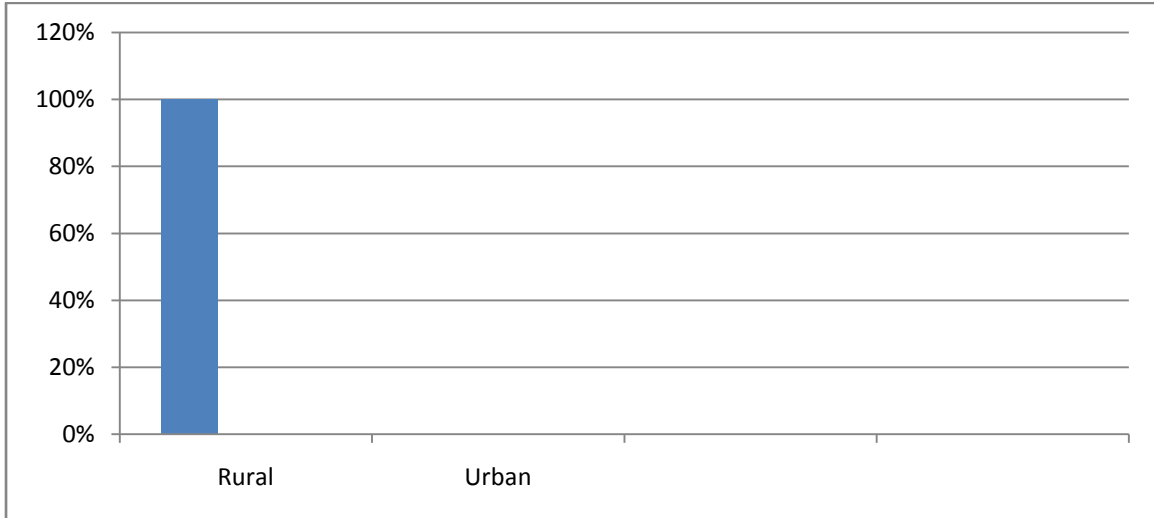
Dhemaji District :

Rural	Percentage	Urban	Percentage
9	90%	1	10%



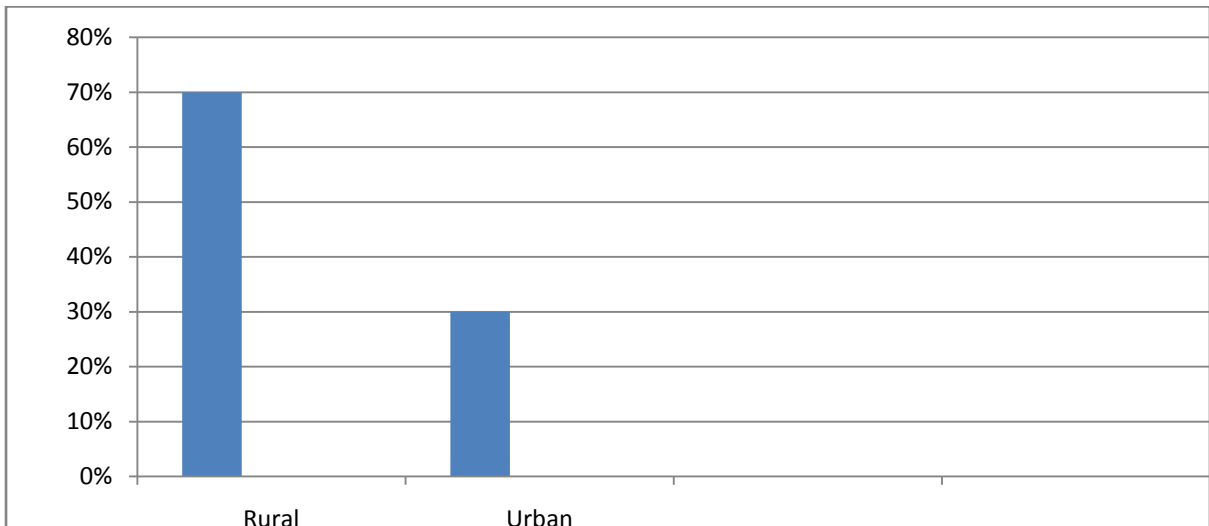
Kamrup District:

Rural	Percentage	Urban	Percentage
		10	100%



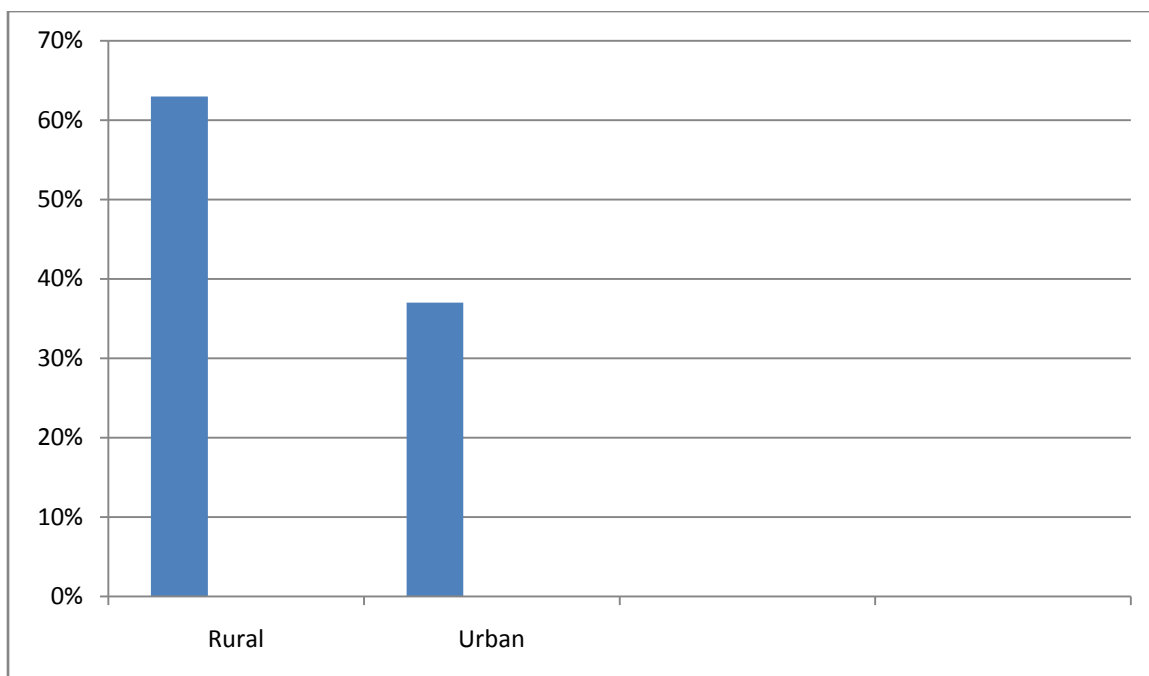
Nagaon District:

Rural	Percentage	Urban	Percentage
7	70%	3	30%



Total number of rural and urban area schools was shown following diagram

Rural	Percentage	Urban	Percentage
38	63%	22	37%



➤ **ICT INFRASTRUCTURE AND OTHER FACILITIES IN THE SCHOOLS:**

To make a smart class room physically accessible to every child and as a part of the programme an ultra modern computer lab is being constructed in entire six districts schools. Where in the following materials/equipments have been installed in one of the classrooms of the school with proper grill door and is being kept under the custody of the concern school Head of the Institution. This particular classroom has been designated as the RGCLP Computer Lab. The following Materials/Equipments are being installed in the RGCLP-Computer Labs:-

S.L. NO	PARTICULARS	QUNTITY
1	Computers	10
2	Licensed Software/Windows	
3	56 KBPS External Modem	1
4	Dot Matrix Printer/ Lesure Printer	1
5	Scanner	1
6	16 port Network Switch with proper network cabling	1
7	Web Cam	1/10
8	Computer tables	10
9	Chairs (Without Arm)	20

10	Chairs (With Arm)	2
11	Printer/Scanner Table	1
12	Instructor Table	1
13	Ceiling Fans	2
14	Tube Lights	2
15	Grill Door	1
16	Generating Set (Silent mode or making minimum noise)	1
17	Proper Electrical wiring	-
18	Dust Free room with False Ceiling and Vinyl Flooring	-
19	Electrical sub meter to record power consumption by the Lab	-
20	Painting of Computer Lab	-

Computer labs were available in every habitation, urban, rural, tribal and tea garden area schools. It was seen that the entire six districts computer lab were well painted, well lighted and proper electrical wiring. But space of the lab is small to comparison of student enrollment, intake capacity of sitting arrangement is very low, only 20 students can sit at a time of class.

The other facilities of schools and computer labs of entire six districts were shown in below table

DIBRUGARH DISTRICT:

SCHOOL FACILITIES

Facilities	Yes	No	Working	Not working
Class room	10		10	
Drinking water	10		10	
Toilets with water	10		10	
Playground	10		10	
Electricity	10		10	
Solar power	1	9	1	9
Generator	10		10	
Inverter		10		10

Natural Gas		10		10
Landline Telephone		10		10
Mobile phone		10		10
Fax Machine		10		10
Cable TV		10		10
Satellite Terminal		10		10
Receive terminal		10		10

ICT COMPUTER LAB FACILITIES:

Facility	Yes	No	Working	Not working
Individuals PCs	10		10	
Laptops	5	5	5	5
Server with Terminals		10		10
Internet Nodes	5	5	5	5
Projectors	5	5	5	5
Printers	10		10	
Scanner	10		10	
Web Camera	10		10	2
Modem	10		6	4
Broadband antenna		10		10
Generator	10		10	
UPS	10		10	
Video Camera	5	5	5	5

SUNITPUR DISTRICT:

In our observation we have seen that the following facilities were available

SCHOOL FACILITIES

Facilities	Yes	No	Working	Not working
Class room	10		10	
Drinking water	10		10	
Toilets with water	10		10	
Playground	10		10	
Electricity	10		10	
Solar power		10		10
Generator	10		10	
Inverter		10		10
Natural Gas		10		10
Landline Telephone		10		10
Mobile phone		10		10
Fax Machine		10		10
Cable TV		10		10
Satelite Terminal		10		10
Receive terminal		10		10

ICT COMPUTER LAB FACILITIES:

Facility	Yes	No	Working	Not working
Individuals PCs	10		10	
Laptops	5	5	5	5
Server with Terminals		10		10
Internet Nodes	5	5	5	5
Projectors	5	5	5	5
Printers	10		10	
Scanner	10		10	
Web Camera	10		10	2
Modem	10		3	7
Broadband antenna		10		10

Generator	10		10	
UPS	10		10	
Video Camera	5	5	5	5

LAKHIMPUR DISTRICT

In our observation we have seen that the following facilities were available

SCHOOL FACILITIES

Facilities	Yes	No	Working	Not working
Class room	10		10	
Drinking water	10		9	1
Toilets with water	9	1	8	2
Playground	9	1	9	1
Electricity	9	1	9	1
Solar power		10		10
Generator	9	1	9	1
Inverter		10		10
Natural Gas		10		10
Landline Telephone	1	9	1	9
Mobile phone		10		10
Fax Machine		10		10
Cable TV		10		10
Satelite Terminal		10		10
Receive terminal		10		10

ICT COMPUTER LAB FACILITIES:

Facility	Yes	No	Working	Not working
Individuals PCs	10		10	
Laptops	5	5	4	6
Server with Terminals		1		10
Internet Nodes	6	4	4	6
Projectors	5	5	5	5
Printers	9	1	8	2

Scanner	8	2	7	3
Web Camera	10		8	2
Modem	9	1	3	7
Broadband antenna		10		10
Generator	10		10	
UPS	10		10	
Video Camera	6	4	5	5

DHEMAJI DISTRICT:

In our observation we have seen that the following facilities were available

SCHOOL FACILITIES

Facilities	Yes	No	Working	Not working
Class room	10		10	
Drinking water	10		10	
Toilets with water	10		10	
Playground	8	2	8	2
Electricity	10		10	
Solar power		10		10
Generator	10		10	
Inverter		10		10
Natural Gas		10		10
Landline Telephone		10		10
Mobile phone		10		10
Fax Machine		10		10
Cable TV		10		10
Satelite Terminal		10		10
Receive terminal		10		10

ICT COMPUTER LAB FACILITIES:

Facility	Yes	No	Working	Not working
Individuals PCs	10		10	
Laptops	5	5	5	5

Server with Terminals		10		10
Internet Nodes	5	5	5	5
Projectors	5	5	5	5
Printers	10		8	2
Scanner	5		5	
Web Camera	10		10	2
Modem	10		3	7
Broadband antenna		10		10
Generator	10		10	
UPS	10		10	
Video Camera	5	5	5	5

KAMRUP DISTRICT:

In our observation we have seen that the following facilities were available

SCHOOL FACILITIES

Facilities	Yes	No	Working	Not working
Class room	10		10	
Drinking water	10		10	
Toilets with water	10		10	
Playground	8	2	8	2
Electricity	10		10	
Solar power		10		10
Generator	10		10	
Inverter		10		10
Natural Gas		10		10
Land. Telephone		10		10
Mobile phone		10		10
Fax Machine		10		10
Cable TV		10		10
Satellite Terminal		10		10
Receive terminal		10		10

ICT COMPUTER LAB FACILITIES:

Facility	Yes	No	Working	Not working
Individuals PCs	10		10	
Laptops	7	3	7	-
Server with Terminals		10		10
Internet Nodes	7	3	7	-
Projectors	7	3	7	-
Printers	10		9	1
Scanner	10		10	
Web Camera	10		10	2
Modem	10		0	10
Broadband antenna		10		10
Generator	10		10	
UPS	10		10	
Video Camera	7	3	7	-

NAGAON DISTRICT:

In our observation we have seen that the following facilities were available

SCHOOL FACILITIES

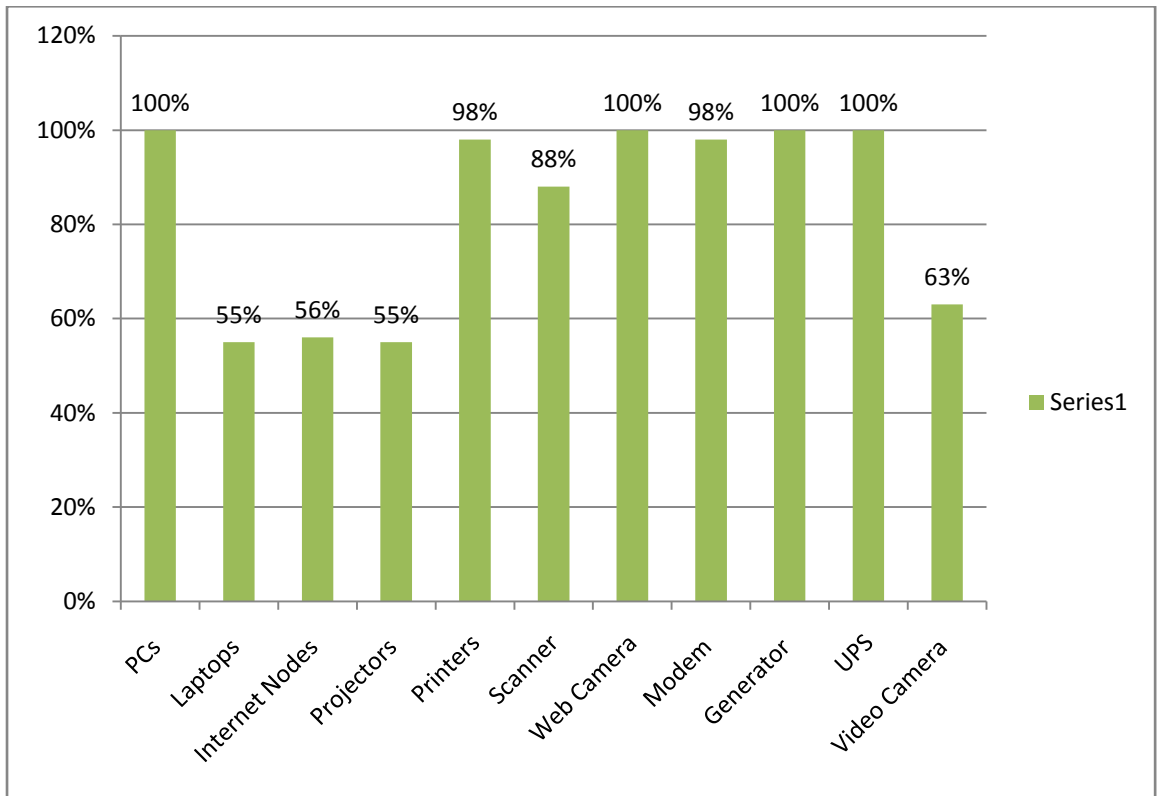
Facilities	Yes	No	Working	Not working
Class room	10		10	
Drinking water	10		10	
Toilets with water	10		10	
Playground	7	3	-	-
Electricity	10		10	
Solar power		10		10
Generator	10		10	
Inverter		10		10
Natural Gas		10		10
Landline Telephone		10		10

Mobile phone		10		10
Fax Machine		10		10
Cable TV		10		10
Satellite Terminal		10		10
Receive terminal		10		10

ICT COMPUTER LAB FACILITIES:

Facility	Yes	No	Working	Not working
Individuals PCs	10		10	
Laptops	6		6	-
Server with Terminals		10		10
Internet Nodes	6		6	-
Projectors	6		6	-
Printers	10		10	
Scanner	10		10	
Web Camera	10		10	
Modem	10		0	10
Broadband antenna		10		10
Generator	10		10	
UPS	10		10	
Video Camera	6		6	-

In general analysis the overall ICT facilities were shown as Follow with the help of graphical represent:



ICT maintenance and technical support

The problems associated with the lack of technical support and maintenance were commented upon strongly in our survey responses from principals and teachers. These respondents' comments provided an insight into the complexities faced by some schools regarding this issue. In our survey we found that the education service partners that is NIIT Ltd. and EDUCOMP were appointed a school coordinator for each school to provide technical support and handle both hardware and software equipment. There were no school budget for ICT maintenance and technical support.

AVERAGE HOUR'S PER DAY OF NORMAL SCHOOL HOURS WHERE THE STUDENTS USE THE COMPUTERS:

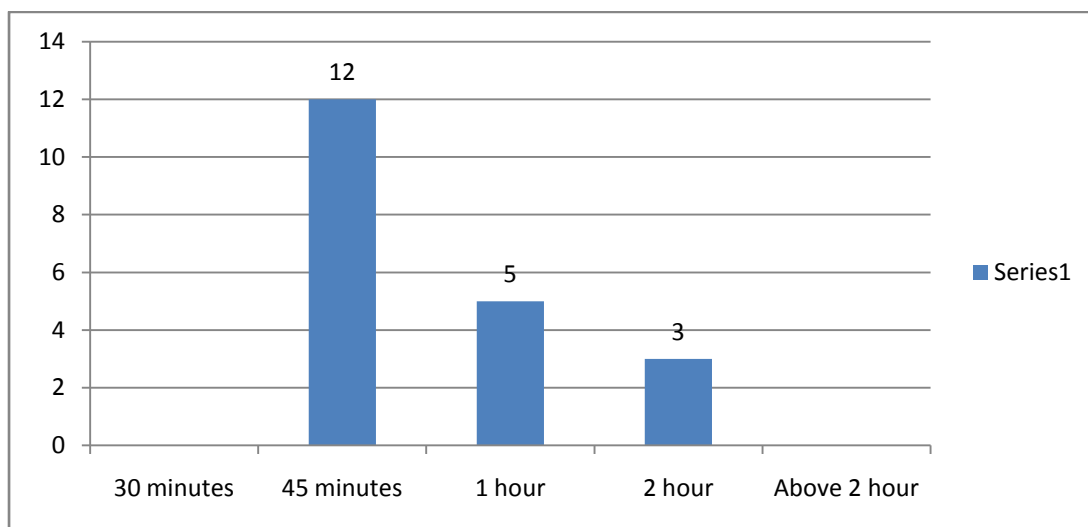
In our survey we also found that the students have got only one class daily for 45 minutes to 1 hour to learn basic computer tasks as well as practical knowledge.

In general analysis the average per day of normal school hours where the students are able to use the computers are shown as Follow with the help of graphical representations:

DIBRUGARH DISTRICT

30 minutes	45 minutes	1 hour	2 hour	Above 2 hour
	12	5	3	

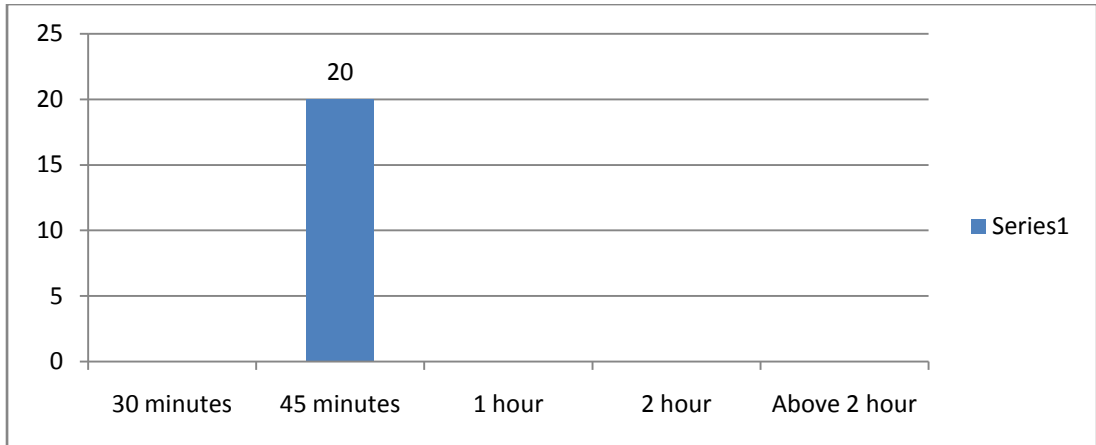
In Dibrugarh Districts 12 students are allotted 45 minutes of use per day, 5 students allotted 1 hour per day and 3 students allotted 2 hour per day where students are able to use the computer.



KAMRUP (METRO)

30 minutes	45 minutes	1 hour	2 hour	Above 2 hour
	20			

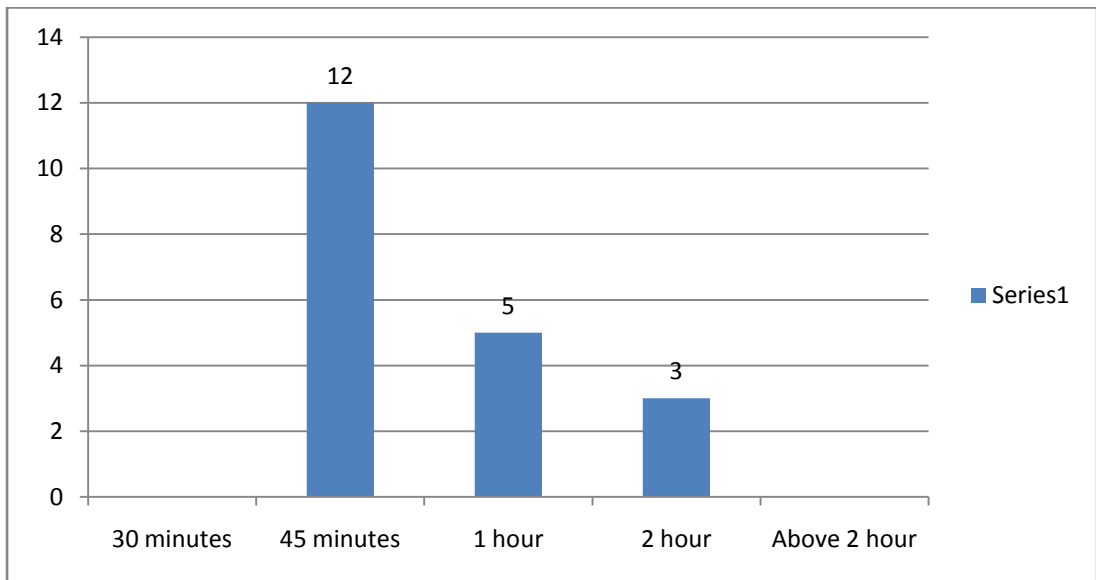
In Kamrup Districts 20 students are allotted 45 minutes per day where students are able to use the computer.



SUNITPUR DISTRICT

30 minutes	45 minutes	1 hour	2 hour	Above 2 hour
	12	5	3	

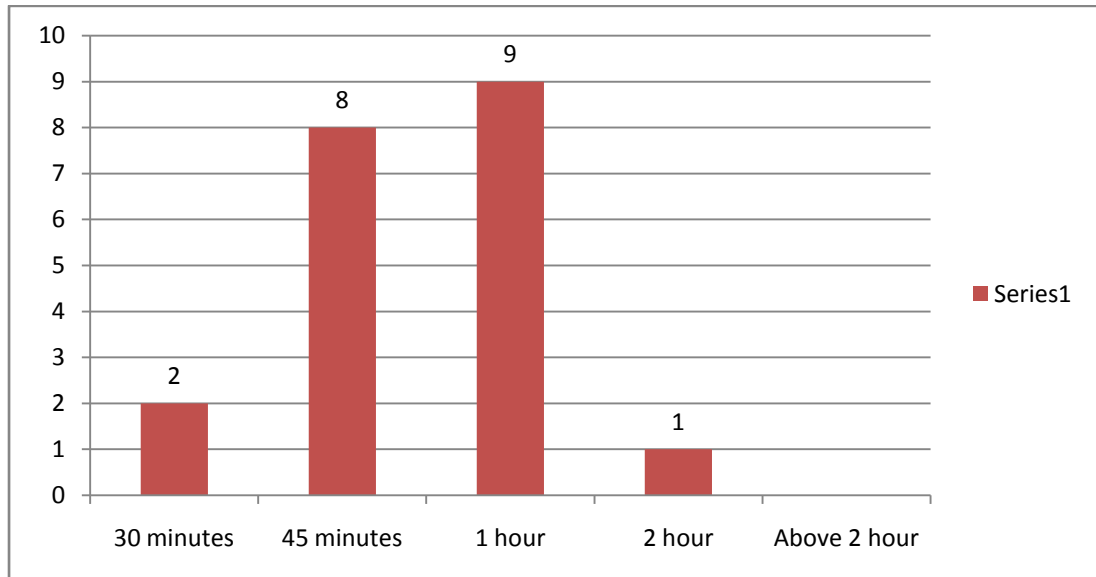
In Sunitpur Districts 12 students are allotted 45 minutes of use per day, 5 students allotted 1 hour per day and 3 students allotted 2 hour per day where students are able to use the computer.



LAKIMPUR DISTRICT

30 minutes	45 minutes	1 hour	2 hour	Above 2 hour
2	8	9	1	

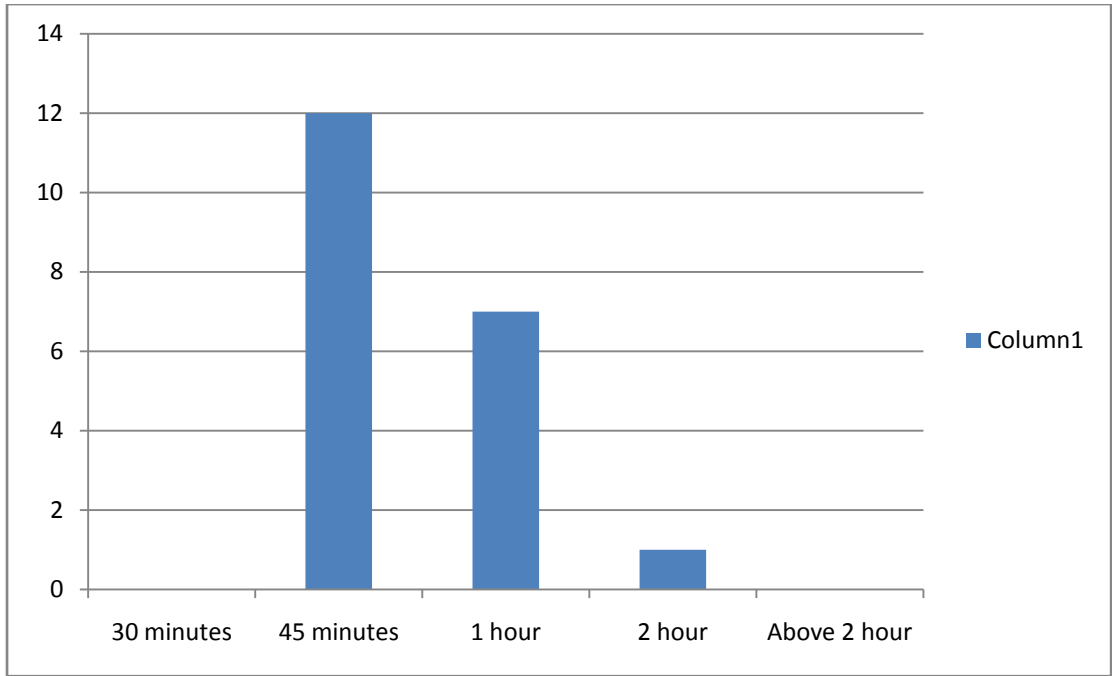
In Lakhimpur Districts 2 students are allotted 30 minutes per day, 8 students are allotted 45 minutes of use per day, 9 students allotted 1 hour per day and 1 student allotted 2 hour per day where students are able to use the computer.



DHEMAJI DISTRICT

30 minutes	45 minutes	1 hour	2 hour	Above 2 hour
	12	7	1	

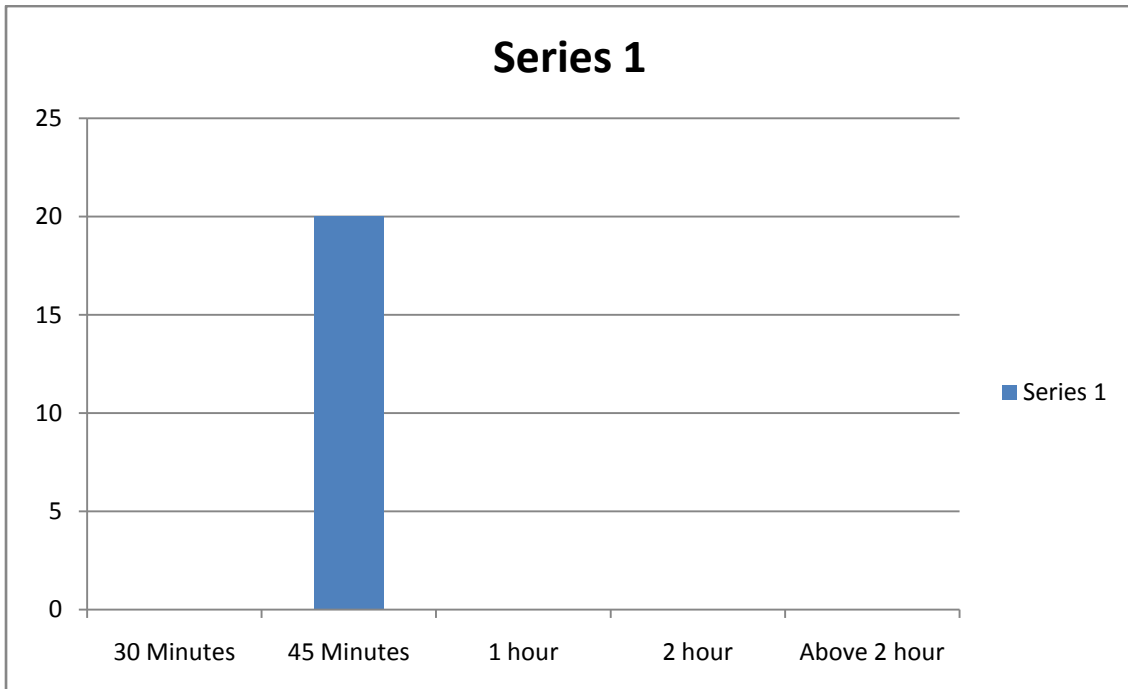
In Dhemaji Districts 12 students are allotted 45 minutes of use per day, 7 students allotted 1 hour per day and 1 student allotted 2 hour per day where students are able to use the computer.



NAGAON DISTRICT

30 minutes	45 minutes	1 hour	2 hour	Above 2 hour
	20			

In Nagaon districts 20 students are allotted 45 minutes per day where students are able to use the computer.



ACCESS TO COMPUTERS

In general our surveys of teachers found that school provided both teachers and students with minimum levels of access to computer facilities. It was seen that only one computer room (computer lab) is provided for both teachers and students to access computer facilities.

ACCESS BY TEACHER

Out of 240 teachers, a few number 58% of schools teachers were found to use computer for classroom teaching in entire six districts. It was also found that only 32% of teacher had access to their school computers outside class hours.

ACCESS BY STUDENTS

In entire six district's 60 schools and 2 students (one boy & one girl) from each schools that participated in the evaluation were also asked about where they had access to a computer. More than 23% of students surveyed at evaluation reported at they had been using computers for three or more years. Their present uses were reported as being frequent 70% reported using computers at least 4 to 6 times a week at school. Students reported that computers were usually in computer labs and that they generally use them in groups. More than one out of 10 student's state that using a computer helps them with their school work. This was mainly through use of internet.

INFORMATION ON INTERNET

Lakhimpur District:

In our observation we found that out of 20 student's only 8 students is capable to use internet and find the information on internet. Along with the students the teachers are also lacking behind to use internet. Out of 40 teachers including 10 head masters only 7 teachers are capable to use internet.

Sunitpur District:

In our observation we found that out of 20 student's only 8 students is capable to use internet and find the information on internet. Along with the students the teachers are also

lacking behind to use internet. Out of 40 teachers including 10 head masters 15 teachers are capable to use internet.

Dibrugarh District:

In our observation we found that out of 20 student's only 6 students is capable to use internet and find the information on internet. Out of 40 teachers including 10 head masters only 14 teachers are capable to use internet.

Kamrup District:

In our observation we found that out of 20 student's 9 students is capable to use internet and find the information on internet and out of 40 teachers including 10 head masters only 16 teachers are capable to use internet.

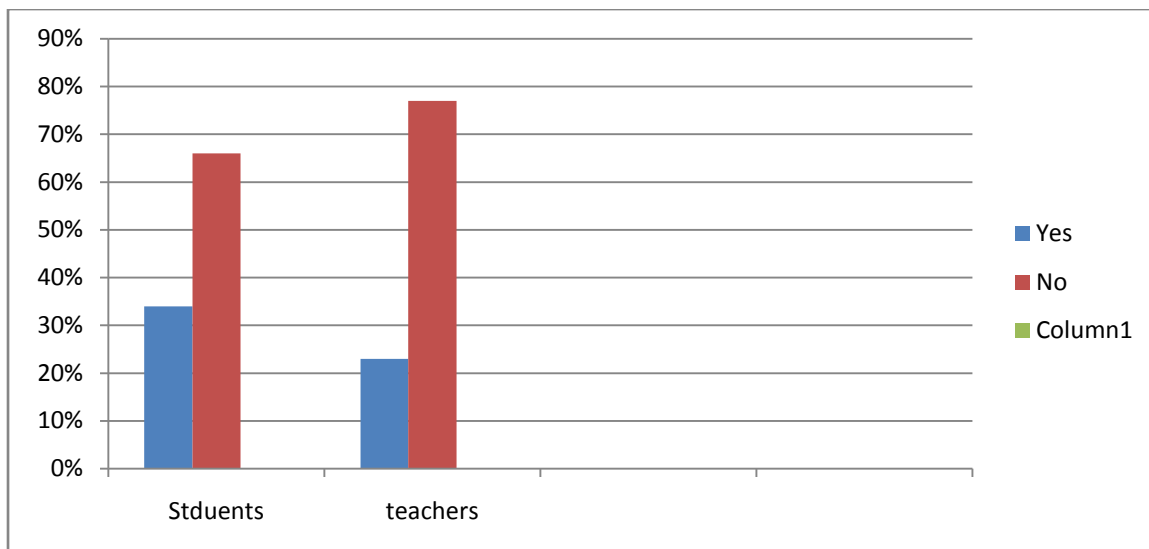
Nagaon District:

In our observation we find that out of 20 student's only 5 students is capable to use internet and find the information on internet. Out of 40 teachers including 10 head masters only 13 teachers are capable to use internet.

Dhemaji District:

In our observation we found that out of 20 student's only 5 students is capable to use internet and find the information on internet. Along with the students the teachers are also lacking behind to use internet. Out of 40 teachers including 10 head masters only 4 teachers are capable to use internet.

The overall percentage of entire six districts of students, Teachers along with school Head using internet is shown as follow:



USE OF E-MAIL FACILITY

Dhemaji District:

We have found that out of 20 students no single student have their E-mail ID. Only 7 teachers have their personal E-mail ID.

Sunitpur District:

The students of Sunitpur District also lacking behind with persona E-mail ID. Only 12 teachers have their E- mail ID.

Dibrugarh District:

In Dibrugarh District we found that out of 20 students only 4 students have their personal E-mail ID and out of 20 teacher only 11 teacher have their personal-mail ID.

Lakhimpur District:

The students of Lakhimpur District also lacking behind with persona E-mail ID. Only 2 students have their E-mail ID and only 8 teachers have their E- mail ID.

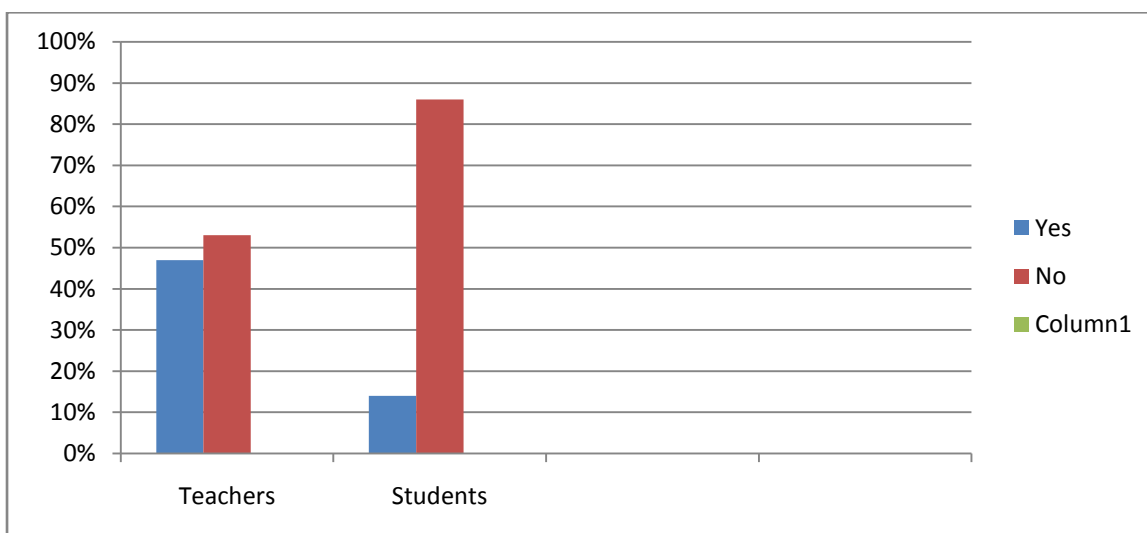
Kamrup District:

We have found that out of 20 students only 5 students have and only 8 teachers have their personal E-mail ID.

Nagaon:

The students of Nagaon District also lacking behind with persona E-mail ID. Only few students i.e. 3students have their E-mail ID and only 6 teachers have their E- mail ID.

In general out of 120 students respondent of entire six districts only14 students had their E- mail ID and out of 240 teachers respondent 69 teacher have their E- mail ID. The overall percentage of entire six districts of students and Teachers email ID shown as follow:



SCHOOL WEBSITE

School with their own website regard it is a means of information the public about their schools and as a way of promoting the work one in their schools. In our survey of school heads asked respondents state whether their school had a website. It was found that there was no single website in entire 60 schools of six districts.

GRADE OF OVERALL ICT CAPABILITIES OF STAFF

DIBRUGARH DISTRICT

	Excellent	Very good	Good	Fair	No Capability
Teaching		3	6	1	
Non teaching			4	4	2
Administrative					10

SUNITPUR DISTRICT

	Excellent	Very good	Good	Fair	No Capability
Teaching		3	7		
Non teaching			3	5	2
Administrative					10

LAKHIMPUR DISTRICT

	Excellent	Very good	Good	Fair	No

					Capability
Teaching			5	5	
Non teaching			3	5	2
Administrative					10

KAMRUP (METRO) DISTRICT

	Excellent	Very good	Good	Fair	No Capability
Teaching		3	5	1	1
Non teaching			5	3	2
Administrative					10

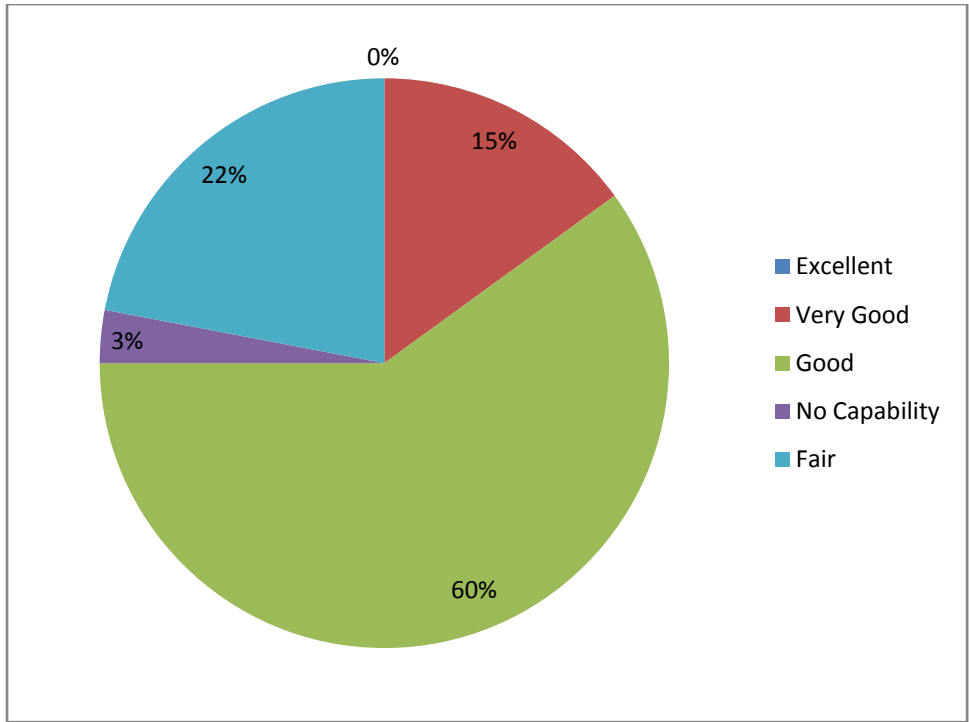
DHEMAJI DISTRICT

	Excellent	Very good	Good	Fair	No Capability
Teaching			4	6	
Non teaching			2	8	2
Administrative					10

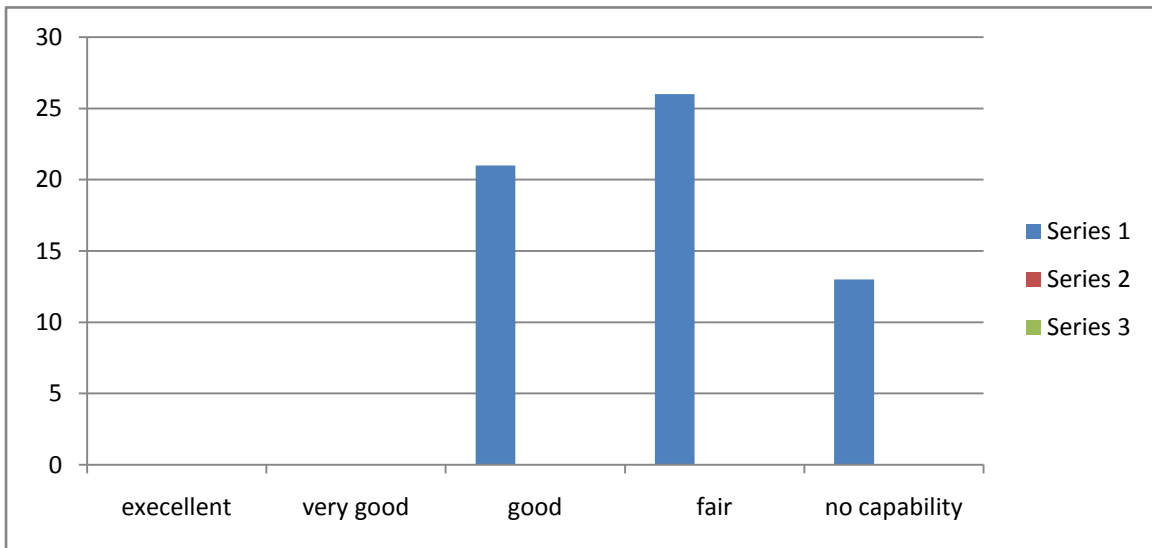
NAGAON DISTRICT

	Excellent	Very good	Good	Fair	No Capability
Teaching			8	1	1
Non teaching			4	3	3
Administrative					10

In general grade of overall ICT capabilities of **TEACHING STAFF** is shown following diagram:



In general grade of overall ICT capabilities of **NON-TEACHING STAFF** is shown following diagram



In our survey we also found that the administrative personal of entire six districts have no ICT capabilities. They did not have any information about this ICT@ school scheme.

AWERNESS OF PRINCIPAL/HEAD ABOUT SCHOOL AND PURPOSE OF ICT IMPLIMENTATION:

In our survey we found that there was very poor awareness of principal/head as well as any other school teachers about scope and purpose of ICT implementation. No one single school head and any other teacher unable to give their feedback regarding the same.

ICT CONTENT AND E-CONTENT FOR OTHER SUBJECT USED IN SCHOOL CURRICULUM:

An analysis of the survey also found that the ICT content and e-content designed prepared by the third party and obtain free from third party.

IMPACT OF ICT PROGRAME ON TEACHER, STUDENT AND OVERALL SCHOOL ENVIRONMENT

IMPACT – TEACHER

TECHNICAL SUPPORT

One of the major burdens on schools' budgets with regard to ICT for technical support there are no other funds are allotted. The lack of technical support and maintenance is a major impediment to the development of ICT in schools.

TEACHERS' USE OF ICT IN PLANNING AND PREPARATION:

A few number of teachers (both secondary and higher secondary) were found to make some use of ICT in their lesson planning and preparation work. Newly qualified teachers were more likely to use ICT for this purpose than their more experienced colleagues. However, fewer teachers were found to plan for the actual use of ICT in teaching and learning.

IMPACT – STUDENTS

In our observation we found that students were very much interested to learn from computers in comparison to other subject. They want to spend lots of time with various computer tasks such as watching images, access documents, playing game and videos etc. Here it is also mentionable that after introducing this scheme the attendance percentage is increasing day by day in every school.

ICT TEACHER:

In our survey we also evaluate 60 ICT teacher respondents of entire six districts. This 60 ICT teacher respondent reported that they were not happy with the mode of recruitment i.e. contract basis and nature of employment. On the other hand all of them reported that they were not satisfied with their remuneration.

OPINION OF SCHOOLS HEAD FOR BETTER IMPROVEMENT OF ICT SCHOOL SCHEME/ ICT USE TO ENHANCING TEACHING LEARNING CAPABILITIES IN SCHOOL ENTIRE SIX DISTRICTS:

- The head of school suggested that though the schools are lacking behind with the study material so study material are urgently required for the better implementation the ICT school scheme.
- They also opined that basic training about information and communication technology and use of technology in teaching learning process are needed both for the students as well as for the teacher.
- Though lack of awareness about this ICT program create problem at the time of implementation so at least a monthly training program should be adopted for better implementation.
- The ICT subject is to be included as an elective subject in every school with required recognition from SEBA.
- Frequently monitoring of the various hardware equipments is very much needed for proper maintenance of the same.
- To make the classroom as smart class room, LCD projector and other teaching aids are too installed in every class room.

CHEPTEER: IV MAJOR FINDINGS AND RECOMMENDATION:

This chapter summaries the main findings and recommendations of this report. The findings show that, Evaluating 60 schools of entire six districts where ICT@ school scheme is going on, we have found that the facilities were provided timely but the benefits of this scheme were not fully implemented. The lack of awareness about this scheme among the students as well as among the teaching and non-teaching staff create obstacle for successful implementation of this programme. Here it is also mentionable that the 5th phase school are lacking behind the hardware equipment like LCD projector, scanner, web camera modem etc. On the other hand the study material relating ICT skills are yet not provided in 6th phase schools. And also lack of proper training facilities teachers were face problem to utilize the

benefits of ICT school scheme. Though some problems are there but through introducing this scheme the students were get a high rate of computer knowledge as well as basic computer skills.

In our survey we found that the ICT@ school scheme started in the entire six districts is running smoothly with some obstacle. Further we observed that the students are very much interested to learn from computers playing game, access documents, watching images and videos etc. Here it is also mentionable that after introducing this scheme the attendance percentage is increasing day by day in every school. Apart from that, out of 120 student's respondent 14% the students are also capable to handle with MS Office, accessing documents class materials from using internet. But though students are ready to get benefits from this scheme, lack of awareness and dedication from the part of other teacher as well as ICT instructor this scheme unable to reach its aim and goal. The teachers often ignore the process of Information and technology and could not find any study materials using internet through modem. The minority of teacher make some use of ICT in lesson planning and preparation. Newly qualified teachers are more likely to use ICT for this purpose than their more experienced colleagues. However, fewer teachers were found to plan for the use of ICT in teaching and learning. The involvement of the teachers is found very less than the student's involvement regarding teaching and learning process. Only 32% of science teacher and 18% of Arts teachers rated their ability as either intermediate or advanced with regard to using teaching and learning methods that are facilitated by ICT. Recently qualified teachers had a higher perception of their ICT skills than more experienced teacher. The evaluation also found that most student are able to perform many of the most basic computer tasks, such as tuning a computer on and off an opening or saving a file, drawing various pictures, prepare a soft application copy etc. But out of 120 students' respondent 7% of them able to print a document or to go on to the internet by themselves. These students reported not being able to create a document by themselves. The others students did not know how to create a presentation; use a spreadsheet, accessing document from internet. Competence in the use of ICT is limited for the most part to basic ICT skills, centered on the use of word-processing. The students as well as teachers interaction with the technology in ICT related activity was observed very limited. The most common ICT related activity was the use of a data projector to make a presentation to a class group. But in our survey we found that the schools of entire six districts is lacking behind with this benefits of ICT school scheme so that the effective integration was very poor in those schools. The survey found that the students had the confidence to perform much computer operation by themselves such as saving, printing,

deleting, opening and editing a document. However, it also found that they generally needed some assistance to perform more complicated tasks such as moving files, copying files to external storage devices, and accessing materials from internet, preparing a presentation and some other tasks related to the MS Office. In our survey we also found that the level of awareness among teachers of the ICT advisory service is generally low, only a few teacher respondents (both science and Arts teacher) respondents reported an awareness of it. Focus Group Discussion with students, teachers indicated that more awareness was needed and therefore training was essential so that they may utilize its benefits to the optimum. However stakeholders opined that the entire ICT program was helping a large number of students access to digital technology.

RECOMMENDATION

1. The level of ICT infrastructure in schools needs to be improved. Specially the policy makers should be working towards equipping not just all schools but all classrooms with an appropriate level of ICT infrastructure. Consideration should be given to equipping all classrooms with at least a computer for use by the teacher, broadband internet access with a fixed data projector and screen for use by the teacher in presentation. Furthermore to ensure appropriate access to ICT by students, the policy makers should strive to reduce its student computer ratio from the present status.
2. Improvements in ICT infrastructure will need to be supported by the introduction of a monthly ICT technical support and maintenance system for schools. Schools also need to be provided with the capacity to regularly upgrade their own ICT infrastructure.
3. Schools, school head and teachers should regularly review the use of ICT in their work. In particular. They should strive to ensure greater integration of ICT within teaching and learning activities in classrooms and other settings.
4. Teachers should exploit the potential of ICT to develop as wide a range of students skills as possible, including the higher-order skills of problem-solving, synthesis, analysis, and evaluation

5. Principal should encourage and facilitate suitable ICT training for teachers as well as for students.
6. School should plan for the maintenance and upgrading of their ICT system.
7. Computer rooms where they exist should be used to maximum effect. Staff members and student should be provided with adequate access to the internet.
8. Teacher should endeavor to integrate ICT more in their planning and preparation for teaching.
9. Schools need to ensure that ICT is used to support students with special educational needs in the most effective and appropriate way. Schools need to ensure that they match students' needs to the most appropriate technology available, and that ICT is used to support not only the acquisition of literacy but the widest range of students need.
10. School should exploit the benefits to be had from ICT in their assessment procedures and also in their administrative practices.
11. Additional guidance should be provided to schools and teachers of students with special educational needs so that the needs of learners may be matched more appropriately with the technology available

CONCLUSION

After evaluating 60 schools of entire six districts we come to conclusion that this ICT@ school scheme has become an eye opener and the implementing institution doing well towards the process of implementation of the programme. This scheme although faces certain lacuna in implementation this should be corrected. It will be not out of context that the Government of Assam introduced and initiated the Anandaram Borooh Award by providing computers to successful HSLC first division holders. On the whole the ICT@ school scheme is being launched successfully and implemented in Assam.

PHOTO GALARY





