



Evaluation of Scheme of Information and Communication Technology (ICT) in Schools for Uttar Pradesh

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May, 2014

**GIRI INSTITUTE OF DEVELOPMENT STUDIES
Sector 'O' Aliganj Housing Scheme
Lucknow-226024**

Preface

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 students of neighbourhood schools. Based on the experience gained so far, the Scheme was revised, in July 2010.

The objective of the Scheme is to cover all Government and government aided secondary and higher secondary schools by giving priority for early coverage of schools in educationally backward blocks and in areas having concentration of SC/ST/minority/weaker section. Under the revised scheme, there is a provision of a suitably qualified full time computer teacher in each secondary and higher secondary school. In case of higher secondary school having computer related subjects as elective, there would be need for a post graduate in computers teacher.

Through the present study, Ministry of HRD, Department of School Education and Literacy, Government of India has entrusted the task of assessment of the Impact of the ICT @ School Scheme in the state of Uttar Pradesh to the Giri Institute of Development Studies. The evaluation of scheme has been carried out as per para- 10 of the revised guidelines.

We would like to express our gratitude to the Ministry of HRD, Department of School Education and Literacy for sponsoring the study. We are extremely thankful to the Secretary MHRD, Department of School Education and Literacy, Shri R. Bhattacharya (IAS), Joint Secretary, MS. S. Radha Chuhan (IAS) and Director MS. Caralyn Khongwar Deshmukh (IAS) for their useful guidance and helpful suggestions in carrying out the study. Special thanks are due to Shri Sanjay Gupta, Under Secretary for his cooperation and help in conducting the study at every stage. We are also thankful to Chief Consultant Shri Rajeev

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We also extend our thanks to the heads and members of the Departments/ Directorates and Agencies implementing the ICT @ school scheme in the state of Uttar Pradesh for providing help and support in course of conducting the study.

We feel highly obliged to Prof. Surinder Kumar, Director Giri Institute of Development Studies for his guidance and encouragement in conducting the study and for making available necessary infrastructure and administrative support required to complete the study.

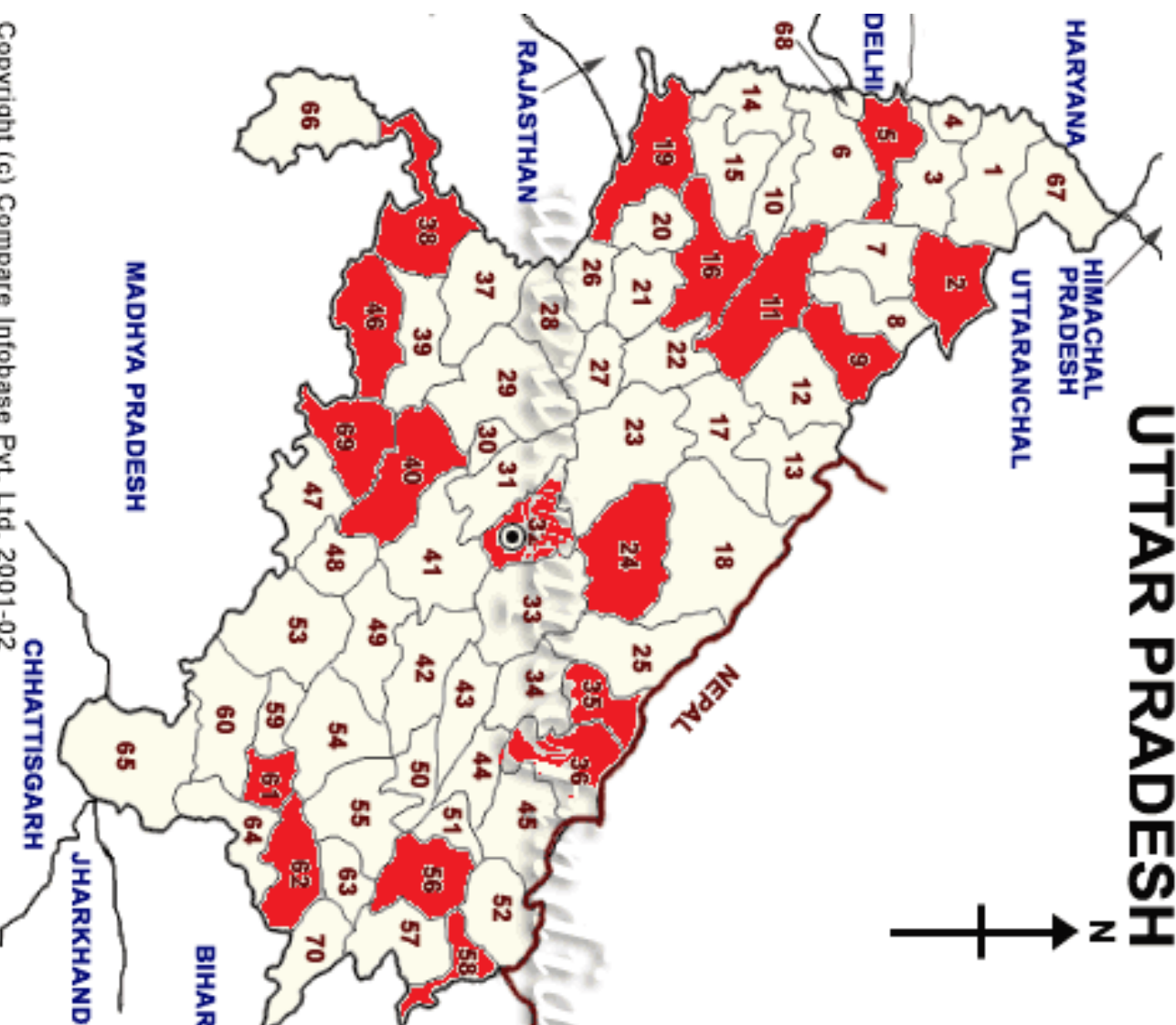
In the end, we would like to express our appreciation of the work done by Dr. Nazia Jamal, Dr. Asha Srivastava and Ajay Kumar Singh for their support in drafting the report. Thanks are also due to Rohit Shukla, Krishan Kumar Verma, Srish Chandra Mishra and other research staff for data collection, analysis and word processing. The administrative staff of the Institute deserves all praise for providing required support for the study.

We are hopeful that the report would provide a useful input to the Ministry of HRD, Department of School Education and Literacy, Government of India.

Lucknow
May, 2014

B. K. Bajpai

UTTAR PRADESH



- | | |
|------------------------|------------------------|
| 1. Muzaffarnagar | 48. Kaushambi |
| 2. Bijnor | 49. Pratapgarh |
| 3. Meerut | 50. Ambedkar Nagar |
| 4. Baghpat | 51. Sant Kabir Nagar |
| 5. Ghaziabad | 52. Maharajanji |
| 6. Bulandshahr | 53. Allahabad |
| 7. Jyotiba Phule Nagar | 54. Jaunpur |
| 8. Moradabad | 55. Azamgarh |
| 9. Rampur | 56. Gorakhpur |
| 10. Aligarh | 57. Deoria |
| 11. Budaun | 58. Kushinagar |
| 12. Bareilly | 59. Sant Ravidas Nagar |
| 13. Pilibhit | 60. Mirzapur |
| 14. Mathura | 61. Varanasi |
| 15. Hathras | 62. Ghazipur |
| 16. Etah | 63. Mau |
| 17. Shahjahanpur | (Maunath Bhanjan) |
| 18. Lakhimpur | 64. Chandauli |
| 19. Agra | 65. Sonbhadra |
| 20. Firozabad | 66. Lalitpur |
| 21. Mainpuri | 67. Saharanpur |
| 22. Farrukhabad | 68. Gautam Budh Nagar |
| 23. Hardoi | 69. Banda |
| 24. Sitapur | 70. Ballia |
| 25. Bahraich | |
| 26. Etawah | |
| 27. Kanauj | |
| 28. Auraiya | |
| 29. Kanpur(Rural) | |
| 30. Kanpur(Urban) | |
| 31. Unnao | |
| 32. Lucknow | |
| 33. Barabanki | |
| 34. Gonda | |
| 35. Shravasti | |
| 36. Balrampur | |
| 37. Jalaun | |
| 38. Jhansi | |
| 39. Hamirpur | |
| 40. Fatehpur | |
| 41. Rae Bareilly | |
| 42. Sultanpur | |
| 43. Faizabad | |
| 44. Basti | |
| 45. Sidharthnagar | |
| 46. Mahoba | |
| 47. Chitrakut | |

ICT Survey Districts

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Executive Summary

The aim of the evaluation study under consideration is to assess the relevance, impact, sustainability, efficiency and economy of ICT school scheme in the sample higher and higher secondary schools of eighteen districts in the state of Uttar Pradesh.

Study Sample

1. Evaluation of ICT school scheme in the state of Uttar Pradesh is based on the feedback and information collected from the state level and district officers involved in the implementation of the scheme in the state. Apart from this, the study is based on the information collected from the 180 ICT schools located in eighteen districts. Districts have been selected across the U.P based on the six criteria.
2. There are three Urban districts, three rural, three districts with high tele-density and three with low tele-density, three districts were chosen as a backward district of the state, and three districts which has electricity problem.
3. Out of total sampled districts, 50 percent schools are of Secondary level and remaining 50 percent are of Higher Secondary level in both the phases of ICT scheme implementation in schools.

State Level Information

1. The state of Uttar Pradesh has implemented ICT Scheme through BOOT model. since 2009 and covered 2500 secondary and higher secondary schools in all the districts in the first phase and 1500 in the second phase.
2. A separate Tendering Process was adopted by the government for both Phase I and II of ICT Implementation in the state.
3. For the first phase tender document were procured by 6 organizations but only 4 organization's bid received timely. Three organisations were selected for scheme implementation.
4. In the second phase, particularly the agency is asked to supply computer hardware, software and connected accessories and is also asked to provide computer education

and computer aided education in 1500 Government/government Aided High schools and intermediate colleges.

5. As far as the funding of this scheme is concerned the central and state governments has agreed to accept the contribution of 75 and 25 percent respectively in it .The assistance of the government of India would be for the selected Financial Parameters and up to the limits indicated against each items.
6. While deciding Monitoring Mechanism of ICT Scheme, it was decided that the district level authority and state level authority monitor ICT scheme in all schools. As per provisions, meetings are held in state office and all related issues are resolved in these meeting by the state authority. State office receives Monthly Information Report of ICT Covered Schools through D.I.O.S. offices for all districts and takes appropriate decisions about them.
7. There are some problems as well in implementing the scheme successfully such as study material, related software and teachers training have been provided for class 6 to 12 but in schools where the strength of students are so high there are not sufficient study material and computers.
8. Further some problems encountered by State Authorities such as finalizing the BOOT vendor, problems in outright purchase model etc. Further maximum ICT covered schools are situated in rural areas, there are more problems as electricity problem, internet problem, repairing and maintenance problem etc in these schools timely service could not provided.
9. As per contract with the vendors, the provision of generator in rural schools is only for 2 hours in a day. This is not found to be sufficient in view of long hours of power cuts in the schools of the rural areas.
10. Like- wise, the arrangement of internet connectivity are not sufficient particularly in the rural areas.
11. In First Phase, three vendors Extra marks, Everonn and Edcomp were selected but in Second Phase, only vendor Extra marks was selected because of certain operational problems.

12. The ICT teachers are working in schools appointed through vendors, getting very low salary. Due to insufficient salary, these teachers are not able to perform their duties at the required/ expected level.
13. For improved implementation of ICT scheme in state, officers suggested to establish smart class rooms in each ICT covered school and also to increase the number of computers where the strength of student is very high and students and teachers are taking interest in getting / providing education through ICT.

District Level Analysis

1. Out of 18 selected sample districts, majority of schools 66.85 percent schools are located in rural areas whereas 33.15 percent in urban areas.
2. Total 18 selected districts consist of 12.93 percent govt. sec. schools followed by 12.46 percent govt. hr. sec. schools, 17.90 percent govt. aided sec. schools govt. sec. schools and 56.71percent govt. aided hr. sec. schools. Thus, all districts have maximum govt. aided hr. sec. schools while govt. hr. sec. schools are least.
3. More schools were covered in rural areas than urban areas for ICT in School Scheme. It covered 67.20 percent schools in rural areas and 32.80percent in urban areas.
4. As far infrastructural facilities under this scheme is concerned, in all the selected schools average 10 desktops were provided under this scheme in rural areas while in urban sector average11 desktops were provided.
5. Digital projectors were made available to 64 percent schools in rural areas and 36 percent schools in urban areas
6. In case of availability of UPS to schools on an average 7 UPS were available across different categories of the schools and schools of rural and urban areas. 72.88 percent UPS were available in the schools of the rural areas while in the urban districts only 27.12 percent UPS were given.
7. In both the phases total 1000 printers were provided in the schools under ICT scheme and each school was given one printer. Out of total number of printers distributed under the scheme, 32.80 percent were distributed in urban schools and 67.20 percent in the schools of rural areas showing there by large disparity in this respect.

8. Under ICT at school system, district authorities provide information to all schools on internet. Nevertheless, against expected it was found that in rural areas 67.20 percent schools receive information on Internet and e-mails while in urban areas only 32.80 percent schools are benefitted through it.
9. It was also found that Microsoft was given to all schools selected for ICT in school scheme in both phase I and Phase II. Linux was basically given in phase I.
10. IT is used for is maximum used for creating databases followed by attendance and preparation of salary in all the schools. For fee collection its use is reported to be least. All the schools widely use IT for different administrative purposes. These facilities are also used for MIS report generation by DIOS.
11. IT is widely used for generating databases by all the district authorities and all of them use it for providing monthly reports. All DIOS and Principals of schools use IT system. About 78 percent of them also use it for communication purposes and preparing monthly reports.
12. Proper training is also provided to the entire district coordinators by training agency in all different categories of districts. They were trained for the use of ICT.
13. Thus, in general it was observed that both in phase I and Phase II adequate infrastructural and training facilities were provided by the government under this scheme which is leading to the increasing usage of IT facilities for various purposes but still the coverage needs to be expanded, particularly in case of urban government schools.

School Heads Views on ICT Performance

1. In this part, performance of different aspects of ICT scheme is assessed on the feedback of the school head teachers. It was found that maximum 50 percent of the total selected sample schools, were covered under ICT programme in 2009 followed by minimum 18.33 percent in 2010 and 31.67 percent in 2011.
2. Maximum 78 percent schools offer schooling from VI to XII standard, Due to unavailability of teachers and time slot, they are unable to offer ICT in every class.
3. Huge variations in total enrolment of students were also found from different social groups in the schools, maximum 45.23 percent OBC students are enrolled in the

schools followed by SC and general students and minimum 15.54 percent minority students have been enrolled whereas enrolment of ST student is negligible as only 0.41 percent students are enrolled.

4. Among all the teachers in school, only 35.30 percent teachers have received ICT training and amongst them higher share of female teachers have received ICT training, this shows that in general male teachers are not very keen to update and improve their skills.
5. Whereas for the non-teaching staff the picture is opposite, as only 17.88 percent have only received ICT training and among these, the percentage of males receiving ICT training is more than females. As far as the capability of trained personnel is concerned for maximum cases it was found to be of average level only.
6. The availability of infrastructure and computer facilities in school was found to be satisfactory in certain respects such as all the sampled schools have class rooms and 87.78 of them have reliable electricity , but generators were found only in 43.33 percent schools, and inverter in 23.89, landline phone connections in 31.11 percent and solar power is found only in 12.78 percent schools.
7. Over 94 percent schools have the ICT lab with capacity of 20 students only because of the less number of computers. Thus, there is a need to improve all these main and backup infrastructural facilities to make ICT program more effective.
8. All categories of schools wanted to offer ICT in their schools, but there are some administrative problems which need to be rectified as it was found that the funds have not been made available to schools directly for implementation of the school ICT plan. The funds are given by SLA to authorized vendors for the same.
9. DIOS Office is reported as monitoring agency and only in about 12 percent schools, district coordinators (D.C.) are monitoring the ICT scheme. Hence, the monitoring of ICT scheme is done by DIOS office in most of the schools across different categories of districts that make the functioning and monitoring comparatively less effective.
10. While observing the impact of ICT, over 90 percent head teachers of total selected sample school have reported that use of ICT have improved the efficiency of the

environment and have also increased the enthusiasm and confidence level of teachers further the teachers have started using ICT in their homes and also for self assessment.

11. However, the impact of ICT on teachers in terms of leadership in ICT related discussions and initiatives on collaborative efforts between schools have been reported to be quite low.
12. It was also observed that the presence of ICT has improved student's attention/behaviour/ attendance after getting the computers and has also reduced the dropout rates. As far as the usage of the ICT is concerned the maximum use of ICT in 71 to 72 percent schools is for preparing monthly ICT report and MIS report respectively.
13. the availability of software was found to be satisfactory as most of them have major softwares but in just 1.12 per cent of sample schools, internet access is available for more than 20 hours per month while for 24.44 percent of schools students never have access to this facility. Backward districts figure poorly in this respect. On average for maximum 46.67 percent schools, across the districts, this facility is available for 5-10 hours per month.
14. In order to make ICT program more effective it is also necessary to provide better internet connectivity further it is also necessary to conduct workshops as it was found that neither a single workshop was conducted nor there had not been any documentation of sessions.
15. Finally, it can be concluded that for enhancing the effectiveness of ICT programme different schools have stressed on different aspects. Both urban and rural schools of sample have sought more number of computers and study material to enhance teaching learning capabilities in schools.

ICT Teachers Views on ICT Performance

1. All sampled schools (Phase-phase-I & II) have one ICT teacher for handling entire ICT activities in schools majority 60.56 percent of the appointed ICT teacher have PG degrees along with computer diploma (MA/MS/M.com and P.G.D.C.A.). Whereas over 24 percent ICT teachers have under graduate degrees.

2. ICT teachers are recruited on contractual basis for a certain period. Further 86.67 percent-recruited ICT teacher received training for the maintenance and proper use of ICT in school premises.
3. But the ICT teachers are not getting proper remuneration which results in less motivation for their job. It was found that in around 66 percent of the sampled schools majority of the ICT teachers are not satisfied with their remuneration. Generally, they are an exploited lot across the districts in terms of their remunerations as well as the work load.
4. As per ICT teachers observation, this programme is very much popular and useful among the school students in Uttar Pradesh. But considering the students strength in schools, the proportion of available ICT computer and other infrastructural facilities are quite insufficient.
5. The purpose of the ICT is not only to impart computer aided learning but is also meant for subject related teaching. The information relating to sufficiency level of study material indicates that majority of 68 percent ICT teachers held the opinion that the study material is insufficient in accordance with the syllabus.
6. The level of Internet use is high, in above 67 percent, whereas in only 32.22 percent school, they use projector and in 69 percent schools printer/scanner is used as per requirement.
7. At inter- district level it is found that the use of internet facility is low in rural districts as compared to the urban district.
8. There is a provision for extenal support system in all sampled schools across the districts of the state to provide technical, training and infrastructural support.
9. Most of ICT teachers want the use of thumb drive/Pen drive to be given first preference followed by availability of more computer, educational CDs/ DVDs , the internet facilities, technological support on the common service centre, subject specific software in computer television, multimedia tools (handheld devices, Interactive Boards, You Tube Video and documentaries)etc.

10. Above facilities/support need to be provided by the government to assist and motivate the teachers along with the improvement in their salaries, so that they can make this program much more effective.

Subject Teachers Views on ICT Performance

1. Maximum 90 percent subject teachers are having postgraduate degrees in their respective subjects, but in backward districts, this percentage is comparatively low.
2. The data related to the level of professional qualification of the subject teachers shows that around 89 percent teachers qualified B.Ed or M.Ed level. Only above 10 percent were reported to have PhD or LT degrees that too of mathematics teachers mostly.
3. Out of total 665 sample subject teachers, Maximum 56 percent were reported to be appointed during last 1 to 10 years. Some 4 percent were the senior most having their services more than 30 years.
4. Out of total subjects teachers maximum 59 percent were recruited by commission and above 33 percent by management.
5. About 53 percent of the total sample subject teachers use ICT as teaching tool to teach their subject in the schools.
6. There has not been any significant variation in the use of ICT as teaching tool for different subjects across different categories of the sample districts.
7. For most of the teachers, ICT use in subject teaching has been new in sample schools.
8. Over 78 percent subject teachers have reported about getting training on computer awareness programme during last 3 years.
9. A substantial part of subject teachers who attained ICT training (41 percent) have undergone training only because of principal orders. Thus, it can be concluded that the teachers in general are not motivated enough to upgrade themselves as majority of teachers attended ICT training under pressure of institutional head.
10. The result of this is that the data of the self assessment of teachers in terms of acquired expertise in the use of ICT indicates that over 40 percent teachers are still poor in this respect. i.e. the ICT training has been quite ineffective for them.

11. Most of the 82 percent subject teachers considered ICT technology different from chalk and talk method as ICT is found to be promoting practical learning among students.
12. Most of the teachers believed in the effectiveness of ICT in overcoming the hard-spots in subject teaching. However, some of them about 47 percent) did not found ICT useful in these respects.
13. About 56 percent subject teachers reported creative use of ICT in classroom teaching. The methods included searching with net, use of other computer related interesting methods and teaching with the help of diagrams.
14. As per subject teachers' feedback majority of 60 percent teachers reported average response among students towards the use of ICT only around 27 percent teachers found students competent enough to use ICT in learning process.
15. Despite of the fact that most of them found ICT useful and effective the reality is that on an average more than two- third subject teachers are not using ICT tools in sample schools across the districts.
16. School computer is accessible to only over 60 percent subject teachers. For most of these, 85 percent, computer is accessible from 1 to 3 hours in a week.
17. Most of the teachers used internet occasionally, they are less computer savvy as about 88 percent did not have their email ID across the districts. This is the reason for which most of them were not satisfied with their performance in terms of use of ICT technology.
18. Thus, it can be concluded that there is need to increase both infrastructural facilities as well as motivational level of the teachers by enhancing their salaries (for contractual teachers), duration of training etc to achieve the desired results of the scheme.

Students Views on ICT Performance

1. In 180 schools, information was collected from 573 students for using computers. In general, most of them are using computer from last one year only.
2. ITC use is recorded highest among class 9 to10 students while it is lowest among class 11 to12 students across all the districts.

3. Maximum numbers of students have average skill in use of computer application while students with excellent competency in computer application are least among the selected districts.
4. Maximum number of students with excellent competency belongs to high Tele-Density district, while maximum with good skill belongs to Urban Districts; with average skill belong to district characterized as backward.
5. Students with Bad skill in computer application mostly belong to Lower Tel – Density District and districts having electricity problems while students from rural Districts have least bad computer skill students.
6. ITC teachers turned out to be most effective source to teach computers as per the students' feedback among all the selected schools. Most of the students learnt computer at school.
7. Maximum 77.7 percent students reported use of computers for creative work, 67.54 percent students for gathering information, and 62.13 percent students for functional purposes.
8. Maximum students reported their favorite activity as looking at different images through computers and playing games, only 34.38 percent students used computer software likes word, Excel and power point etc.
9. Most of the students do not have their personal email as well. Hence, the availability of school hours for ICT use to students and the internet usage has been quite low across the districts in the state. Thus efforts are required in these respects.

Chapter-1

Introduction

Information and Communications Technologies (ICT) is society's efforts to teach computer education in current and emerging atmosphere of globalized era. It teaches computing and communication devices, software applications that run on them and systems that are built with them. Today, everyone needs basic understanding of ICT to lead a comfortable life. Teaching people how to be competent basic users of ICT technologies is an important role of ICT in education, In order to be successful in their academic and careers, thus they can efficiently participate in modern technical society. Schools must promote "learning to learn," i.e., the acquisition of knowledge and skills that make possible continuous learning over the lifetime. "The illiterate of the 21st century," according to futurist Alvin Toffler, "but those who cannot learn, unlearn, and relearn." When used appropriately, different ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace make teaching and learning into an engaging, active process connected to real life in education is basically our citizens' valuable knowledge and skills software, which operates them.

Background:

The scheme of Educational Technology (ET) was started in 1972 during the IV Plan. Under the scheme 100 percent assistance was given to 6 State Institutes of Educational Technology (SIET) and the States/ UTs were assisted for procurement of radio cum cassette players and colour TVs. Further, in recognition of the importance of role of ICT in education, the Computer Literacy and Studies in Schools (CLASS). This project was introduced as a pilot project in 1984-85 with the use of BBC micros. The project was adopted as a Centrally Sponsored Scheme during the 8th Plan (1993-98) and its scope was widened to provide financial grants to educational institutions and also to cover new Government and Government aided secondary and higher secondary schools. The use and supply of software was limited with coverage confined only to higher secondary Schools. The National Task Force on Information Technology and Software Development (IT Task Force), constituted by the Prime Minister in July, 1998 made specific recommendations on introduction of IT in the education sector including schools for making computers accessible through the Vidyarthi

Computer Scheme, Shikshak Computer Scheme and School Computer Schemes. Smart Schools were recommended on a pilot basis in each State for demonstration purposes. It was also stipulated that 1 to 3% of the total budget was to be spent on provision of computers to all educational Institutions up to Secondary and Higher Secondary level during the next five years. Based on the experience gained so far, a need for a revision of the scheme of ICT @ Schools was felt on the following grounds.

1. Expansion with emphasis on quality and equity: A need was felt to expand the outreach of the scheme to cover all Government and Government aided secondary and higher secondary schools in the country with emphasis on educationally backward blocks and areas with concentration of SC, ST, minority and weaker sections. Along with that, there is a need for ensuring dependable power supply where the electricity supply is erratic and internet connectivity, including Broadband connection.
2. Demonstration effect: There is a need to set up smart schools at the district level to serve as demonstration models for neighbouring schools.
3. Teacher engagement and better in-service and pre-service training: Since ICT education will be imparted to all secondary and higher secondary students, an exclusive ICT teacher is required for each school. Similarly, there is a need for pre service as well as in service training of all teachers in effective use of ICT in teaching and learning process.
4. Development of e-content: There is also a need to develop and use appropriate e content to enhance the comprehension levels of children in various subjects.
5. A strong mechanism for monitoring and management needs to be set in place at all levels for ensuring optimal delivery of set targets.
6. The Scheme envisages that the School Management Committee, Parents Teachers Association and local bodies would be involved in the programme management along with the setting up of an online web-based portal for real-time monitoring and transparency. In addition, independent monitoring and evaluation is envisaged. Accordingly, the Scheme has been revised, with the approval of Cabinet Committee on Economic Affairs (CCEA) on 9th January 2010, for implementation during the remaining period of 11th Plan.

Components of the Scheme: The scheme has essentially four components.

- ❖ The first one is providing computer aided education to Secondary and Higher Secondary Government and Government aided schools.
- ❖ The second is the establishment of smart schools, which shall be technology demonstrators.
- ❖ The third component is teacher related interventions, such as provision for Engagement of an exclusive teacher, capacity enhancement of all teachers in ICT and a scheme for national ICT award as a means of motivation.
- ❖ Fourth one relates to the development of e-content, mainly through Central Institute of Education Technologies (CIET), six State Institutes of Education Technologies (SIETs) and 5 Regional Institutes of Education (RIEs), as also through outsourcing.

Mandates

Expansion of coverage of schools: It shall be the endeavour to bring all Government and Government aided secondary and higher secondary schools under the ambit of the scheme, subject to the availability of budgetary provision. Priority would be given to educationally backward blocks and areas with concentration of SC, ST, minority and weaker sections.

Infrastructure

Hardware and software: Each school would be provided with 10 PCs or 10 nodes connected through a server. Accessories like printers, projection system etc will also be provided. Keyboards would be customized for use in the regional languages.

Connectivity: The first priority would be to have a broadband internet connection of at least 2 MBPS bandwidth in each school. Wherever that is not possible, connection of lower bandwidth would be provided with plan to upgrade in future. Wireless links would also be explored.

Power Supply: Wherever the power supply is unreliable, it is proposed to provide assistance for purchase of a generator, as a back up only and also its recurring cost, subject to a maximum of Rs.1000 per month, in addition to Rs 1000 per month for the electricity charges. In areas where there is no power supply, solar generated power should be made use of.

Computer Room/Lab: The computers would be installed in one of the safe rooms in the school. If such rooms are not available, the need can be met from the scheme Rashtriya Madhyamik Shiksha Abhiyan (RMSA) in case of Government schools.

Mode of implementation

States would be encouraged to implement the programme through a BOOT model under which the supplier would make available the ICT infrastructure for the duration of the contract period (normally five years) on the basis of a service level agreement and assurance of a periodic payment subject to satisfactory maintenance. The release of Central assistance in that case would be spread over the contract period. In exceptional cases where such arrangements are difficult to implement, ICT infrastructure can be procured on 'Outright Purchase Basis'. The State Govt. shall be free to partner with private organizations or integrate it with other similar schemes for implementation of the 'ICT in schools' scheme including providing for maintenance. The implementation of the scheme will be multi-modal. The Ministry of Human Resource Development shall consider the entry of the private sector in a Build-Own-Operate or annuity modal wherever possible. The direct procurement of hardware by the State would be last resort. The National Council for Teachers Education shall be associated with the scheme in the context of training of teachers in computer-aided learning. The Rehabilitation Council of India would play an important role in projects involving introduction of use of technology for the education of children with special needs.

Objective of the Study

1. The core objective of undertaking evaluation is to assess the
 - (a) Relevance of the project
 - (b) Benefit derived from the project (Impact)
 - (c) Whether benefits will continue after the projects end (sustainability)
 - (d) The attainment of specific targets for key indicators (Effectiveness)
 - (e) The amount of effort and resource used (efficiency/ economy)
 - (f) Institutional development and sustainability.
2. The study shall be aimed at evolving a critical evaluation of the implementation of the ICT in School Scheme and its impact on overall use of ICT in School.
3. Implementation Models.

4. Usage and skills to use ICT by various stakeholders such as Students, Teachers, School Head, Principal, DIOs, State level authorities Etc.
5. Impact on learning process.
6. ICT in School Governance.

Methodology

Every study must have a definite strategy and methodology for conducting the overall activities. There is a unique contribution of strategy and methodology for successfulness of the study. Present impact assessment carried out with following strategies and methodologies.

As per the guidelines each EI shall cover a minimum of six districts in the State/ UT allotted to it and if the State has more than 20 districts, 25 percent of the total districts may be covered. The EI shall cover 10 Secondary or Higher Secondary Govt. or Govt. aided schools in each district out Sample of which 5 schools shall be selected for Focus Group Discussion and short video screening of ICT facilities preferably when in use.

Sample design

As required in the methodology provided in TOR, in this study eighteen districts have been selected across the U.P based on the six criterions. There are three Urban districts, three rural, three districts with high tele-density and three with low tele-density, three districts were chosen as a backward district of the state, and three districts which has electricity problem.

As per TOR of the study, eighteen districts have been selected across Uttar Pradesh based on the following six criterions.

1. Urban Districts
2. Rural Districts
3. Districts with high Tele- Density
4. Districts with low Tele- Density
5. Districts Characterized as backward by the State
6. Districts with electricity problems

Table 1.1: Criteria for Selecting Eighteen Districts in Uttar Pradesh

Sl.No	Criteria	Selected District		
1.	Urban district	Agra	Jhansi	Gorakhpur
2.	Rural districts	Mohaba	Ghazipur	Bijnor
3.	Districts with high tele-density	Lucknow	Ghaziabad	Varanasi
4.	Districts with low tele- density	Banda	Fatehpur	Balrampur
5.	Districts characterized as backward by the state	Sharwasti	Rampur	Badaun
6.	Districts with electricity problems	Kushinagar	Sitapur	Etah

Out of eighteen district's, 180 schools have been selected on following criterion:

1. Covered under ICT in school scheme.
2. Higher gender gap in enrollment.
3. Higher proportion of SC/ST/Minority/ Weaker Section students.
4. The localities where problem of electricity connection and supply exists.
5. The localities where there is problem of 'no internet connectivity' or 'connective problem'
6. The schools located in rural areas.

Table 1.2 presents the coverage of phase- wise ICT coverage in 18 districts of different categories and district category- wise sample schools.

Table 1.2: District and School Category- wise ICT School Coverage and Sample Selection

Type	Phase	ICT Covered School			Sample School		
		Government	Aided	Number of School	Government	Aided	Number of School
Urban Districts-3	I	12	124	136 (62.96)	5	14	19 (63.33)
	II	5	75	80 (37.04)	3	8	11 (36.67)
	I+II	17	199	216 (100.0)	8	22	30 (100.0)
Rural Districts-3	I	26	84	110 (56.12)	9	10	19 (63.33)
	II	9	77	86 (43.88)	4	7	11 (36.67)
	I+II	35	161	196 (100.0)	13	17	30 (100.0)

High Tele - Density Districts-3	I	18	78	96 (50.53)	4	10	14 (46.67)
	II	5	89	94 (49.47)	3	13	16 (53.33)
	I+II	23	167	190 (100.0)	7	23	30 (100.0)
Districts Lower Tele - Density-3	I	19	74	93 (78.81)	10	15	25 (83.33)
	II	3	22	25 (21.19)	1	4	5 (16.67)
	I+II	22	96	118 (100.0)	11	19	30 (100.0)
Districts Characterized as backward by the state-3	I	20	57	77 (75.49)	7	17	24 (80.00)
	II	8	17	25 (24.51)	2	4	6 (20.00)
	I+II	28	74	102 (100.0)	9	21	30 (100.0)
Electricity Problems Districts-3	I	20	103	123 (69.10)	6	15	21 (70.00)
	II	6	49	55 (30.90)	3	6	9 (30.00)
	I+II	26	152	178 (100.0)	9	21	30 (100.0)
Total sample districts-18	I	115	520	635 (63.50)	41	81	122(67.78)
	II	36	329	365 (36.50)	16	42	58 (32.22)
	I+II	151	849	1000(100.0)	57	123	180 (100.0)

Out of total sampled districts, 50 percent schools are of Secondary level and remaining 50 percent are of Higher Secondary level in both the phases of ICT scheme implementation in schools as presented in Table 1.3.

Table 1.3: Type of Sample School

Particulars	Phase-I			Phase- II			Total		
	Secondary	Higher Secondary	Total	Secondary	Higher Secondary	Total	Secondary	Higher Secondary	Total
Urban Districts-3	10 (52.63)	9 (47.37)	19 (100.00)	5 (45.45)	6 (54.55)	11 (100.00)	15 (50.00)	15 (50.00)	30 (100.00)
Rural Districts-3	7 (36.84)	12 (63.16)	19 (100.00)	8 (72.73)	3 (27.27)	11 (100.00)	15 (50.00)	15 (50.00)	30 (100.00)
High Tele - Density Districts-3	8 (57.14)	6 (42.86)	14 (100.00)	7 (43.75)	9 (56.25)	16 (100.00)	15 (50.00)	15 (50.00)	30 (100.00)
Districts Lower Tele - Density-3	14 (56.00)	11 (44.00)	25 (100.00)	1 (20.00)	4 (80.00)	5 (100.00)	15 (50.00)	15 (50.00)	30 (100.00)
Districts Characterized as backward by the state-3	10 (41.67)	14 (58.33)	24 (100.00)	5 (83.33)	1 (16.67)	6 (100.00)	15 (50.00)	15 (50.00)	30 (100.00)
Electricity Problems Districts-3	9 (42.86)	12 (57.14)	21 (100.00)	6 (66.67)	3 (33.33)	9 (100.00)	15 (50.00)	15 (50.00)	30 (100.00)
Total sample districts-18	58 (47.54)	64 (52.46)	122 (100.00)	32 (55.17)	26 (44.83)	58 (100.00)	90 (50.00)	90 (50.00)	180 (100.00)

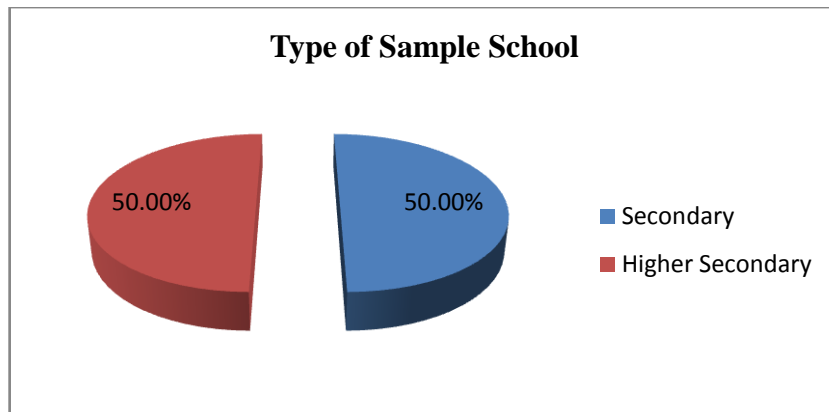
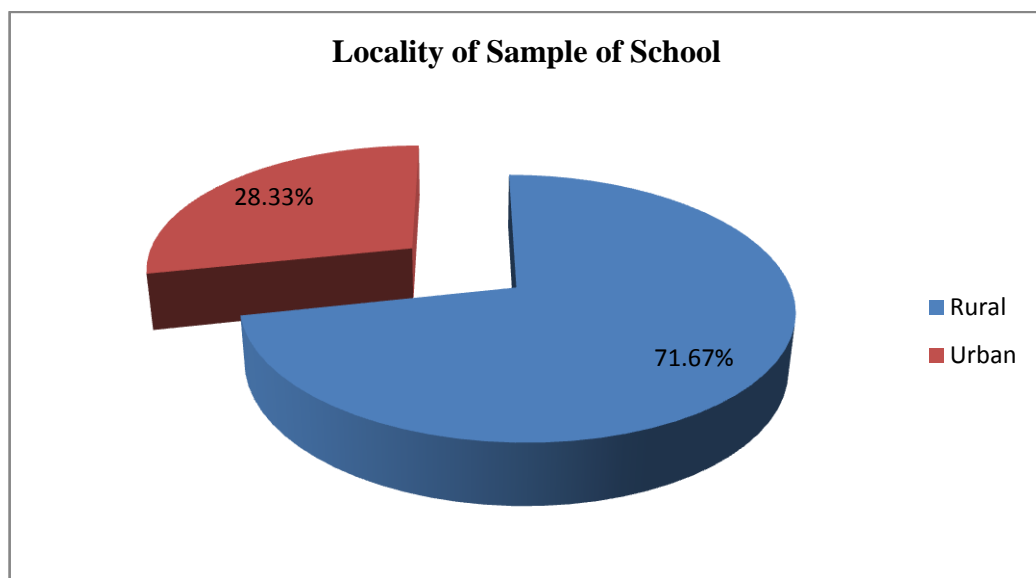


Table 1.4 reveals that 71.67 percent of sampled schools located at the rural area whereas 28.33 percent situated at the urban area.

Table 1.4 : Locality of Sample of School

Particulars	Phase-I			Phase- II			Total		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Urban Districts-3	10 (52.63)	9 (47.37)	19 (100.00)	2 (18.18)	9 (81.82)	11 (100.00)	12 (40.00)	18 (60.00)	30 (100.00)
Rural Districts-3	16 (84.21)	3 (15.79)	19 (100.00)	8 (72.73)	3 (27.27)	11 (100.00)	24 (80.00)	6 (20.00)	30 (100.00)
High Tele - Density Districts-3	11 (78.57)	3 (21.43)	14 (100.00)	11 (68.75)	5 (31.25)	16 (100.00)	22 (73.33)	8 (26.67)	30 (100.00)
Districts Lower Tele - Density-3	23 (92.00)	2 (8.00)	25 (100.00)	3 (60.00)	2 (40.00)	5 (100.00)	26 (86.67)	4 (13.33)	30 (100.00)
Districts Characterized as backward by the state-3	20 (83.33)	4 (16.67)	24 (100.00)	3 (50.00)	3 (50.00)	6 (100.00)	23 (76.67)	7 (23.33)	30 (100.00)
Electricity Problems Districts-3	16 (76.19)	5 (23.81)	21 (100.00)	6 (66.67)	3 (33.33)	9 (100.00)	22 (73.33)	8 (26.67)	30 (100.00)
Total sample districts-18	96 (78.69)	26 (21.31)	122 (100.00)	33 (56.90)	25 (43.10)	58 (100.00)	129 (71.67)	51 (28.33)	180 (100.00)



Tools used:

State level information has been taken from state level authorities relating to the coverage of ICT program in each district. The problems relating to the ICT programme implementation has been presented in the report are based on the available relevant documents as well as with the help of FGD with the group of stakeholder officials. The district level relevant information from the sample districts has been taken from the district level records and discussion/ FGD with the officials involved in ICT program. Detailed information has been taken from the sampled schools by following structured questionnaire provided by Department of School Education and Literacy (MHRD). FGD method had been adopted to evaluate response on ICT in Class wise observations and discussion for qualitative information. Different minutes like class routines, attendance register, etc had been consulted in order to assess the level and nature of the ICT use. Face to face interview had been carried out with the ICT teacher, subject teachers, head teacher and student of the particular school separately.

Apart from this, interview had been carried out with the ICT teacher, subject teachers, head masters and students separately in each of the sampled schools following structured questionnaires as prescribed in TOR.

Questionnaire A: For collecting response from the State, level Authorities.

Questionnaire B: For collecting response from the District, level Authorities.

Questionnaire C: For collecting response from the Head of the Institutions.

Questionnaire D: For collecting information from the ICT teacher of the schools.

Questionnaire E: For collecting information from the other subjective teacher of the schools.

Questionnaire F: For conducting FGD with student and teacher groups.

Questionnaire G: For collecting information from the students.

CHAPTER II

IMPLEMENTATION OF ICT PROGRAMME: STATE LEVEL INFORMATION

The state of Uttar Pradesh has implemented ICT in School Scheme since 2009 and covered 2500 secondary and higher secondary schools in all the districts. The coverage under ICT scheme was of 2500 schools in the First phase of the programme implementation during the year 2009- 10. In second phase of ICT scheme implementation 1500 schools were covered during the year 2010-11. The programme has been implemented through BOOT model.

Analysis of Tender Document and Tendering Process

Tendering Process for Ist Phase of ICT Implementation in State:

The Additional Director (Vocational Education), Camp office, Director of secondary education, Uttar Pradesh invited sealed bids containing two parts viz., (a) Technical bid and (b) Financial bid in separate sealed covers from reputed and experienced organizations/institutes having three years experience in the supply of computer hardware, software and connected accessories and provision of IT Education services in 2500 Government Aided Schools in the State of Uttar Pradesh on Build Own Operate and Transfer(BOOT) basis. Bidders who have annual average turnover of at least Rs.20.0 Crores from Computer Education business in India in the last three years have been considered eligible.

Tender document were procured by 6 organizations but only 4 organization's bid received timely. The list of Organizations given below:

1. Compucom Software Limited, Jaipur for 6 zone on the basis of Rs. 9450000 / school.
2. N.I.I.T. Limited, Chennai. For one zone Rs.1165280/school.
3. Everonn solutions Limited, Chennai for 8 zone on the basis of Rs.923900/school.
4. Educomp solutions Limited, New Delhi. 8zone on the basis of Rs. 8360000/ school.

According criteria and weight age for technical evaluation Educomp was on highest rank, on second rank N.I.I.T., third rank was of Everonn, and lowest rank of compucom software Limited, Jaipur. Overall Educomp solutions Limited has got 4 Zones at the rate of

Rs.8.36lacs/school and Everonn system India Ltd. Chennai was invited for next four Zones on same amount.

Tendering Process for IInd Phase of ICT Implementation in State:

According Agreement, the agency is to supply computer hardware, software and connected accessories (must be brand new & of branded company as per minimum specifications) for one server and 10 terminals as provided in the specifications of revised scheme of information and communication technology in schools (ICT in schools) during the XI plan approved by CCEA Government of India on 9th January 2010. Also to provide computer education and computer aided education in the 1500 Government/government Aided High schools and intermediate colleges from classes VI to X where there is high schools. From class VI to XII where there is intermediate colleges on BOOT model. Director Secondary Education and committee member have agreed to Uttar Pradesh Development systems Corporation Limited (UPDESCO) with some conditions to complete the ICT scheme in 1500 schools in U.P. through Score of Work and third party agreement.

Service Level Agreement

An agreement made on July 2009 between Director, Secondary Education, Government of U.P. on behalf of Govt. of U.P. and Educomp solutions Limited New Delhi and Everonn Education Limited, Chennai for first phase of work.

For second phase, agreement is made at Lucknow on December 2010 by and between Department of Secondary Education, Lucknow and Uttar Pradesh Development systems corporation Limited, Lucknow.

As per agreement the Agency shall maintain the entire system in working condition during the contract period of 5(five) years and for teacher training and financial parameters are given below:

Teacher's Training

Guidelines for First Phase according service level agreement:

The agency shall impart training of computer operation, operating system, application software and computer based training on multimedia consisting of text, graphics, sound, animation & video to at least 5 (five) teachers per year per school and ensure such efficiency in teacher so that they may develop child centered education through multimedia. In case the

numbers of teachers are less than 25 in a school the amount of training would be deducted proportionally in the corresponding year.

Guidelines for IInd Phase according service level agreement:

(a) Induction Training:

To impart induction training to 10 teachers per school for a period of 10 days (8 hours per day) and ensure such efficiency in teacher so that they may develop child centered education through multimedia. The following are the topics on which training has to be provided.

Table 2.1 : Induction Training

S.No	Topics	Hours
1	Introduction Session	0.30
2	Computer overview-parts of a PC, digital devices	7.30
3	Operating systems (any scalable, standardized and least support required OS)	10.20
4	Productivity suits & integration of power point in classroom learning	11.40
5	Documents management using word	12.00
6	Spreadsheet creation using excel	14.00
7	Internet, Email	14.00
8	Classroom learning and teaching tools (white boards, collaborative note working)	8.30
9	Assessment	1.00
10	Feedback	0.30
	Total hours	80.00

(b) Refresher Training:

To provide refresher training on the topics working with multimedia. Overview of Management information system. Computer technology and security training to 10 teachers every year per school for 5 days (8 hours per day). The following are the topics on which training has to be provided.

Table 2.2 : Refresher Training

S.No	Topics	Hours
1	Working with Multimedia	5.00
2	Making and editing movies(Movie Maker/picture story)	4.00
3	Working with pictures(picture manager)	2.00
4	Overview of BPOs and other web applications	2.30
5	Internet and e communication	4.00
6	Overview of Management information system	3.30
7	Legal and ethical aspects of web based information	1.00
8	Computer technology and Security	2.30
9	Search optimization (search engines and how to take out relevant content)	4.00
10	Classroom learning and teaching tools (white board, multipoint)	8.00
11	Overview of personalized learning	2.00
12	Assessment and Evaluation	1.30
	Total Hours	40.00

Table 2.3 : Financial Parameters for Fist Phase

S.No	Topics	In Rupees
1	10 PCs/ Printer/CRT per school inclusive of facilities like scanner, web camera, modern etc. or one server with 10 terminals with accessories	4,05,000
2	Operating system & Application software	20,000
3	Educational Software	45,000
4	Furniture	16,000
5	Computer Stationary	50,000
6	Teacher's Training	60,000
7	Internet	30,000
8	Maintenance	20,000
9	Monitoring Cost	24,000
	Total	6,70,000

Government Contribution in Ist Phase:

Central Government has agreed to accept the contribution of 75 percent on old tendering amount Rs.6.70 lacs per school and State Government has also accepted 25 percent on it and excess amount of Rs.1.66 lacs (difference 8.36 lacs passed tender amount and old tender amount of Rs.6.70lacs) per school.

Financial Parameters for IInd Phase:

The assistance of the government of India would be for the following items and up to the limits indicated against each items:

Table 2.4: Government Assistance

a.	Capital Expenditure (Non-recurring)	Rupees (In lakhs)
1	10 PCs (or one server with 10 Terminals) 1 projector, 1 Printer, 1 Scanner, 1 Web camera, 1 modern, Broad band antenna, Generator/Solar Package, UPS, Video camera etc.	5,10,000
2	Operating System & Application Software	20,000
3	Educational Software and CD ROMs	45,000
4	Furniture	25,000
5	Induction training in ICT to teachers for 10 days @ Rs. 400/- per day (average of 10 teachers)	40,000
	Total	6,40,000
b.	(Recurring)	Rupees (In lakhs)
1	Computer stationary (Printer cartridges, CD ROMs- Floppies, Paper etc. extra.	0.80
2	Electricity charges @ Rs. 1,000/- p.m.	0.12
3	Expenses on Diesel/Kerocine for generator @ Rs. 1,000/- p.m.	0.12
4	Telephone charges @ Rs. 500/- p.m.	0.60
5	Internet Broadband Charges	0.10
6	Teacher's Salary @ Rs./10000/- p.m	1.20
7	Refresher Training for 5 days to teachers @ Rs. 400/- per day (Average of 10 teachers)	0.20
8	Management, Monitoring and Evaluation	0.10
	Total	2.70

The Government of India would provide 75 percent on total amount of financial assistance to State and the balance 25 percent of funds would be contributed by the State Governments. Subject to the availability of central share and state funds, the payment to the Agency will be made on installment basis. The amount due and the payment schedule is as under:

1. Mobilization Advance: 2.5 percent of the value of contract.
2. First Year: 25percent of the contract value will be due on successful implementation out of which 6.5 percent will be paid after adjusting the mobilization advance on receipt of certificates of successful commissioning from schools under implementation. The balance 18.5 percent will be paid on quarterly basis in three quarterly installments starting from the next quarter from the date making first payment of 6.5 percent.
3. 20 percent of the contract value will be paid in second, third and fourth year in four equal quarterly installments.
4. 15 percent of the contract value will be paid in the fifth year in four equal quarterly installments.

All payments will be subjected to tax deduction at source if applicable at the prevailing tax rates. The decision of Director, Secondary Education, 18-Park Road, Lucknow U.P. in this regard will be final and binding and no dispute in this regard will be entertained.

Analysis of Monitoring Mechanism of ICT Scheme

The district level authority and state level authority monitor ICT scheme in all schools. As per provisions, meetings are held in state office and all related issues are resolved in these meeting by the state authority. State office receives Monthly Information Report of ICT Covered Schools through D.I.O.S. offices for all districts and takes appropriate decisions about them.

Problems in Overall plan for education through ICT

Study material, related software and teachers training have been provided for class 6 to 12 but in schools where the strength of students are so high there are not sufficient study material and computers. In some schools subject teachers are not taking any interest in subject teaching through computers and don't want to take training.

Problems encountered by State Authorities in implementing the scheme in the State such as finalizing the BOOT vendor, and related issues in case of BOOT model and the problems encountered by State Authorities in case of outright purchase model

As reported by state authorities, the implementation of Build, Own, Operate and Transfer (BOOT) model is very difficult as under this model vender has to establish everything relating

to computer lab in the schools without sufficient advance payment. Maximum ICT covered schools are situated in rural areas, there are more problems as electricity problem, internet problem, repairing and maintenance problem etc in these schools timely service could not provided. As per contract with the vendors, the provision of generator in rural schools is only for 2 hours in a day. This is not found to be sufficient in view of long hours of power cuts in the schools of the rural areas. Like- wise, the arrangement of internet connectivity are not sufficient particularly in the rural areas.

Problems encountered by State Authorities in issues with contractor/ vendor and contract teachers, issues with District authorities, issues with schools

State authorities face problems in selecting vendors. In First Phase, three vendors Extra marks, Everonn and Edcomp were selected but in Second Phase, only vendor Extra marks was selected because of certain operational problems.

The ICT teachers are working in schools appointed through vendors, getting very low salary. Due to insufficient salary, these teachers are not able to perform their duties at the required/ expected level.

As per agreement with the vendors, the monthly payment to contract ICT teachers has been fixed at Rs. 3500 per month for these appointments in First Phase. The monthly payment of Rs. 10,000 has been fixed for contractual ICT teacher appointed during Second Phase. But in practice, none of the ICT teacher is getting monthly salary more than Rs. 5000 a month. There is a huge difference in the salary payment between ICT teachers appointed in First and Second Phase of ICT programme in the state.

Another major problem encountered in implementing this scheme is availability of computer is very low in comparison to the number of students. Availability of computers as compared to the number of students is very low. As per existing provisions, 10 to 11 computers are provided in every school while strength of students is very high.

In rural areas there is acute shortage of electricity hence operation of computer becomes very troublesome. For ICT in school scheme most schools are selected in rural areas which face the problem of electric supply. In some rural area power supply is given in odd hours during late hours or early morning when computer training is not possible. In other rural areas power supply is given but for a very short period.

According to TOR generator faculty is given only for 2 hours, which is not sufficient for the operation of computer labs.

Suggestions of State Authorities for improved implementation of ICT scheme in state

According to the state authorities it is necessary to establish smart class rooms in each ICT covered school and increase number of computer where the strength of student is very high and students and teachers are taking interest education through ICT.

Conclusions and findings

The state of Uttar Pradesh has implemented ICT Scheme through BOOT model since 2009 and covered 2500 secondary and higher secondary schools in all the districts in the first phase and 1500 in the second phase.

A separate Tendering Process was adopted by the government for both Phase I and II of ICT Implementation in the state. sealed bids containing two parts viz., (a) Technical bid and (b) Financial bid in separate sealed covers from reputed and experienced organizations/ institutes having three years experience in the supply of computer hardware, software and connected accessories and provision of IT Education services in 2500 Government Aided Schools in the State of Uttar Pradesh on Build Own Operate and Transfer (BOOT) basis were invited. Bidders who have annual average turnover of at least Rs.20.0 Crores from Computer Education business in India in the last three years have been considered eligible.

Tender document were procured by 6 organizations but only 4 organization's bid received timely. The main of Organizations are Compucom Software Limited, Jaipur, N.I.I.T. Limited, Chennai, Everonn solutions Limited, Chennai, Educomp solutions Limited, New Delhi. In the second phase particularly the agency is asked to supply computer hardware, software and connected accessories and is also asked to provide computer education and computer aided education in 1500 Government/government Aided High schools and intermediate colleges. A Service Level Agreement was also made which says that an Agency shall maintain the entire system in working condition during the contract period of 5(five) years and for teacher training and financial parameters.

The agency shall impart training of computer operation, operating system, application software and computer based training on multimedia consisting of text, graphics, sound, animation & video to at least 5 (five) teachers per year per school and ensure such efficiency

in teacher so that they may develop child centered education through multimedia. In case the numbers of teachers are less than 25 in a school the amount of training would be deducted proportionally in the corresponding year .In the second phase the agency is supposed to provide Induction training: to 10 teachers per school for a period of 10 days (8 hours per day) and ensure such efficiency in teacher so that they may develop child centered education through multimedia. Further refresher training also needs to be provided on the topics working with multimedia, MIS. Computer technology and security training etc. to 10 teachers every year per school for 5 days (8 hours per day)

As far as the funding of this scheme is concerned the central and state governments has agreed to accept the contribution of 75and 25 percent respectively in it .The assistance of the government of India would be for the selected Financial Parameters and up to the limits indicated against each items.

All payments will be subjected to tax deduction at source if applicable at the prevailing tax rates. The decision of Director, Secondary Education, 18-Park Road, Lucknow U.P. in this regard will be final and binding and no dispute in this regard will be entertained.

With respect to the Monitoring Mechanism of ICT Scheme it was decided that_the district level authority and state level authority monitor ICT scheme in all schools. As per provisions, meetings are held in state office and all related issues are resolved in these meeting by the state authority. State office receives Monthly Information Report of ICT Covered Schools through D.I.O.S. offices for all districts and takes appropriate decisions about them.

There are some problems as well in implementing the scheme successfully such as study material, related software and teachers training have been provided for class 6 to 12 but in schools where the strength of students are so high there are not sufficient study material and computers. In some schools subject teachers are not taking any interest in subject teaching through computers and don't want to take training. Further some problems encountered by State Authorities such as finalizing the BOOT vendor, problems in outright purchase model etc. Further maximum ICT covered schools are situated in rural areas, there are more problems as electricity problem, internet problem, repairing and maintenance problem etc in these schools timely service could not provided. As per contract with the vendors, the provision of generator in rural schools is only for 2 hours in a day. This is not found to be sufficient in view of long hours of power cuts in the schools of the rural areas. Like- wise, the arrangement of internet connectivity are not sufficient particularly in the rural areas. State

authorities face problems in selecting vendors. In First Phase, three vendors Extra marks, Everonn and Edcomp were selected but in Second Phase, only vendor Extra marks was selected because of certain operational problems.

The ICT teachers are working in schools appointed through vendors, getting very low salary. Due to insufficient salary, these teachers are not able to perform their duties at the required/ expected level.

Finally it was admitted by the state government authorities that in order to ensure improved implementation of ICT scheme in state it is necessary to establish smart class rooms in each ICT covered school and also to increase the number of computers where the strength of student is very high and students and teachers are taking interest in getting / providing education through ICT.

CHAPTER III

ICT IN SCHOOLS: DISTRICT LEVEL ANALYSIS

District- Wise Schools and ICT Coverage

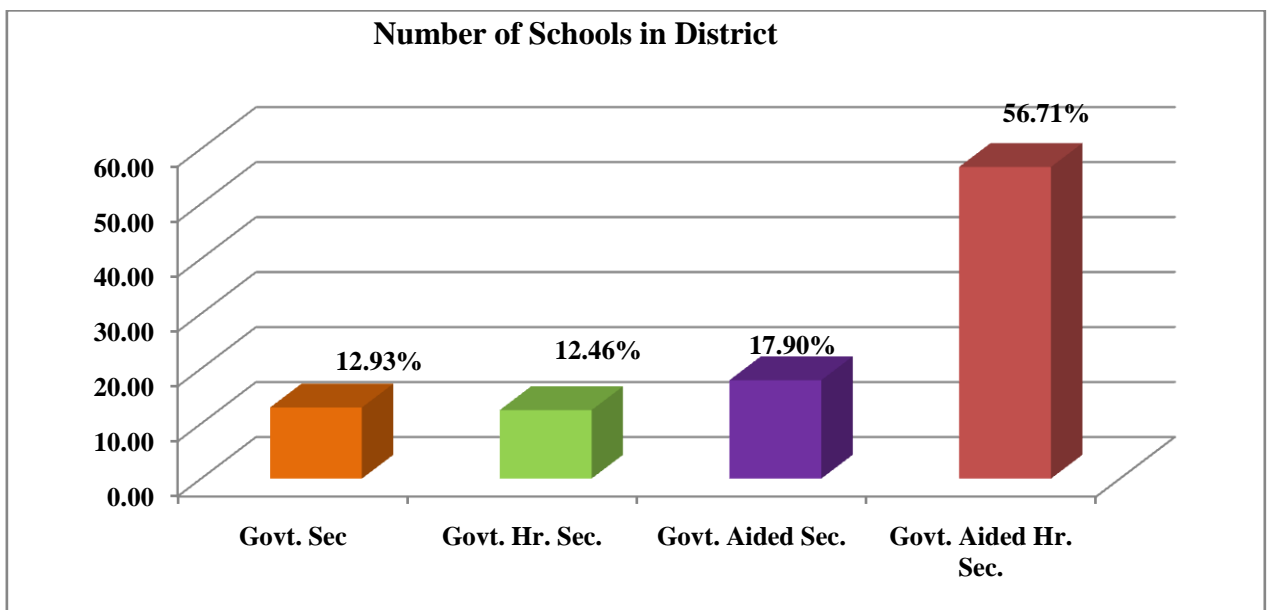
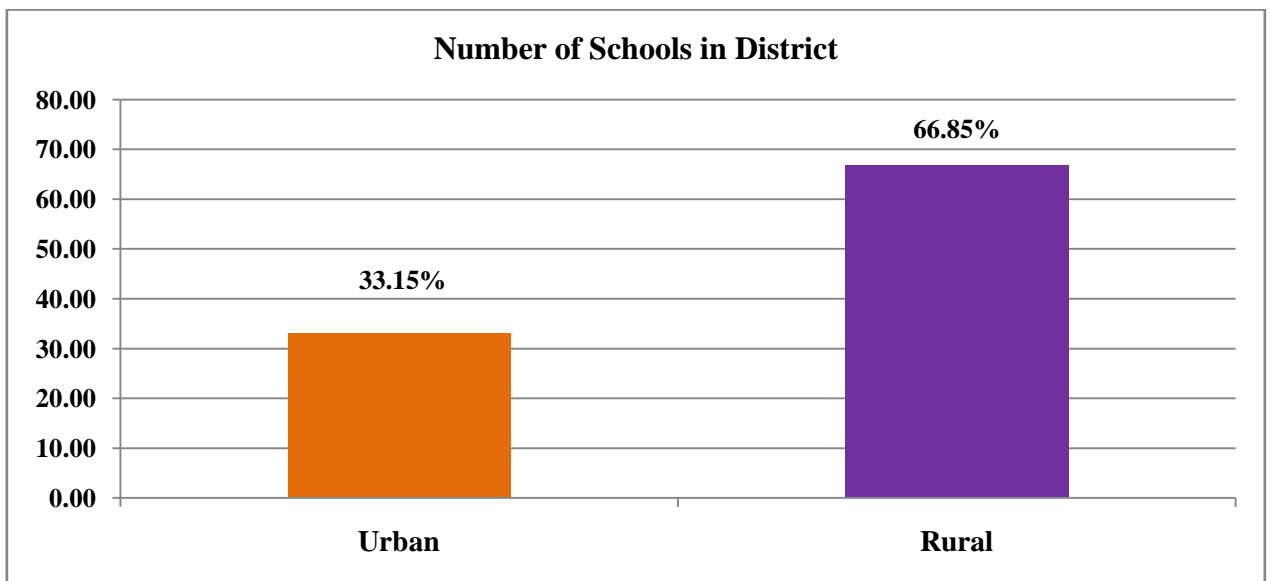
As per decided methodology of the district selection, 18 districts were selected from the state of Uttar Pradesh. For selecting the representative districts, as per norms, District- wise development Indicators of Uttar Pradesh, 2009 were considered. Out of 18 selected sample districts, there are 1469 schools of which 66.85 percent schools are located in rural areas and 33.15 percent in urban areas. Total 18 selected districts consist of 12.93 percent govt. sec. schools followed by 12.46 percent govt. hr. sec. schools, 17.90 percent govt. aided sec. schools govt. sec. schools and 56.71percent govt. aided hr. sec. schools. Thus, all districts have maximum govt. aided hr. sec. schools while govt. hr. sec. schools are least.

In urban districts 11.77 percent govt. sec. schools, 7.35 percent govt. hr. sec. schools, 14.12 percent govt. aided schools and 66.76 percent govt. aided hr. sec. schools were selected. From rural districts 12.90 percent govt. sec. schools followed by 14.92 percent govt. hr. sec. schools, 18.95 percent govt. aided schools and 53.23 percent govt. aided hr. sec. schools were selected. In districts with High Tele density 13.93percent govt. sec. schools, 7.74 percent govt. hr. sec. schools 26.01 percent Govt. aided schools and 52.32 percent govt. aided hr. sec. schools were elected. In districts with Lower Tele density 9.29 percent govt. sec. schools, 15.85 percent govt. hr. sec. schools 12.57 percent Govt. aided schools and 62.29 percent govt. aided hr. sec. schools were selected. In districts characterized as Backward by the state 21.90 percent govt. sec. schools followed by 21.90 percent govt. hr. sec. schools, followed by 17.52 percent govt. aided schools and 38.68 percent govt. aided hr. sec. schools were elected. Districts with Electricity problems 10.92 percent govt. sec. schools, 15.55 percent govt. hr. sec. schools 15.55 percent govt. aided schools and 56.71 percent govt. aided hr. sec. schools were selected for feedback of the program.

Table 3.1: Number of Schools in District

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	20 (14.49)	8 (5.80)	18 (13.04)	92 (66.67)	138 (100.00)	30 (21.74)	108 (78.26)
	JHANSI	10 (14.29)	12 (17.14)	0 (0.00)	48 (68.57)	70 (100.00)	15 (21.43)	55 (78.57)
	GORAKHPUR	10 (7.58)	5 (3.79)	30 (22.73)	87 (65.90)	132 (100.00)	22 (16.67)	110 (83.33)
	TOTAL	40 (11.77)	25 (7.35)	48 (14.12)	227 (66.76)	340 (100.00)	67 (19.71)	273 (80.29)
RURAL DISTRICTS	MAHOBA	7 (26.92)	9 (34.62)	2 (7.69)	8 (30.77)	26 (100.00)	11 (42.31)	15 (57.69)
	GHAZIPUR	13 (10.74)	12 (9.92)	39 (32.23)	57 (47.11)	121 (100.00)	12 (9.92)	109 (90.08)
	BIJNOR	12 (11.88)	16 (15.84)	6 (5.94)	67 (66.34)	101 (100.00)	52 (51.49)	49 (48.51)
	TOTAL	32 (12.90)	37 (14.92)	47 (18.95)	132 (53.23)	248 (100.00)	75 (30.24)	173 (69.76)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	18 (14.06)	13 (10.16)	24 (18.75)	73 (57.03)	128 (100.00)	113 (88.28)	15 (11.72)
	GHAZIABAD	5 (8.47)	4 (6.78)	10 (16.95)	40 (67.80)	59 (100.00)	21 (35.59)	38 (64.41)
	VARANASI	22 (16.18)	8 (5.88)	50 (36.76)	56 (41.18)	136 (100.00)	56 (41.18)	80 (58.82)
	TOTAL	45 (13.93)	25 (7.74)	84 (26.01)	169 (52.32)	323 (100.00)	190 (58.82)	133 (41.18)
DISTRICT WITH LOWER TELE DENSITY	BANDA	7 (9.86)	18 (25.35)	15 (21.13)	31 (43.66)	71 (100.00)	26 (36.62)	45 (63.38)
	FATEHPUR	0 (0.00)	7 (8.86)	7 (8.86)	65 (82.28)	79 (100.00)	8 (10.13)	71 (89.87)
	BALRAMPUR	10 (30.30)	4 (12.12)	1 (3.03)	18 (54.55)	33 (100.00)	11 (33.33)	22 (66.67)
	TOTAL	17 (9.29)	29 (15.85)	23 (12.57)	114 (62.29)	183 (100.00)	45 (24.59)	138 (75.41)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	11 (44.00)	3 (12.00)	5 (20.00)	6 (24.00)	25 (100.00)	5 (20.00)	20 (80.00)
	RAMPUR	8 (14.81)	21 (38.89)	6 (11.11)	19 (35.19)	54 (100.00)	28 (51.85)	26 (48.15)
	BADAUN	11 (18.97)	6 (10.34)	13 (22.41)	28 (48.28)	58 (100.00)	13 (22.41)	45 (77.59)
	TOTAL	30 (21.90)	30 (21.90)	24 (17.52)	53 (38.68)	137 (100.00)	46 (33.58)	91 (66.42)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	10 (14.71)	3 (4.41)	17 (25.00)	38 (55.88)	68 (100.00)	12 (17.65)	56 (82.35)
	SITAPUR	16 (18.60)	16 (18.60)	15 (17.45)	39 (45.35)	86 (100.00)	32 (37.21)	54 (62.79)
	ETAH	0 (0.00)	18 (21.43)	5 (5.95)	61 (72.62)	84 (100.00)	20 (23.81)	64 (76.19)
	TOTAL	26 (10.92)	37 (15.55)	37 (15.55)	138 (57.98)	238 (100.00)	64 (26.89)	174 (73.11)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	190 (12.93)	183 (12.46)	263 (17.90)	833 (56.71)	1469 (100.00)	487 (33.15)	982 (66.85)

Source: Office of District Inspector of schools (DIOS)



From total 1469 schools in all the selected districts, the Ministry covered 1000 (68.07 percent) schools under ICT in school scheme. The selected sample districts represented 1000 schools implementing, ICT school scheme in two phases. At district level, first phase was started during the year 2009-10, which covered 635 schools. Second phase started from the year 2010-11, which covered 365 schools.

The study results are based on 180 ICT sample schools, selected proportionately from first and second phase of ICT School Scheme of the state. For the scheme, 77.05 percent govt. hr. sec. schools, 59.70 percent govt. aided sec. schools and 82.71 percent govt. aided hr. sec.

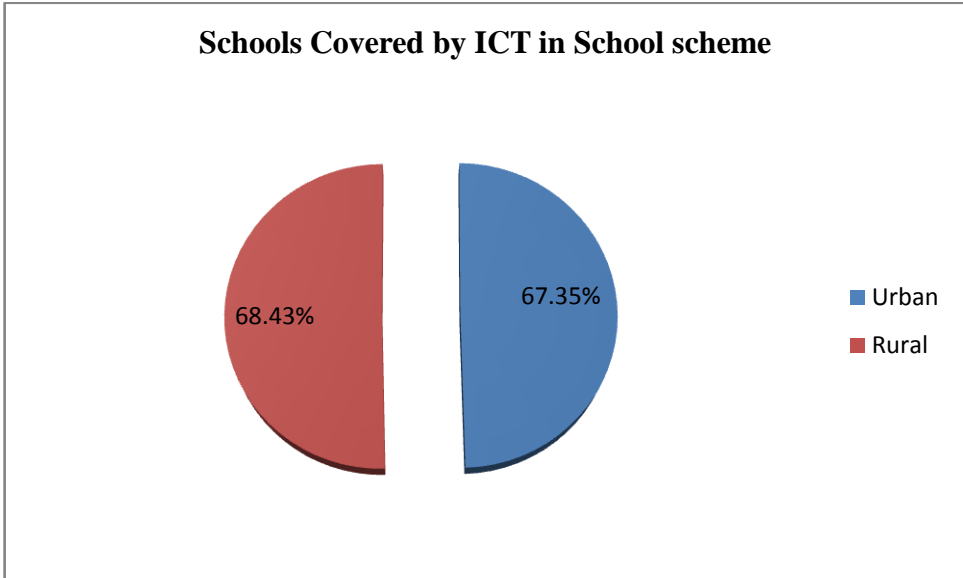
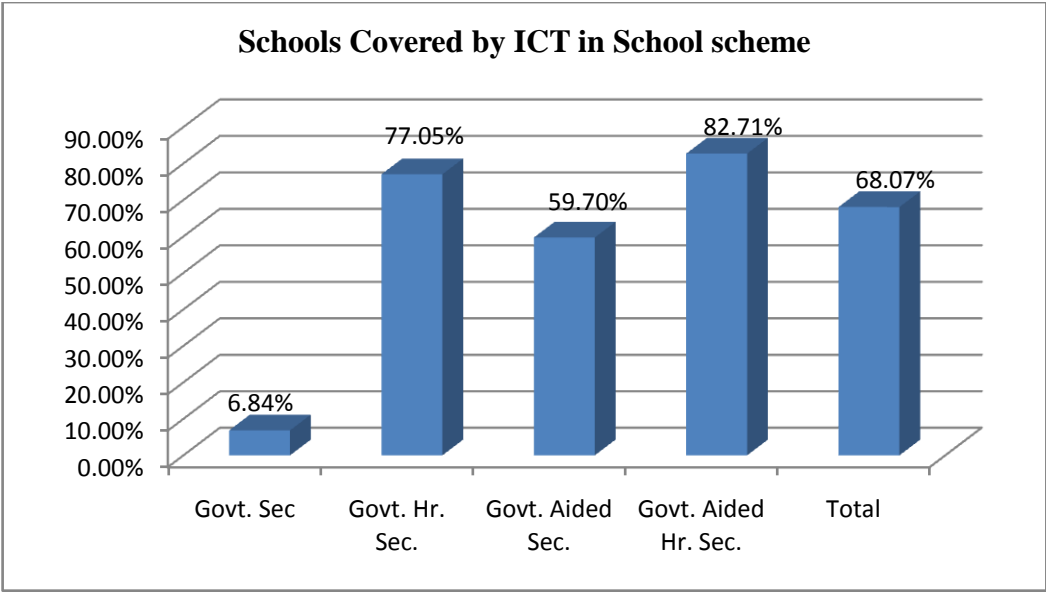
schools were selected. Only 6.84 percent govt. sec. was selected for this scheme. Highest share of govt. aided hr. sec. schools is due to the fact that it has the maximum share in total schools in the selected districts.

From all the schools located in rural areas, 67.35 percent schools were selected for ICT in school scheme and in case of urban areas 68.43 percent schools were selected from all the schools in urban areas.

Table 3.2: Schools Covered by ICT in School scheme

Particulars	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	40	25	48	227	340	67	273
	Schools Covered by ICT Scheme	0	17	16	183	216	52	164
	Percentage	(0.00)	(68.00)	(33.33)	(80.62)	(63.53)	(77.61)	(60.07)
Rural Districts	Total No. Of School	32	37	47	132	248	75	173
	Schools Covered by ICT Scheme	0	35	34	127	196	68	128
	Percentage	(0.00)	(94.59)	(72.34)	(96.21)	(79.03)	(90.67)	(73.99)
District with High Tele Density	Total No. Of School	45	25	84	169	323	190	133
	Schools Covered by ICT Scheme	6	17	60	107	190	103	87
	Percentage	(13.33)	(68.00)	(71.43)	(63.31)	(58.82)	(54.21)	(65.41)
District with Low Tele Density	Total No. Of School	17	29	23	114	183	45	138
	Schools Covered by ICT Scheme	0	22	8	88	118	27	91
	Percentage	(0.00)	(75.86)	(34.78)	(77.19)	(64.48)	(60.00)	(65.94)
Districts Characterized as backward by the state	Total No. Of School	30	30	24	53	137	46	91
	Schools Covered by ICT Scheme	4	27	18	53	102	32	70
	Percentage	(13.33)	(90.00)	(75.00)	(100.00)	(74.45)	(69.57)	(76.92)
Districts with Electricity Problems	Total No. Of School	26	37	37	138	238	64	174
	Schools Covered by ICT Scheme	3	23	21	131	178	46	132
	Percentage	(11.54)	(62.16)	(56.76)	(94.93)	(74.79)	(71.88)	(75.86)
All Total Sample Districts	Total No. Of School	190	183	263	833	1469	487	982
	Schools Covered by ICT Scheme	13	141	157	689	1000	328	672
	Percentage	(6.84)	(77.05)	(59.70)	(82.71)	(68.07)	(67.35)	(68.43)

Source: Office of District Inspector of schools (DIOS)



More schools were covered in rural areas than urban areas for ICT in School Scheme. It covered 67.20 percent schools in rural areas and 32.80 percent in urban areas.

ICT in schools covered 68.90 percent govt. aided hr. sec. schools which were highest among all types of schools followed by 1.30 percent schools in govt. Sec. Schools which was lowest among the selected schools. No govt. sec. school in urban areas, rural areas and lower tele density was selected for this scheme.

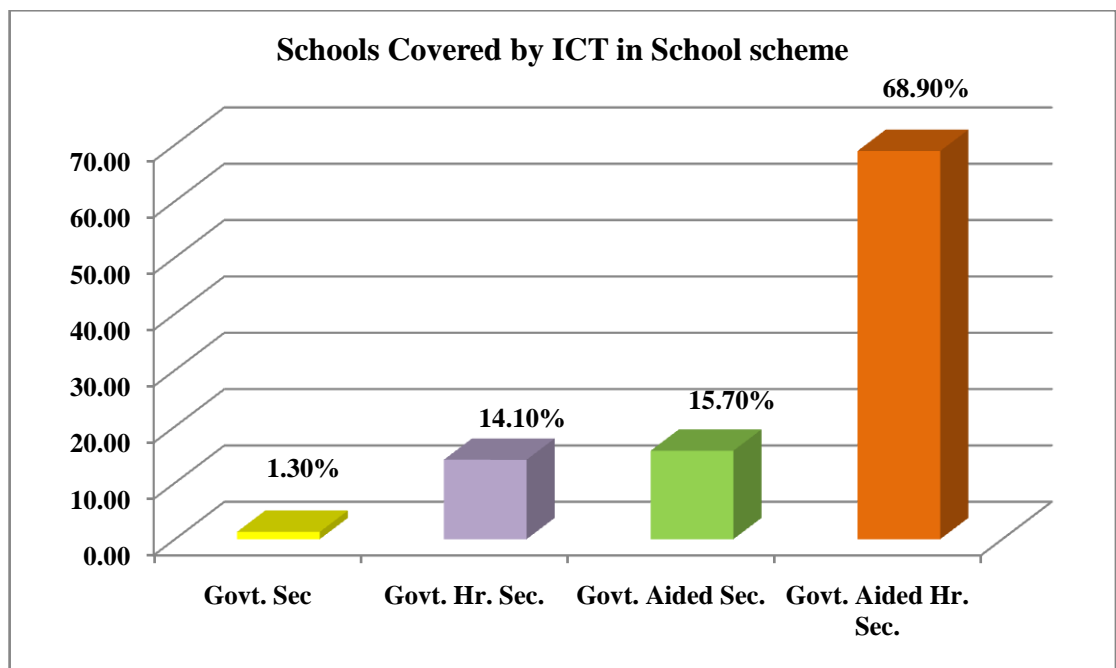
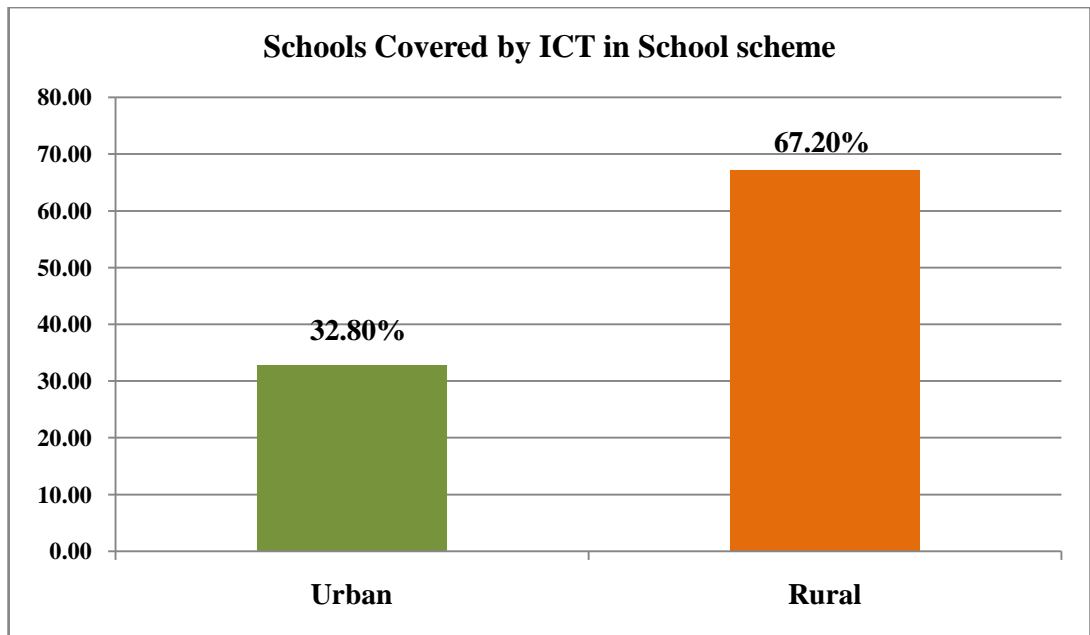
This scheme covered 31.58 percent govt. aided sec. schools from districts with high tele density and was highest among the selected districts. 31.58 percent govt. aided sec. schools was elected from districts with High tele Density and was highest among the state. Maximum in all the selected districts were govt. aided hr. sec. schools from which highest number 84.72

percent in urban districts and lowest 51.96 percent from districts was characterized as backward by the state.

Table 3.3 : Number of Schools Covered by ICT in School Scheme (District- wise)

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	4 (5.88)	6 (8.82)	58 (85.30)	68 (100)	21 (30.88)	47 (69.12)
	JHANSI	0 (0.00)	11 (20.75)	0 (0.00)	42 (79.25)	53 (100)	14 (26.42)	39 (73.58)
	GORAKHPUR	0 (0.00)	2 (2.11)	10 (10.53)	83 (87.36)	95 (100)	17 (17.89)	78 (82.11)
	TOTAL	0 (0.00)	17 (7.87)	16 (7.41)	183 (84.72)	216 (100)	52 (24.07)	164 (75.93)
RURAL DISTRICTS	MAHOPA	0 (0.00)	9 (52.94)	0 (0.00)	8 (47.06)	(100)	10 (58.82)	7 (41.18)
	GHAZIPUR	0 (0.00)	11 (10.89)	34 (33.66)	56 (55.45)	101 (100)	12 (11.88)	89 (88.12)
	BIJNOR	0 (0.00)	15 (19.23)	0 (0.00)	63 (80.77)	78 (100)	46 (58.97)	32 (41.03)
	TOTAL	0 (0.00)	35 (17.86)	34 (17.35)	127 (64.79)	196 (100)	68 (34.69)	128 (65.31)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	13 (16.25)	11 (13.75)	56 (70.00)	80 (100)	65 (81.25)	15 (18.75)
	GHAZIABAD	0 (0.00)	2 (6.90)	0 (0.00)	27 (93.10)	29 (100)	7 (24.14)	22 (75.86)
	VARANASI	6 (7.41)	2 (2.47)	49 (60.49)	24 (29.63)	81 (100)	31 (38.27)	50 (61.73)
	TOTAL	6 (3.16)	17 (8.95)	60 (31.58)	107 (56.32)	190 (100)	103 (54.21)	87 (45.79)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	11 (32.35)	7 (20.59)	16 (47.06)	34 (100)	8 (23.53)	26 (76.47)
	FATEHPUR	0 (0.00)	7 (11.48)	0 (0.00)	54 (88.52)	61 (100)	8 (13.11)	53 (86.89)
	BALRAMPUR	0 (0.00)	4 (17.39)	1 (4.35)	18 (78.26)	23 (100)	11 (47.83)	12 (52.17)
	TOTAL	0 (0.00)	22 (18.64)	8 (6.78)	88 (74.58)	118 (100)	27 (22.88)	91 (77.12)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	3 (25.00)	3 (25.00)	6 (50.00)	12 (100)	2 (16.67)	10 (83.33)
	RAMPUR	0 (0.00)	19 (46.34)	3 (7.32)	19 (46.34)	41 (100)	17 (41.46)	24 (58.54)
	BADAUN	4 (8.16)	5 (10.20)	12 (24.49)	28 (57.14)	49 (100)	13 (26.53)	36 (73.47)
	TOTAL	4 (3.92)	27 (26.47)	18 (17.65)	53 (51.96)	102 (100)	32 (31.37)	70 (68.63)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	2 (4.08)	12 (24.49)	35 (71.43)	49 (100)	11 (22.45)	38 (77.55)
	SITAPUR	3 (5.56)	12 (22.22)	4 (7.41)	35 (64.81)	54 (100)	20 (37.04)	34 (62.96)
	ETAH	0 (0.00)	9 (12.00)	5 (6.67)	61 (81.33)	75 (100)	15 (20.00)	60 (80.00)
	TOTAL	3 (1.69)	23 (12.92)	21 (11.80)	131 (73.60)	178 (100)	46 (25.84)	132 (74.16)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	13 (1.30)	141 (14.10)	157 (15.70)	689 (68.90)	1000 (100)	328 (32.80)	672 (67.20)

Source: Office of District Inspector of schools (DIOS)



Availability of Desktops

In all the selected schools average 10 desktops were provided under this scheme while in urban sector average 11 desktops were provided. The reason behind was more urban schools were selected during second phase.

Table 3.4: Availability of Desktops in schools

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Availability of Desktops	0	175	166	1899	2240	560	1680
	Average	0	10	10	10	10	11	10
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Availability of Desktops	0	359	364	1323	2046	710	1336
	Average	0	10	11	10	10	10	10
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Availability of Desktops	60	175	616	1143	1994	1090	904
	Average	10	10	10	11	10	11	10
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Availability of Desktops	0	223	80	902	1205	276	929
	Average		10	10	10	10	10	10
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Availability of Desktops	40	277	186	542	1045	337	708
	Average	10	10	10	10	10	11	10
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Availability of Desktops	33	233	221	1348	1835	477	1358
	Average	11	10	11	10	10	10	10
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Availability of Desktops	133	1442	1633	7157	10365	3450	6915
	Average	10	10	10	10	10	11	10

Source: Office of District Inspector of schools (DIOS)

33.29 percent of schools located in urban areas and 66.71 percent schools in rural areas were given desk tops under this scheme.

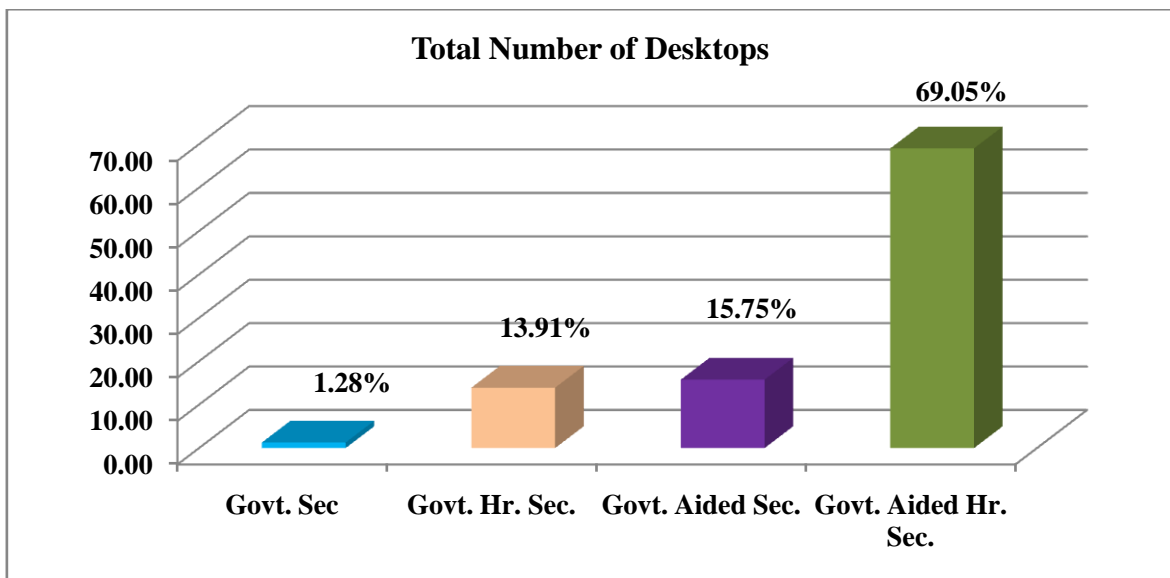
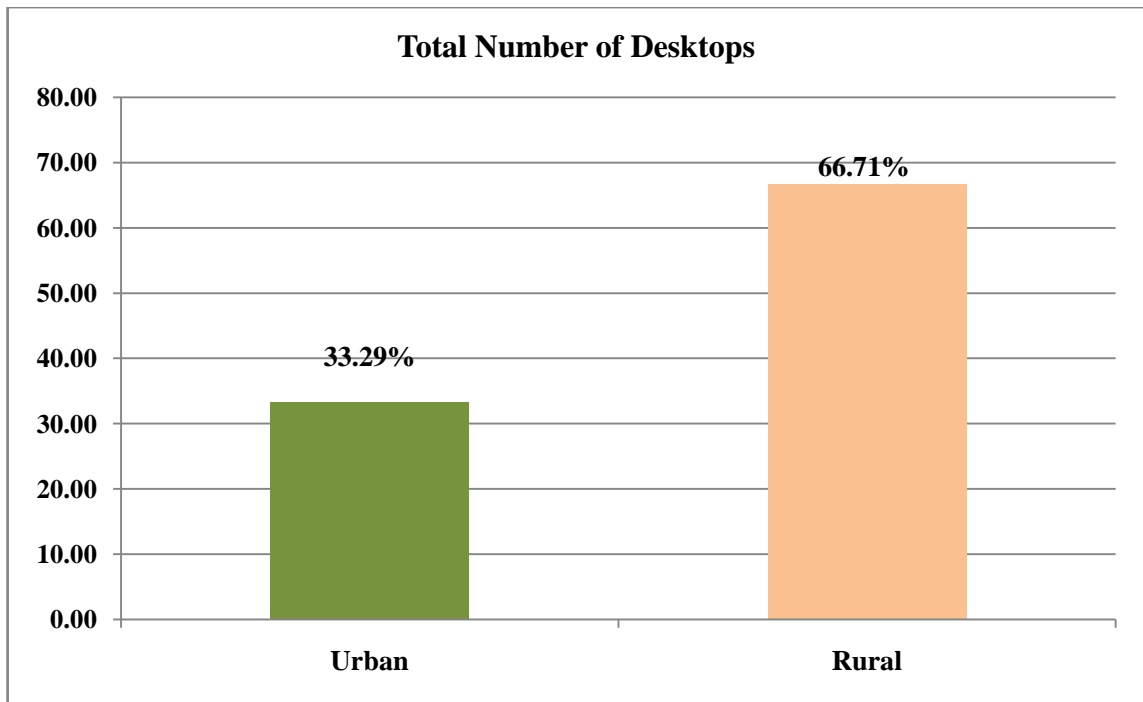
Total 10365 desktops were distributed among 18 districts during two phases. 69.05percent Govt. aided hr. schools which was highest among the selected schools and 1.28 percent Govt. sec schools which was lowest receiving Desktops under this scheme. Only two districts namely, Sitapur from electricity problems received 5.99 percent and Badaun from district characterized as backward by the state got 7.91 percent desk tops for govt. sec. schools. For govt. sec. hr. sec. schools 26.51percent desktops were given to district characterized as backward by the state for govt. aided schools 30.89 percent desktops were given to district with high tele density 84.78 percent desktops were given to govt. aided hr. sec. schools in

urban districts. Hence, there has not been any set pattern for the distribution of desktops under this scheme across different categories of districts.

Table 3.5: Total Number of Desktops

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	41 (5.75)	66 (9.26)	606 (84.99)	713 (100.00)	229 (32.12)	484 (67.88)
	JHANSI	0 (0.00)	113 (20.70)	0 (0.00)	433 (79.30)	546 (100.00)	150 (27.47)	396 (72.53)
	GORAKHPUR	0 (0.00)	21 (2.14)	100 (10.19)	860 (87.67)	981 (100.00)	181 (18.45)	800 (81.55)
	TOTAL	0 (0.00)	175 (7.81)	166 (7.41)	1899 (84.78)	2240 (100.00)	560 (25.00)	1680 (75.00)
RURAL DISTRICTS	MAHOBA	0 (0.00)	93 (53.76)	0 (0.00)	80 (46.24)	173 (100.00)	103 (59.54)	70 (40.46)
	GHAZIPUR	0 (0.00)	112 (10.55)	364 (34.27)	586 (55.18)	1062 (100.00)	126 (11.86)	936 (88.14)
	BIJNOR	0 (0.00)	154 (18.99)	0 (0.00)	657 (81.01)	811 (100.00)	481 (59.31)	330 (40.69)
	TOTAL	0 (0.00)	359 (17.55)	364 (17.79)	1323 (64.66)	2046 (100.00)	710 (34.70)	1336 (65.30)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	132 (15.73)	112 (13.35)	595 (70.92)	839 (100.00)	685 (81.64)	154 (18.36)
	GHAZIABAD	0 (0.00)	21 (6.86)	0 (0.00)	285 (93.14)	306 (100.00)	74 (24.18)	232 (75.82)
	VARANASI	60 (7.07)	22 (2.59)	504 (59.36)	263 (30.98)	849 (100.00)	331 (38.99)	518 (61.01)
	TOTAL	60 (3.01)	175 (8.78)	616 (30.89)	1143 (57.32)	1994 (100.00)	1090 (54.66)	904 (45.34)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	113 (32.75)	70 (20.29)	162 (46.96)	345 (100.00)	85 (24.64)	260 (75.36)
	FATEHPUR	0 (0.00)	70 (11.11)	0 (0.00)	560 (88.89)	630 (100.00)	81 (12.86)	549 (87.14)
	BALRAMPUR	0 (0.00)	40 (17.39)	10 (4.35)	180 (78.26)	230 (100.00)	110 (47.83)	120 (52.17)
	TOTAL	0 (0.00)	223 (18.51)	80 (6.64)	902 (74.85)	1205 (100.00)	276 (22.90)	929 (77.10)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	30 (25.00)	30 (25.00)	60 (50.00)	120 (100.00)	20 (16.67)	100 (83.33)
	RAMPUR	0 (0.00)	195 (46.54)	31 (7.40)	193 (46.06)	419 (100.00)	175 (41.77)	244 (58.23)
	BADAUN	40 (7.91)	52 (10.28)	125 (24.70)	289 (57.11)	506 (100.00)	142 (28.06)	364 (71.94)
	TOTAL	40 (3.83)	277 (26.51)	186 (17.80)	542 (51.86)	1045 (100.00)	337 (32.25)	708 (67.75)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	21 (4.20)	122 (24.40)	357 (71.40)	500 (100.00)	112 (22.40)	388 (77.60)
	SITAPUR	33 (5.99)	120 (21.78)	44 (7.99)	354 (64.24)	551 (100.00)	207 (37.57)	344 (62.43)
	ETAH	0 (0.00)	92 (11.73)	55 (7.02)	637 (81.25)	784 (100.00)	158 (20.15)	626 (79.85)
	TOTAL	33 (1.80)	233 (12.70)	221 (12.04)	1348 (73.46)	1835 (100.00)	477 (25.99)	1358 (74.01)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	133 (1.28)	1442 (13.91)	1633 (15.76)	7157 (69.05)	10365 (100.00)	3450 (33.29)	6915 (66.71)

Source: Office of District Inspector of schools (DIOS)



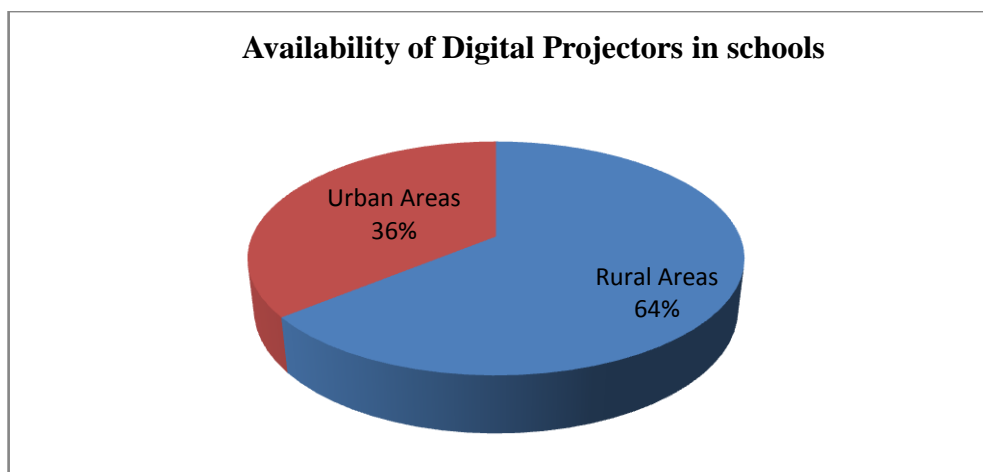
Availability of Digital Projectors

Digital projectors were provided in 39 percent govt. aided hr. sec. schools 40percent govt. aided sec. schools and only 23percent each to govt. sector schools and govt. hr. sec. schools. Digital projectors were made available to 64 percent schools in rural areas 36 percent schools in urban areas.

Table 3.6: Availability of Digital Projectors in schools

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Availability of Digital Projectors	0	5	6	69	80	40	40
	Percentage	(0.00)	(29.41)	(37.50)	(37.70)	(37.04)	(76.92)	(24.39)
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Availability of Digital Projectors	0	9	24	53	86	30	56
	Percentage	(0.00)	(25.71)	(70.59)	(41.73)	(43.88)	(44.12)	(43.75)
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Availability of Digital Projectors	0	5	16	73	94	60	34
	Percentage	(0.00)	(29.41)	(26.67)	(68.22)	(49.47)	(58.25)	(39.08)
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Availability of Digital Projectors	0	3	0	22	25	6	19
	Percentage	(0.00)	(13.64)	(0.00)	(25.00)	(21.19)	(22.22)	(20.88)
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Availability of Digital Projectors	0	7	6	12	25	17	8
	Percentage	(0.00)	(25.93)	(33.33)	(22.64)	(24.51)	(53.13)	(11.43)
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Availability of Digital Projectors	3	3	11	38	55	17	38
	Percentage	(100.00)	(13.04)	(52.38)	(29.01)	(30.90)	(36.96)	(28.79)
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Availability of Digital Projectors	3	32	63	267	365	170	195
	Percentage	(23.08)	(22.70)	(40.13)	(38.75)	(36.50)	(51.83)	(29.02)

Source: Office of District Inspector of schools (DIOS)



There is no huge difference in distribution of Digital Projectors in rural and urban areas. 53.42 percent Digital projectors were given in rural areas and 46.58 percent in urban areas.

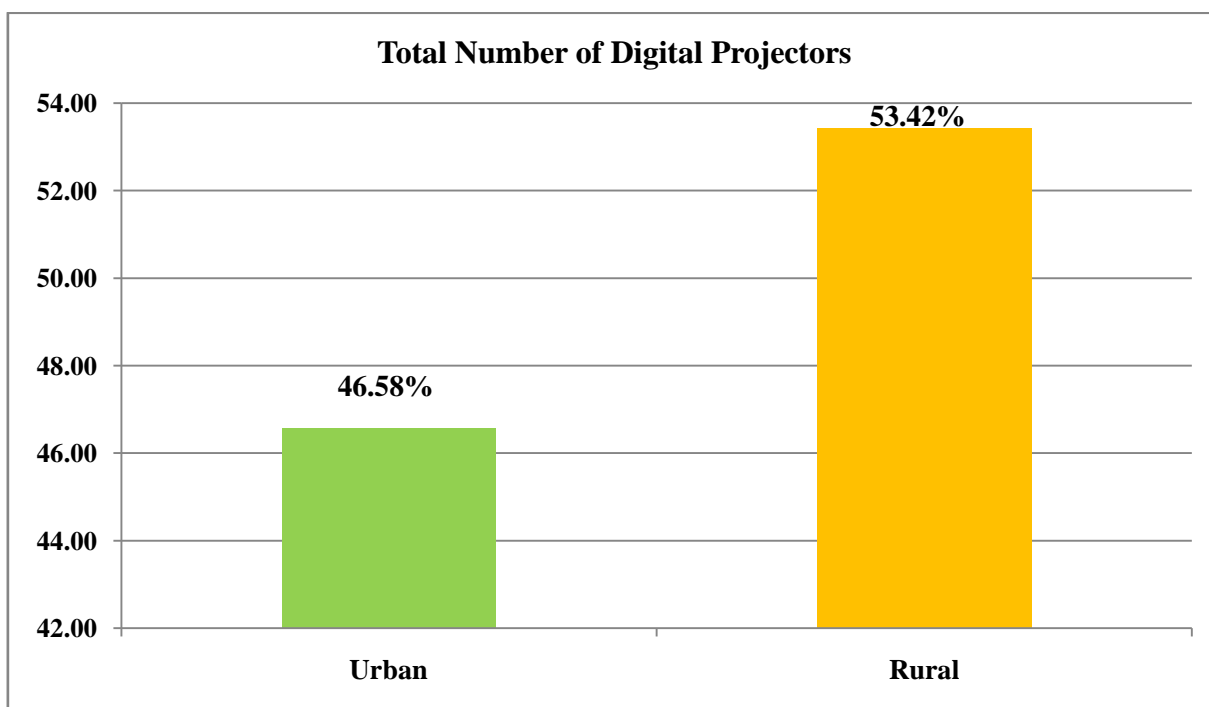
Digital projectors were given only in phase II covering 365 schools. These were given maximum to govt. sec. schools (73.15 percent) while only 0.82 percent digital projectors were given to govt. aided schools. 8.77 percent govt. hr. sec schools and 17.26 percent govt. aided Sec. Schools received Digital projectors. Total 365 Projectors were distributed among the schools of selected districts shows that only 36.50 percent schools got projectors.

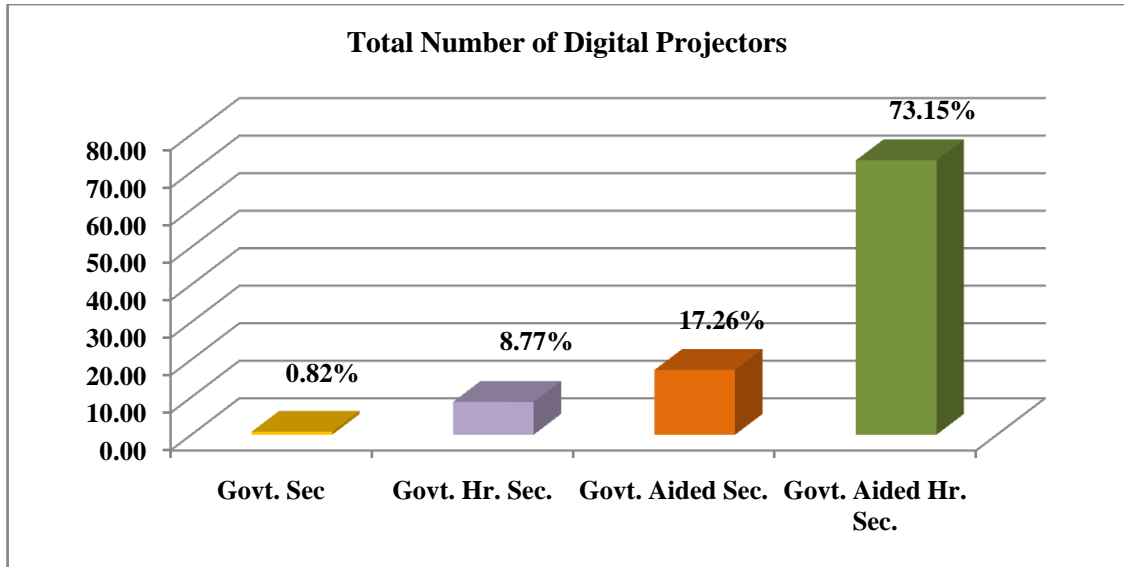
Table 3.7: Total Number of Digital Projectors

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	1 (3.03)	6 (18.18)	26 (78.79)	33 (100.00)	19 (57.58)	14 (42.42)
	JHANSI	0 (0.00)	3 (18.75)	0 (0.00)	13 (81.25)	16 (100.00)	10 (62.50)	6 (37.50)
	GORAKHPUR	0 (0.00)	1 (3.23)	0 (0.00)	30 (96.77)	31 (100.00)	11 (35.48)	20 (64.52)
	TOTAL	0 (0.00)	5 (6.25)	6 (7.50)	69 (86.25)	80 (100.00)	40 (50.00)	40 (50.00)
RURAL DISTRICTS	MAHOBA	0 (0.00)	3 (100.00)	0 (0.00)	0 (0.00)	3 (100.00)	3 (100.00)	0 (0.00)
	GHAZIPUR	0 (0.00)	2 (3.85)	24 (46.15)	26 (50.00)	52 (100.00)	6 (11.54)	46 (88.46)
	BIJNOR	0 (0.00)	4 (12.90)	0 (0.00)	27 (87.10)	31 (100.00)	21 (67.74)	10 (32.26)
	TOTAL	0 (0.00)	9 (10.47)	24 (27.90)	53 (61.63)	86 (100.00)	30 (34.88)	56 (65.12)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	2 (5.13)	2 (5.13)	35 (89.74)	39 (100.00)	35 (89.74)	4 (10.26)
	GHAZIABAD	0 (0.00)	1 (6.25)	0 (0.00)	15 (93.75)	16 (100.00)	4 (25.00)	12 (75.00)
	VARANASI	0 (0.00)	2 (5.13)	14 (35.90)	23 (58.97)	39 (100.00)	21 (53.85)	18 (46.15)
	TOTAL	0 (0.00)	5 (5.32)	16 (17.02)	73 (77.66)	94 (100.00)	60 (63.83)	34 (36.17)

DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	3 (60.00)	0 (0.00)	2 (40.00)	5 (100.00)	5 (100.00)	0 (0.00)
	FATEHPUR	0 (0.00)	0 (0.00)	0 (0.00)	20 (100.00)	20 (100.00)	1 (5.00)	19 (95.00)
	BALRAMPUR	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	TOTAL	0 (0.00)	3 (12.00)	0 (0.00)	22 (88.00)	25 (100.00)	6 (24.00)	19 (76.00)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	RAMPUR	0 (0.00)	5 (55.56)	1 (11.11)	3 (33.33)	9 (100.00)	5 (55.56)	4 (44.44)
	BADAUN	0 (0.00)	2 (12.50)	5 (31.25)	9 (56.25)	16 (100.00)	12 (75.00)	4 (25.00)
	TOTAL	0 (0.00)	7 (28.00)	6 (24.00)	12 (48.00)	25 (100.00)	17 (68.00)	8 (32.00)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	1 (10.00)	2 (20.00)	7 (70.00)	10 (100.00)	2 (20.00)	8 (80.00)
	SITAPUR	3 (27.27)	0 (0.00)	4 (36.36)	4 (36.36)	11 (100.00)	7 (63.64)	4 (36.36)
	ETAH	0 (0.00)	2 (5.88)	5 (14.71)	27 (79.41)	34 (100.00)	8 (23.53)	26 (76.47)
	TOTAL	3 (5.46)	3 (5.45)	11 (20.00)	38 (69.09)	55 (100.00)	17 (30.91)	38 (69.09)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	3 (0.82)	32 (8.77)	63 (17.26)	267 (73.15)	365 (100.00)	170 (46.58)	195 (53.42)

Source: Office of District Inspector of schools (DIOS)





Availability of UPS

In case of availability of UPS to schools on an average 7 UPS were available across different categories of the schools and schools of rural and urban areas. The average availability has been 8 each in govt. sec. and govt. hr. sec. schools, 7 in govt. aided sec. schools, and 7 in govt. aided hr. sec. schools. Whereas average 6 UPS in schools of urban areas and 8 in rural areas were made available.

Table 3.8: Availability of UPS (Uninterrupted Power Supply)

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Availability of UPS	0	130	112	1278	1520	200	1320
	Average	0	8	7	7	7	4	8
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Availability of UPS	0	278	148	846	1272	440	832
	Average	0	8	4	7	6	6	7
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Availability of UPS	60	130	472	486	1148	550	598
	Average	0	8	8	5	6	5	7
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Availability of UPS	0	196	80	704	980	222	758
	Average	0	9	10	8	8	8	8

Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Availability of UPS	40	214	132	434	820	184	636
	Average	0	8	7	8	8	6	9
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Availability of UPS	6	206	122	1006	1340	324	1016
	Average	0	9	6	8	8	7	8
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Availability of UPS	106	1154	1066	4754	7080	1920	5160
	Average	8	8	7	7	7	6	8

Official sources specify that out of the total UPS supplied in the selected sample ICT schools, 72.88 percent UPS were available in the schools of the rural areas while in the urban districts only 27.12 percent UPS were given.

Total 7080 UPS were provided to schools in both the phases. In phase I- 10 UPS per school were given while in phase II only 2 UPS per school were given under this scheme.

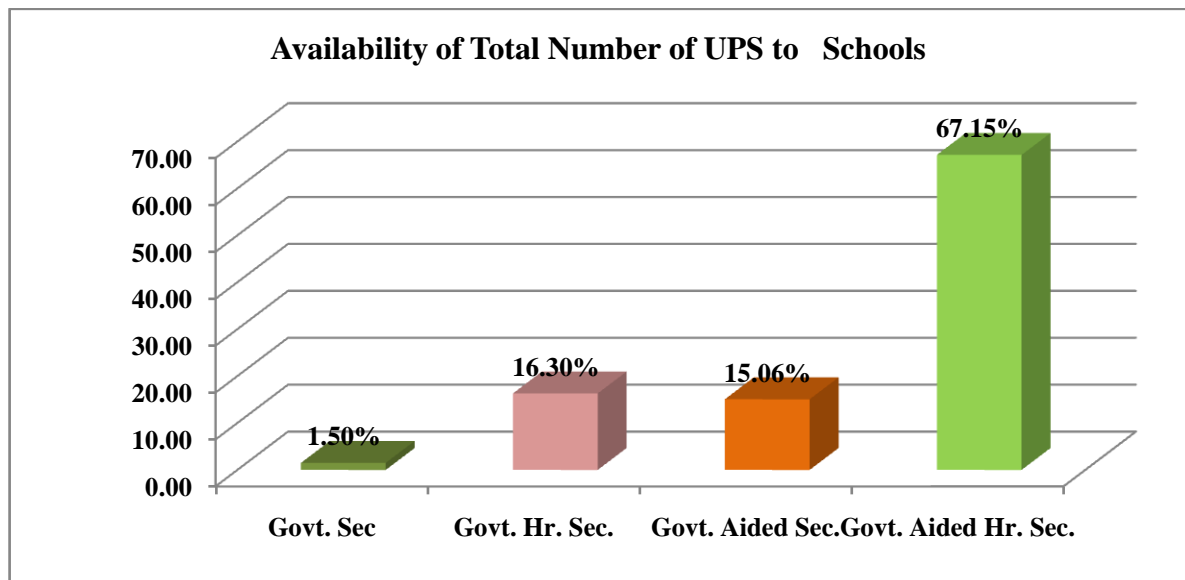
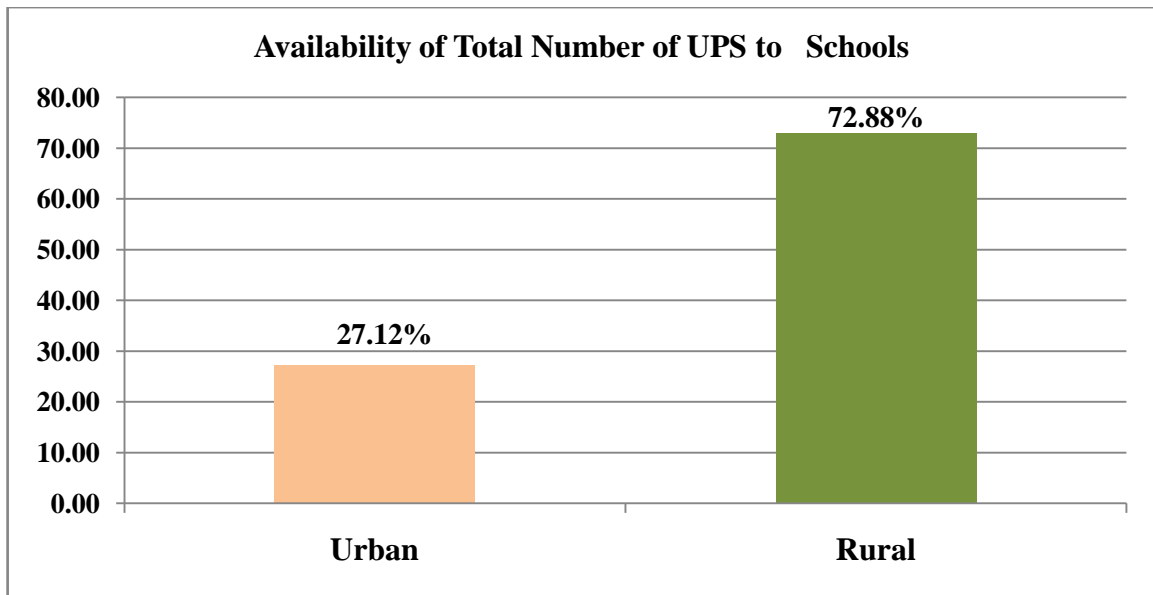
The distribution pattern of UPS across different categories of the schools indicated that Govt. aided hr. sec. schools were given 67.15 percent UPS from which urban districts were given maximum 84.08 percent. Among the higher secondary schools of districts with high tele density 42.33 percent, UPS were given which turned out to be the lowest among higher secondary schools.

The absolute availability of UPS has been lowest in the districts which are characterized as backward and the highest availability has been in urban category of the selected districts.

**Table 3.9: Availability of Total Number of UPS (Uninterrupted Power Supply) to
Schools**

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	32 (7.69)	12 (2.88)	372 (89.42)	416 (100.00)	58 (13.94)	358 (86.06)
	JHANSI	0 (0.00)	86 (21.39)	0 (0.00)	316 (78.61)	402 (100.00)	60 (14.93)	342 (85.07)
	GORAKHPUR	0 (0.00)	12 (1.71)	100 (14.25)	590 (84.05)	702 (100.00)	82 (11.68)	620 (88.32)
	TOTAL	0 (0.00)	130 (8.55)	112 (7.37)	1278 (84.08)	1520 (100.00)	200 (13.16)	1320 (86.84)
RURAL DISTRICTS	MAHOBA	0 (0.00)	66 (45.21)	0 (0.00)	80 (54.79)	146 (100.00)	76 (52.05)	70 (47.95)
	GHAZIPUR	0 (0.00)	94 (15.82)	148 (24.92)	352 (59.26)	594 (100.00)	72 (12.12)	522 (87.88)
	BIJNOR	0 (0.00)	118 (22.18)	0 (0.00)	414 (77.82)	532 (100.00)	292 (54.89)	240 (45.11)
	TOTAL	0 (0.00)	278 (21.86)	148 (11.64)	846 (66.51)	1272 (100.00)	440 (34.59)	832 (65.41)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	114 (23.36)	94 (19.26)	280 (57.38)	488 (100.00)	370 (75.82)	118 (24.18)
	GHAZIABAD	0 (0.00)	12 (7.41)	0 (0.00)	150 (92.59)	162 (100.00)	38 (23.46)	124 (76.54)
	VARANASI	60 (12.05)	4 (0.80)	378 (75.90)	56 (11.24)	498 (100.00)	142 (28.51)	356 (71.49)
	TOTAL	60 (5.23)	130 (11.32)	472 (41.11)	486 (42.33)	1148 (100.00)	550 (47.91)	598 (52.09)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	86 (28.67)	70 (23.33)	144 (48.00)	300 (100.00)	40 (13.33)	260 (86.67)
	FATEHPUR	0 (0.00)	70 (15.56)	0 (0.00)	380 (84.44)	450 (100.00)	72 (16.00)	378 (84.00)
	BALRAMPUR	0 (0.00)	40 (17.39)	10 (4.35)	180 (78.26)	230 (100.00)	110 (47.83)	120 (52.17)
	TOTAL	0 (0.00)	196 (20.00)	80 (8.16)	704 (71.84)	980 (100.00)	222 (22.65)	758 (77.35)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	30 (25.00)	30 (25.00)	60 (50.00)	120 (100.00)	20 (16.67)	100 (83.33)
	RAMPUR	0 (0.00)	150 (44.38)	22 (6.51)	166 (49.11)	338 (100.00)	130 (38.46)	208 (61.54)
	BADAUN	40 (11.05)	34 (9.39)	80 (22.10)	208 (57.46)	362 (100.00)	34 (9.39)	328 (90.61)
	TOTAL	40 (4.88)	214 (26.10)	132 (16.10)	434 (52.93)	820 (100.00)	184 (22.44)	636 (77.56)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	12 (2.93)	104 (25.37)	294 (71.71)	410 (100.00)	94 (22.93)	316 (77.07)
	SITAPUR	6 (1.33)	120 (26.55)	8 (1.77)	318 (70.35)	452 (100.00)	144 (31.86)	308 (68.14)
	ETAH	0 (0.00)	74 (15.48)	10 (2.09)	394 (82.43)	478 (100.00)	86 (17.99)	392 (82.01)
	TOTAL	6 (0.45)	206 (15.37)	122 (9.10)	1006 (75.07)	1340 (100.00)	324 (24.18)	1016 (75.82)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	106 (1.50)	1154 (16.30)	1066 (15.06)	4754 (67.15)	7080 (100.00)	1920 (27.12)	5160 (72.88)

Source: Office of District Inspector of schools (DIOS)



Availability of printers

In both the phases total 1000 printers were provided in the schools under ICT scheme and each school was given one printer.

Table 3.10: Availability of printers

Particulars	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Availability of Printer	0	17	16	183	216	52	164
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Availability of Printer	0	35	34	127	196	68	128
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Availability of Printer	6	17	60	107	190	103	87
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Availability of Printer	0	22	8	88	118	27	91
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Availability of Printer	4	27	18	53	102	32	70
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Availability of Printer	3	23	21	131	178	46	132
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Availability of Printer	13	141	157	689	1000	328	672
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Source: Office of District Inspector of schools (DIOS)

Out of total number of printers distributed under the scheme, 32.80 percent were distributed in urban schools and 67.20 percent in the schools of rural areas showing there by large disparity in this respect.

Table 3.11: Total Number of Printers

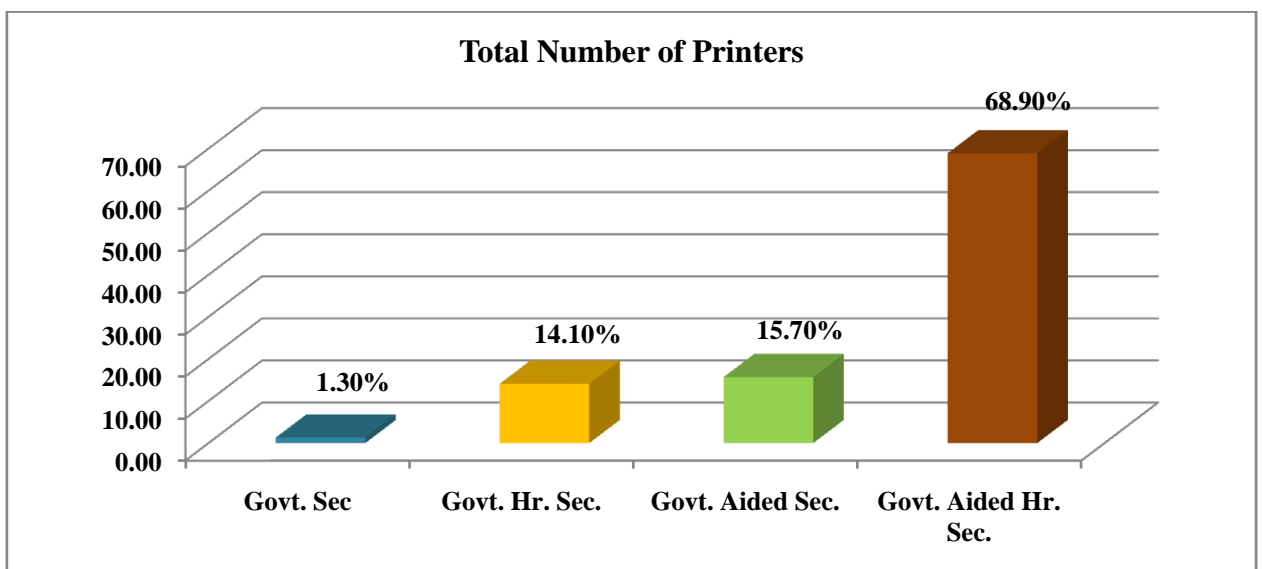
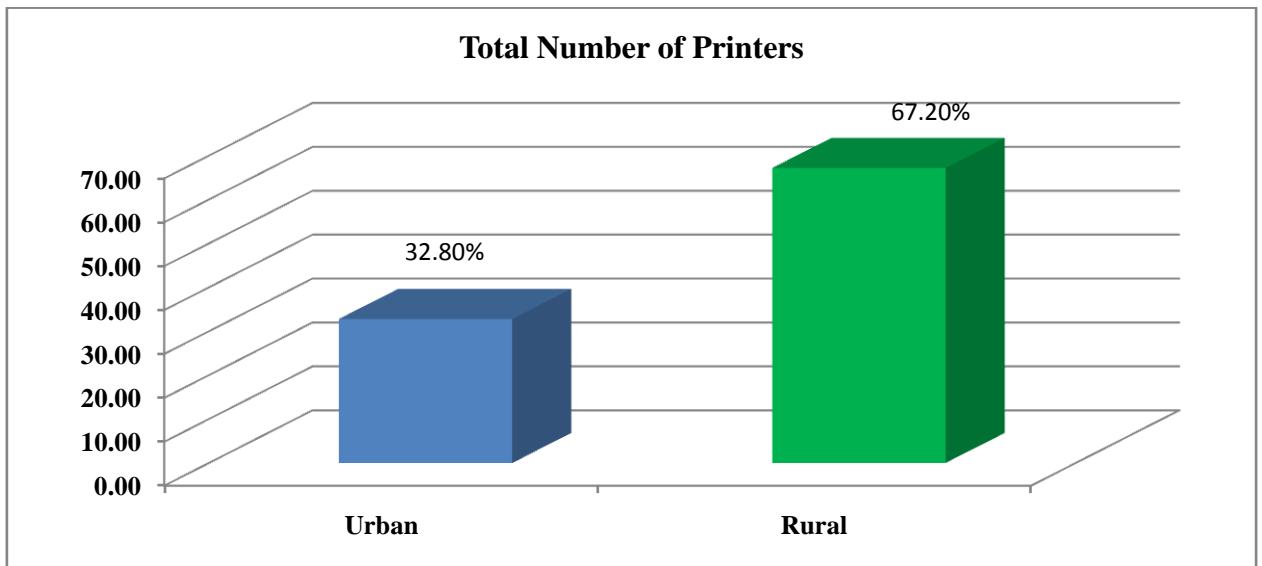
TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	4 (5.88)	6 (8.82)	58 (85.29)	68 (100.00)	21 (30.88)	47 (69.12)
	JHANSI	0 (0.00)	11 (20.75)	0 (0.00)	42 (79.25)	53 (100.00)	14 (26.42)	39 (73.58)
	GORAKHPUR	0 (0.00)	2 (2.11)	10 (10.53)	83 (87.37)	95 (100.00)	17 (17.89)	78 (82.11)
	TOTAL	0 (0.00)	17 (7.87)	16 (7.41)	183 (84.72)	216 (100.00)	52 (24.07)	164 (75.93)
RURAL DISTRICTS	MAHOBA	0 (0.00)	9 (52.94)	0 (0.00)	8 (47.06)	17 (100.00)	10 (58.82)	7 (41.18)
	GHAZIPUR	0 (0.00)	11 (10.89)	34 (33.66)	56 (55.45)	101 (100.00)	12 (11.88)	89 (88.12)
	BIJNOR	0 (0.00)	15 (19.23)	0 (0.00)	63 (80.77)	78 (100.00)	46 (58.97)	32 (41.03)
	TOTAL	0 (0.00)	35 (17.86)	34 (17.35)	127 (64.80)	196 (100.00)	68 (34.69)	128 (65.31)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	13 (16.25)	11 (13.75)	56 (70.00)	80 (100.00)	65 (81.25)	15 (18.75)
	GHAZIABAD	0 (0.00)	2 (6.90)	0 (0.00)	27 (93.10)	29 (100.00)	7 (24.14)	22 (75.86)
	VARANASI	6 (7.41)	2 (2.47)	49 (60.49)	24 (29.63)	81 (100.00)	31 (38.27)	50 (61.73)
	TOTAL	6 (3.16)	17 (8.95)	60 (31.58)	107 (56.32)	190 (100.00)	103 (54.21)	87 (45.79)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	11 (32.35)	7 (20.59)	16 (47.06)	34 (100.00)	8 (23.53)	26 (76.47)
	FATEHPUR	0 (0.00)	7 (11.48)	0 (0.00)	54 (88.52)	61 (100.00)	8 (13.11)	53 (86.89)
	BALRAMPUR	0 (0.00)	4 (17.39)	1 (4.35)	18 (78.26)	23 (100.00)	11 (47.83)	12 (52.17)
	TOTAL	0 (0.00)	22 (18.64)	8 (6.78)	88 (74.58)	118 (100.00)	27 (22.88)	91 (77.12)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	3 (25.00)	3 (25.00)	6 (50.00)	12 (100.00)	2 (16.67)	10 (83.33)
	RAMPUR	0 (0.00)	19 (46.34)	3 (7.32)	19 (46.34)	41 (100.00)	17 (41.46)	24 (58.54)
	BADAUN	4 (8.16)	5 (10.20)	12 (24.49)	28 (57.14)	49 (100.00)	13 (26.53)	36 (73.47)
	TOTAL	4 (3.92)	27 (26.47)	18 (17.65)	53 (51.96)	102 (100.00)	32 (31.37)	70 (68.63)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	2 (4.08)	12 (24.49)	35 (71.43)	49 (100.00)	11 (22.45)	38 (77.55)
	SITAPUR	3 (5.56)	12 (22.22)	4 (7.41)	35 (64.81)	54 (100.00)	20 (37.04)	34 (62.96)
	ETAH	0 (0.00)	9 (12.00)	5 (6.67)	61 (81.33)	75 (100.00)	15 (20.00)	60 (80.00)
	TOTAL	3 (1.69)	23 (12.92)	21 (11.80)	131 (73.60)	178 (100.00)	46 (25.84)	132 (74.16)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	13 (1.30)	141 (14.10)	157 (15.70)	689 (68.90)	1000 (100.00)	328 (32.80)	672 (67.20)

Source: Office of District Inspector of schools (DIOS)

Official sources confirm that govt. aided hr. sec. schools got maximum 68.90 percent printers while govt. sec. schools received minimum 1.30 percent, among all the selected schools of 18

districts. In case of govt., sec. schools districts with high tele density, Varanasi received 7.41 percent Printers, Districts characterized as backward by the state. Badaun, categories among backward districts, received 8.16 percent printers, and among the three districts, with electricity problems, only Sitapur got 5.56 percent printers for govt. sec schools. No other district received printers for govt. sec schools. for govt. hr. sec. schools Districts characterized as backward by the state received maximum 26.47 percent printers and districts with lower tele density received minimum 6.78 percent printers.

Considering absolute numbers of printers, maximum 216 printers were made available to schools in urban districts and minimum 102 printers were given to schools in districts characterized as backward by the state out of total selected schools for ICT in school scheme.



Availability of Scanners

Out of total schools selected for ICT in school scheme 1,000 scanners were made available to schools and each school got one scanner. All schools covered in both the phases got one printer and one scanner each.

Table 3.12: Availability of Scanners

Particulars	DISTRICTS	Govt. Sec.	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Availability of Scanners		17	16	183	216	52	164
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Availability of Scanners	0	35	34	127	196	68	128
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with High Tele Density	Total No. Of Schools	6	17	60	107	190	103	87
	Availability of Scanners	6	17	60	107	190	103	87
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Availability of Scanners	0	22	8	88	118	27	91
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Availability of Scanners	4	27	18	53	102	32	70
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Availability of Scanners	3	23	21	131	178	46	132
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Availability of Scanners	13	141	157	689	1000	328	672
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

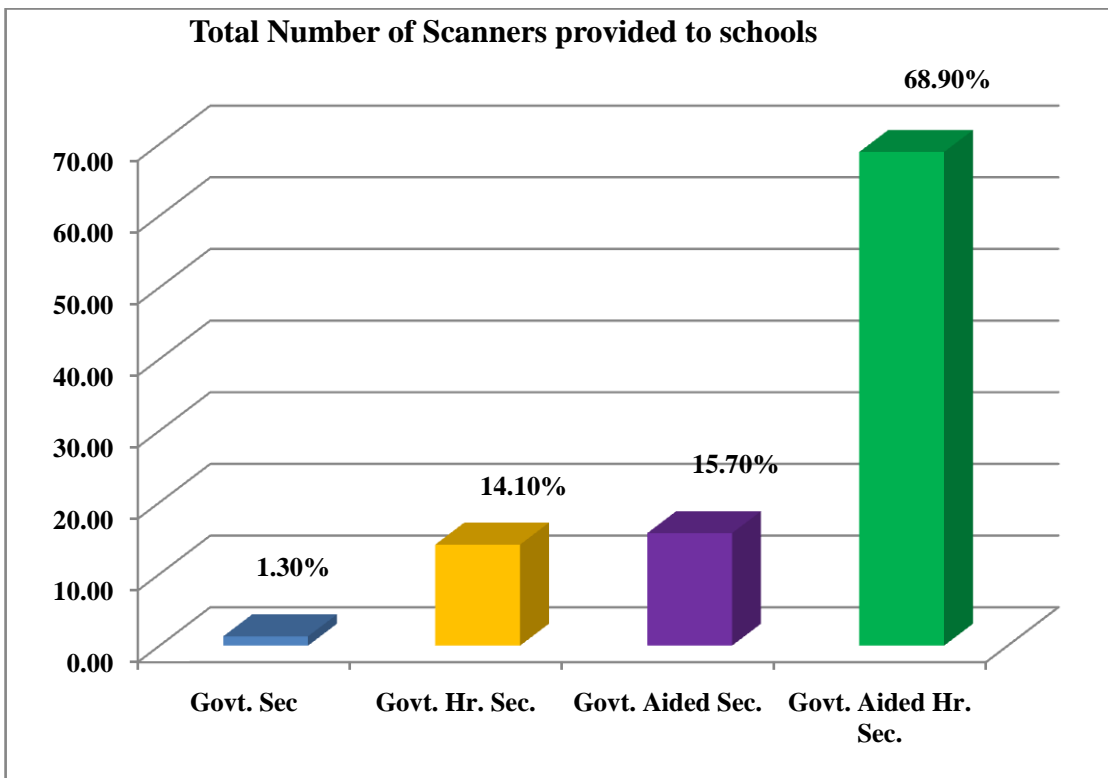
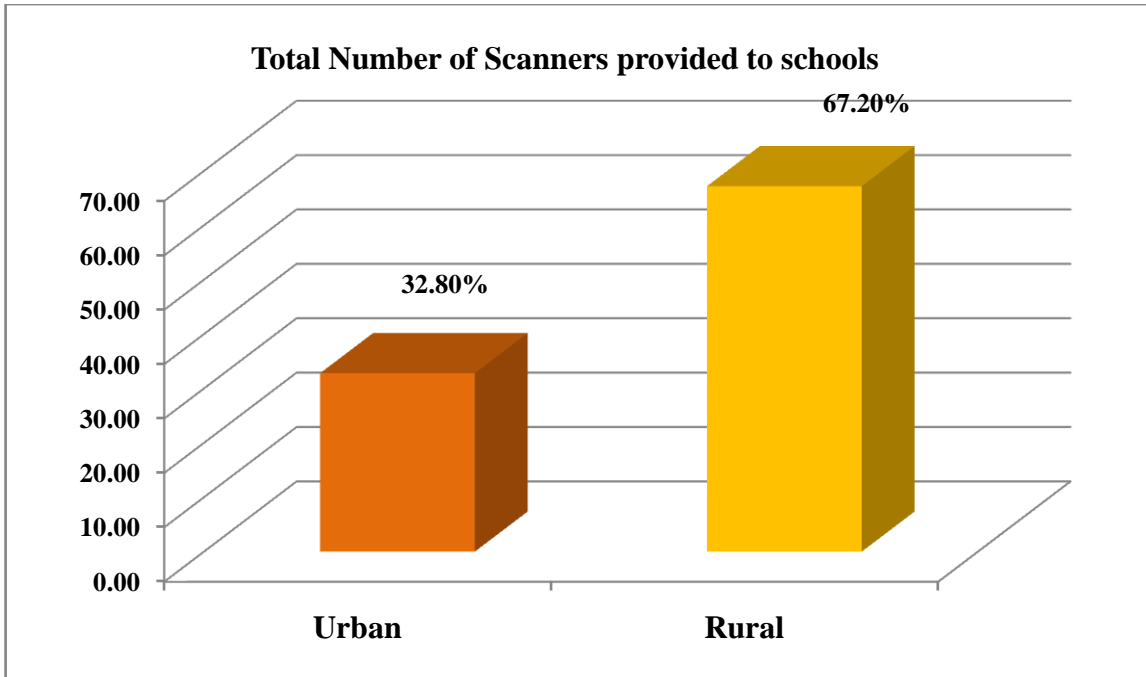
Source: Office of District Inspector of schools (DIOS)

Total no. of scanners provided to schools in rural areas was 67.20percent while that in urban areas was 32.80 percent. Hence, rural areas got more scanners than urban areas.

As reflected from the Table- , one scanner was distributed in each of the 1000 schools. The allocation of the scanners varied from above one percent to about 70 percent across different categories of the schools.

Table 3.13: Total Number of Scanners provided to schools

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	4 (5.88)	6 (8.82)	58 (85.29)	68 (100.00)	21 (30.88)	47 (69.12)
	JHANSI	0 (0.00)	11 (20.75)	0 (0.00)	42 (79.25)	53 (100.00)	14 (26.42)	39 (73.58)
	GORAKHPUR	0 (0.00)	2 (2.11)	10 (10.53)	83 (87.37)	95 (100.00)	17 (17.89)	78 (82.11)
	TOTAL	0 (0.00)	17 (7.87)	16 (7.41)	183 (84.72)	216 (100.00)	52 (24.07)	164 (75.93)
RURAL DISTRICTS	MAHOBA	0 (0.00)	9 (52.94)	0 (0.00)	8 (47.06)	17 (100.00)	10 (58.82)	7 (41.18)
	GHAZIPUR	0 (0.00)	11 (10.89)	34 (33.66)	56 (55.45)	101 (100.00)	12 (11.88)	89 (88.12)
	BIJNOR	0 (0.00)	15 (19.23)	0 (0.00)	63 (80.77)	78 (100.00)	46 (58.97)	32 (41.03)
	TOTAL	0 (0.00)	35 (17.86)	34 (17.35)	127 (64.80)	196 (100.00)	68 (34.69)	128 (65.31)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	13 (16.25)	11 (13.75)	56 (70.00)	80 (100.00)	65 (81.25)	15 (18.75)
	GHAZIABAD	0 (0.00)	2 (6.90)	0 (0.00)	27 (93.10)	29 (100.00)	7 (24.14)	22 (75.86)
	VARANASI	6 (7.41)	2 (2.47)	49 (60.49)	24 (29.63)	81 (100.00)	31 (38.27)	50 (61.73)
	TOTAL	6 (3.16)	17 (8.95)	60 (31.58)	107 (56.32)	190 (100.00)	103 (54.21)	87 (45.79)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	11 (32.35)	7 (20.59)	16 (47.06)	34 (100.00)	8 (23.53)	26 (76.47)
	FATEHPUR	0 (0.00)	7 (11.48)	0 (0.00)	54 (88.52)	61 (100.00)	8 (13.11)	53 (86.89)
	BALRAMPUR	0 (0.00)	4 (17.39)	1 (4.35)	18 (78.26)	23 (100.00)	11 (47.83)	12 (52.17)
	TOTAL	0 (0.00)	22 (18.64)	8 (6.78)	88 (74.58)	118 (100.00)	27 (22.88)	91 (77.12)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	3 (25.00)	3 (25.00)	6 (50.00)	12 (100.00)	2 (16.67)	10 (83.33)
	RAMPUR	0 (0.00)	19 (46.34)	3 (7.32)	19 (46.34)	41 (100.00)	17 (41.46)	24 (58.54)
	BADAUN	4 (8.16)	5 (10.20)	12 (24.49)	28 (57.14)	49 (100.00)	13 (26.53)	36 (73.47)
	TOTAL	4 (3.92)	27 (26.47)	18 (17.65)	53 (51.96)	102 (100.00)	32 (31.37)	70 (68.63)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	2 (4.08)	12 (24.49)	35 (71.43)	49 (100.00)	11 (22.45)	38 (77.55)
	SITAPUR	3 (5.56)	12 (22.22)	4 (7.41)	35 (64.81)	54 (100.00)	20 (37.04)	34 (62.96)
	ETAH	0 (0.00)	9 (12.00)	5 (6.67)	61 (81.33)	75 (100.00)	15 (20.00)	60 (80.00)
	TOTAL	3 (1.69)	23 (12.92)	21 (11.80)	131 (73.60)	178 (100.00)	46 (25.84)	132 (74.16)
ALL TOTAL SAMPLE DISTRICTS		13 (1.30)	141 (14.10)	157 (15.70)	689 (68.90)	1000 (100.00)	328 (32.80)	672 (67.20)



Use of Internet

Under ICT at school system, district authorities provide information to all schools on internet.

Table 3.14: Information on Internet

	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Availability of Internet	0	17	16	183	216	52	164
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Availability of Internet	0	35	34	127	196	68	128
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Availability of Internet	6	17	60	107	190	103	87
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Availability of Internet	0	22	8	88	118	27	91
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Availability of Internet	4	27	18	53	102	32	70
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Availability of Internet	3	23	21	131	178	46	132
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Availability of Internet	13	141	157	689	1000	328	672
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

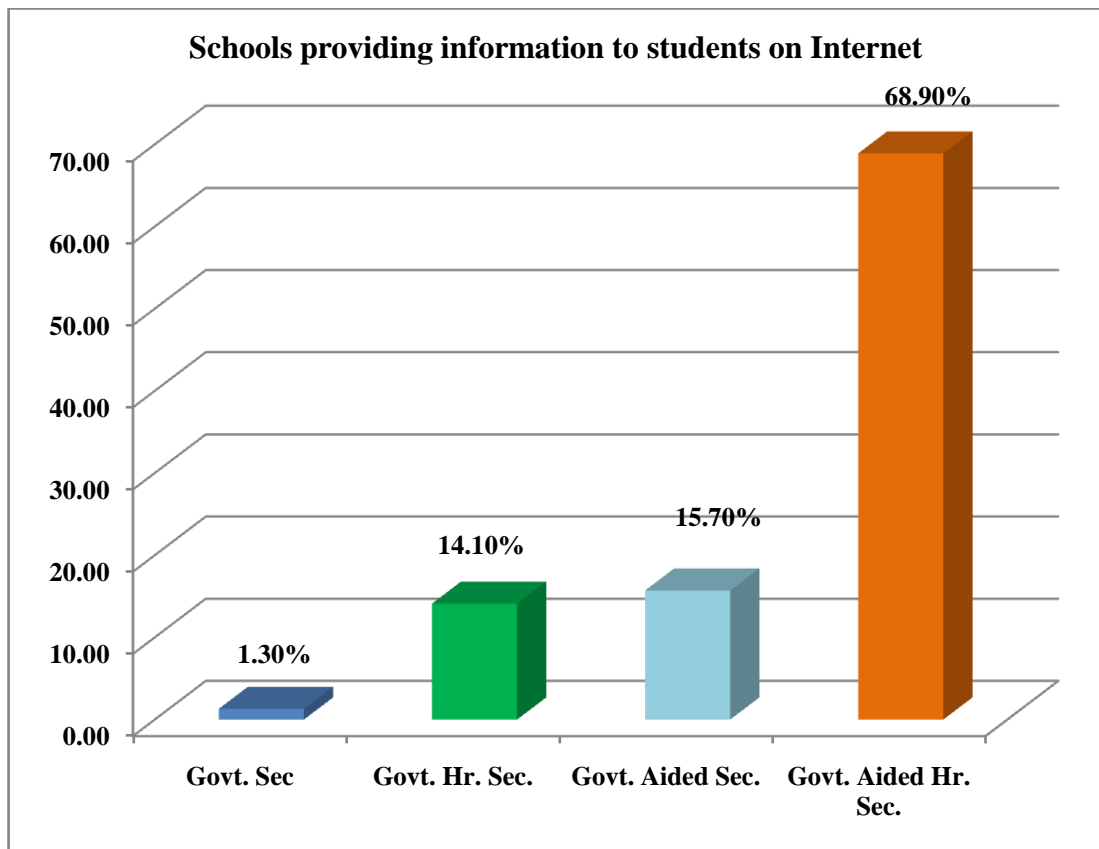
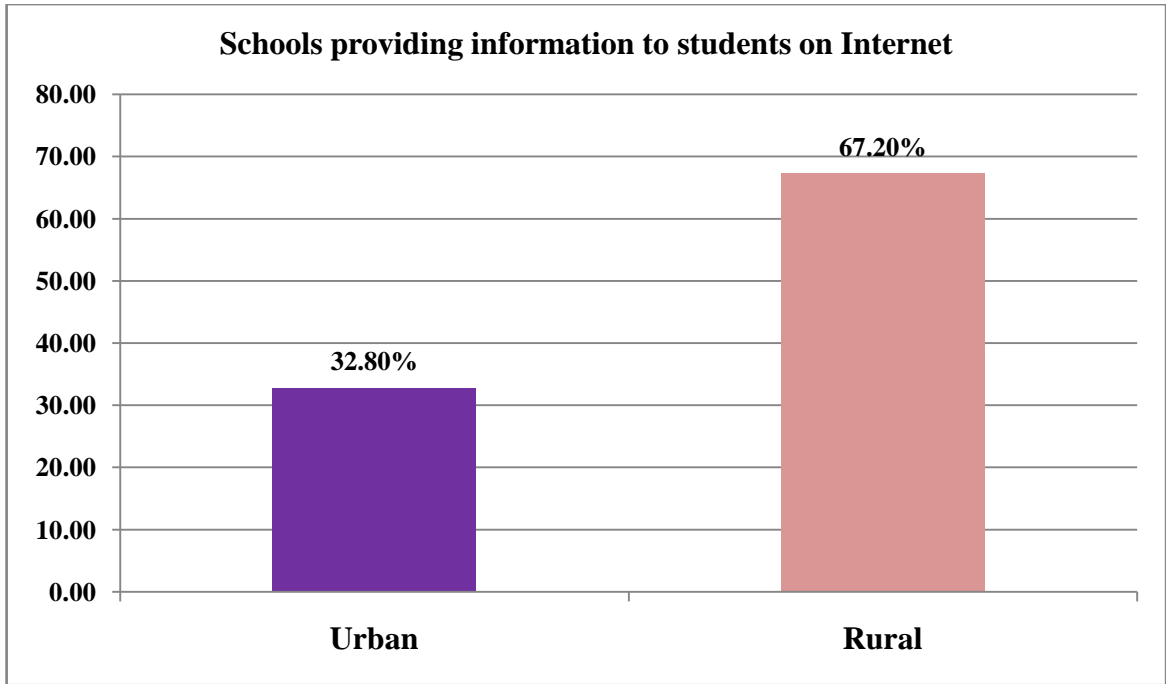
Source: Office of District Inspector of schools (DIOS)

In rural areas 67.20 percent schools receive information on Internet while in urban areas 32.80 percent schools are benefitted through it.

Table 3.15: Schools providing information to students on Internet

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	4 (5.88)	6 (8.82)	58 (85.29)	68 (100.00)	21 (30.88)	47 (69.12)
	JHANSI	0 (0.00)	11 (20.75)	0 (0.00)	42 (79.25)	53 (100.00)	14 (26.42)	39 (73.58)
	GORAKHPUR	0 (0.00)	2 (2.11)	10 (10.53)	83 (87.37)	95 (100.00)	17 (17.89)	78 (82.11)
	TOTAL	0 (0.00)	17 (7.87)	16 (7.41)	183 (84.72)	216 (100.00)	52 (24.07)	164 (75.93)
RURAL DISTRICTS	MAHOBA	0 (0.00)	9 (52.94)	0 (0.00)	8 (47.06)	17 (100.00)	10 (58.82)	7 (41.18)
	GHAZIPUR	0 (0.00)	11 (10.89)	34 (33.66)	56 (55.45)	101 (100.00)	12 (11.88)	89 (88.12)
	BIJNOR	0 (0.00)	15 (19.23)	0 (0.00)	63 (80.77)	78 (100.00)	46 (58.97)	32 (41.03)
	TOTAL	0 (0.00)	35 (17.86)	34 (17.35)	127 (64.80)	196 (100.00)	68 (34.69)	128 (65.31)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	13 (16.25)	11 (13.75)	56 (70.00)	80 (100.00)	65 (81.25)	15 (18.75)
	GHAZIABAD	0 (0.00)	2 (6.90)	0 (0.00)	27 (93.10)	29 (100.00)	7 (24.14)	22 (75.86)
	VARANASI	6 (7.41)	2 (2.47)	49 (60.49)	24 (29.63)	81 (100.00)	31 (38.27)	50 (61.73)
	TOTAL	6 (3.16)	17 (8.95)	60 (31.58)	107 (56.32)	190 (100.00)	103 (54.21)	87 (45.79)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	11 (32.35)	7 (20.59)	16 (47.06)	34 (100.00)	8 (23.53)	26 (76.47)
	FATEHPUR	0 (0.00)	7 (11.48)	0 (0.00)	54 (88.52)	61 (100.00)	8 (13.11)	53 (86.89)
	BALRAMPUR	0 (0.00)	4 (17.39)	1 (4.35)	18 (78.26)	23 (100.00)	11 (47.83)	12 (52.17)
	TOTAL	0 (0.00)	22 (18.64)	8 (6.78)	88 (74.58)	118 (100.00)	27 (22.88)	91 (77.12)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	3 (25.00)	3 (25.00)	6 (50.00)	12 (100.00)	2 (16.67)	10 (83.33)
	RAMPUR	0 (0.00)	19 (46.34)	3 (7.32)	19 (46.34)	41 (100.00)	17 (41.46)	24 (58.54)
	BADAUN	4 (8.16)	5 (10.20)	12 (24.49)	28 (57.14)	49 (100.00)	13 (26.53)	36 (73.47)
	TOTAL	4 (3.92)	27 (26.47)	18 (17.65)	53 (51.96)	102 (100.00)	32 (31.37)	70 (68.63)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	2 (4.08)	12 (24.49)	35 (71.43)	49 (100.00)	11 (22.45)	38 (77.55)
	SITAPUR	3 (5.56)	12 (22.22)	4 (7.41)	35 (64.81)	54 (100.00)	20 (37.04)	34 (62.96)
	ETAH	0 (0.00)	9 (12.00)	5 (6.67)	61 (81.33)	75 (100.00)	15 (20.00)	60 (80.00)
	TOTAL	3 (1.69)	23 (12.92)	21 (11.80)	131 (73.60)	178 (100.00)	46 (25.84)	132 (74.16)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	13 (1.30)	141 (14.10)	157 (15.70)	689 (68.90)	1000 (100.00)	328 (32.80)	672 (67.20)

Source: Office of District Inspector of schools (DIOS)



Use of E-mail Facility

According to data available by district authorities each school use E-mail facility for different purposes.

Table 3.16: Use of E-mail Facility

Particulars	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Use of E-mail Facility	0	17	16	183	216	52	164
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Use of E-mail Facility	0	35	34	127	196	68	128
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Use of E-mail Facility	6	17	60	107	190	103	87
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Use of E-mail Facility	0	22	8	88	118	27	91
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Use of E-mail Facility	4	27	18	53	102	32	70
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Use of E-mail Facility	3	23	21	131	178	46	132
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Use of E-mail Facility	13	141	157	689	1000	328	672
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

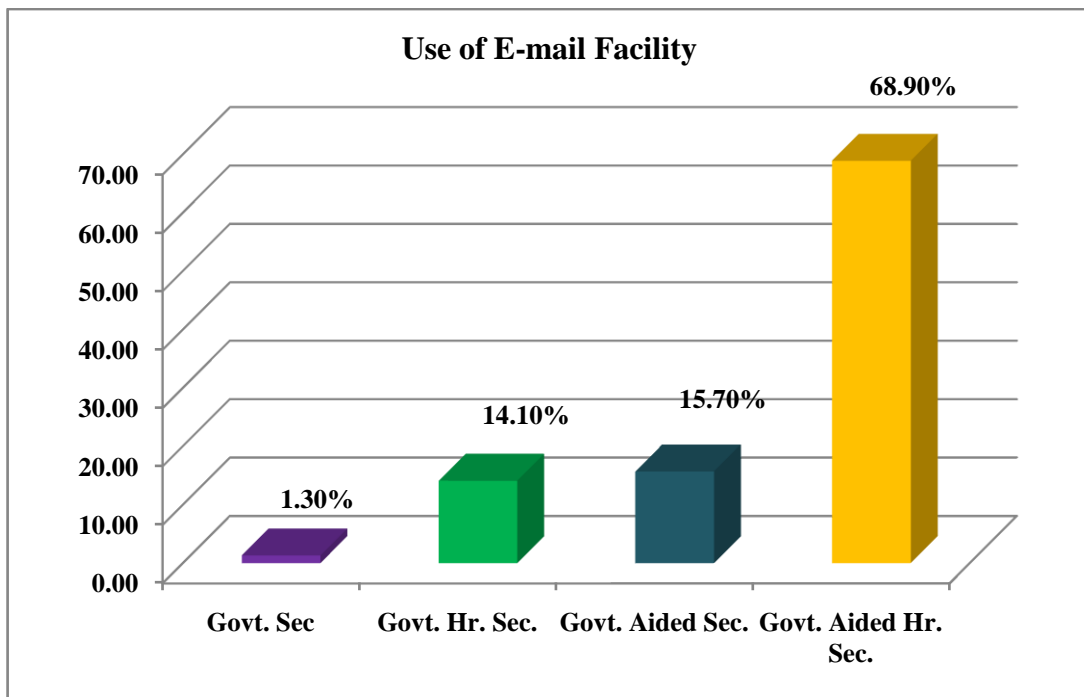
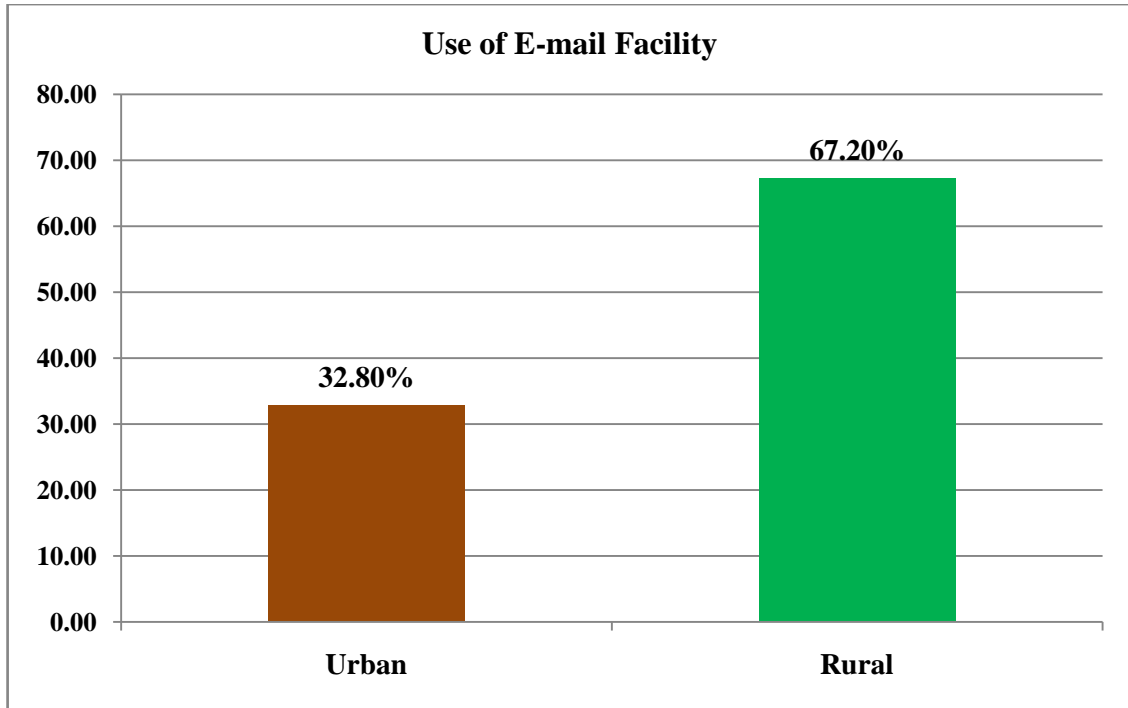
Source: Office of District Inspector of schools (DIOS)

76.20 percent schools in rural areas and 32.80 percent schools in urban areas use E-Mail facility to receive and provide information.

Table 3.17: Use of E-mail Facility

TYPE	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	4 (5.88)	6 (8.82)	58 (85.29)	68 (100.00)	21 (30.88)	47 (69.12)
	JHANSI	0 (0.00)	11 (20.75)	0 (0.00)	42 (79.25)	53 (100.00)	14 (26.42)	39 (73.58)
	GORAKHPUR	0 (0.00)	2 (2.11)	10 (10.53)	83 (87.37)	95 (100.00)	17 (17.89)	78 (82.11)
	TOTAL	0 (0.00)	17 (7.87)	16 (7.41)	183 (84.72)	216 (100.00)	52 (24.07)	164 (75.93)
RURAL DISTRICTS	MAHOBA	0 (0.00)	9 (52.94)	0 (0.00)	8 (47.06)	17 (100.00)	10 (58.82)	7 (41.18)
	GHAZIPUR	0 (0.00)	11 (10.89)	34 (33.66)	56 (55.45)	101 (100.00)	12 (11.88)	89 (88.12)
	BIJNOR	0 (0.00)	15 (19.23)	0 (0.00)	63 (80.77)	78 (100.00)	46 (58.97)	32 (41.03)
	TOTAL	0 (0.00)	35 (17.86)	34 (17.35)	127 (64.80)	196 (100.00)	68 (34.69)	128 (65.31)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	13 (16.25)	11 (13.75)	56 (70.00)	80 (100.00)	65 (81.25)	15 (18.75)
	GHAZIABAD	0 (0.00)	2 (6.90)	0 (0.00)	27 (93.10)	29 (100.00)	7 (24.14)	22 (75.86)
	VARANASI	6 (7.41)	2 (2.47)	49 (60.49)	24 (29.63)	81 (100.00)	31 (38.27)	50 (61.73)
	TOTAL	6 (3.16)	17 (8.95)	60 (31.58)	107 (56.32)	190 (100.00)	103 (54.21)	87 (45.79)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	11 (32.35)	7 (20.59)	16 (47.06)	34 (100.00)	8 (23.53)	26 (76.47)
	FATEHPUR	0 (0.00)	7 (11.48)	0 (0.00)	54 (88.52)	61 (100.00)	8 (13.11)	53 (86.89)
	BALRAMPUR	0 (0.00)	4 (17.39)	1 (4.35)	18 (78.26)	23 (100.00)	11 (47.83)	12 (52.17)
	TOTAL	0 (0.00)	22 (18.64)	8 (6.78)	88 (74.58)	118 (100.00)	27 (22.88)	91 (77.12)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	3 (25.00)	3 (25.00)	6 (50.00)	12 (100.00)	2 (16.67)	10 (83.33)
	RAMPUR	0 (0.00)	19 (46.34)	3 (7.32)	19 (46.34)	41 (100.00)	17 (41.46)	24 (58.54)
	BADAUN	4 (8.16)	5 (10.20)	12 (24.49)	28 (57.14)	49 (100.00)	13 (26.53)	36 (73.47)
	TOTAL	4 (3.92)	27 (26.47)	18 (17.65)	53 (51.96)	102 (100.00)	32 (31.37)	70 (68.63)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	2 (4.08)	12 (24.49)	35 (71.43)	49 (100.00)	11 (22.45)	38 (77.55)
	SITAPUR	3 (5.56)	12 (22.22)	4 (7.41)	35 (64.81)	54 (100.00)	20 (37.04)	34 (62.96)
	ETAH	0 (0.00)	9 (12.00)	5 (6.67)	61 (81.33)	75 (100.00)	15 (20.00)	60 (80.00)
	TOTAL	3 (1.69)	23 (12.92)	21 (11.80)	131 (73.60)	178 (100.00)	46 (25.84)	132 (74.16)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	13 (1.30)	141 (14.10)	157 (15.70)	689 (68.90)	1000 (100.00)	328 (32.80)	672 (67.20)

Source: Office of District Inspector of schools (DIOS)



Availability of Operating Software: Micro soft and Linux

Operating software Microsoft was given to all schools selected for ICT in school scheme due to the fact that in phase I and Phase II both, this software was given.

Table 3.18: Operating Software (OS) (Microsoft)

Particulars	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Microsoft	0	17	16	183	216	52	164
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Microsoft	0	35	34	127	196	68	128
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Microsoft	6	17	60	107	190	103	87
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Microsoft	0	22	8	88	118	27	91
	Percentage	(0.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Microsoft	4	27	18	53	102	32	70
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Microsoft	3	23	21	131	178	46	132
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Microsoft	13	141	157	689	1000	328	672
	Percentage	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

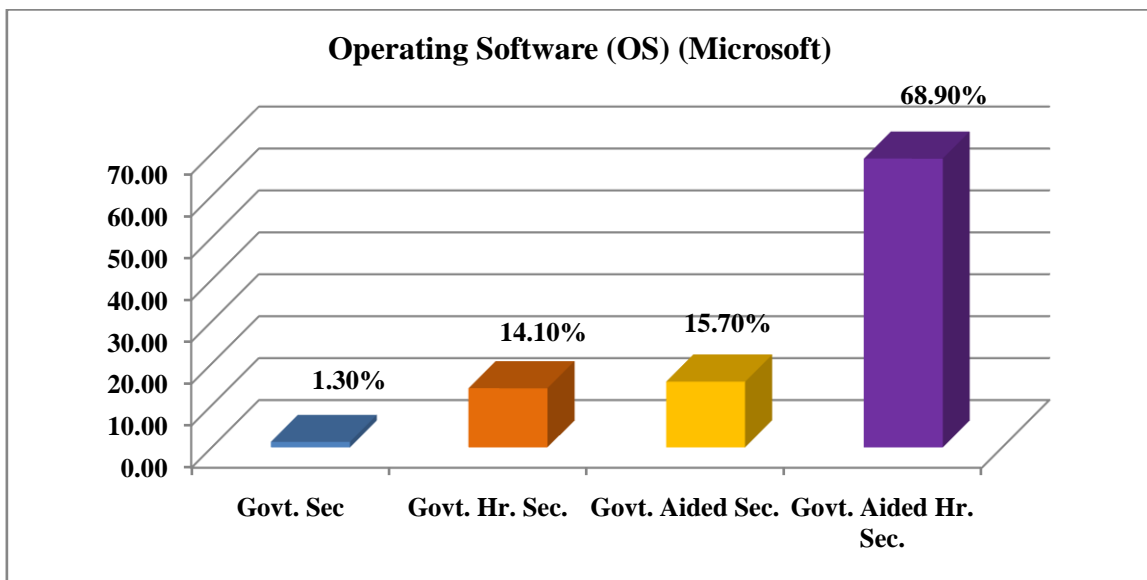
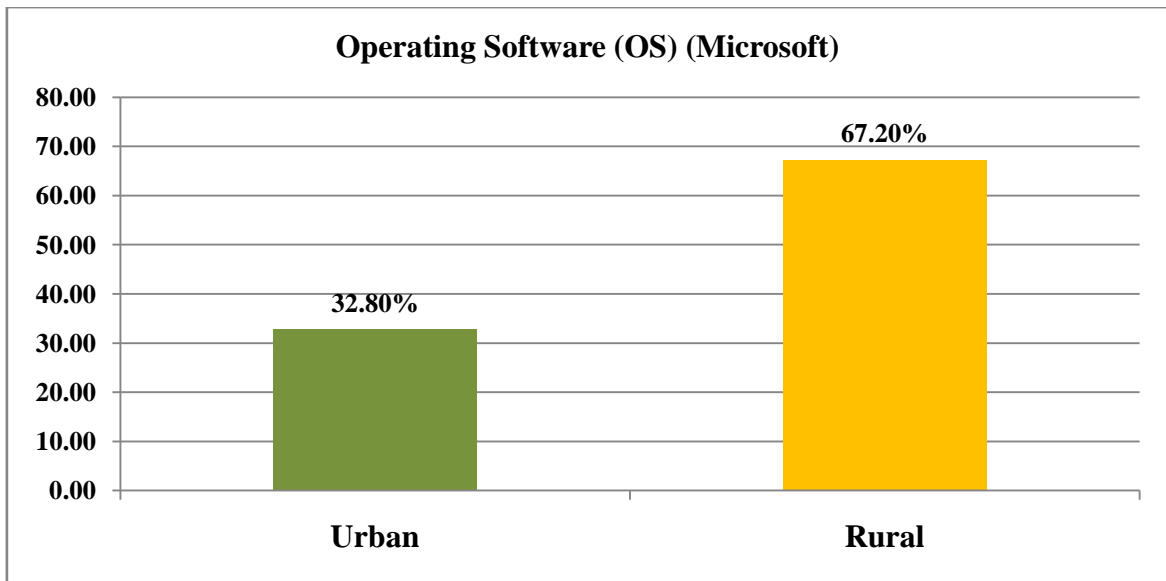
Source: Office of District Inspector of schools (DIOS)

Microsoft software was provided in ICT schools during Phase I and Phase II. This shows that all 1000 schools selected were provided Microsoft OS for ICT in School scheme of which 67.20percent schools were having operating software (Microsoft) in rural areas and rest 32.80percent in urban areas.

Table 3.19: Operating Software (OS) (Microsoft)

TYPE	DISTRICTS	Microsoft						
		Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	4 (5.88)	6 (8.82)	58 (85.29)	68 (100.00)	21 (30.88)	47 (69.12)
	JHANSI	0 (0.00)	11 (20.75)	0 (0.00)	42 (79.25)	53 (100.00)	14 (26.42)	39 (73.58)
	GORAKHPUR	0 (0.00)	2 (2.11)	10 (10.53)	83 (87.37)	95 (100.00)	17 (17.89)	78 (82.11)
	TOTAL	0 (0.00)	17 (7.87)	16 (7.41)	183 (84.72)	216 (100.00)	52 (24.07)	164 (75.93)
RURAL DISTRICTS	MAHOBA	0 (0.00)	9 (52.94)	0 (0.00)	8 (47.06)	17 (100.00)	10 (58.82)	7 (41.18)
	GHAZIPUR	0 (0.00)	11 (10.89)	34 (33.66)	56 (55.45)	101 (100.00)	12 (11.88)	89 (88.12)
	BIJNOR	0 (0.00)	15 (19.23)	0 (0.00)	63 (80.77)	78 (100.00)	46 (58.97)	32 (41.03)
	TOTAL	0 (0.00)	35 (17.86)	34 (17.35)	127 (64.80)	196 (100.00)	68 (34.69)	128 (65.31)
DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	13 (16.25)	11 (13.75)	56 (70.00)	80 (100.00)	65 (81.25)	15 (18.75)
	GHAZIABAD	0 (0.00)	2 (6.90)	0 (0.00)	27 (93.10)	29 (100.00)	7 (24.14)	22 (75.86)
	VARANASI	6 (7.41)	2 (2.47)	49 (60.49)	24 (29.63)	81 (100.00)	31 (38.27)	50 (61.73)
	TOTAL	6 (3.16)	17 (8.95)	60 (31.58)	107 (56.32)	190 (100.00)	103 (54.21)	87 (45.79)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	11 (32.35)	7 (20.59)	16 (47.06)	34 (100.00)	8 (23.53)	26 (76.47)
	FATEHPUR	0 (0.00)	7 (11.48)	0 (0.00)	54 (88.52)	61 (100.00)	8 (13.11)	53 (86.89)
	BALRAMPUR	0 (0.00)	4 (17.39)	1 (4.35)	18 (78.26)	23 (100.00)	11 (47.83)	12 (52.17)
	TOTAL	0 (0.00)	22 (18.64)	8 (6.78)	88 (74.58)	118 (100.00)	27 (22.88)	91 (77.12)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	3 (25.00)	3 (25.00)	6 (50.00)	12 (100.00)	2 (16.67)	10 (83.33)
	RAMPUR	0 (0.00)	19 (46.34)	3 (7.32)	19 (46.34)	41 (100.00)	17 (41.46)	24 (58.54)
	BADAUN	4 (8.16)	5 (10.20)	12 (24.49)	28 (57.14)	49 (100.00)	13 (26.53)	36 (73.47)
	TOTAL	4 (3.92)	27 (26.47)	18 (17.65)	53 (51.96)	102 (100.00)	32 (31.37)	70 (68.63)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	2 (4.08)	12 (24.49)	35 (71.43)	49 (100.00)	11 (22.45)	38 (77.55)
	SITAPUR	3 (5.56)	12 (22.22)	4 (7.41)	35 (64.81)	54 (100.00)	20 (37.04)	34 (62.96)
	ETAH	0 (0.00)	9 (12.00)	5 (6.67)	61 (81.33)	75 (100.00)	15 (20.00)	60 (80.00)
	TOTAL	3 (1.69)	23 (12.92)	21 (11.80)	131 (73.60)	178 (100.00)	46 (25.84)	132 (74.16)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	13 (1.30)	141 (14.10)	157 (15.70)	689 (68.90)	1000 (100.00)	328 (32.80)	672 (67.20)

Source: Office of District Inspector of schools (DIOS)



Operating software Linux was given only in first phase of ICT implementation in schools of the districts under consideration. Hence, it was available to more than 63 percent schools selected for ICT in phase I only.

Operating software Linux was available to 63.50 percent schools as it was given only in phase II. The Linux software was given in maximum 77.30 percent govt. hr. sec. schools and minimum 59.87 percent govt. aided sec. schools received the same.

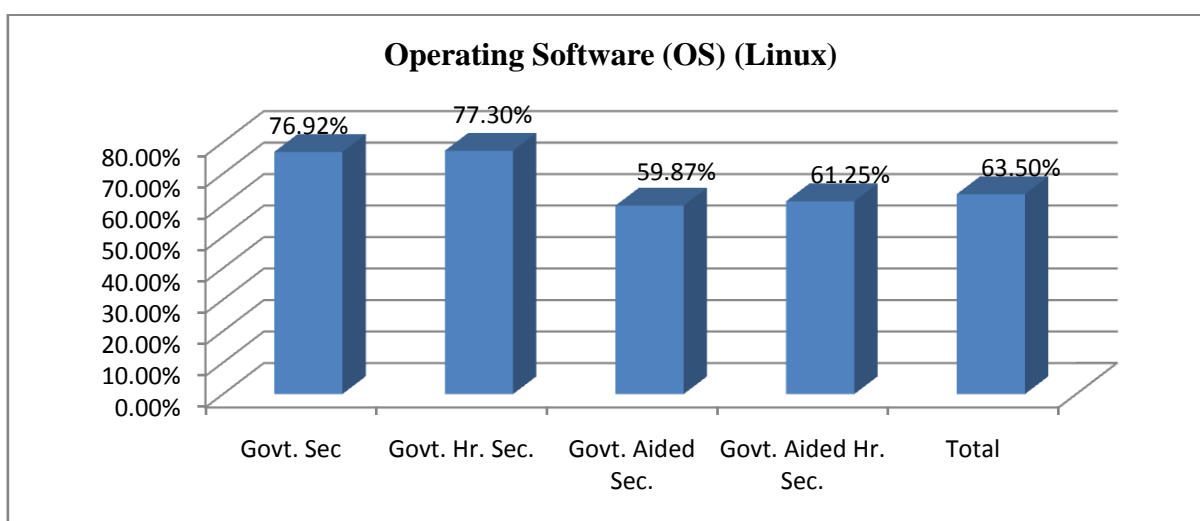
Operating software Linux was given 48.17 percent to urban schools and 70.98 percent to schools situated in rural areas. However, the availability of Linux software was higher in urban districts as compared to the rural districts (Table 3.20).

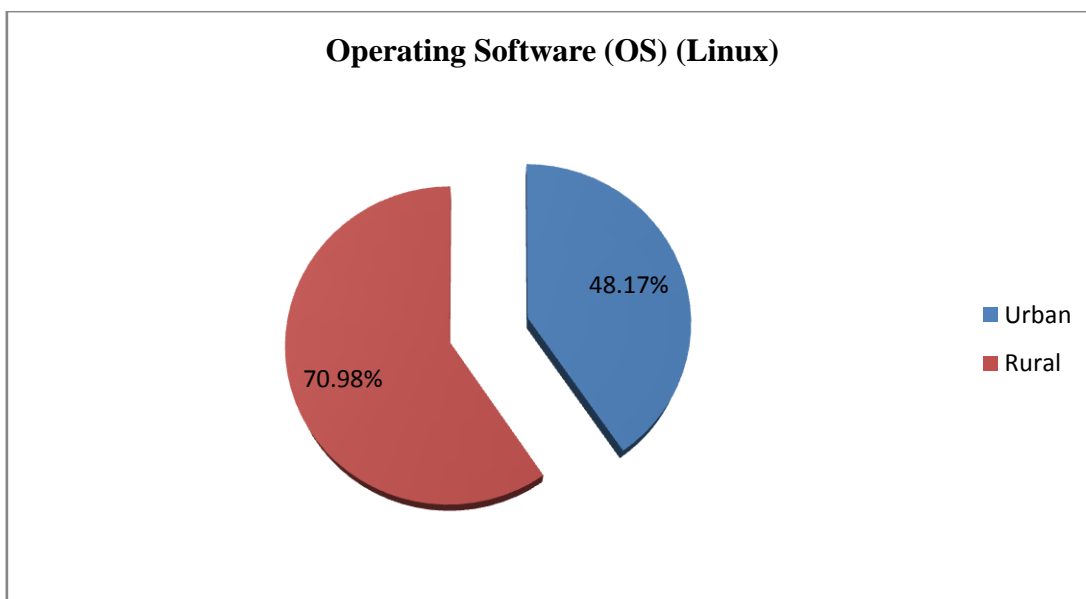
The availability of Linux software has been maximum (79 percent) in schools belonging to the low tele density districts. However, the same software was available only in about 50 percent schools of high tele density.

Table 3.20: Operating Software (OS) (Linux)

Particulars	DISTRICTS	Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
Urban Districts	Total No. Of School	0	17	16	183	216	52	164
	Linux	0	12	10	114	136	12	124
	Percentage	(0.00)	(70.59)	(62.50)	(62.30)	(62.96)	(23.08)	(75.61)
Rural Districts	Total No. Of School	0	35	34	127	196	68	128
	Linux	0	26	10	74	110	38	72
	Percentage	(0.00)	(74.29)	(29.41)	(58.27)	(56.12)	(55.88)	(56.25)
District with High Tele Density	Total No. Of School	6	17	60	107	190	103	87
	Linux	6	12	44	34	96	43	53
	Percentage	(100.00)	(70.59)	(73.33)	(31.78)	(50.53)	(41.75)	(60.92)
District with Low Tele Density	Total No. Of School	0	22	8	88	118	27	91
	Linux	0	19	8	66	93	21	72
	Percentage	(0.00)	(86.36)	(100.00)	(75.00)	(78.81)	(77.78)	(79.12)
Districts Characterized as backward by the state	Total No. Of School	4	27	18	53	102	32	70
	Linux	4	20	12	41	77	15	62
	Percentage	(100.00)	(74.07)	(66.67)	(77.36)	(75.49)	(46.88)	(88.57)
Districts with Electricity Problems	Total No. Of School	3	23	21	131	178	46	132
	Linux	0	20	10	93	123	29	94
	Percentage	(0.00)	(86.96)	(47.62)	(70.99)	(69.10)	(63.04)	(71.21)
All Total Sample Districts	Total No. Of School	13	141	157	689	1000	328	672
	Linux	10	109	94	422	635	158	477
	Percentage	(76.92)	(77.30)	(59.87)	(61.25)	(63.50)	(48.17)	(70.98)

Source: Office of District Inspector of schools (DIOS)





As stated earlier, Linux Software was provided only in phase 1 of ICT implementation in the schools, 635 schools were selected during this phase. The distribution pattern of the software across schools of different areas and categories shows that Linux was used in 24.88 percent schools belonged to urban areas and 75.12percent schools from rural areas.

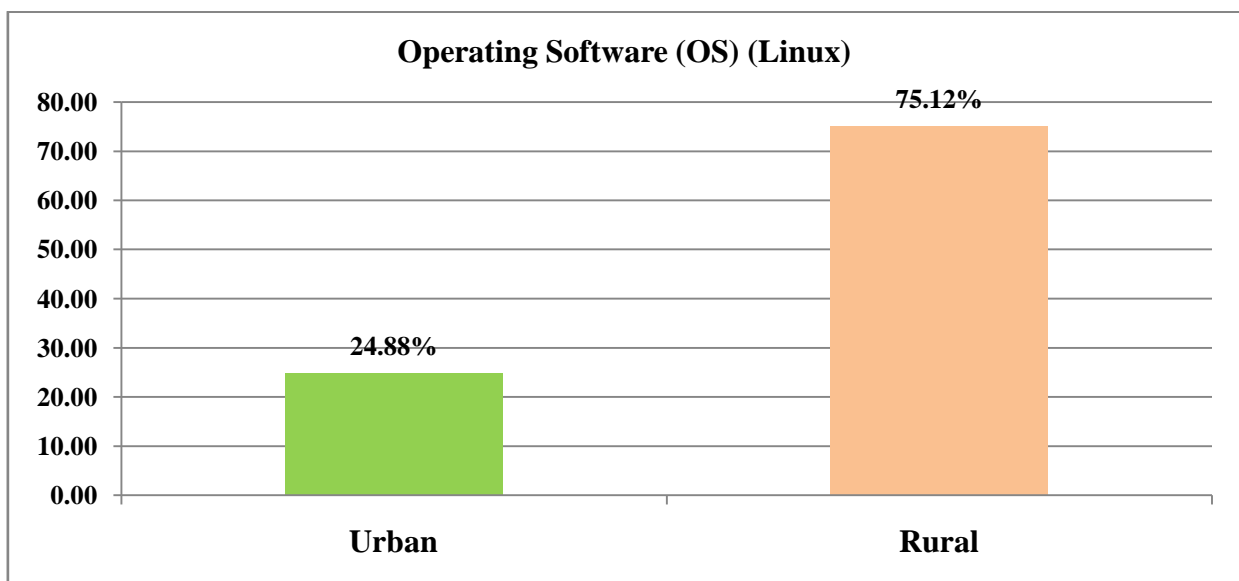
Linux Software was provided in 1.57 percent to Govt. sec. schools, 17.17percent Govt. hr. sec. schools, 14.80percent Govt. aided Schools, and maximum in 66.46 percent Govt. aided hr. sec. schools. Share of Govt. aided hr. sec. schools with Linux Software was maximum and it covered 83.82percent schools urban districts and minimum35.42percent schools in districts with high tele density.

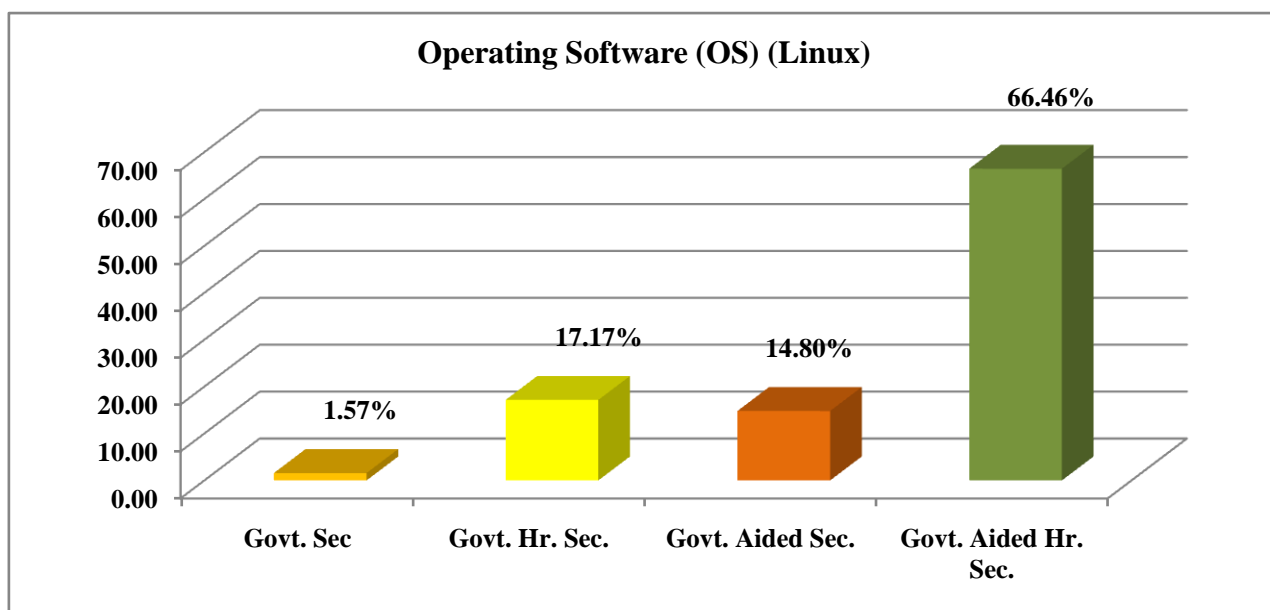
Table 3.21: Operating Software (OS) (Linux)

TYPE	DISTRICTS	Linux						
		Govt. Sec	Govt. hr. Sec.	Govt. aided Sec.	Govt. aided hr. Sec.	Total	Urban	Rural
URBAN DISTRICTS	AGRA	0 (0.00)	3 (8.57)	0 (0.00)	32 (91.43)	35 (100.00)	2 (5.71)	33 (94.29)
	JHANSI	0 (0.00)	8 (21.62)	0 (0.00)	29 (78.38)	37 (100.00)	4 (10.81)	33 (89.19)
	GORAKHPUR	0 (0.00)	1 (1.56)	10 (15.63)	53 (82.81)	64 (100.00)	6 (9.38)	58 (90.63)
	TOTAL	0 (0.00)	12 (8.82)	10 (7.35)	114 (83.82)	136 (100.00)	12 (8.82)	124 (91.18)
RURAL DISTRICTS	MAHOBA	0 (0.00)	6 (42.86)	0 (0.00)	8 (57.14)	14 (100.00)	7 (50.00)	7 (50.00)
	GHAZIPUR	0 (0.00)	9 (18.37)	10 (20.41)	30 (61.22)	49 (100.00)	6 (12.24)	43 (87.76)
	BIJNOR	0 (0.00)	11 (23.40)	0 (0.00)	36 (76.60)	47 (100.00)	25 (53.19)	22 (46.81)
	TOTAL	0 (0.00)	26 (23.64)	10 (9.09)	74 (67.27)	110 (100.00)	38 (34.55)	72 (65.45)

DISTRICT WITH HIGH TELE DENSITY	LUCKNOW	0 (0.00)	11 (26.83)	9 (21.95)	21 (51.22)	41 (100.00)	30 (73.17)	11 (26.83)
	GHAZIABAD	0 (0.00)	1 (7.69)	0 (0.00)	12 (92.31)	13 (100.00)	3 (23.08)	10 (76.92)
	VARANASI	6 (14.29)	0 (0.00)	35 (83.33)	1 (2.38)	42 (100.00)	10 (23.81)	32 (76.19)
	TOTAL	6 (6.25)	12 (12.50)	44 (45.83)	34 (35.42)	96 (100.00)	43 (44.79)	53 (55.21)
DISTRICT WITH LOWER TELE DENSITY	BANDA	0 (0.00)	8 (27.59)	7 (24.14)	14 (48.28)	29 (100.00)	3 (10.34)	26 (89.66)
	FATEHPUR	0 (0.00)	7 (17.07)	0 (0.00)	34 (82.93)	41 (100.00)	7 (17.07)	34 (82.93)
	BALRAMPUR	0 (0.00)	4 (17.39)	1 (4.35)	18 (78.26)	23 (100.00)	11 (47.83)	12 (52.17)
	TOTAL	0 (0.00)	19 (20.43)	8 (8.60)	66 (70.97)	93 (100.00)	21 (22.58)	72 (77.42)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	SHRAWASTI	0 (0.00)	3 (25.00)	3 (25.00)	6 (50.00)	12 (100.00)	2 (16.67)	10 (83.33)
	RAMPUR	0 (0.00)	14 (43.75)	2 (6.25)	16 (50.00)	32 (100.00)	12 (37.50)	20 (62.50)
	BADAUN	4 (12.12)	3 (9.09)	7 (21.21)	19 (57.58)	33 (100.00)	1 (3.03)	32 (96.97)
	TOTAL	4 (5.19)	20 (25.97)	12 (15.58)	41 (53.25)	77 (100.00)	15 (19.48)	62 (80.52)
DISTRICTS WITH ELECTRICITY PROBLEMS	KUSHINAGAR	0 (0.00)	1 (2.56)	10 (25.64)	28 (71.79)	39 (100.00)	9 (23.08)	30 (76.92)
	SITAPUR	0 (0.00)	12 (27.91)	0 (0.00)	31 (72.09)	43 (100.00)	13 (30.23)	30 (69.77)
	ETAH	0 (0.00)	7 (17.07)	0 (0.00)	34 (82.93)	41 (100.00)	7 (17.07)	34 (82.93)
	TOTAL	0 (0.00)	20 (16.26)	10 (8.13)	93 (75.61)	123 (100.00)	29 (23.58)	94 (76.42)
ALL TOTAL SAMPLE DISTRICTS	TOTAL	10 (1.57)	109 (17.17)	94 (14.80)	422 (66.46)	635 (100.00)	158 (24.88)	477 (75.12)

Source: Office of District Inspector of schools (DIOS)





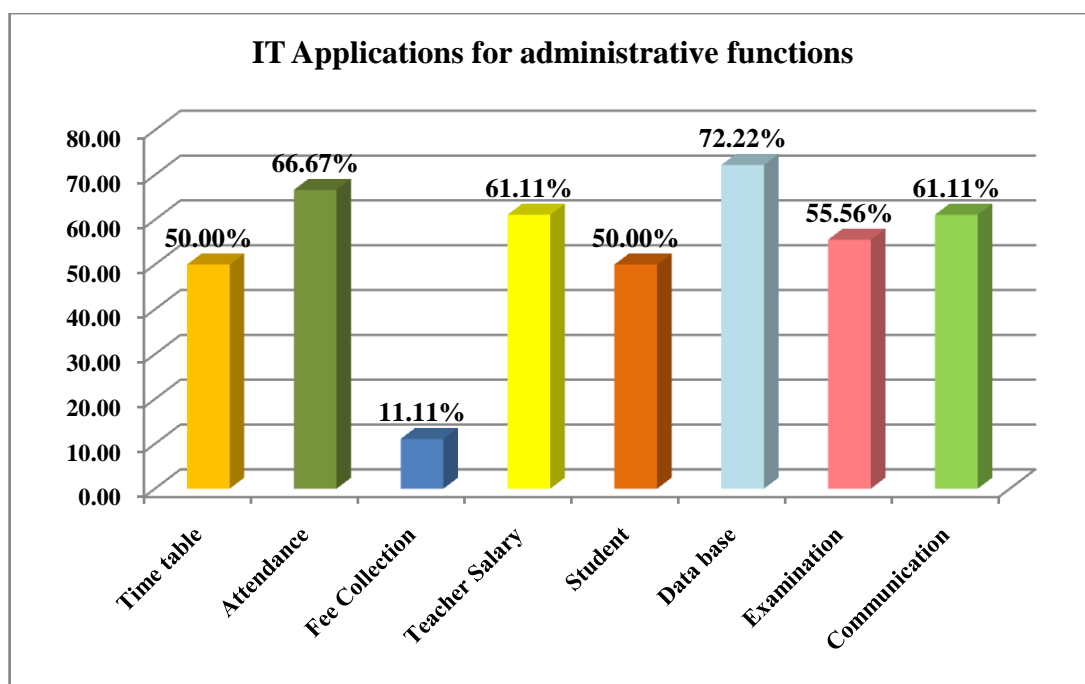
IT Applications for administrative Purposes

Table 3.22: IT Applications for administrative functions

(Multiple responses)

	Time table	Attendance	Fee Collection	Teacher Salary	Database	Examination	Communication	Total districts
Urban Districts	2 (66.67)	3 (100)	0 (0.00)	3 (100)	3 (100)	3 (100)	2 (66.67)	3 (100)
Rural Districts	2 (66.67)	3 (100)	2 (66.67)	2 (66.67)	3 (100)	2 (66.67)	2 (66.67)	3 (100)
District with High tele Density	2 (66.67)	2 (66.67)	0 (0.00)	2 (66.67)	2 (66.67)	2 (66.67)	2 (66.67)	3 (100)
District with Lower tele density	1 (33.33)	2 (66.67)	0 (0.00)	2 (66.67)	3 (100)	2 (66.67)	3 (100)	3 (100)
Districts Characterized as backward by the state	2 (66.67)	2 (66.67)	0 (0.00)	2 (66.67)	2 (66.67)	1 (33.33)	2 (66.67)	3 (100)
All Sample Total Districts	9 (50.00)	12 (66.67)	2 (11.11)	11 (61.11)	13 (72.22)	10 (55.56)	11 (61.11)	18 (100)

Source: Office of District Inspector of schools (DIOS)



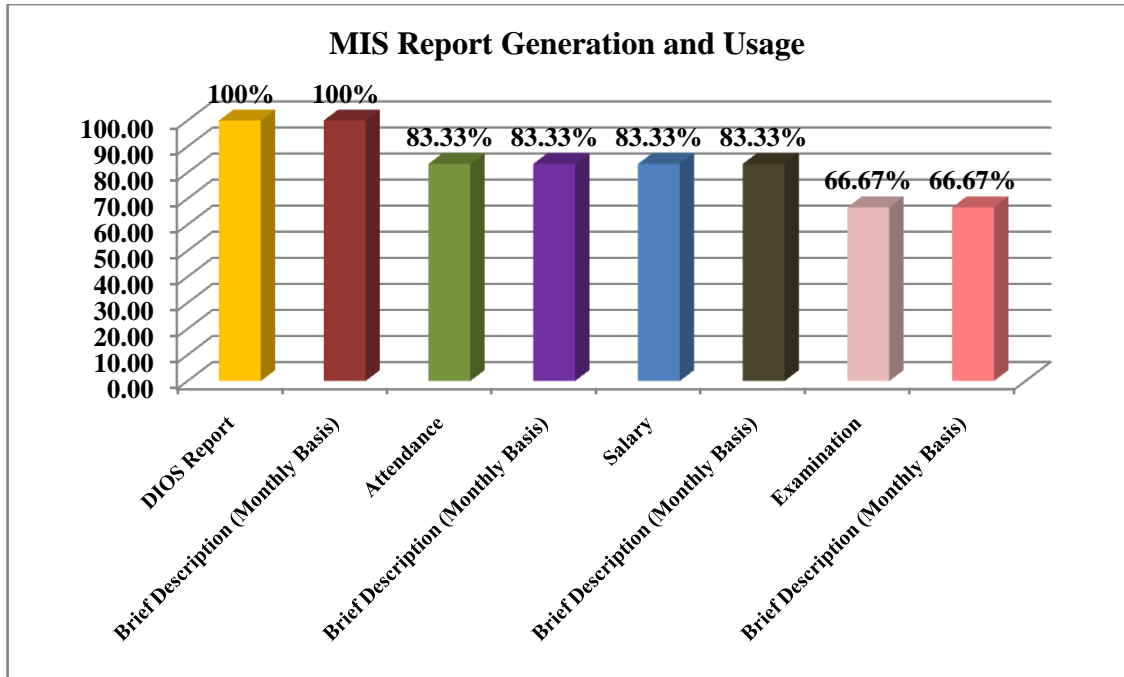
MIS Report Generation

IT is very useful at district level to officials for official information generation. All District Inspector of Schools (DIOS) uses monitoring Information System (MIS) for report generation. It is used by all for brief description on monthly basis and generation of DIOS report by all district level officials. 83.33 percent of them use it for attendance and salary preparation and all of them provide brief monthly description. District officials use IT for monitoring information and 66.67 percent of them use it for examination and other monthly reports.

Table 3.23: MIS Report Generation and Usage

(Multiple responses)

type	DIOS Report	Brief Description (Monthly Basis)	Attendance	Brief Description (Monthly Basis)	Salary	Brief Description (Monthly Basis)	Examination	Brief Description (Monthly Basis)	Total no. of districts
urban districts	3 (100)	3 (100)	3 (100)	3 (100)	2 (66.67)	2 (66.67)	2 (66.67)	2 (66.67)	3 (100)
rural districts	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)
district with high tele density	3 (100)	3 (100)	3 (100)	3 (100)	1 (33.33)	1 (33.33)	2 (66.67)	2 (66.67)	3 (100)
district with lower tele density	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)
districts characterized as backward by the state	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)
districts with electricity problems	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)
all total sample districts	18 (100)	18 (100)	15 (83.33)	15 (83.33)	15 (83.33)	15 (83.33)	12 (66.67)	12 (66.67)	18 (100)



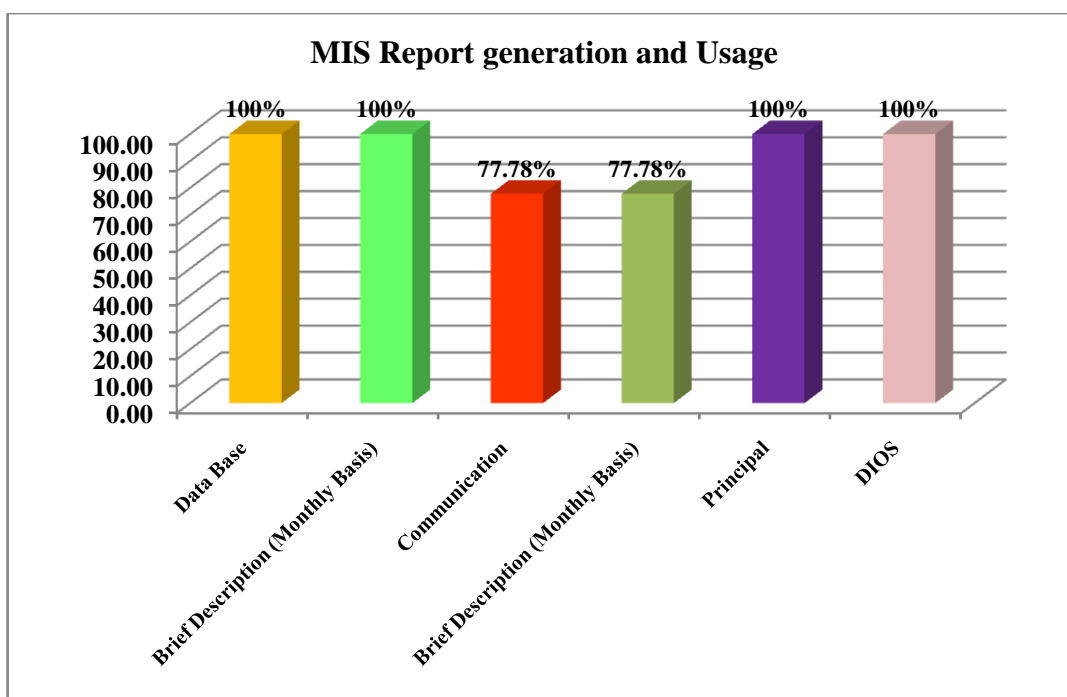
IT is widely used for generating data bases by all the district authorities and all of them use it for providing monthly reports. All DIOS and Principals of schools use IT system. About 78 percent of them also use it for communication purposes and preparing monthly reports.

Table 3.24: MIS Report generation and Usage

(Multiple responses)

TYPE	Data Base	Brief Description (Monthly Basis)	Communication	Brief Description (Monthly Basis)	Use by (Name and Designation of people using this information)		Total no. of districts
					Principal	DIOS	
URBAN DISTRICTS	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)
RURAL DISTRICTS	3 (100)	3 (100.00)	2 (66.67)	2 (66.67)	3 (100)	3 (100)	3 (100)
DISTRICT WITH HIGH TELE DENSITY	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)	3 (100)	3 (100)
DISTRICT WITH LOWER TELE DENSITY	3 (100)	3 (100.00)	2 (66.67)	2 (66.67)	3 (100)	3 (100)	3 (100)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	3 (100)	3 (100)	2 (66.67)	2 (66.67)	3 (100)	3 (100)	3 (100)
DISTRICTS WITH ELECTRICITY PROBLEMS	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)	3 (100)
ALL TOTAL SAMPLE DISTRICTS	18 (100)	18 (100)	14 (77.78)	14 (77.78)	18 (100)	18 (100)	18 (100)

Source: Office of District Inspector of schools (DIOS)

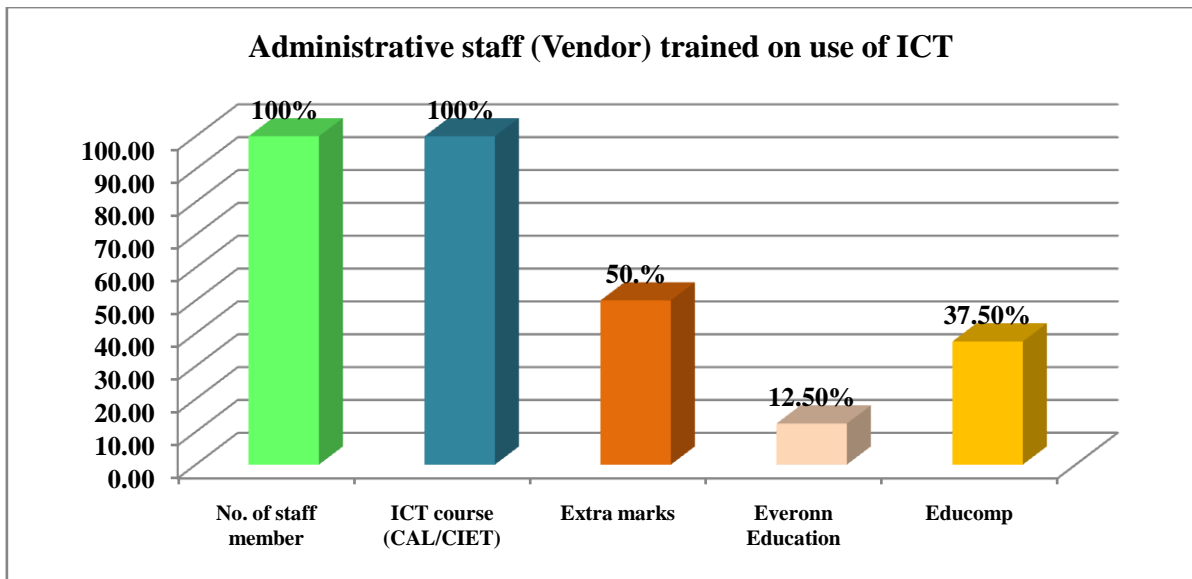


The entire district coordinators appointed by training agency in all different categories of districts were trained for the use of ICT. All of them were trained for courses on CAL /CIET to facilitate ICT teachers.50 percent district coordinators were trained by vendor- Extra Marks, 12.50 percent by Everonn Education and rest of 37.5 percent by Educomp. During Phase I of ICT implementation, all the three vendors were selected through bidding but during phase II of ICT, only Extra marks was given the chance. At the same time 635 schools were chosen during phase I and 365 for phase II.

Table 3.25: Administrative staff (Vendor) trained on use of ICT

TYPE	Number of Staff Member (DISTRICT CORDINATOR)	Name of IT Course Trained in (CAL/CIET)	Training Agency(Vendor)		
			Extra Marks	Everonn Education	Educomp
URBAN DISTRICTS	5 (100.00)	5 (100.00)	3 (60.00)	0 (0.00)	2 (40.00)
RURAL DISTRICTS	6 (100.00)	6 (100.00)	3 (50.00)	1 (16.67)	2 (33.33)
DISTRICT WITH HIGH TELE DENSITY	6 (100.00)	6 (100.00)	3 (50.00)	1 (16.67)	2 (33.33)
DISTRICT WITH LOWER TELE DENSITY	4 (100.00)	4 (100.00)	2 (50.00)	1 (25.00)	1 (25.00)
DISTRICTS CHARACTERIZED AS BACKWARD BY THE STATE	5 (100.00)	5 (100.00)	2 (40.00)	1 (20.00)	2 (40.00)
DISTRICTS WITH ELECTRICITY PROBLEMS	6 (100.00)	6 (100.00)	3 (50.00)	0 (0.00)	3 (50.00)
ALL TOTAL SAMPLE DISTRICTS	32 (100.00)	32 (100.00)	16 (50.00)	4 (12.50)	12 (37.50)

Source: Office of District Inspector of schools (DIOS)



Findings and Conclusion

Out of 18 selected sample districts, it was found that majority of schools 66.85 percent schools are located in rural areas whereas 33.15 percent in urban areas. Total 18 selected districts consist of 12.93 percent govt. sec. schools followed by 12.46 percent govt. hr. sec. schools, 17.90 percent govt. aided sec. schools govt. sec. schools and 56.71 percent govt. aided hr. sec. schools. Thus, all districts have maximum govt. aided hr. sec. schools while govt. hr. sec. schools are least.

More schools were covered in rural areas than urban areas for ICT in School Scheme. It covered 67.20 percent schools in rural areas and 32.80 percent in urban areas. ICT in schools covered 68.90 percent Govt. aided hr. sec. schools which were highest among all types of schools followed by 1.30 percent schools in Govt. Sec. Schools which was lowest among the selected schools. No govt. sec. school in urban areas, rural areas and lower tele density was selected for this scheme.

As far as the availability of infrastructural facilities under this scheme is concerned, in all the selected schools average 10 desktops were provided under this scheme in rural areas while in urban sector average 11 desktops were provided. The reason behind this was more urban schools were selected during second phase. 33.29 percent of schools located in urban areas and 66.71 percent schools in rural areas were given desk tops under this scheme.

Digital projectors were provided in 39 percent govt. aided hr. sec. schools 40 percent govt. aided sec. schools and only 23 percent each to govt. sector schools and govt. hr. sec. schools. Other than this digital projectors were made available to 64 percent schools in rural areas 36 percent schools in urban areas. In case of availability of UPS to schools on an average 7 UPS

were available across different categories of the schools and schools of rural and urban areas. The average availability has been 8 each in govt. sec. and Govt. hr. sec. schools, 7 in Govt. aided Sec. schools, and 7 in Govt. aided hr. sec. schools. Whereas average 6 UPS in schools of urban areas and 8 in rural areas were made available.

It was found through official sources that out of the total UPS supplied in the selected sample ICT schools, 72.88 percent UPS were available in the schools of the rural areas while in the urban districts only 27.12 percent UPS were given.

In both the phases total 1000 printers were provided in the schools under ICT scheme and each school was given one printer. Out of total number of printers distributed under the scheme, 32.80 percent were distributed in urban schools and 67.20 percent in the schools of rural areas showing there by large disparity in this respect. It was found that under ICT at school system, district authorities provide information to all schools on internet. But against expected it was found that in rural areas 67.20 percent schools receive information on Internet and e-mails while in urban areas only 32.80 percent schools are benefitted through it.

It was also found that Microsoft was given to all schools selected for ICT in school scheme in both phase I and Phase II. Linux was basically given in phase I.

With respect to the usage of IT facilities for administrative purposes it was found that, IT is used for is maximum used for creating databases followed by attendance and preparation of salary in all the schools. For fee collection its use is reported to be least. All the schools widely use IT for different administrative purposes. These facilities are also used for MIS report generation by DIOS.

IT is widely used for generating data bases by all the district authorities and all of them use it for providing monthly reports. All DIOS and Principals of schools use IT system. About 78 percent of them also use it for communication purposes and preparing monthly reports.

Proper training is also provided to the entire district coordinators by training agency in all different categories of districts. They were trained for the use of ICT. All of them were trained for courses on CAL /CIET to facilitate ICT teachers. 50 percent district coordinators were trained by vendor- Extra Marks, 12.50 percent by Everonn Education and rest of 37.5 percent by Educom. Thus, in general it was observed that both in phase I and Phase II adequate infrastructural and training facilities were provided by the government under this scheme which is leading to the increasing usage of IT facilities for various purposes but still the coverage needs to be expanded, particularly in case of urban government schools.

CHAPTER-IV

PERFORMANCE OF ICT: VIEWS OF PRINCIPALS/ HEAD OF SCHOOLS

The performance and status of ICT Scheme in schools presented in the preceding part of the report has been based on the feedback of the state and district level officials involved in the implementation of ICT scheme in the schools under consideration. In this section of the report, the performance of different aspects of ICT scheme is assessed on the feedback of the school head teachers.

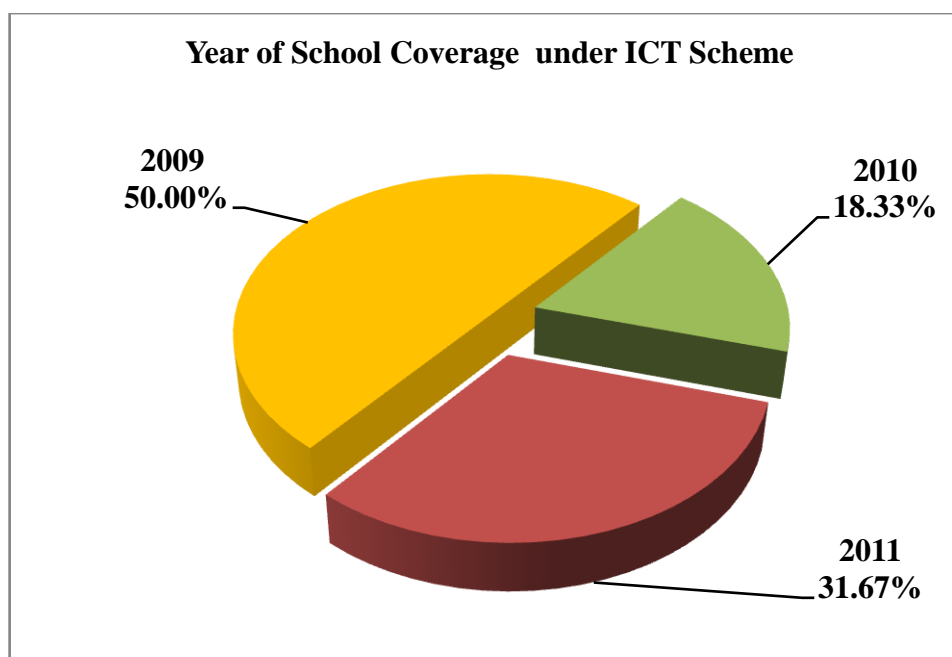
Coverage of ICT Scheme in Schools

Table 4.1 shows that maximum 50 percent of the total selected sample schools were covered under ICT programme in 2009 followed by minimum 18.33 percent in 2010 and 31.67 percent in 2011. Thus, maximum sample school were covered under ICT during the year 2009.

Table 4.1: Year of School Coverage under ICT Scheme

Particulars	2009	2010	2011	Total
Urban Districts-3	14 (46.67)	5(16.67)	11(36.67)	30(100)
Rural Districts-3	14(46.67)	6(20.00)	10(33.33)	30(100)
High Tele - Density District-3	10(33.33)	4(13.33)	16(53.33)	30(100)
Lower Tele - Density District-3	14(46.67)	11(36.67)	5(16.67)	30(100)
District Characterized as backward	19(63.33)	5(16.67)	6(20.00)	30(100)
Electricity Problems District-3	19(63.33)	2(6.67)	9(30.00)	30(100)
All Sample Districts-18	90(50.00)	33(18.33)	57(31.67)	180(100)

Source- Based on field survey

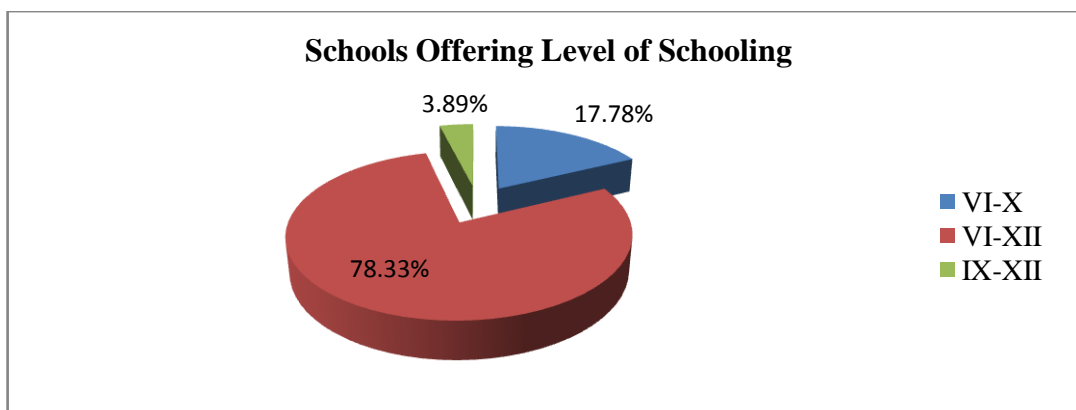


From the sampled schools the overall picture indicates that maximum 78 percent schools offer schooling from VI to XII standard, about 18 percent schools offer schooling from VI to X standard and only about 4 percent schools offer teaching from IX to XII standard (Table 4.2).

Table 4.2: Schools Offering Level of Schooling

Particulars	VI-X	VI-XII	IX-XII	Total
Urban Districts-3	5 (16.67)	25 (83.33)	0 (0.00)	30 (100.00)
Rural Districts-3	5 (16.67)	22 (73.33)	3 (10.00)	30 (100.00)
High Tele - Density Districts-3	3 (10.00)	27 (90.00)	0 (0.00)	30 (100.00)
Lower Tele - Density Districts-3	6 (20.00)	20 (66.67)	4 (13.33)	30 (100.00)
Districts Characterized as backward by the state-3	5 (16.67)	25 (83.33)	0 (0.00)	30 (100.00)
Electricity Problems Districts-3	8 (26.67)	22 (73.33)	0 (0.00)	30 (100.00)
Total Sample districts-18	32 (17.78)	141 (78.33)	7 (3.89)	180 (100.00)

Source- Based on field survey



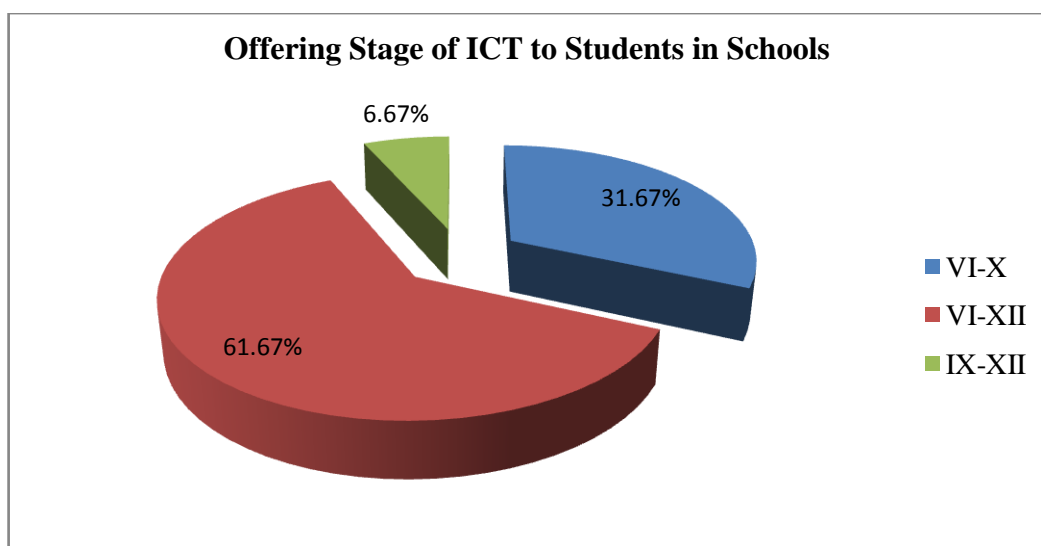
The overall scenario reveals that maximum, around 62 percent, schools offer ICT from VI to XII standards, about 32 percent sample schools from VI to X and only about 7 percent schools offer ICT to students from IX to XII standards.

It was reported in maximum schools that the school authority wanted to offer ICT in every class, but due to unavailability of teachers and time slot, they are unable to do the same (Table 4.3).

Table 4.3: Offering Stage of ICT to Students in Schools.

Particulars	VI-X	VI-XII	IX-XII	Total
Urban Districts-3	8 (26.67)	22 (73.33)	0 (0.00)	30 (100.00)
Rural Districts-3	5 (16.67)	23 (76.67)	2 (6.67)	30 (100.00)
High Tele - Density Districts-3	7 (23.33)	21 (70.00)	2 (6.67)	30 (100.00)
Lower Tele - Density Districts-3	13 (43.33)	13 (43.33)	4 (13.33)	30 (100.00)
District Characterized as backward by the state-3	10 (33.33)	16 (53.33)	4 (13.33)	30 (100.00)
Electricity Problems Districts-3	14 (46.67)	16 (53.33)	0 (0.00)	30 (100.00)
All Sample District-18	57 (31.67)	111 (61.67)	12 (6.67)	180 (100.00)

Source- Based on field survey



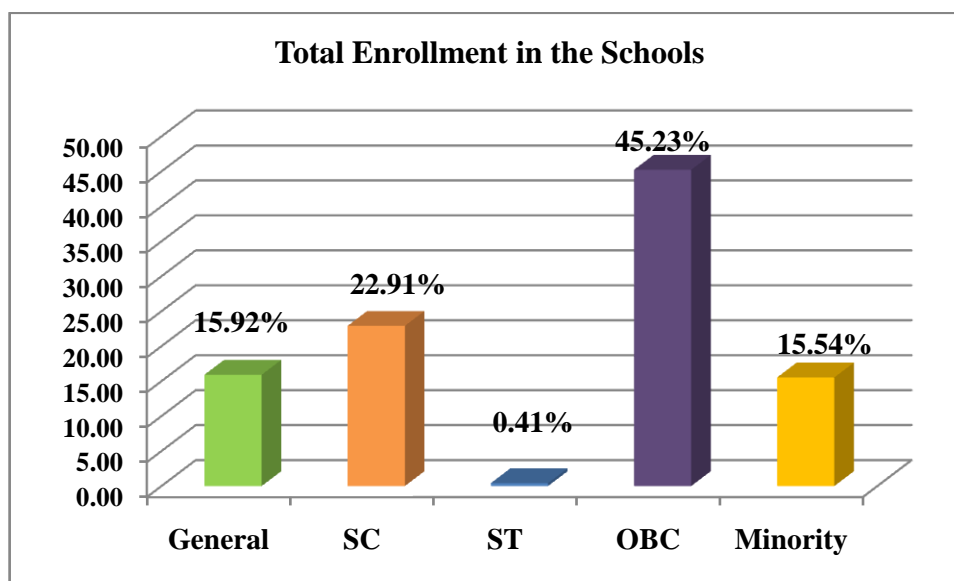
Enrollment in the Schools

The table 4.4 shows huge variations in terms of total enrollment of students from different social groups in the schools, maximum 45.23 percent OBC students are enrolled in the schools followed by 22.91 percent SC students, 15.92 percent general and minimum 15.54 percent minority students have been enrolled in schools as reported by the head teachers of total selected sample schools. Enrollment of ST student is negligible as only 0.41 percent students are enrolled. In all the categories of schools- Urban, Rural, High and Low Tele-Density- maximum share of OBC students is recorded.

Table 4.4: Total Enrollment in the Schools (Students)

Particulars	Total Student in School					
	General	SC	ST	OBC	Minority	Total
Urban District-3	4988 (15.20)	8846 (26.95)	102 (0.31)	17162 (52.29)	1725 (5.26)	32823 (100.00)
Rural District-3	5324 (14.49)	8734 (23.77)	46 (0.13)	16168 (44.00)	6470 (17.61)	36742 (100.00)
High Tele – Density District-3	4948 (15.49)	7910 (24.76)	100 (0.31)	15358 (48.07)	3631 (11.37)	31947 (100.00)
Lower Tele – Density District-3	6116 (20.46)	5703 (19.08)	98 (0.33)	13048 (43.66)	4921 (16.47)	29886 (100.00)
Districts Characterized as backward by the state-3	6015 (16.37)	7178 (19.53)	88 (0.24)	14748 (40.13)	8719 (23.73)	36748 (100.00)
Electricity Problems District-3	5442 (16.37)	8879 (19.53)	407 (0.24)	16809 (40.13)	6581 (23.73)	38118 (100.00)
All Sample District-18	32833 (15.92)	47250 (22.91)	841 (0.41)	93293 (45.23)	32047 (15.54)	206264 (100.00)

Source- Based on field survey



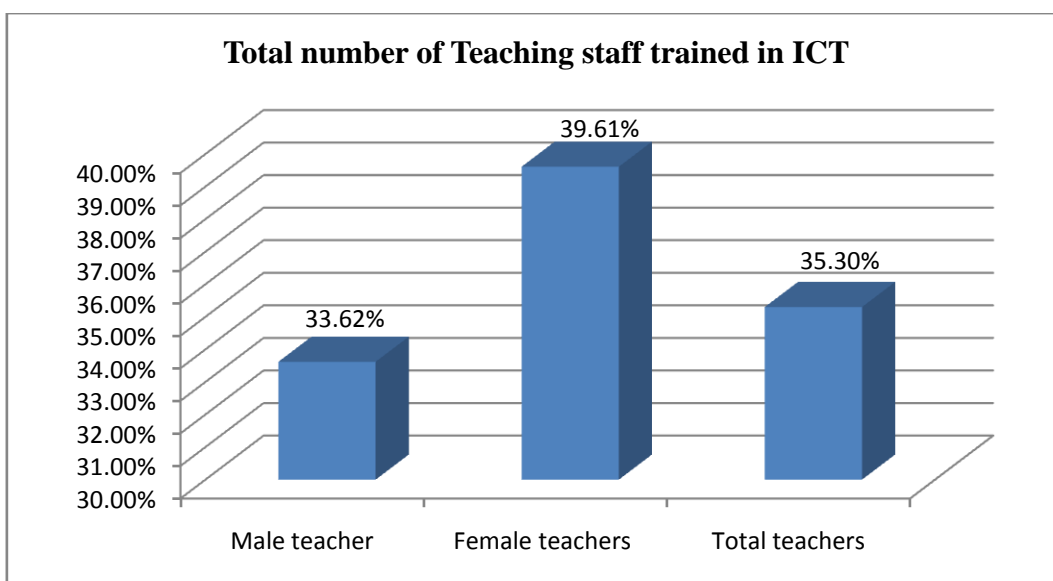
ICT Training to School Staff

Table 4.5 shows that among all the teachers in school, only 35.30 percent teachers have received ICT training. Overall, a higher share of female teachers received ICT training. However, higher share of teachers received ICT training (56.23 percent) in the schools of districts with electricity problems. Around 44 percent teachers received ICT training belonging to schools located in rural districts. In rest of different categories of the districts, a far lower percentage of schoolteachers received ICT training.

Table 4.5: Total number of Teaching staff trained in ICT

Particulars	Total No. of Teacher in School			No. of Teacher Received ICT Training		
	Male	Female	Total	Male	Female	Total
Urban District-3	513 (100.0)	157 (100.0)	670 (100.0)	129 (25.15)	44 (28.03)	173 (25.82)
Rural District-3	352 (100.0)	246 (100.0)	598 (100.0)	135 (38.35)	125 (50.81)	260 (43.48)
High Tele – Density District-3	394 (100.0)	227 (100.0)	621 (100.0)	109 (27.66)	66 (29.07)	175 (28.18)
Low Tele – Density District-3	381 (100.0)	71 (100.0)	452 (100.0)	161 (42.26)	19 (26.76)	180 (39.82)
Districts Characterized as backward by the state-3	360 (100.0)	120 (100.0)	480 (100.0)	89 (24.72)	30 (25.00)	119 (24.79)
Electricity Problems-3	332 (100.0)	93 (100.0)	425 (100.0)	161 (48.49)	78 (83.87)	239 (56.23)
All Sample Districts-18	2332 (100.0)	914 (100.0)	3246 (100.0)	784 (33.62)	362 (39.61)	1146 (35.30)

Source- Based on field survey

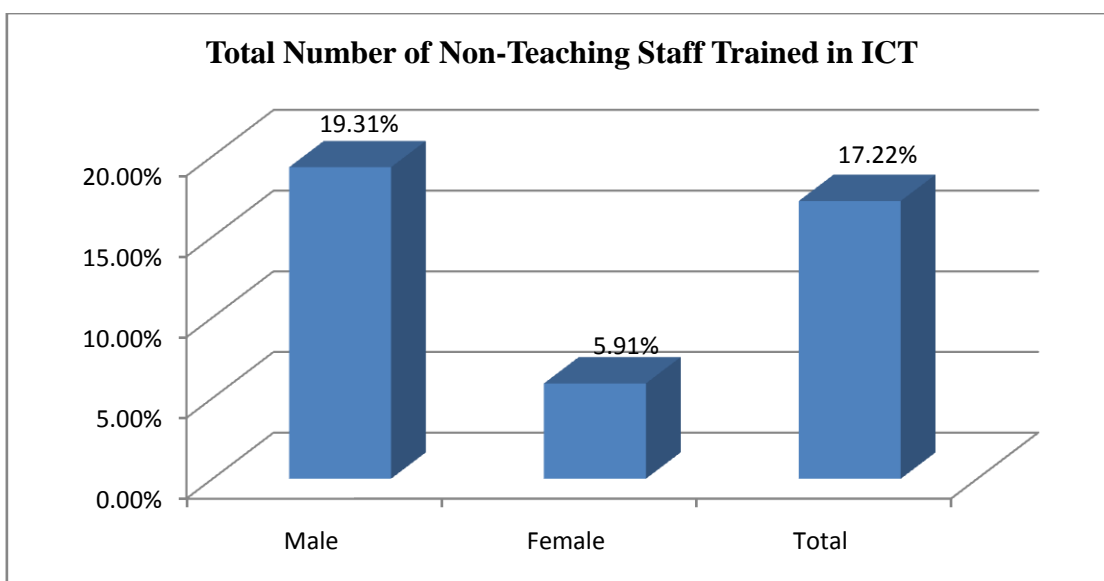


Head teachers of the total selected sample schools have reported that out of total non-teaching staff only 17.88 percent have only received ICT training. Among these, 19.31 percent of males have received ICT training as compared to only 10.13 percent females receiving ICT training (Table 4.6).

Table 4.6: Total Number of Non-Teaching Staff Trained in ICT

articulars	Total No. of Non Teaching staff			Total No. of Non Teacher Received ICT Training		
	Male	Female	Total	Male	Female	Total
Urban District-3	279 (100.0)	45 (100.0)	324 (100.0)	36 (12.90)	0 (0.00)	36 (11.11)
Rural District-3	142 (100.0)	93 (100.0)	235 (100.0)	10 (7.04)	3 (3.23)	13 (5.53)
High Tele – Density District-3	235 (100.0)	46 (100.0)	281 (100.0)	18 (7.66)	6 (13.04)	24 (8.54)
Low Tele – Density District-3	217 (100.0)	10 (100.0)	227 (100.0)	17 (7.83)	0 (0.00)	17 (7.49)
Districts Characterized as backward by the state-3	223 (100.0)	33 (100.0)	256 (100.0)	10 (4.48)	0 (0.00)	10 (3.91)
Electricity Problems-3	183 (100.0)	10 (100.0)	193 (100.0)	156 (85.25)	5 (50.00)	161 (83.42)
All Sample Districts-18	1279 (100.0)	237 (100.0)	1516 (100.0)	247 (19.31)	14 (5.91)	261 (17.22)

Source- Based on field survey

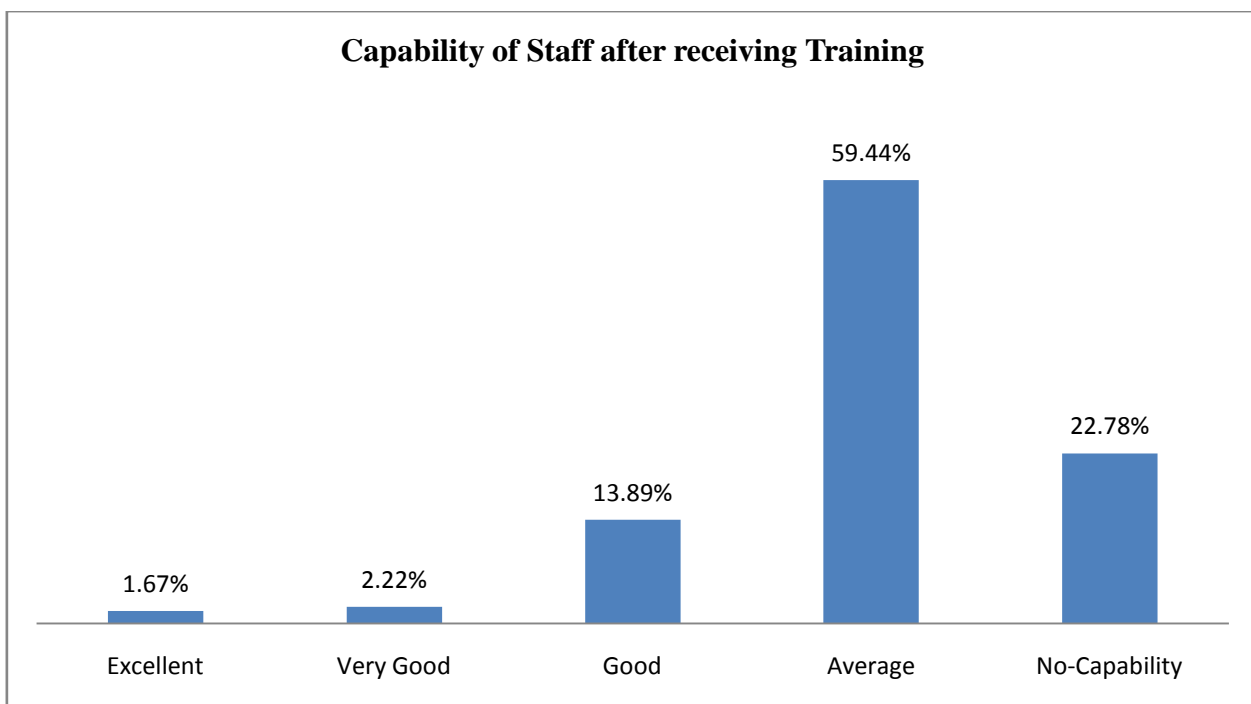


After providing computers training to the teachers and non-teaching staffs of the schools, head of the schools were asked to grade the ICT capability of trained personnel in their schools. According to their gradation, maximum, 59 percent staff could acquire only average level of ICT capabilities. About 14 percent were rated as good and 4 percent were found very good to excellent in this respect. However, about 23 percent staff could not develop any ICT capability despite getting training (Table 4.7).

Table 4.7: Capability of Staff after receiving Training

Particulars	Excellent	Very Good	Good	Average	No-Capability	Total
Urban Districts-3	0 (0.00)	0 (0.00)	4 (13.33)	23 (76.67)	3 (10.00)	30 (100.00)
Rural Districts-3	1 (3.33)	1 (3.33)	5 (16.67)	14 (46.67)	9 (30.00)	30 (100.00)
High Tele Density-3	0 (0.00)	2 (6.67)	4 (13.33)	17 (56.67)	7 (23.33)	30 (100.00)
Low Tele Density-3	1 (3.33)	0 (0.00)	4 (13.33)	19 (63.33)	6 (20.00)	30 (100.00)
Characterized as Backward by the State-3	0 (0.00)	1 (3.33)	4 (13.33)	17 (56.67)	8 (26.67)	30 (100.00)
Districts with electricity Problems-3	1 (3.33)	0 (0.00)	4 (13.33)	17 (56.67)	8 (26.67)	30 (100.00)
Total Sample Districts-18	3 (1.67)	4 (2.22)	25 (13.89)	107 (59.44)	41 (22.78)	180 (100.00)

Source- Based on field survey



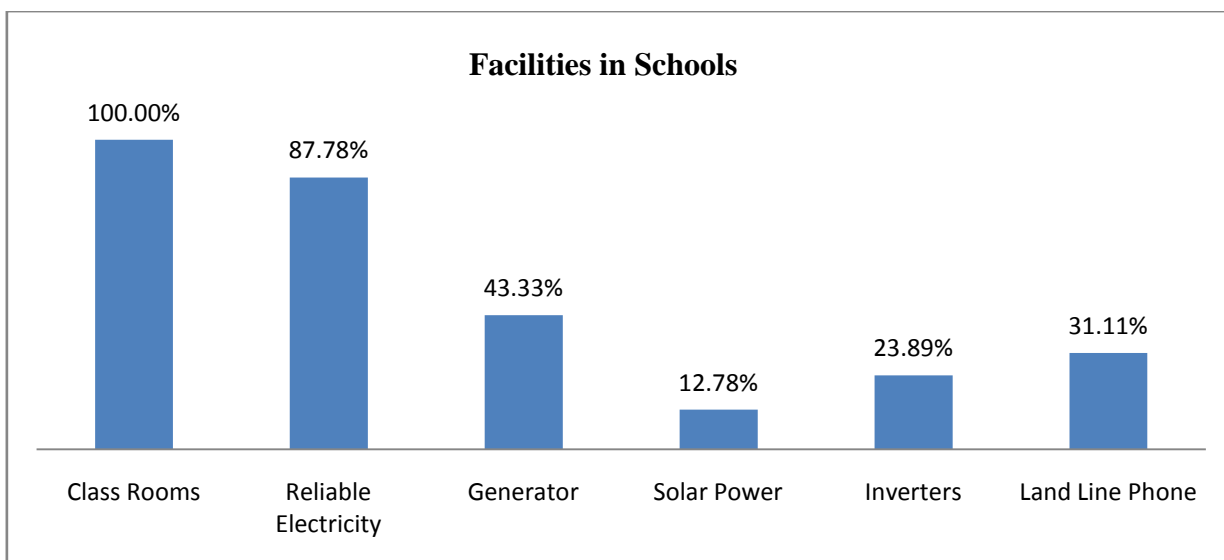
School Infrastructure and Computer Facilities

It is clear from the Table 4.8 that all the sampled schools have class rooms. Reliable electricity is found only in 87.78 percent schools, generators are found in 43.33 percent schools, inverter in 23.89 percent schools, landline phone connections are found only in 31.11 percent schools and solar power is found only in 12.78 percent schools.

Table 4.8: Facilities in Schools

Particulars	Class Rooms	Reliable Electricity	Generator	Solar Power	Inverters	Land Line Phone
Urban District-3	30 (100.00)	30 (100.00)	4 (13.33)	3 (10.00)	15 (50.00)	19 (63.33)
Rural District-3	30 (100.00)	27 (90.00)	15 (50.00)	0 (0.00)	3 (10.00)	9 (30.00)
High Tele –Density District-3	30 (100.00)	29 (96.67)	24 (80.00)	2 (6.67)	8 (26.67)	11 (36.67)
Lower Tele Density Districts-3	30 (100.00)	23 (76.67)	8 (26.67)	3 (10.00)	6 (20.00)	3 (10.00)
Districts Characterized as backward by the state-3	30 (100.00)	26 (86.67)	7 (23.33)	8 (26.67)	8 (26.67)	11 (36.67)
Electricity Problems District-3	30 (100.00)	23 (76.67)	20 (66.67)	7 (23.33)	3 (10.00)	3 (10.00)
All Sample Districts-18	180 (100.00)	158 (87.78)	78 (43.33)	23 (12.78)	43 (23.89)	56 (31.11)

Source- Based on field survey



All categories of schools wanted to offer ICT in their schools, even the students are also very much enthusiastic about computer-aided learning. Every sampled school have separate computer lab for holding ICT classes (Table 4.9).

Table 4.9: Availability of Computer Lab for ICT Classes in Schools.

Particulars	Available	Not Available	Total
Urban Districts-3	30 (100.00)	0	30 (100.00)
Rural Districts-3	30 (100.00)	0	30 (100.00)
Districts with High Tele – Density-3	30 (100.00)	0	30 (100.00)
Districts with Lower Tele – Density-3	30 (100.00)	0	30 (100.00)
Districts Characterized as backward by the State-3	30 (100.00)	0	30 (100.00)
Districts with Electricity Problems-3	30 (100.00)	0	30 (100.00)
All Sample District-18	180 (100.00)	0	180 (100.00)

Source- Based on field survey

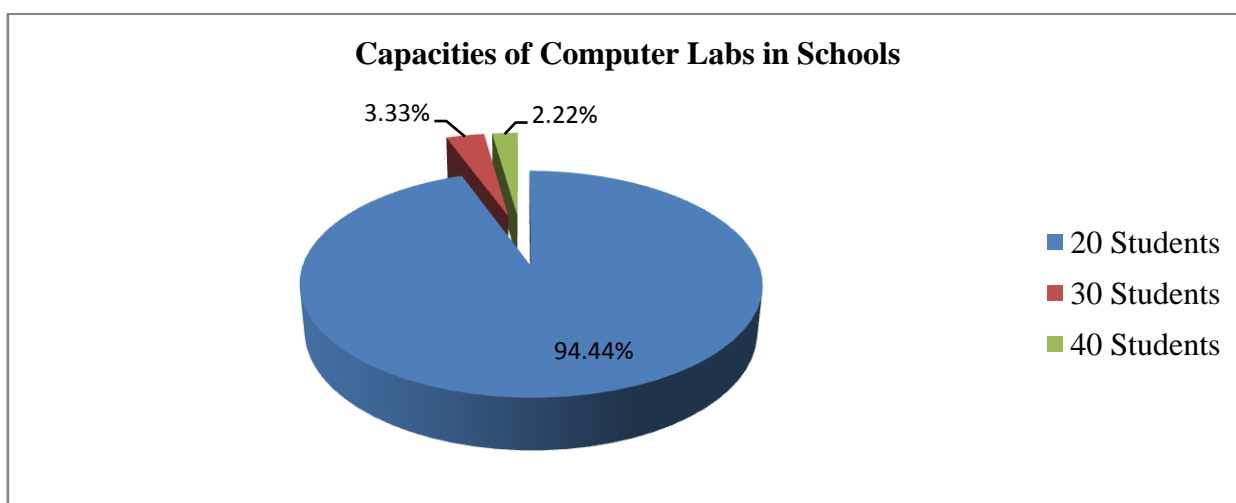
As the number of the computer is much less as compared to the students strength in a class. Hence, is not possible for the teachers to accommodate whole class at a time. They usually divide the class into small sections. Over 94 percent schools have the ICT lab with capacity of 20 students.3.33 percent schools have capacity of 30 students and only 2.22 percent have

capacity of 40 students at a time (Table 4.10). As per the norms of the ICT programme there is a provision of computer lab having capacity of 20 students.

Table 4.10: Capacities of Computer Labs in Schools.

Particulars	20 Students	30 Students	40 Students	Total
Urban Districts-3	27 (90.00)	1 (3.33)	2 (6.67)	30 (100.00)
Rural Districts-3	28 (93.33)	1 (3.33)	1 (3.33)	30 (100.00)
Districts with High Tele – Density-3	30 (100.00)	0 (0.00)	0 (0.00)	30 (100.00)
Districts with Lower Tele – Density-3	28 (93.33)	2 (6.67)	0 (0.00)	30 (100.00)
Districts Characterized as backward by the State-3	28 (93.33)	1 (3.33)	1 (3.33)	30 (100.00)
Districts with Electricity Problems-3	29 (96.67)	1 (3.33)	0 (0.00)	30 (100.00)
All Sample District-18	170 (94.44)	6 (3.33)	4 (2.22)	180 (100.00)

Source- Based on field survey



School Budget for ICT plan

Head Teachers of the sample schools have reported that no budgets have been allocated directly to their schools and all of them have reported that the budget is allocated directly to the implementing agencies- Educomp, Extra Marks and Everonn (Table 4.11).

Table 4.11: School Budget for the Implementation of the School ICT Plan

Particulars	Yes	No	Total
Urban Districts-3	0 (0.00)	30 (100)	30 (100)
Rural Districts-3	0 (0.00)	30 (100)	30 (100)
High Tele - Density Districts-3	0 (0.00)	30 (100)	30 (100)
Districts Lower Tele - Density-3	0 (0.00)	30 (100)	30 (100)
Districts Characterized as backward by the state-3	0 (0.00)	30 (100)	30 (100)
Electricity Problems Districts-3	0 (0.00)	30 (100)	30 (100)
All Sample Districts-18	0 (0.00)	180 (100)	180 (100)

Source- Based on field survey

The funds have not been made available to schools directly for implementation of the school ICT plan. The funds are given by SLA to authorized vendors for the same. It is shown in Table 4.12 that 41.67 percent of the total funds released by State Level Authorities to each of the contracting agencies i.e. Educomp and Extra Marks. On other hand only 16.67 percent funds are released to the Everonn. The entire school budget for the implementation of the school ICT plan is released by the State Level Authorities to Educomp, Extra Marks and Everonn. Urban and Rural districts are under the coverage area of Educomp and Extra Marks and they are getting maximum funds.

Table 4.12: Source and Mechanism of ICT Funding

Particulars	Fund is given by SLA to			Total
	Educomp	Extra Marks	Everonn	
Urban Districts-3	14 (46.67)	16 (53.33)	0 (0.00)	30 (100)
Rural Districts-3	14 (46.67)	11 (36.67)	5 (16.67)	30 (100)
High Tele - Density Districts-3	9 (30.00)	16 (53.33)	5 (16.67)	30 (100)
Districts Lower Tele - Density-3	8 (26.67)	12 (40.00)	10 (33.33)	30 (100)
Districts Characterized as backward by the state-3	14 (46.67)	6 (20.00)	10 (33.33)	30 (100)
Electricity Problems Districts-3	16 (53.33)	14 (46.67)	0 (0.00)	30 (100)
All Sample Districts-18	75 (41.67)	75 (41.67)	30 (16.67)	180 (100)

Source- Based on field survey

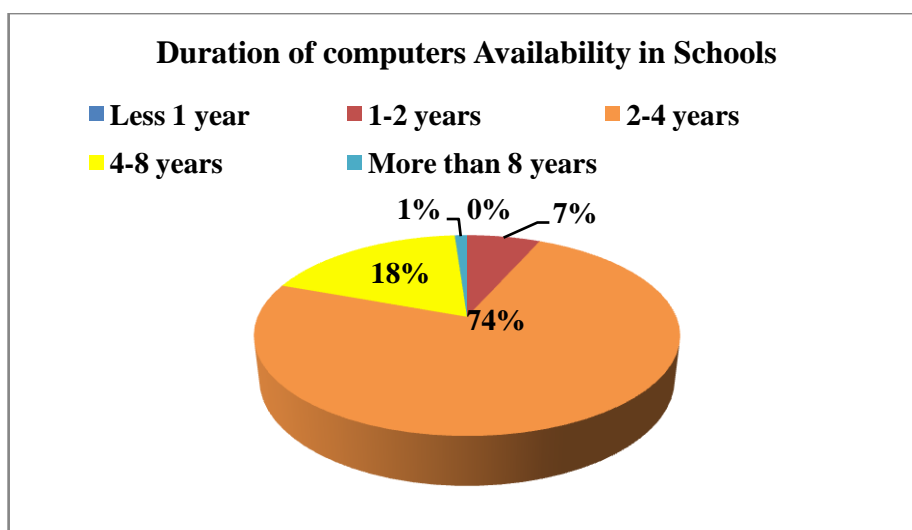
Computer Availability and their Maintenance

As per Table 4.13, maximum 73.89 percent head teachers have reported that their schools had computers for last of 2 to 4 years and 18.33 percent have reported the computers availability in the schools for last 4 to 8 years. At the same time, around one percent head teachers reported that schools had computers for more than eight years and in no school the computers were acquired during last one year. In maximum schools, located in Urban, Rural, High and Low Tele-density, Backward districts and districts with electricity problems, most of the computers were acquired during last 2 to 4 years.

Table 4.13: Duration of computers Availability in Schools

Particulars	Less 1 year	1-2 years	2-4 years	4-8 years	More than 8 years	Total
Urban Districts-3	0 (0.00)	5 (16.67)	20 (66.67)	4 (13.33)	1 (3.33)	30 (100)
Rural Districts-3	0 (0.00)	0 (0.00)	20 (66.67)	10 (33.33)	0 (0.00)	30 (100)
High Tele - Density Districts-3	0 (0.00)	6 (20.00)	20 (66.67)	3 (10.00)	1 (3.33)	30 (100)
Districts Lower Tele - Density -3	0 (0.00)	0 (0.00)	28 (93.33)	2 (6.67)	0 (0.00)	30 (100)
Districts Characterized as backward by the state-3	0 (0.00)	0 (0.00)	22 (73.33)	8 (26.67)	0 (0.00)	30 (100)
Electricity Problems Districts -3	0 (0.00)	1 (3.33)	23 (76.67)	6 (20.00)	0 (0.00)	30 (100)
All Sample Districts-18	0 (0.00)	12 (6.67)	133 (73.89)	33 (18.33)	2 (1.11)	180 (100)

Source- Based on field survey

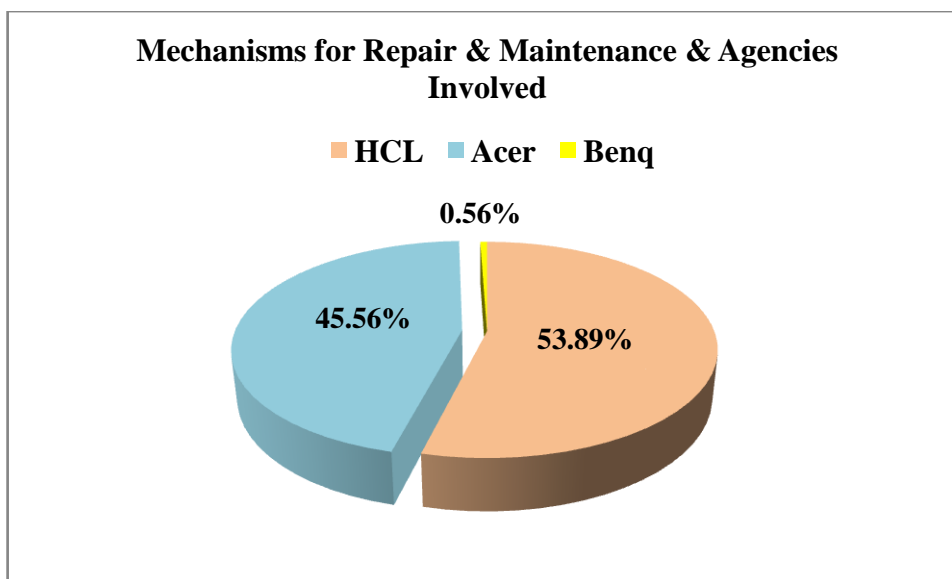


Repair and mechanism of the computers in schools is done by three agencies- HCL, Acer and Benqon contractual basis. HCL has maximum contract as repair and maintenance agency in 53.89 percent schools followed by Acer covering 45.56 percent schools and Benq covered minimum 0.56 percent schools as informed by the head teachers. HCL has good coverage in Rural Districts, Districts Lower Tele – Density and in Districts Characterized as backward by the state along with districts facing electricity problems. Acer has higher coverage for repair and maintenance in Urban and High Tele - Density Districts. Benq is lagging in all areas (Table 4.14).

Table 4.14: Mechanisms for Repair & Maintenance & Agencies Involved

Particulars	HCL	Acer	Benq	Total
Urban Districts-3	14 (46.67)	16 (53.33)	0 (0.00)	30 (100)
Rural Districts3	19 (63.33)	11 (36.67)	0 (0.00)	30 (100)
High Tele - Density District3	12 (40.00)	17 (56.67)	1 (3.33)	30 (100)
Districts Lower Tele - Density3	18 (60.00)	12 (40.00)	0 (0.00)	30 (100)
Districts Characterized as backward by the state3	18 (60.00)	12 (40.00)	0 (0.00)	30 (100)
Electricity Problems Districts3	16 (53.33)	14 (46.67)	0 (0.00)	30 (100)
All Sample Districts-18	97 (53.89)	82 (45.56)	1 (0.56)	180 (100)

Source- Based on field survey

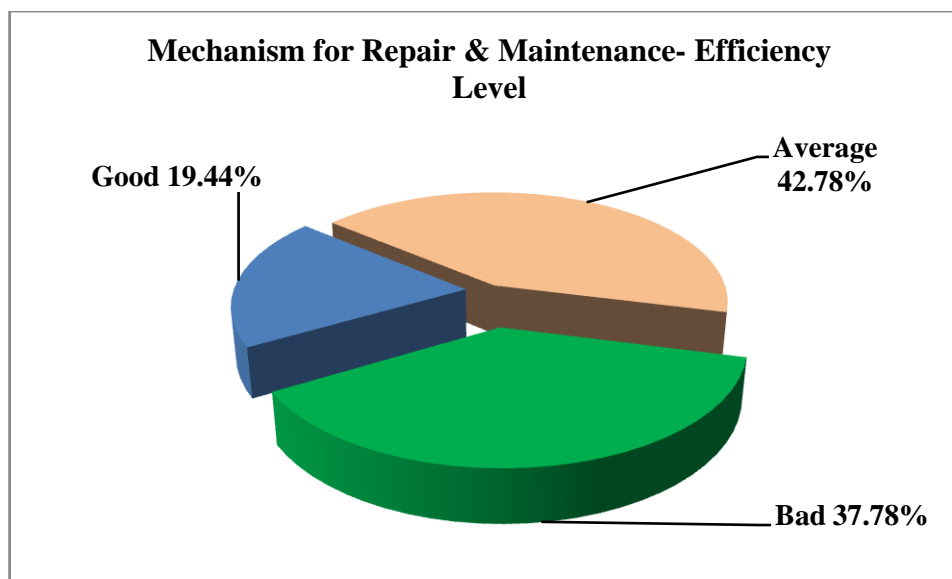


In about 43 percent of sample schools, the head teachers have reported average level of repair and maintenance of computer undertaken by the appointed agencies. In 38 percent schools, head teachers reported bad experience in terms of mechanism for repair & maintenance and on an average only about 20 percent have reported good experience in terms of mechanism for repair & maintenance considering schools of all the districts under consideration (Table 4.15).

Table 4.15: Mechanism for Repair & Maintenance- Efficiency Level

Particulars	Good	Average	Bad	Total
Urban Districts-3	6 (20.00)	15 (50.00)	9 (30.00)	30 (100)
Rural Districts-3	4 (13.33)	12 (40.00)	14 (46.67)	30 (100)
High Tele - Density District-3	8 (26.67)	12 (40.00)	10 (33.33)	30 (100)
Districts Lower Tele - Density-3	6 (20.00)	13 (43.33)	11 (36.67)	30 (100)
Districts Characterized as backward by the state-3	6 (20.00)	15 (50.00)	9 (30.00)	30 (100)
Electricity Problems Districts-3	5 (16.67)	10 (33.33)	15 (50.00)	30 (100)
All Sample Districts-18	35 (19.44)	77 (42.78)	68 (37.78)	180 (100)

Source- Based on field survey



In around 50 percent of sample schools, the head teachers have faced no challenges. At the same time in 24.44 percent schools, head teachers have reported that problems are not resolved in time. About in 21 percent sample schools, head teachers have reported replacement process of defective items has been very lengthy. On average about 6 percent head teachers have also reported for no sufficient financial support across the districts (Table 4.16).

Table 4.16: Challenges Encountered in Computers Repair and Maintenance

particulars	The Problems are not resolved in time	Replacement process of defective items is very lengthy	No sufficient financial Support	No Problem	Total
Urban Districts-3	8 (26.67)	3 (10.00)	2 (6.67)	17 (56.67)	30 (100)
Rural Districts-3	11 (36.67)	7 (23.33)	2 (6.67)	10 (33.33)	30 (100)
High Tele - Density District-3	5 (16.67)	3 (10.00)	2 (6.67)	20 (66.67)	30 (100)
Districts Lower Tele - Density-3	9 (30.00)	7 (23.33)	2 (6.67)	12 (40.00)	30 (100)
Districts Characterized as backward by the state-	8 (26.67)	5 (16.67)	2 (6.67)	15 (50.00)	30 (100)
Electricity Problems Districts-3	3 (10.00)	12 (40.00)	0 (0.00)	15 (50.00)	30 (100)
All Sample Districts-18	44 (24.44)	37 (20.56)	10 (5.56)	89 (49.44)	180 (100)

Source- Based on field survey

In Table 4.17 data regarding hardware handling and operators is shown, which indicates that 93.33 percent schools, ICT teachers are operating the hardware of the ICT classes whereas only in 6.67 percent schools other than ICT teachers operate hardware in their schools.

Table 4.17: Handling and Operation of Hardware in Schools

Particulars	ICT Teacher	Other Teacher	Total
Urban Districts-3	28 (93.33)	2 (6.67)	30 (100)
Rural Districts-3	28 (93.33)	2 (6.67)	30 (100)
High Tele - Density Districts-3	28 (93.33)	2 (6.67)	30 (100)
Districts Lower Tele - Density-3	28 (93.33)	2 (6.67)	30 (100)
Districts Characterized as backward by the state-3	28 (93.33)	2 (6.67)	30 (100)
Electricity problems Districts-3	28 (93.33)	2 (6.67)	30 (100)
All Sample Districts-18	168 (93.33)	12 (6.67)	180 (100)

Source- Based on field survey

Monitoring Organizations of ICT Scheme

Details of the existing monitoring organization for ICT scheme are shown in Table 4.18. In maximum above 88 percent schools, DIOS Office is reported as monitoring agency and only in about 12 percent schools, district coordinators (D.C.) are monitoring the ICT scheme. Hence, the monitoring of ICT scheme is done by DIOs office in most of the schools across different categories of districts.

Table 4.18: Details of the Monitoring Organizations for ICT Scheme

Particulars	DIOS Office	D.C.	Total
Urban Districts-3	26(86.67)	4(13.33)	30(100)
Rural Districts-3	23(76.67)	7(23.33)	30(100)
High Tele - Density Districts-3	30(100)	0(0.00)	30(100)
Districts Lower Tele – Density-3	26(86.67)	4(13.33)	30 (100)
Districts Characterized as backward by the state-3	24(80.00)	6(20.00)	30 (100)
Electricity Problems Districts-3	30(100)	0(0.00)	30 (100)
All Sample Districts-18	159(88.33)	21(11.67)	180 (100)

Source- Based on field survey

Awareness of Head Teachers about ICT Programme

As revealed by Table 4.19, the heads of institutions who happen to be immediate implementing officers of the ICT programme have been made aware of the programme during staff meeting only and this had happened with head teachers of more than 96 percent of sample schools and is alike in all schools located in all categories of districts, viz., rural, urban, backward, with electricity problem and with low tele density. Not a single workshop was conducted and there had not been any documentation of sessions and feedback about the programme from staff in 98 percent of sample schools which is an indication of administrative lacunae and poor implementation design rather than the poor infrastructure or backwardness of the area.

Table 4.19: Awareness among Head Teachers about the Program, Infrastructure, SLA, Syllabus for ICT

Particulars	Awareness during staff meet	Special workshop conducted	Are the sessions documented?	Was any feedback taken from the staff?	Was there any helpdesk/team created for follow-up	Total
Urban Districts-3	29 (96.67)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
Rural Districts-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
High Tele - Density District-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
Lower Tel - Density District-3	29 (96.67)	1 (3.33)	1 (100.0)	1 (100.0)	0 (0.00)	30 (100.00)
District Characterized as backward by the state-3	29 (96.67)	1 (3.33)	1 (100.0)	1 (100.0)	0 (0.00)	30 (100.00)
Electricity Problems District-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
All sample districts-18	177 (98.33)	2 (1.11)	2 (100.0)	2 (100.0)	0 (0.00)	180 (100.00)

Source- Based on field survey

Although other subject teachers would not have been directly involved in computer training but their awareness about the programme may have a certainly indirect benefit. But data reveals that in all categories of schools other subject specific teachers have been kept almost aloof and in 98.33 per cent sample schools teachers introduction to programme had been limited to staff meeting only. Although teachers in some schools have been introduced to programme through workshops also but their percentage is dismally low at only around 1 per cent . In two schools where workshops were conducted sessions were documented also and feedback was taken from the staff (Table 4.20).

Table 4.20: Awareness of Subject Teachers about Program, Infrastructure, SLA, Syllabus for ICT

Particulars	Awareness during staff meet	Special workshop conducted	Are the sessions documented?	Was any feedback taken from the staff?	Was these any helpdesk/ team created for fellow-up	Total
Urban Districts-3	29 (96.67)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
Rural Districts-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
High Tele - Density District-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
Lower Tel - Density District-3	29 (96.67)	1 (3.33)	1 (100.0)	1 (100.0)	0 (0.00)	30 (100.00)
District Characterized as backward by the state-3	29 (96.67)	1 (3.33)	1 (100.0)	1 (100.0)	0 (0.00)	30 (100.00)
Electricity Problems District-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)
All sample districts-18	177 (98.33)	2 (1.11)	2 (100.0)	2 (100.0)	0 (0.00)	180 (100.00)

Source- Based on field survey

ICT Content and E- Content

More than 86 percent schools obtained subject based e-content and ICT based e-contents which were obtained by all the schools through third party. The coverage of ICT syllabus through e-content has been in all schools. However, coverage of other subjects like language, social science and math has been only 86 percent. All e-contents were approved and validated by the school Boards in case of all such schools (Table 4.21).

Table 4.21: Type of ICT Content and E- Content for Other Subjects Used in School Curriculum

Particulars	Obtained Free from third party				Approved validated by school board				Total No. of Schools
	E-Content		Subject Coverage		E-Content		Subject Coverage		
	ICT Base	Subject Based	ICT Syllabus	Language , Social Science, Math	ICT Base	Subject Based	ICT Base	Language , Social Science, Math	
Urban Districts-3	30 (100.0)	23 (76.67)	30 (100.0)	23 (76.67)	30 (100.0)	23 (76.67)	30 (100.0)	23 (76.67)	30 (100.0)
Rural Districts-3	30 (100.0)	25 (83.33)	30 (100.0)	25 (83.33)	30 (100.0)	25 (83.33)	30 (100.0)	25 (83.33)	30 (100.0)
High Tele - Density District-3	30 (100.0)	24 (80.00)	30 (100.0)	24 (80.00)	30 (100.0)	24 (80.00)	30 (100.0)	24 (80.00)	30 (100.0)
Lower Tel - Density District-3	30 (100.0)	30 (100.00)	30 (100.0)	30 (100.00)	30 (100.0)	30 (100.00)	30 (100.0)	30 (100.00)	30 (100.0)
District Characterized as backward by the state-3	30 (100.0)	29 (96.67)	30 (100.0)	29 (96.67)	30 (100.0)	29 (96.67)	30 (100.0)	29 (96.67)	30 (100.0)
Electricity Problems District-3	30 (100.0)	24 (80.00)	30 (100.0)	24 (80.00)	30 (100.0)	24 (80.00)	30 (100.0)	24 (80.00)	30 (100.0)
All sample districts-18	180 (100.0)	155 (86.11)	180 (100.0)	155 (86.11)	180 (100.0)	155 (86.11)	180 (100.0)	155 (86.11)	180 (100.0)

Source- Based on field survey

There has been regular use of ICT based e-content in school curriculum in over 52 percent sample schools. The use of ICT content has been reported to be regular in maximum urban districts and in districts with low tele density.

The application of ICT based content has been need based in over 9 percent schools only. It is used often in 28 percent and sometimes in 8 percent schools. In above 2 percent schools, there has not been any use of ICT based content for ICT teaching (Table 4.22).

Table 4.22: Frequency and Nature of ICT Based Content and E-Content Used in School Curriculum

Particulars	Regular	According to need	Often	Some Time	No use	Total
Urban Districts-3	19 (63.33)	2 (6.67)	8 (26.67)	1 (3.33)	0 (0.00)	30 (100.00)
Rural Districts-3	12 (40.00)	5 (16.67)	10 (33.33)	3 (10.00)	0 (0.00)	30 (100.00)
High Tele - Density District-3	17 (56.67)	1 (3.33)	10 (33.33)	0 (0.00)	2 (6.67)	30 (100.00)
Lower Tel - Density District-3	20 (66.67)	2 (6.67)	8 (26.67)	0 (0.00)	0 (0.00)	30 (100.00)
District Characterized as backward by the state-3	12 (40.00)	0 (0.00)	13 (43.33)	3 (10.00)	2 (6.67)	30 (100.00)
Electricity Problems District-3	14 (46.67)	7 (23.33)	2 (6.67)	7 (23.33)	0 (0.00)	30 (100.00)
All sample districts-18	94 (52.22)	17 (9.44)	51 (28.33)	14 (7.78)	4 (2.22)	180 (100.00)

Source- Based on field survey

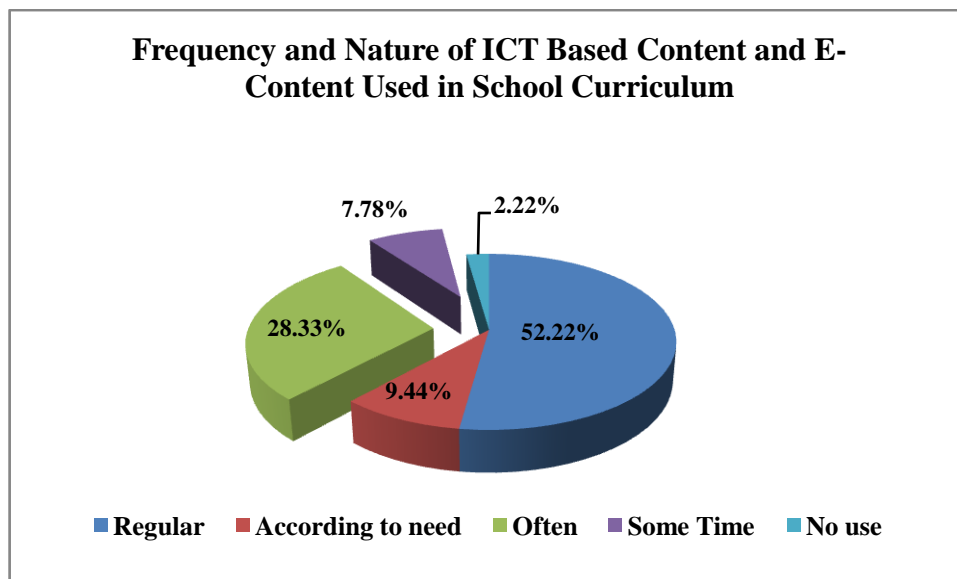
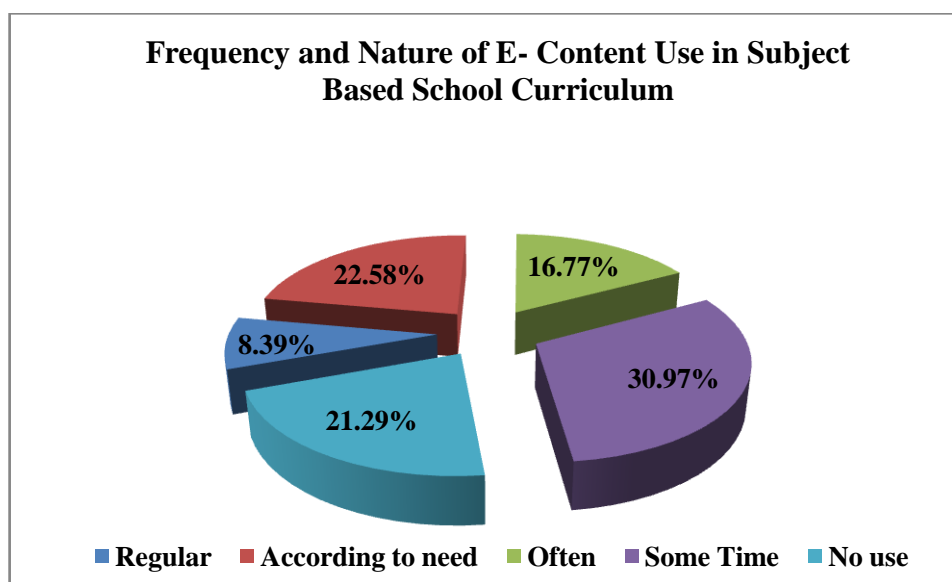


Table 4.23 reveals that in 31 percent schools subject based e-content is used sometimes and in only over 8 per cent schools its use is found to be a regular feature. Highest percentage of schools (48 percent) in rural districts followed by 35 in urban districts have been using subject with e-content according to the need. Thus, in higher percent of rural schools, use of subject-wise e-content has been found need based. In more than 29 percent schools, across the districts, there has not been any use of subject-wise e-content.

Table 4.23: Frequency and Nature of E- Content Use in Subject Based School Curriculum

Particulars	Regular	According to need	Often	Some Time	No use	Total
Urban Districts-3	0 (0.00)	8 (34.78)	9 (39.13)	6 (26.09)	0 (0.00)	23 (100.00)
Rural Districts-3	0 (0.00)	12 (48.00)	3 (12.00)	8 (32.00)	2 (8.00)	25 (100.00)
High Tele - Density District-3	1 (4.17)	2 (8.33)	8 (33.33)	5 (20.83)	8 (33.33)	24 (100.00)
Lower Tel - Density District-3	12 (40.00)	2 (6.67)	0 (0.00)	5 (16.67)	11 (36.67)	30 (100.00)
District Characterized as backward by the state-3	0 (0.00)	4 (13.79)	1 (3.45)	15 (51.72)	9 (31.03)	29 (100.00)
Electricity Problems District-3	0 (0.00)	7 (29.17)	5 (20.83)	9 (37.50)	3 (12.50)	24 (100.00)
All sample districts-18	13 (8.39)	35 (22.58)	26 (16.77)	48 (30.97)	33 (21.29)	155 (100.00)

Source- Based on field survey



Impact of ICT on Teachers

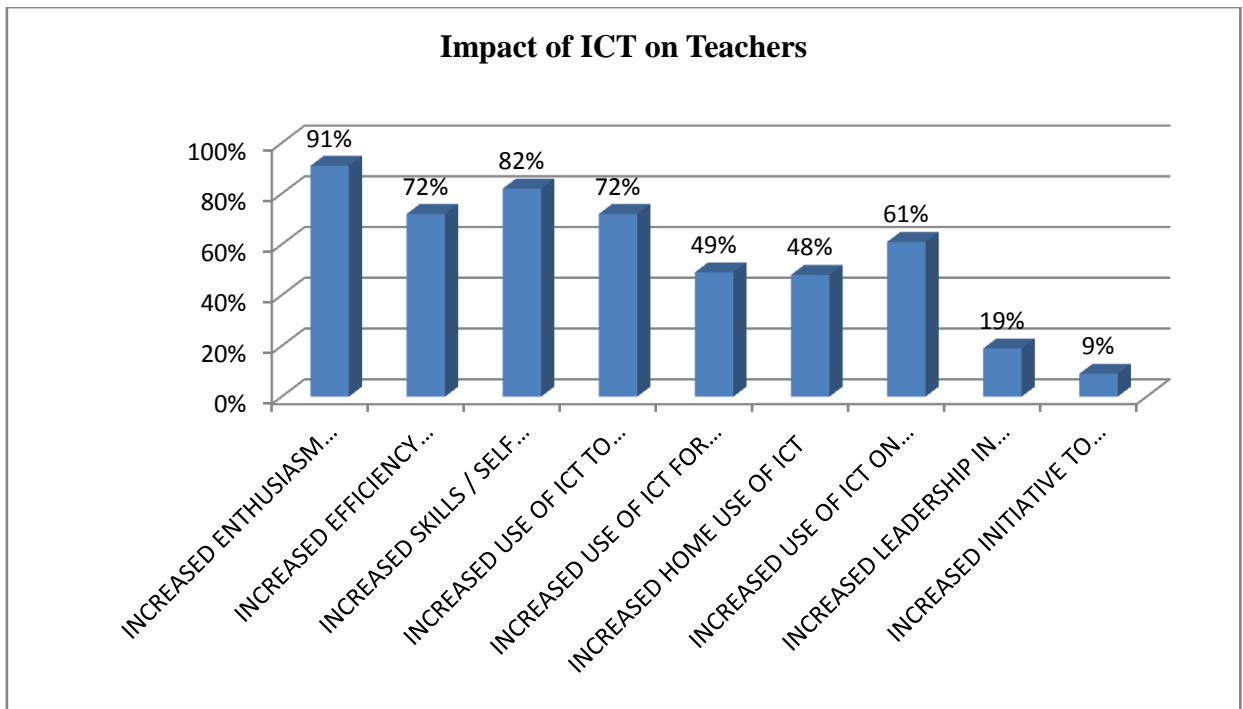
The main thrust of the study is to find out the impact of information communication technology on schoolteachers. Over 90 percent head teachers of total selected sample school have reported that use of ICT have increased the enthusiasm and confidence level of teachers which is maximum (96.67 percent) in urban districts and minimum (76.67 percent) in districts which are characterized as backward by the state (Table 4.24).

Around 60 to 82 percent of the head teachers have reported that ICT have led to increased use of ICT in teachers mobiles, in their learning process, increasing collaboration/ planning and developing skills among teachers. Over 48 to 49 percent of the head teachers reported that the teachers have started using ICT in their homes and also for self assessment. However, the impact of ICT on teachers in terms of leadership in ICT related discussions and initiatives on collaborative efforts between schools have been reported to be quite low.

Table 4.24: Impact of ICT on Teachers

Particulars	Increase d enthusia sm and Confide nce	Increase d efficien cy /collabo ration /plannin g	Increase d skills / self develo pment drive	Increase d use of ICT to plan enhance Learning process in classroo m/attenti on/behavi or / attendanc e	Increase d use of ICT for assess ment	Increase d home use of ICT	Increase d use of ICT on mobile devices	Increase d leadership in ICT related discussion s/ forum	Increase d initiative to collaborat e between schools	Total
Urban Districts-3	29 (96.67)	19 (63.33)	28 (93.33)	23 (76.67)	15 (50.00)	17 (56.67)	20 (66.67)	4 (13.33)	2 (6.67)	30 (100.00)
Rural Districts-3	27 (90.00)	20 (66.67)	25 (83.33)	20 (66.67)	16 (53.33)	18 (60.00)	17 (56.67)	7 (23.33)	3 (10.00)	30 (100.00)
High Tele Density-3	27 (90.00)	18 (60.00)	23 (76.67)	19 (63.33)	14 (46.67)	17 (56.67)	26 (86.67)	8 (26.67)	1 (3.33)	30 (100.00)
Low Tele Density-3	29 (96.67)	21 (70.00)	25 (83.33)	19 (63.33)	15 (50.00)	16 (53.33)	18 (60.00)	8 (26.67)	7 (23.33)	30 (100.00)
Characterized as backward by State-3	23 (76.67)	24 (80.00)	24 (80.00)	23 (76.67)	13 (43.33)	14 (46.67)	21 (70.00)	6 (20.00)	3 (10.00)	30 (100.00)
Districts with Electricity Problems- 3	28 (93.33)	28 (93.33)	23 (76.67)	25 (83.33)	16 (53.33)	5 (16.67)	7 (23.33)	2 (6.67)	0 (0.00)	30 (100.00)
Total Sample Districts-18	163 (90.56)	130 (72.22)	148 (82.22)	129 (71.67)	89 (49.44)	87 (48.33)	109 (60.56)	35 (19.44)	16 (8.89)	180 (100.00)

Source- Based on field survey



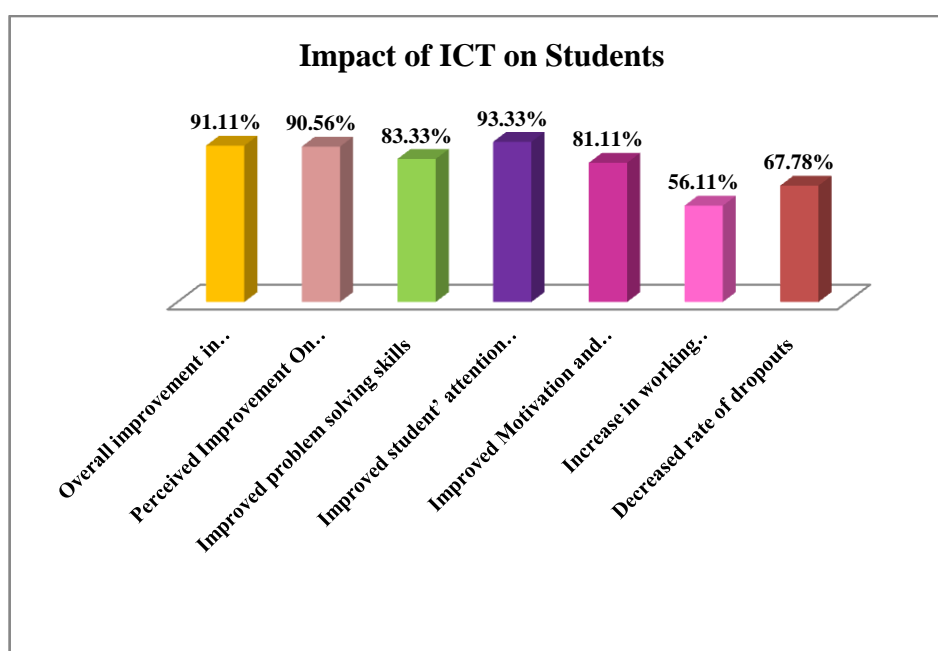
Impact of ICT on Students

The analysis of impact of ICT on students is very essential, because this programme will get its' final approval only if it leaves good impact on students. Maximum 93.93 percent head of schools replied that presence of ICT has "Improved student's attention/ behavior/attendance" after getting the computers. This percentage is good in Urban districts and in rural districts i.e. 96.67 percent of their respective selected schools of the districts. The head teachers also expanded that the ICT has increased the "Overall improvement in student's subject related performance", in 91.11 percent sample schools. In 90.56 percent schools, head teachers have perceived improvement on learning outcomes among students. The "Decreased rate of dropouts" point is also important according to 68 percent teachers. Attraction for computer learning among students may also decrease the dropout rate. In 93.33 percent schools of urban districts the maximum decrease in dropouts was reported. Over 56 percent school teachers have reported "Increase in working collaboratively with peers" as an outcome of ICT use in schools (Table 4.25).

Table 4.25: Impact of ICT on Students

Particulars	Overall improvement in student's subject related performance	Perceived Improvement On learning outcomes	Improved problem solving skills	Improved student' attention /behavior /attendance	Improved Motivation and engagement with studies	Increase in working collaboratively with peers	Decrease d rate of dropouts	Total
Urban Districts -3	29 (96.67)	29 (96.67)	27 (90.00)	29 (96.67)	24 (80.00)	10 (33.33)	28 (93.33)	30 (100)
Rural Districts -3	28 (93.33)	27 (90.00)	25 (83.33)	29 (96.67)	25 (83.33)	20 (66.67)	15 (50.00)	30 (100)
High Tele Density-3	26 (86.67)	27 (90.00)	26 (86.67)	28 (93.33)	25 (83.33)	17 (56.67)	23 (76.67)	30 (100)
Low Tele Density-3	28 (93.33)	29 (96.67)	24 (80.00)	26 (86.67)	24 (80.00)	14 (46.67)	18 (60.00)	30 (100)
Characterized as Backward by the State-3	23 (76.67)	23 (76.67)	24 (80.00)	28 (93.33)	24 (80.00)	18 (60.00)	20 (66.67)	30 (100)
Districts with electricity Problems-3	30 (100)	28 (93.33)	24 (80.00)	28 (93.33)	24 (80.00)	22 (73.33)	18 (60.00)	30 (100)
Total Sample districts-18	164 (91.11)	163 (90.56)	150 (83.33)	168 (93.33)	146 (81.11)	101 (56.11)	122 (67.78)	180 (100)

Source- Based on field survey



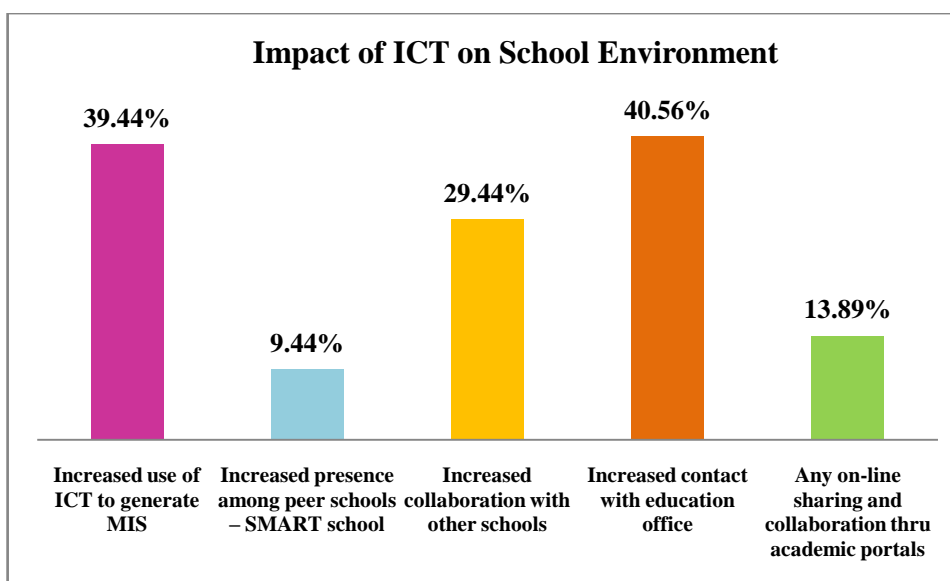
Impact of ICT on School Environment

The introduction of ICT programme in the school system has been instrumental to some extent in improving the school environment in terms of increased teaching, learning and collaborative efficiencies among the school stakeholders. Table 4.26 indicates that 40.56 percent head of schools responded that presence of ICT has "increased contact with education office" after getting the computers through ICT. This effect is maximum in rural districts i.e. 56.67 percent of their respective selected schools of the districts. The head teachers also explained that the ICT has increased the "use of ICT to generate MIS ", in 39.44 percent sample schools. In 29.44 percent schools, head teachers have perceived increased collaboration with other schools. Over 9.44 percent head teachers have also reported increased presence among peer schools – SMART school after started ICT programme.

Table 4.26: Impact of ICT on School Environment

Particulars	Increased use of ICT to generate MIS	Increased presence among peer schools – SMART school	Increased collaboration with other schools	Increased contact with education office	Any on-line sharing and collaboration thru academic portals	Total
Urban Districts-3	23 (76.67)	7 (23.33)	14 (46.67)	13 (43.33)	6 (20.00)	30 (100)
Rural Districts-3	10 (33.33)	2 (6.67)	7 (23.33)	17 (56.67)	7 (23.33)	30 (100)
High Tele Density-3	14 (46.67)	3 (10.00)	9 (30.00)	8 (26.67)	5 (16.67)	30 (100)
Low Tele Density-3	10 (33.33)	2 (6.67)	8 (26.67)	6 (20.00)	2 (6.67)	30 (100)
Characterized as Backward by the State-3	8 (26.67)	1 (3.33)	5 (16.67)	10 (33.33)	3 (10.00)	30 (100)
Districts with electricity Problems-3	6 (20.00)	2 (6.67)	10 (33.33)	7 (23.33)	2 (6.67)	30 (100)
Total Sample districts-180	71 (39.44)	17 (9.44)	53 (29.44)	73 (40.56)	25 (13.89)	180 (100)

Source- Based on field survey

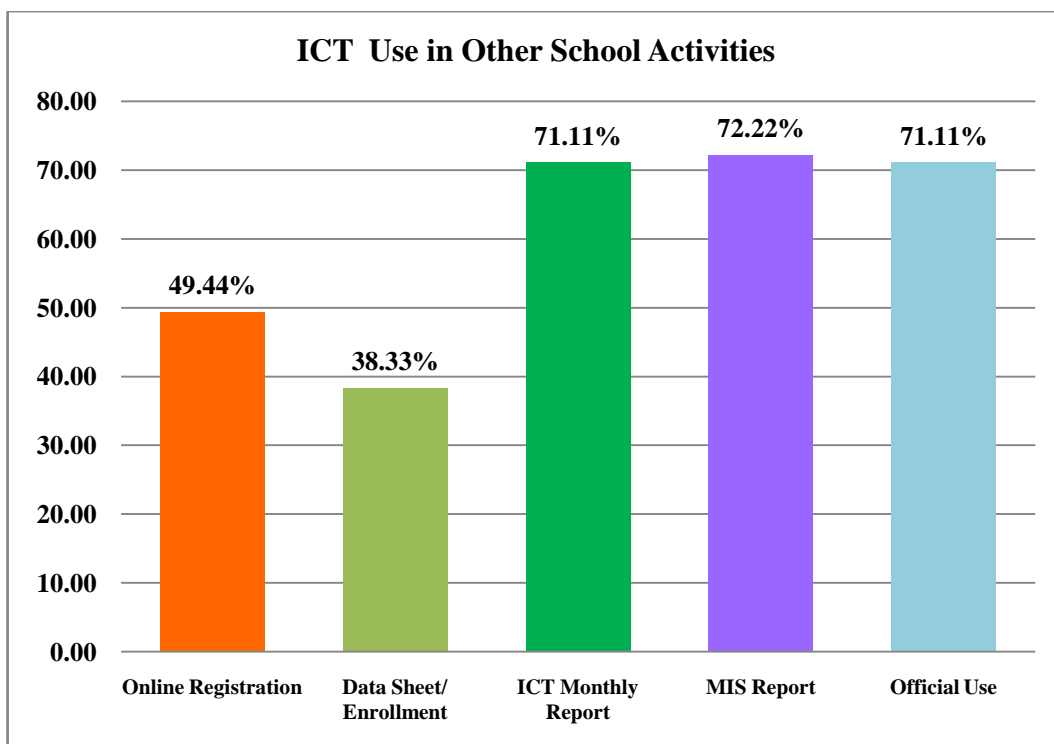


The maximum use of ICT in other teaching activities is seen in maximum 71 to 72 percent schools for preparing monthly ICT report and MIS report respectively. In 71 percent school ICT is used for other official purposes. In more than 38 percent to 50 percent schools, ICT has been used for online registration and also for preparing enrollment data sheet. Thus, ICT use has been prevalent in most of the schools for the activities other than teaching (Table-4.27).

Table 4.27: ICT Use in Other School Activities

Particulars	Online Registration	Data Sheet/ Enrollment	ICT Monthly Report	MIS Report	Official Use	Total no. of School
Urban Districts-3	19 (63.33)	20 (66.67)	26 (86.67)	28 (93.33)	23 (76.67)	30 (100.00)
Rural Districts-3	11 (36.67)	18 (60.00)	20 (66.67)	25 (83.33)	15 (50.00)	30 (100.00)
High Tele - Density District-3	18 (60.00)	19 (63.33)	26 (86.67)	26 (86.67)	26 (86.67)	30 (100.00)
Lower Tel - Density District-3	12 (40.00)	3 (10.00)	19 (63.33)	19 (63.33)	23 (76.67)	30 (100.00)
District Characterized as backward by the state-3	15 (50.00)	5 (16.67)	18 (60.00)	15 (50.00)	22 (73.33)	30 (100.00)
Electricity Problems District-3	14 (46.67)	4 (13.33)	19 (63.33)	17 (56.67)	19 (63.33)	30 (100.00)
All sample districts-18	89 (49.44)	69 (38.33)	128 (71.11)	130 (72.22)	128 (71.11)	180 (100.00)

Source- Based on field survey



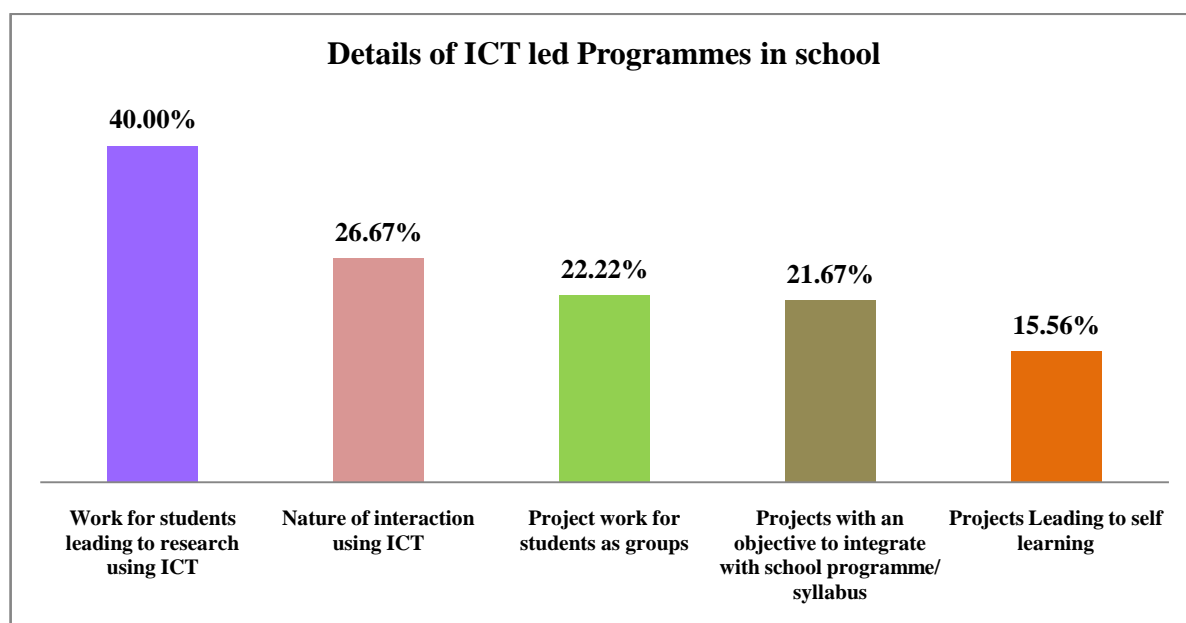
Details of ICT led programs in schools is as follows, " work for students leading to research using ICT " has been highest reported by 72 respondent head teachers constituting 40 percentage of all selected sample schools. The head teacher stated that "interaction using ICT" in context of ICT led programme in schools is found in only 26.67 percent of total sample schools. Nevertheless, the impact of ICT programme in self-learning is also not so good according to overall responses (Table-4.28).

However, ICT programme led to project work among every student groups and projects were integrated with schools' programmes according to head teachers is about 22 percent schools. Thus, the ICT programme has been able for mobilizing different categories of stakeholders for improving their efficiency in the schools under consideration.

Table 4.28: Details of ICT led Programmes in school.

Particulars	Work for students leading to research using ICT	Nature of interaction using ICT	Project work for students as groups	Projects with an objective to integrate with school programme/ syllabus	Projects Leading to self learning	Total
Urban Districts-3	9 (30.00)	4 (13.33)	4 (13.33)	2 (6.67)	2 (6.67)	30 (100.00)
Rural Districts-3	11 (36.67)	10 (33.33)	6 (20.00)	10 (33.33)	12 (40.00)	30 (100.00)
High Tele Density-3	14 (46.67)	10 (33.33)	5 (16.67)	5 (16.67)	2 (6.67)	30 (100.00)
Low Tele Density-3	3 (10.00)	1 (3.33)	5 (16.67)	3 (10.00)	0 (0.00)	30 (100.00)
Characterized as Backward by the State-3	14 (46.67)	8 (26.67)	6 (20.00)	0 (0.00)	0 (0.00)	30 (100.00)
Districts with electricity Problems-3	21 (70.00)	15 (50.00)	14 (46.67)	19 (63.33)	12 (40.00)	30 (100.00)
Total Sample districts-18	72 (40.00)	48 (26.67)	40 (22.22)	39 (21.67)	28 (15.56)	180 (100.00)

Source- Based on field survey



Teachers' Capabilities in ICT

For the development of teaching capability in ICT among teachers, only over 50 percent teachers have attended computer based awareness programme. Only 26 percent and 23 percent teachers have got functional training and CAL software respectively. The nature of training included hands on, theory and both. The training has been found to be helpful in developing have capability skill, intermediate level skills and also advanced skills. But there

benefits were availed by only limited number of teachers who have undergone ICT training programmes (Table 4.29).

Table 4.29: Teachers' Capabilities in ICT in Schools

Particulars	Training Programme Attended			Nature of Training			Scope			Total Number Of Teacher
	Computer Basis Awareness Program	Computer Education and Functional Training	CAL Software and Computer Fundamental Training Program	Hands On	Theory	Both	Basic skills	Intermediate skills	Advanced skills	
Urban Districts-3	100 (57.80)	47 (27.17)	26 (15.03)	72 (41.62)	52 (30.06)	49 (28.32)	69 (39.88)	50 (28.90)	54 (31.21)	173 (100)
Rural Districts-3	115 (44.23)	69 (26.54)	76 (29.23)	65 (25.00)	44 (16.92)	151 (58.08)	154 (59.23)	85 (32.69)	21 (8.08)	260 (100)
High Tele - Density District-3	78 (44.57)	56 (32.00)	41 (23.43)	31 (17.71)	28 (16.00)	116 (66.29)	141 (80.57)	25 (14.29)	9 (5.14)	175 (100)
Lower Tel - Density District-3	82 (45.56)	64 (35.56)	34 (18.89)	44 (24.44)	53 (29.44)	83 (46.11)	78 (43.33)	82 (45.56)	20 (11.11)	180 (100)
District Characterized as backward by the state-3	75 (63.03)	12 (10.08)	32 (26.89)	67 (56.30)	7 (5.88)	45 (37.82)	93 (78.15)	20 (16.81)	6 (5.04)	119 (100)
Electricity Problems District-3	107 (55.15)	43 (22.16)	44 (22.68)	100 (51.55)	32 (16.49)	62 (31.96)	151 (77.84)	23 (11.86)	20 (10.31)	194 (100)
All sample districts-18	557 (50.59)	291 (26.43)	253 (22.98)	379 (34.42)	216 (19.62)	506 (45.96)	686 (62.31)	285 (25.89)	130 (11.81)	1101 (100)

Source- Based on field survey

For maximum number of teachers (44.69 percent) average duration of training programmes was up to 10 days but for 46.86 percent teachers of high tele density schools this was only up to 5 days. In case of 35.56 percent of schoolteachers in low tele density schools duration of programmes was up to 15 days. Over all in 43.42 percent cases, basic computer fundamentals were covered and MS office was covered in only 25.52 per cent schools. Further, Only 19.62 percent school in rural areas covered MS office in training programmes (Table 4.30).

Thus, the coverage of ICT usage in different subject teaching under teachers capability programme was quite low. It ranged only from about 22 percent to 28 percent schoolteachers.

Table 4.30: Duration of Teachers' Capabilities Programmes in ICT

Particulars	Duration			Coverage-Broad topics			ICT usage-subjects covered				Number Of Teacher
	Up to 5 days	Up to 10 days	Up to 15 days	Computer Fundamentals and ICT Topic	CAL Software	MS Office	Math	Science	Social Science	Language	
Urban Districts-3	52 (30.06)	69 (39.88)	52 (30.06)	76 (43.93)	44 (25.43)	53 (30.64)	53 (30.64)	42 (24.28)	62 (35.84)	16 (9.25)	173 (100)
Rural Districts-3	108 (41.54)	127 (48.85)	25 (9.62)	125 (48.08)	84 (32.31)	51 (19.62)	70 (26.92)	57 (21.92)	68 (26.15)	65 (25.00)	260 (100)
High Tele - Density District-3	82 (46.86)	83 (47.43)	10 (5.71)	69 (39.43)	70 (40.00)	36 (20.57)	32 (18.29)	35 (20.00)	51 (29.14)	57 (32.57)	175 (100)
Lower Tel - Density District-3	53 (29.44)	63 (35.00)	64 (35.56)	73 (40.56)	41 (22.78)	66 (36.67)	49 (27.22)	65 (36.11)	46 (25.56)	20 (11.11)	180 (100)
District Characterized as backward by the state-3	32 (26.89)	66 (55.46)	21 (17.65)	54 (45.38)	38 (31.93)	27 (22.69)	28 (23.53)	30 (25.21)	29 (24.37)	32 (26.89)	119 (100)
Electricity Problems District-3	89 (45.88)	84 (43.30)	21 (10.82)	81 (41.75)	65 (33.51)	48 (24.74)	44 (22.68)	45 (23.20)	55 (28.35)	50 (25.77)	194 (100)
All sample districts-18	416 (37.78)	492 (44.69)	193 (17.53)	478 (43.42)	342 (31.06)	281 (25.52)	276 (25.07)	274 (24.89)	311 (28.25)	240 (21.80)	1101 (100)

Source- Based on field survey

Computer Access for Teachers and Students

Students and to some extent teachers in selected sample schools find them satisfied in terms of computer usage. In all the selected sampled districts head teachers have reported about the 100 percent regular computer classes as per school time table. Over 97 percent head teachers reported that students have access to the school's computers in all sampled districts. However, only 55 percent head teachers have reported that their teachers have access of internet in school (Table-4.31).

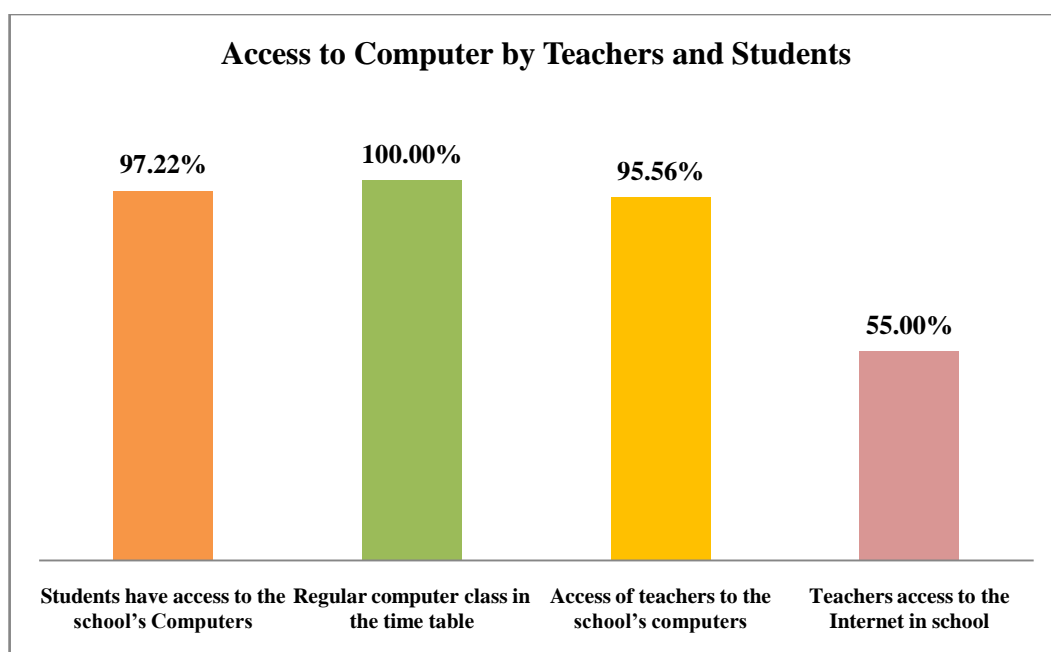
It is clearly visible that Students have access to the school's computers which is 100 percent in rural districts, district with high tele-density and districts with low tele-density.

In case of internet access by the teachers, in urban district about 77 percent teachers are using the same. Very low Teacher's access (37 percent) to the internet is reported in districts having electricity problems.

Table 4.31: Access to Computer by Teachers and Students

Particulars	Students have access to the school's Computers	Regular computer class in the time table	Access of teachers to the school's computers	Teachers access to the Internet in school	Total
Urban Districts-3	27 (90.00)	30 (100.00)	28 (93.33)	23 (76.67)	30 (100.00)
Rural Districts-3	30 (100.00)	30 (100.00)	28 (93.33)	19 (63.33)	30 (100.00)
District with High Tele – Density-3	30 (100.00)	30 (100.00)	29 (96.67)	16 (53.33)	30 (100.00)
Districts with Low Tele density-3	30 (100.00)	30 (100.00)	30 (100.00)	15 (50.00)	30 (100.00)
Districts Characterized as backward by the State-3	29 (96.67)	30 (100.00)	28 (93.33)	15 (50.00)	30 (100.00)
Districts with Electricity Problems-3	29 (96.67)	30 (100.00)	29 (96.67)	11 (36.67)	30 (100.00)
Total Sample districts-18	175 (97.22)	180 (100.00)	172 (95.56)	99 (55.00)	180 (100.00)

Source- Based on field survey



Accessibility to internet is poor both for teachers as well as students after school hours. About 99 percent of teachers and students have no access to internet after

school hours indicating their high dependence on schools for this facility (Table 4.32).

Table 4.32: Use of ICT Facilities After School Hours.

Particulars	Teachers have access to the use of ICT facilities after school hours				Students have access to the use of ICT facilities after school hours				Total No. of schools
	No, they are never accessible	They are sometimes accessible	They are always accessible	They are accessible for a fee	No, they are never accessible	They are sometimes accessible	They are always accessible	They are accessible for a fee	
Urban Districts-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100)
Rural Districts-3	28 (93.33)	2 (6.67)	0 (0.00)	0 (0.00)	29 (96.67)	1 (3.33)	0 (0.00)	0 (0.00)	30 (100)
High Tele - Density District-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100)
Lower Tel - Density District-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100)
District Characterized as backward by the state-3	29 (96.67)	1 (3.33)	0 (0.00)	0 (0.00)	29 (96.67)	1 (3.33)	0 (0.00)	0 (0.00)	30 (100)
Electricity Problems District-3	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	30 (100)
All sample districts-18	177 (98.33)	3 (1.67)	0 (0.00)	0 (0.00)	178 (98.89)	2 (1.11)	0 (0.00)	0 (0.00)	180 (100)

Source- Based on field survey

Use of Computer in School Teaching

As per Table 4.33, 100 percent schools in the total selected sample schools are providing basic computer knowledge as a separate subject to their student that is very useful to them. 69.44 percent head teachers of the selected sample schools also stated that computer is an elective subject and according to about 69 percent it is integrated with other subjects. In 62 percent schools, head teachers reported that computer as a subject is integrated with elective subjects of the curriculum.

Table 4.33: ICT Computer Course in School

Particulars	As a separate Subject (Basic)	Integrated with other subjects	Elective subject	Integrated with elective subject	Total
Urban Districts-3	30 (100.00)	25 (83.33)	29 (96.67)	20 (66.67)	30 (100.00)
Rural Districts-3	30 (100.00)	18 (60.00)	23 (76.67)	24 (80.00)	30 (100.00)
District with High Tele – Density-3	30 (100.00)	19 (63.33)	23 (76.67)	23 (76.67)	30 (100.00)
Districts with Lower Tele – density-3	30 (100.00)	24 (80.00)	10 (33.33)	5 (16.67)	30 (100.00)
Districts Characterized as backward by the State-3	30 (100.00)	15 (50.00)	19 (63.33)	19 (63.33)	30 (100.00)
Districts with Electricity Problems-3	30 (100.00)	23 (76.67)	21 (70.00)	20 (66.67)	30 (100.00)
Total Sample districts-18	180 (100.00)	124 (68.89)	125 (69.44)	111 (61.67)	180 (100.00)

Source- Based on field survey

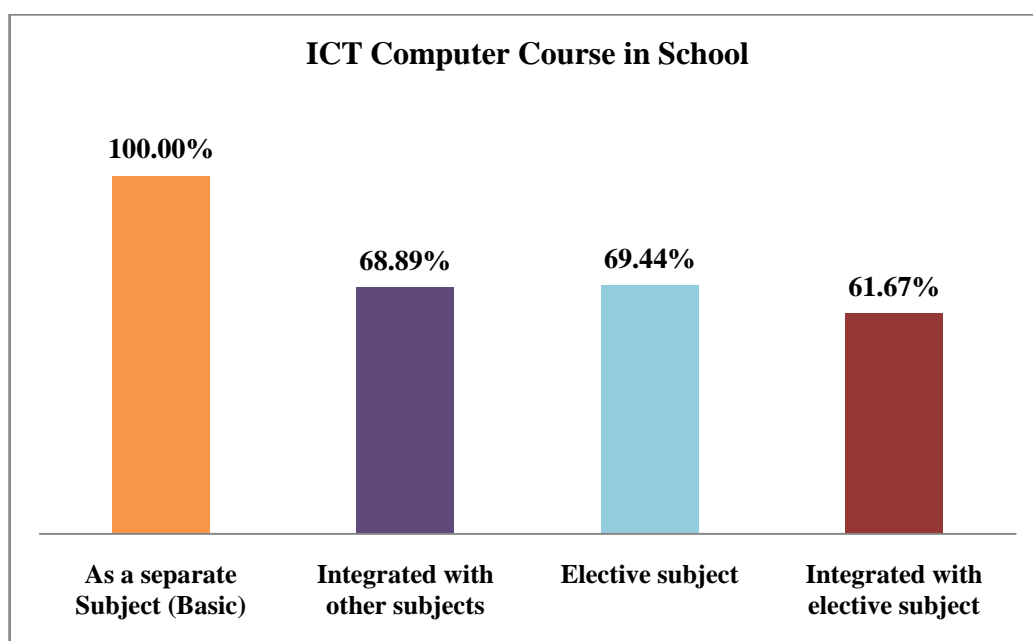


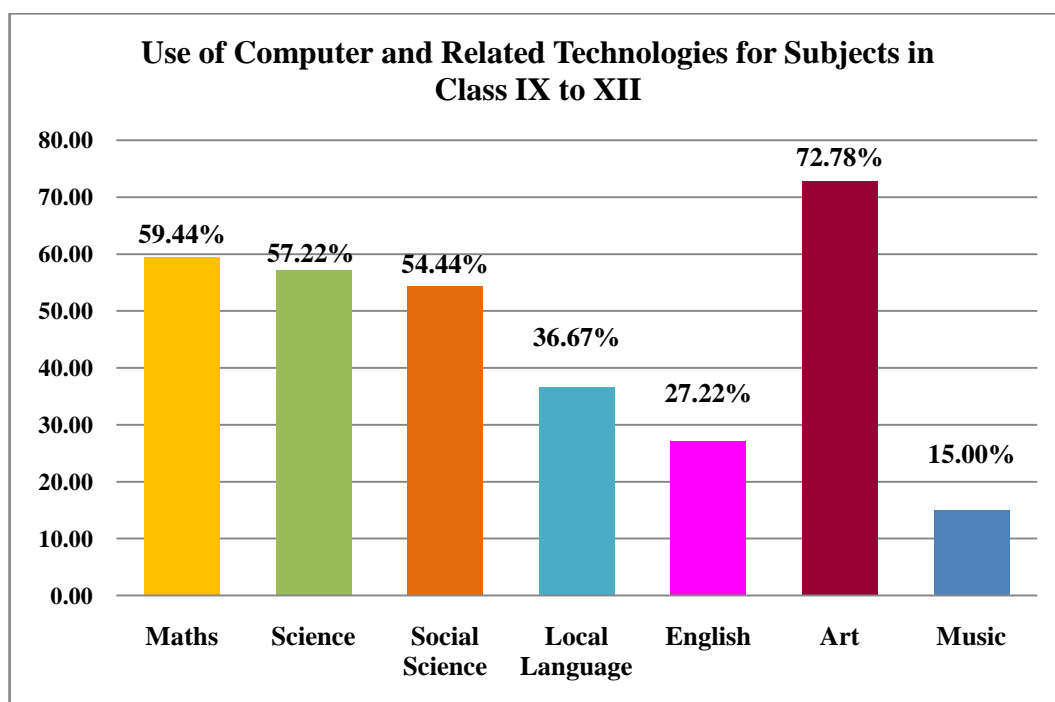
Table 4.34 shows that ICT as a separate subject is mainly related to basic computer course which is offered by all the schools under consideration. The computer is mostly used in Art subjects in about 73 percent schools. In case of Maths, the use of computer is in 59.44 percent schools. For other subjects like in Science 57.22 percent and in English 27.22 percent schools use computer and related technologies. Some active teachers also download the study material

from internet by mobiles or schools internet. The percentage of computer use is reported to be very low in music, which is only in 15 percent schools.

Table 4.34: Use of Computer and Related Technologies for Subjects in Class IX to XII

Particulars	ICT-as a Separate Subject (Basic)	Maths	Science	Social Science	Local Language	English	Art	Music
Urban Districts-3	30 (100.00)	23 (76.67)	24 (80.00)	25 (83.33)	13 (43.33)	10 (33.33)	13 (43.33)	4 (13.33)
Rural Districts-3	30 (100.00)	20 (66.67)	20 (66.67)	19 (63.33)	16 (53.33)	7 (23.33)	27 (90.00)	3 (10.00)
High Tele Density-3	30 (100.00)	21 (70.00)	20 (66.67)	16 (53.33)	12 (40.00)	9 (30.00)	22 (73.33)	4 (13.33)
Low Tele Density-3	30 (100.00)	18 (60.00)	14 (46.67)	12 (40.00)	7 (23.33)	8 (26.67)	20 (66.67)	7 (23.33)
Characterized as Backward by the State-3	30 (100.00)	12 (40.00)	12 (40.00)	14 (46.67)	6 (20.00)	4 (13.33)	22 (73.33)	4 (13.33)
Districts with electricity Problems-3	30 (100.00)	13 (43.33)	13 (43.33)	12 (40.00)	12 (40.00)	11 (36.67)	27 (90.00)	5 (16.67)
Total Sample districts-18	180 (100.00)	107 (59.44)	103 (57.22)	98 (54.44)	66 (36.67)	49 (27.22)	131 (72.78)	27 (15.00)

Source- Based on field survey



Purposes of ICT Use in schools

As presented in Table 4.35, it is seen that in 95.56 percent of the selected sample schools as per reporting of the school head teachers, learning new things or at teaching learning enrichment is obtained as a result of ICT programme. In 71 percent cases ICT materials are

used as teaching/learning tool for teaching specific subjects. Urban districts are on top in this respect with 83.33 percent.

Around 51 to 58 percent head teachers of the total selected sample schools reported that they are being helped with school administration followed by communication with other modes like e-mail and Finding/accessing information & researching through Internet.

70 percent head teachers reported that regular instruction and training for development computer skills is provided to the total selected sample schools and 35 percent schools use computers to play game and also for recreation.

According to our survey, "Tracking of pupil/student performance level, instructional objective mastered, instructional objectives currently active and suggested instructional activities" were least effective in this area as only in 28 percent for all the schools use of these was reported.

Table 4.35: Purposes of ICT Use in schools

Particulars	Learning new thing or learning enrichment	Remedial Teaching	Regular instruction and training for development computer	Finding/accessing information & researching through Internet	Communicating with others(email etc.)	As teaching/ learning tool for teaching specific subject	Development of logic, reasoning , critical thinking& problem	Development of ability to use basic application programs	For playing games and fun	Helping with school administrator	Using in test administration, scoring and analysis	Tracking of pupil/student performance level, instructional objective mastered instructional objectives currently active.&	Total
Urban Districts-3	29 (96.67)	25 (83.33)	28 (93.33)	20 (66.67)	19 (63.33)	25 (83.33)	19 (63.33)	26 (86.67)	11 (36.67)	18 (60.00)	12 (40.00)	8 (26.67)	30 (100)
Rural Districts-3	30 (100.00)	17 (56.67)	19 (63.33)	19 (63.33)	17 (56.67)	23 (76.67)	5 (16.67)	14 (46.67)	10 (33.33)	14 (46.67)	10 (33.33)	7 (23.33)	30 (100)
High Tele Density-3	28 (93.33)	20 (66.67)	20 (66.67)	15 (50.00)	12 (40.00)	19 (63.33)	1 (3.33)	23 (76.67)	9 (30.00)	17 (56.67)	11 (36.67)	7 (23.33)	30 (100)
Low Tele Density-3	29 (96.67)	22 (73.33)	22 (73.33)	15 (50.00)	13 (43.33)	19 (63.33)	15 (50.00)	16 (53.33)	10 (33.33)	8 (26.67)	6 (20.00)	3 (10.00)	30 (100)
Characterized as Backward by the State-3	28 (93.33)	15 (50.00)	15 (50.00)	16 (53.33)	18 (60.00)	20 (66.67)	10 (33.33)	14 (46.67)	11 (36.67)	15 (50.00)	11 (36.67)	9 (30.00)	30 (100)
Districts with electricity Problems-3	28 (93.33)	19 (63.33)	22 (73.33)	20 (66.67)	17 (56.67)	22 (73.33)	13 (43.33)	25 (83.33)	12 (40.00)	21 (70.00)	18 (60.00)	16 (53.33)	30 (100)
Total Sample districts-18	172 (95.56)	118 (65.56)	126 (70.00)	105 (58.33)	96 (53.33)	128 (71.11)	75 (41.67)	118 (65.56)	63 (35.00)	93 (51.67)	68 (37.78)	50 (27.78)	30 (100)

Source- Based on field survey

ICT Fee Details

None of the schools from sample had reported any general computer fee for students or a fee specifically for a computer course. Apart from regular classes in schools, students can make use of computers or internet facility after classes also without any separate charges (Table-4.36).

Table 4.36: ICT Fee Details

Particulars	Computer fee in general		Computer courses		Use of computers after class by students		Use of Internet after Class by students		Use of computers by non-formal classes	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Urban Districts-3	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)
Rural Districts-3	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)
High Tele - Density District-3	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)
Lower Tel - Density District-3	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)
District Characterized as backward by the state-3	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)
Electricity Problems District-3	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)	0 (0.00)	30 (100)
All sample districts-18	0 (0.00)	180 (100)	0 (0.00)	180 (100)	0 (0.00)	180 (100)	0 (0.00)	180 (100)	0 (0.00)	180 (100)

Source- Based on field survey

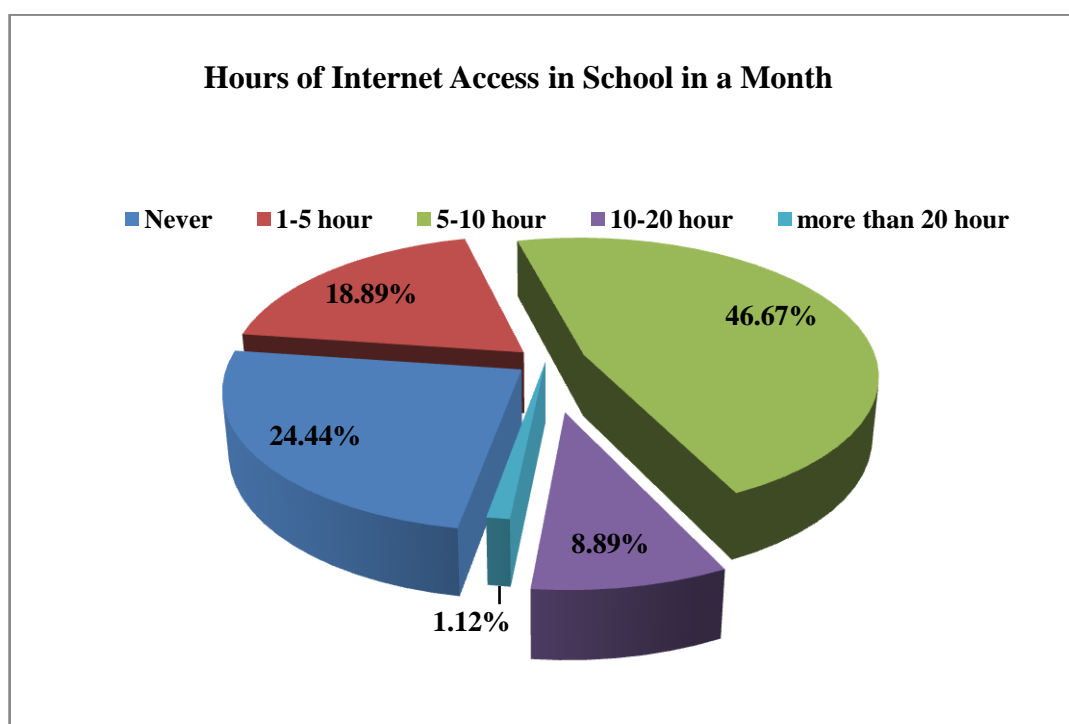
Internet Access in school

In just 1.12 per cent of sample schools, internet access is available for more than 20 hours per month while for 24.44 percent of schools students never have access to this facility. Backward districts figure poorly in this respect with 46.67 percent of such schools devoid of this facility. On average for maximum 46.67 percent schools, across the districts, this facility is available for 5-10 hours per month (Table 4.37).

Table 4.37: Hours of Internet Access in School in a Month

Particulars	Never	1-5 hour	5-10 hour	10-20 hour	more than 20 hour	Total
Urban Districts-3	3 (10.00)	5 (16.67)	18 (60.00)	4 (13.33)	0 (0.00)	30 (100.00)
Rural Districts-3	9 (30.00)	8 (26.67)	9 (30.00)	3 (10.00)	1 (3.33)	30 (100.00)
High Tele - Density District-3	11 (36.67)	5 (16.67)	13 (43.33)	0 (0.00)	1 (3.33)	30 (100.00)
Lower Tel - Density District-3	0 (0.00)	5 (16.67)	20 (66.67)	5 (16.67)	0 (0.00)	30 (100.00)
District Characterized as backward by the state-3	14 (46.67)	5 (16.67)	7 (23.33)	4 (13.33)	0 (0.00)	30 (100.00)
Electricity Problems District-3	7 (23.33)	6 (20.00)	17 (56.67)	0 (0.00)	0 (0.00)	30 (100.00)
All sample districts-18	44 (24.44)	34 (18.89)	84 (46.67)	16 (8.89)	2 (1.12)	180 (100.00)

Source- Based on field survey

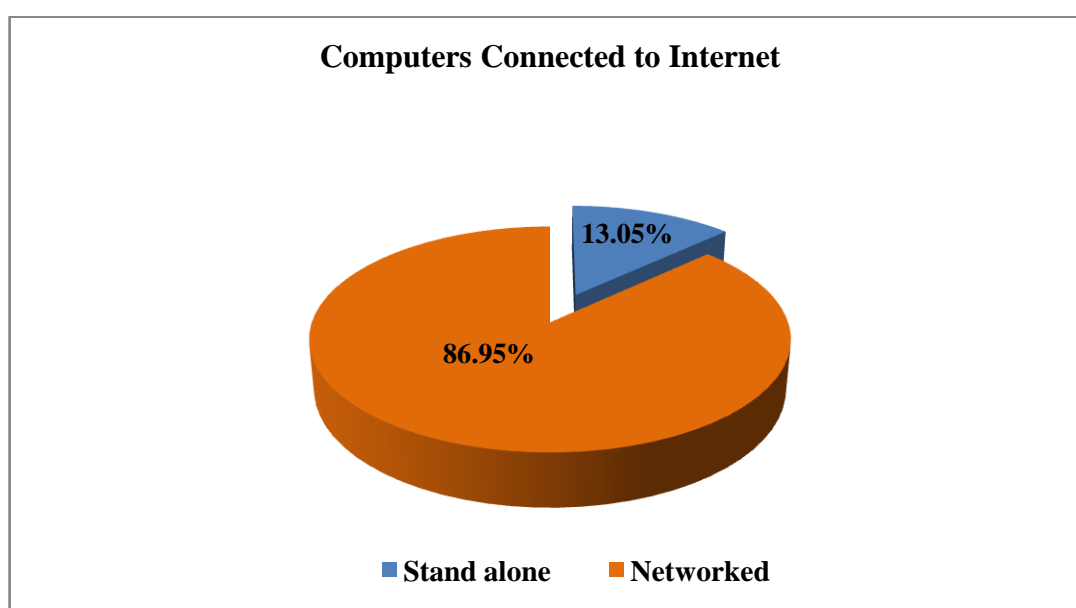


Data shows that overall 86.95 per cent of sample schools have their computers connected to internet, with maximum 93.25 and 93.35 percent of schools in urban and high tele density districts. schools in low tele- density group are lagging in this respect with just 74.83 percent schools having internet connectivity (Table 4.38).

Table 4.38: Computers Connected to Internet

Particulars	Stand alone	Networked	Total
Urban Districts-3	21 (6.75)	290 (93.25)	311 (100.00)
Rural Districts-3	45 (14.47)	266 (85.53)	311 (100.00)
High Tele - Density District-3	21 (6.65)	295 (93.35)	316 (100.00)
Lower Tel - Density District-3	72 (25.17)	214 (74.83)	286 (100.00)
District Characterized as backward by the state-3	50 (16.34)	256 (83.66)	306 (100.00)
Electricity Problems District-3	27 (9.68)	252 (90.32)	279 (100.00)
All sample districts-18	236 (13.05)	1573 (86.95)	1809 (100.00)

Source- Based on field survey



Very few(1.11 percent) sample schools have their own web sites where as above 63percent schools have created their own e- mail addresses . About 47 percent of schools in backward districts are without e- mail addresses and 96.67 per cent of such schools have not developed their websites. None of the schools in rural, low/high tele density, and districts with electricity problems have developed their websites (Table 4.39).

Table 4.39: School With a Website and E-mail

Particulars	With website		With e-mail		Total
	Yes	No	Yes	No	
Urban Districts-3	1 (3.33)	29 (96.67)	23 (76.67)	7 (23.33)	30 (100.00)
Rural Districts-3	0 (0.00)	30 (100.00)	20 (66.67)	10 (33.33)	30 (100.00)
High Tele - Density District-3	0 (0.00)	30 (100.00)	16 (53.33)	14 (46.67)	30 (100.00)
Lower Tel - Density District-3	0 (0.00)	30 (100.00)	21 (70.00)	9 (30.00)	30 (100.00)
District Characterized as backward by the state-3	1 (3.33)	29 (96.67)	16 (53.33)	14 (46.67)	30 (100.00)
Electricity Problems District-3	0 (0.00)	30 (100.00)	18 (60.00)	12 (40.00)	30 (100.00)
All sample districts-18	2 (1.11)	178 (98.89)	114 (63.33)	66 (36.67)	180 (100.00)

Source- Based on field survey

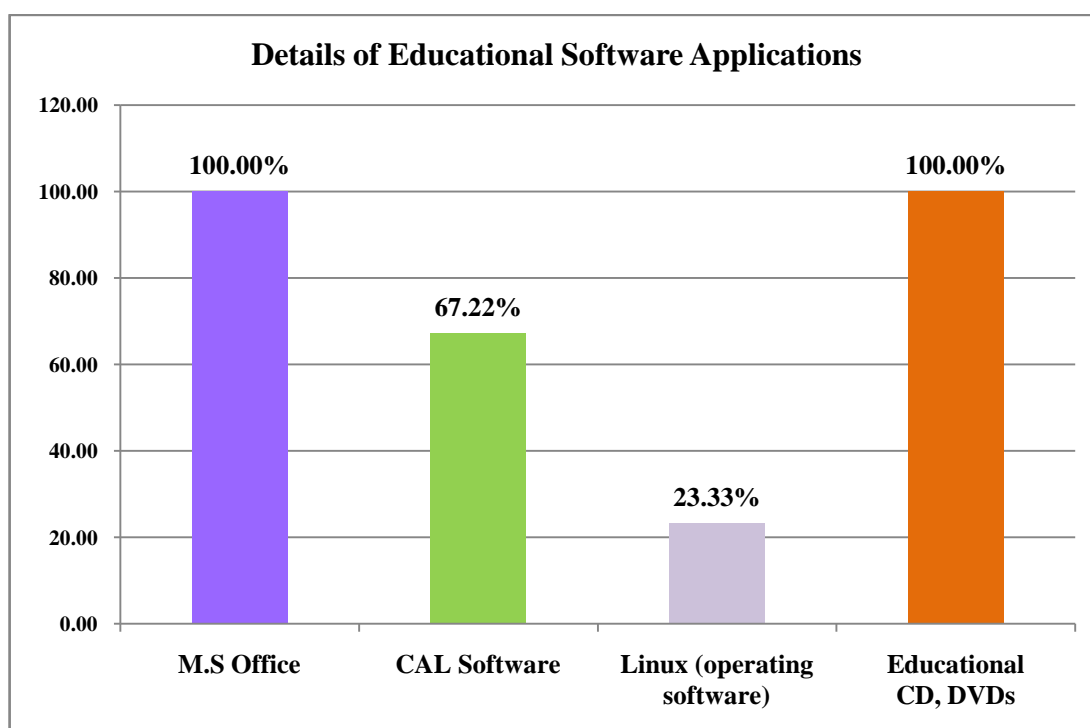
Computer and Software Applications

Any computer setup is incomplete without the availability of relevant software. As far as basic software needs of computer labs are concerned, 100 percent schools in all categories of districts have reported availability of M.S. Office and educational CDs and DVDs thereby implying sufficiency of basic software requirements for minimum computer literacy and also success of ICT project in this regard. Linux operating software is present in only 23.33 percent of sample schools with just 20 percent schools of backward districts having this facility. Again overall availability of CAL software in 67.22 per cent schools is not encouraging and this calls for some serious attention especially in low density districts and districts with electricity problems (Table-4.40).

Table 4.40: Details of Educational Software Applications

Particulars	M.S Office	CAL Software	Linux (operating software)	Educational CD, DVDs	Total
Urban Districts-3	30 (100.00)	27 (90.00)	9 (30.00)	30 (100.00)	30 (100.00)
Rural Districts-3	30 (100.00)	26 (86.67)	8 (26.67)	30 (100.00)	30 (100.00)
High Tele - Density District-3	30 (100.00)	28 (93.33)	7 (23.33)	30 (100.00)	30 (100.00)
Lower Tel - Density District-3	30 (100.00)	6 (20.00)	5 (16.67)	30 (100.00)	30 (100.00)
District Characterized as backward by the state-3	30 (100.00)	24 (80.00)	6 (20.00)	30 (100.00)	30 (100.00)
Electricity Problems District-3	30 (100.00)	10 (33.33)	7 (23.33)	30 (100.00)	30 (100.00)
All sample districts-18	180 (100.00)	121 (67.22)	42 (23.33)	180 (100.00)	180 (100.00)

Source- Based on field survey



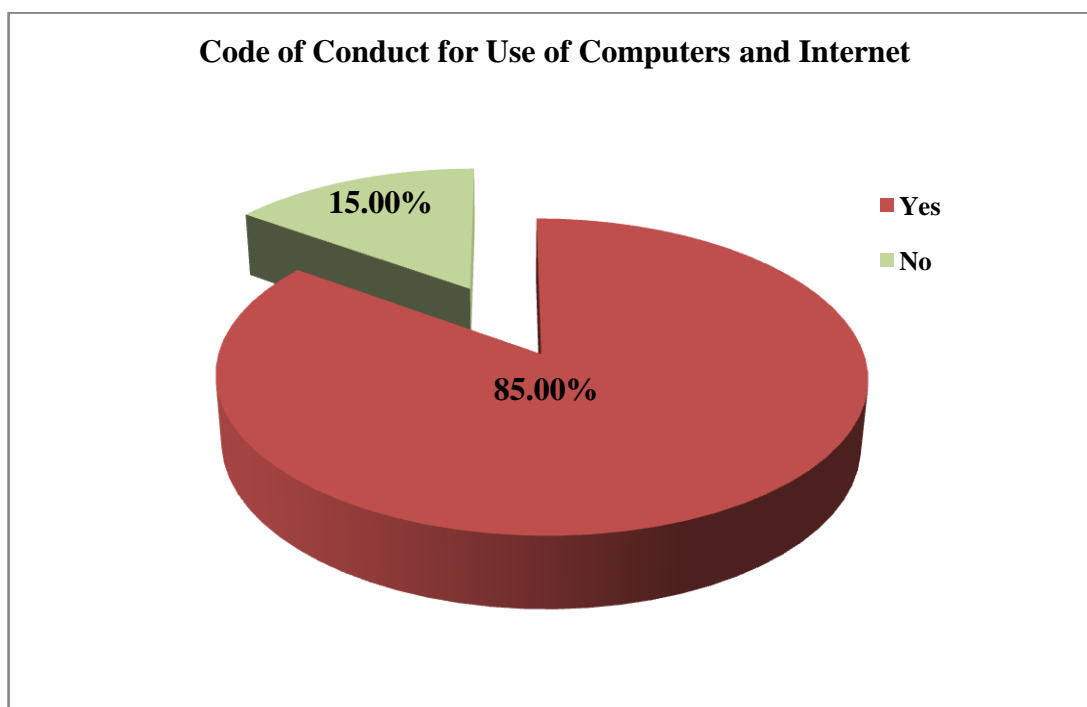
It is expected that all the targeted beneficiaries having a share in proposed benefits of programme would have a code of conduct for use of computers and internet at gross root level and it is framed by individual schools. However, in this aspect a total of 15

percent schools on average are yet to have such procedure . In over 36 percent urban schools code of conduct is yet to be framed. These are followed by over 13 percent schools each in rural, and low and high tele density districts (Table-4.41).

Table 4.41: Code of Conduct for Use of Computers and Internet

Particulars	Yes	No	Total
Urban Districts-3	19 (63.33)	11 (36.67)	30 (100.00)
Rural Districts-3	26 (86.67)	4 (13.33)	30 (100.00)
High Tele - Density District-3	26 (86.67)	4 (13.33)	30 (100.00)
Lower Tel - Density District-3	26 (86.67)	4 (13.33)	30 (100.00)
District Characterized as backward by the state-3	28 (93.33)	2 (6.67)	30 (100.00)
Electricity Problems District-3	28 (93.33)	2 (6.67)	30 (100.00)
All sample districts-18	153 (85.00)	27 (15.00)	180 (100.00)

Source- Based on field survey



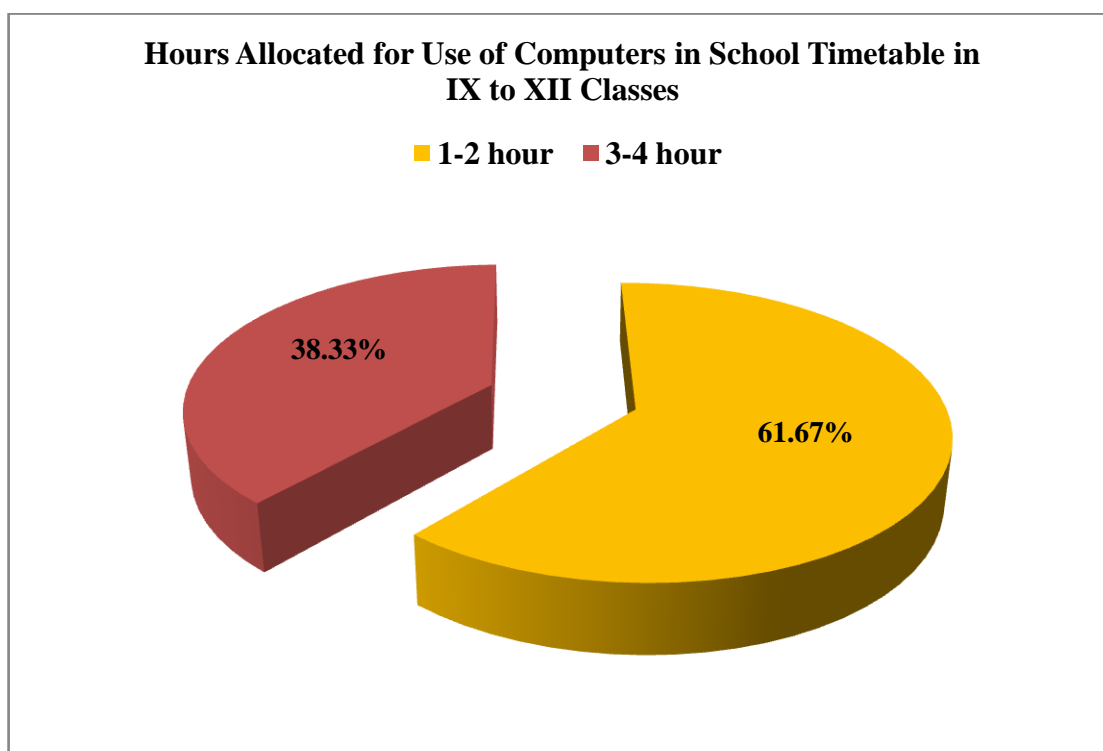
Given the fixed schooling hours on average only 38 per cent, schools have stipulated 3 to 4 hours for computer use. A high proportion of schools located in rural and backward districts have allotted long hours of computer use in school hours. This shows that such schools

attach high importance to the ICT projects for students. However, just 20 per cent of schools falling in areas with electricity problems have stipulated 3 to 4 hours for use of computers that may ultimately limit the benefits of this programme and needs to be redressed. Over all, in majority of 62 percent schools, only one to two hours are allocated for the use of computers (Table 4.42).

Table 4.42: Hours Allocated for Use of Computers in School Timetable in IX to XII Classes

Particulars	1-2 hour	3-4 hour	Total
Urban Districts-3	17 (56.67)	13 (43.33)	30 (100.00)
Rural Districts-3	15 (50.00)	15 (50.00)	30 (100.00)
High Tele - Density District-3	21 (70.00)	9 (30.00)	30 (100.00)
Lower Tel - Density District-3	21 (70.00)	9 (30.00)	30 (100.00)
District Characterized as backward by the state-3	13 (43.33)	17 (56.67)	30 (100.00)
Electricity Problems District-3	24 (80.00)	6 (20.00)	30 (100.00)
All sample districts-18	111 (61.67)	69 (38.33)	180 (100.00)

Source- Based on field survey

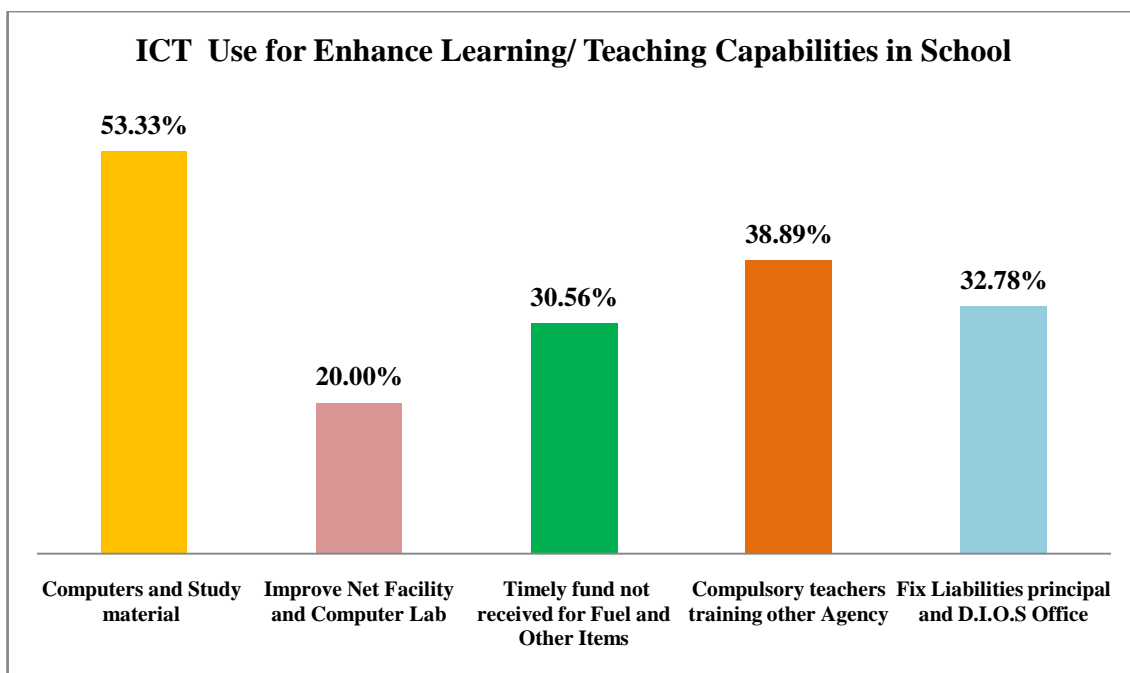


For enhancing the effectiveness of ICT programme different schools have stressed on different aspects. Both urban and rural schools of sample have sought more number of computers and study material to enhance teaching learning capabilities in schools. 40 per cent of schools in low and high tele density areas have given weight age to compulsory teachers training for enhancing learning capabilities. Over 53 per cent of schools in districts with electricity problems and overall over 30 percent schools have reported delay in funds for fuel and other items as a major problem. Improved internet facility was considered as an important factor from 36.67 per cent schools located in high tele- density districts and 20 percent schools of all the districts (Table 4.43).

Table 4.43: ICT Use for Enhance Learning/ Teaching Capabilities in School

Particulars	Computers and Study material	Improve Net Facility and Computer Lab	Timely fund not received for Fuel and Other Items	Compulsory teachers training by other Agency	Fix Liabilities of principal and D.I.O.S Office	Total No. Of schools
Urban Districts-3	17 (56.67)	4 (13.33)	5 (16.67)	13 (43.33)	6 (20.00)	30 (100.00)
Rural Districts-3	17 (56.67)	1 (3.33)	11 (36.67)	4 (13.33)	16 (53.33)	30 (100.00)
High Tele - Density District-3	11 (36.67)	11 (36.67)	11 (36.67)	12 (40.00)	13 (43.33)	30 (100.00)
Lower Tel - Density District-3	16 (53.33)	6 (20.00)	6 (20.00)	12 (40.00)	8 (26.67)	30 (100.00)
District Characterized as backward by the state-3	19 (63.33)	6 (20.00)	6 (20.00)	20 (66.67)	5 (16.67)	30 (100.00)
Electricity Problems District-3	16 (53.33)	8 (26.67)	16 (53.33)	9 (30.00)	11 (36.67)	30 (100.00)
All sample districts-18	96 (53.33)	36 (20.00)	55 (30.56)	70 (38.89)	59 (32.78)	180 (100.00)

Source- Based on field survey



Conclusions and Findings

Preceding two chapters of the study present the performance and status of ICT Scheme in schools based on the feedback of the state and district level officials involved in the implementation of ICT scheme in the schools under consideration. In this chapter, the performance of different aspects of ICT scheme is assessed on the feedback of the school head teachers. It was found that maximum 50 percent of the total selected sample schools, were covered under ICT programme in 2009 followed by minimum 18.33 percent in 2010 and 31.67 percent in 2011.

The data collected for the sampled schools reveals that maximum 78 percent schools offer schooling from VI to XII standard, Due to unavailability of teachers and time slot, they are unable to offer ICT in every class. Huge variations in terms of total enrolment of students were also found from different social groups in the schools, maximum 45.23 percent OBC students are enrolled in the schools followed by SC and general students and minimum 15.54 percent minority students have been enrolled whereas enrolment of ST student is negligible as only 0.41 percent students are enrolled. In all the categories of schools- Urban, Rural, High and Low Tele-Density- maximum share of OBC students is recorded. Further it was observed that among all the teachers in school, only 35.30 percent teachers have received ICT training and amongst them higher share of female teachers have received ICT training, this shows that in general male teachers are not very keen to update and improve their skills whereas for the non-teaching staff the picture is opposite as only 17.88 percent have only received ICT

training and among these, the percentage of males receiving ICT training is more than females. As far as the capability of trained personnel is concerned for maximum cases it was found to be of average level only.

The availability of infrastructure and computer facilities in school was found to be satisfactory in certain respects such as all the sampled schools have class rooms and 87.78 of them have reliable electricity, but generators were found only in 43.33 percent schools, and inverter in 23.89, landline phone connections in 31.11 percent and solar power is found only in 12.78 percent schools. Further, over 94 percent schools have the ICT lab with capacity of 20 students only because of the less number of computers. Thus, there is a need to improve all these main and backup infrastructural facilities to make ICT program more effective.

All categories of schools wanted to offer ICT in their schools, even the students are also very much enthusiastic about computer-aided learning. Every sampled school has separate computer lab for holding ICT classes. but there are some administrative problems which need to be rectified as it was found that the funds have not been made available to schools directly for implementation of the school ICT plan. The funds are given by SLA to authorized vendors for the same. DIOS Office is reported as monitoring agency and only in about 12 percent schools, district coordinators (D.C.) are monitoring the ICT scheme. Hence, the monitoring of ICT scheme is done by DIOS office in most of the schools across different categories of districts which make the functioning and monitoring comparatively less effective.

The main thrust of the study is to find out the impact of information communication technology on school environment, teachers and students. Over 90 percent head teachers of total selected sample school have reported that use of ICT have improved the efficiency of the environment and have also increased the enthusiasm and confidence level of teachers further the teachers have started using ICT in their homes and also for self assessment. However, the impact of ICT on teachers in terms of leadership in ICT related discussions and initiatives on collaborative efforts between schools have been reported to be quite low.

It was also observed that the presence of ICT has improved student's attention/ behavior/ attendance after getting the computers and has also reduced the dropout rates. As far as the usage of the ICT is concerned the maximum use of ICT in 71 to 72 percent schools is for preparing monthly ICT report and MIS report respectively.

the availability of software was found to be satisfactory as most of them have major softwares but in just 1.12 per cent of sample schools, internet access is available for more than 20 hours per month while for 24.44 percent of schools students never have access to this facility. Backward districts figure poorly in this respect with 46.67 percent of such schools devoid of this facility. On average for maximum 46.67 percent schools, across the districts, this facility is available for 5-10 hours per month.

\In order to make ICT program more effective it is also necessary to provide better internet connectivity further it is also necessary to conduct workshops as it was found that neither a single workshop was conducted nor there had not been any documentation of sessions and feed back about the programme from staff in 98 percent of sample schools which is an indication of administrative lacunae and poor implementation design rather than the poor infrastructure or backwardness of the area.

Finally, it can be concluded that for enhancing the effectiveness of ICT programme different schools have stressed on different aspects. Both urban and rural schools of sample have sought more number of computers and study material to enhance teaching learning capabilities in schools. 40 per cent of schools in low and high tele density areas have given weight-age to compulsory teachers training for enhancing learning capabilities. Over 53 per cent of schools in districts with electricity problems and overall over 30 percent schools have reported delay in funds for fuel and other items as a major problem. Improved internet facility was considered as an important factor from 36.67 per cent schools located in high tele- density districts and 20 percent schools of all the districts. Thus this all needs to be ensured.

CHAPTER-V

PERFORMANCE OF ICT: VIEW OF ICT TEACHERS

ICT teachers undertake most of the teaching and up keeping of computer software and hardware under ICT programme in the schools. The tables presented below are based on the feedback and collected information from the ICT teachers of the sampled schools. Tables prepared on the basis of overall observations collected from the 18 (Eighteen) sampled districts of Uttar Pradesh.

Number Qualifications and Recruitment of ICT Teachers

The overall scenario of sampled schools shows that ICT plays an important role in school education and the ICT teachers are the key person play very important role in this programme. Among the all sampled schools (Phase-phase-I &II) have one ICT teacher for handling entire ICT activities in schools(Table 5.1).

Table 5.1: Number of ICT Teacher in Schools

Particulars		Schools having ICT Teacher		
		Phase – I	Phase – II	Total
Urban District -3	Secondary	10 (66.67)	5 (33.33)	15 (100.00)
	H. Secondary	9 (60.00)	6 (40.00)	15 (100.00)
	Total	19 (63.33)	11 (36.67)	30 (100.00)
Rural District-3	Secondary	7 (46.67)	8 (53.33)	15 (100.00)
	H. Secondary	12 (80.00)	3 (20.00)	15 (100.00)
	Total	19 (63.33)	11 (36.67)	30 (100.00)
High Tele - Density District-3	Secondary	8 (53.33)	7 (46.67)	15 (100.00)
	H. Secondary	6 (40.00)	9 (60.00)	15 (100.00)
	Total	14 (46.67)	16 (53.33)	30 (100.00)
Lower Tele - Density District-3	Secondary	14 (93.33)	1 (6.67)	15 (100.00)
	H. Secondary	11 (73.33)	4 (26.67)	15 (100.00)

	Total	25 (83.33)	5 (16.67)	30 (100.00)
Backward by the State-3	Secondary	10 (33.33)	5 (16.67)	30 (100.00)
	H. Secondary	14 (46.67)	1 (3.33)	30 (100.00)
	Total	24 (40.00)	6 (10.00)	60 (100.00)
Electricity Problems District-3	Secondary	9 (60.00)	6 (40.00)	15 (100.00)
	H. Secondary	12 (80.00)	3 (20.00)	15 (100.00)
	Total	21 (70.00)	9 (30.00)	30 (100.00)
All Sample District-18	Secondary	58 (64.44)	32 (35.56)	90 (100.00)
	H. Secondary	64 (71.11)	26 (28.89)	90 (100.00)
	Total	122 (67.78)	58 (32.22)	180 (100.00)

Source- Based on field survey

Among 180 sampled schools, majority 60.56 percent of the appointed ICT teacher have PG degrees along with computer diploma (MA/MSC/M.com and P.G.D.C.A.). Whereas over 24 percent ICT teachers have under graduate degrees like, BA/B. sc. /B. com and P.G.D.C.A and 15 percent have BCA/ MCA as their qualifying degrees (Table 5.2).

Table 5.2: Qualification of ICT Teacher

Particulars	BA/Bsc/Bcom and P.G.D.C.A	MA/MSC/Mcom and P.G.D.C.A	BCA/MCA	Total
Urban Districts-3	8 (26.67)	18 (60.00)	4 (13.33)	30 (100.00)
Rural Districts-3	7 (23.33)	19 (63.33)	4 (13.33)	30 (100.00)
High Tele Density-3	3 (10.00)	25 (83.33)	2 (6.67)	30 (100.00)
Low Tele Density-3	8 (26.67)	16 (53.33)	6 (20.00)	30 (100.00)
Characterized as Backward by the State-3	9 (30.00)	15 (50.00)	6 (20.00)	30 (100.00)
Districts with electricity Problems-3	9 (30.00)	16 (53.33)	5 (16.67)	30 (100.00)
All Sample District-18	44 (24.44)	109 (60.56)	27 (15.00)	180 (100.00)

Source- Based on field survey

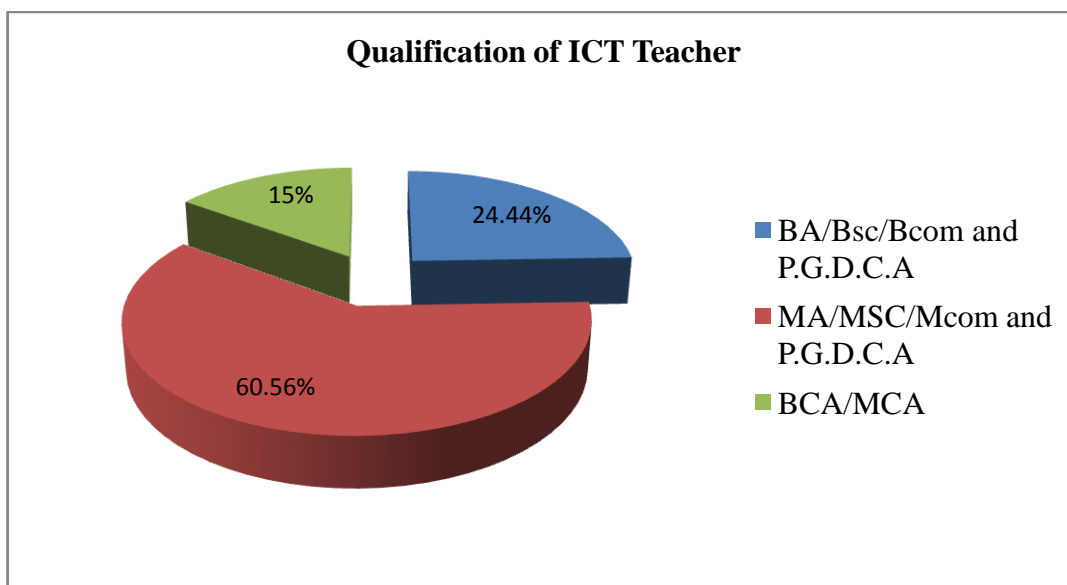
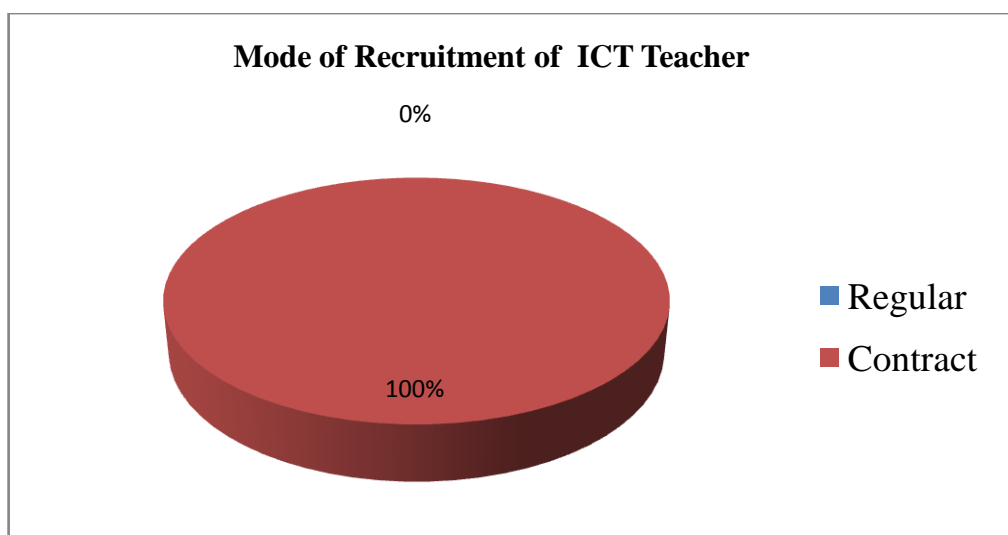


Table 5.3, showing the mode of recruitment of the ICT teachers in schools. The overall scenario tells that in all the sampled schools, ICT teachers are recruited on contractual basis for a certain period.

Table 5.3: Mode of Recruitment of ICT Teacher.

Particulars	Regular	Contract	Total
Urban Districts-3	0 (0.00)	30 (100.00)	30 (100.00)
Rural Districts-3	0 (0.00)	30 (100.00)	30 (100.00)
High Tele Density-3	0 (0.00)	30 (100.00)	30 (100.00)
Low Tele Density-3	0 (0.00)	30 (100.00)	30 (100.00)
Characterized as Backward by the State-3	0 (0.00)	30 (100.00)	30 (100.00)
Districts with electricity Problems-3	0 (0.00)	30 (100.00)	30 (100.00)
Total Sample Districts-18	0 (0.00)	180 (100.00)	180 (100.00)

Source- Based on field survey



Considering both phases of the launch of the ICT programme in sample schools, 86.67 percent recruited ICT teacher received training for the maintenance and proper use of ICT in school premises where as 13.33 percent did not receive any type of training from the vendors or other training organizations for maintaining ICT related hard and soft wares (Table-5.4).

Table 5.4: Received Training under ICT

Particulars	Phase I			Phase II			Total		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Urban Districts -3	13 (86.67)	2 (13.33)	15 (100)	14 (93.33)	1 (6.67)	15 (100)	27 (90.00)	3 (10.00)	30 (100.0)
Rural Districts-3	15 (100)	0 (0.00)	15 (100)	14 (93.33)	1 (6.67)	15 (100)	29 (96.67)	1 (3.33)	30 (100.0)
High Tele Density-3	12 (80.00)	3 (20.00)	15 (100)	12 (80.00)	3 (20.00)	15 (100)	24 (80.00)	6 (20.00)	30 (100.0)
Low Tele Density-3	14 (93.33)	1 (6.67)	15 (100)	11 (73.33)	4 (26.67)	15 (100)	25 (83.33)	5 (16.67)	30 (100.0)
Characterized as Backward by the State-3	12 (80.00)	3 (20.00)	15 (100)	12 (80.00)	3 (20.00)	15 (100)	24 (80.00)	6 (20.00)	30 (100.0)
Districts with electricity Problems-3	13 (86.67)	2 (13.33)	15 (100)	14 (93.33)	1 (6.67)	15 (100)	27 (90.00)	3 (10.00)	30 (100.0)
Total Sample Districts-18	79 (87.78)	11 (12.22)	90 (100)	77 (85.56)	13 (14.44)	90 (100)	156 (86.67)	24 (13.33)	180 (100.0)

Source- Based on field survey

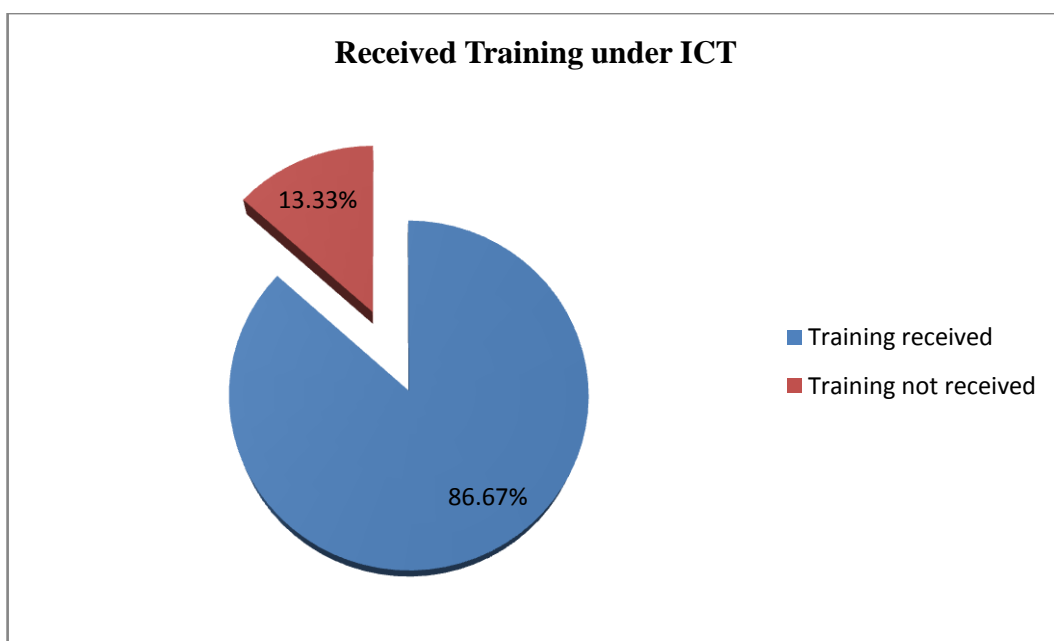
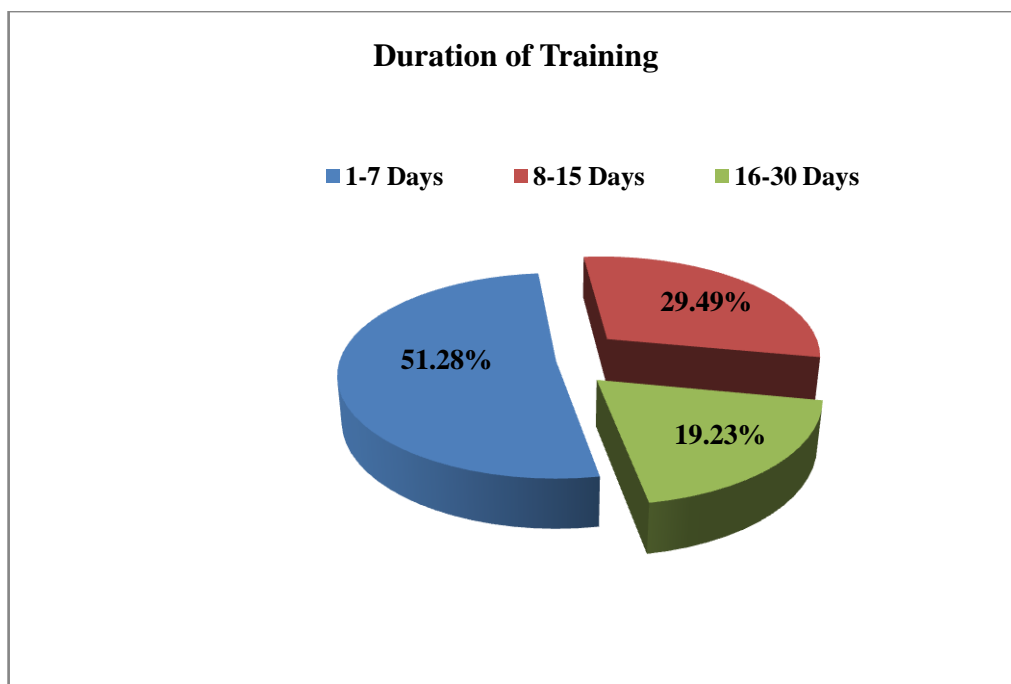


Table 5.5 shows the duration of ICT teacher training. In above 51 percent sampled schools it is found that the ICT teachers received training from 1 to 7 days. In 29.49 percent schools ICT teacher have received training from 8 to 15 days. In only 19.23 percent schools, ICT teachers have received 16 to 30 days training. Hence, for more than 50 percent ICT teacher, the training period has been minimum i.e. only one to seven days.

Table 5.5: Duration of Training

Particulars	1-7 Days	8-15 Days	16-30 Days	Total
Urban Districts -3	12 (44.44)	9 (33.33)	6 (22.22)	27 (100.00)
Rural Districts-3	15 (51.72)	12 (41.38)	2 (6.90)	29 (100.00)
High Tele Density-3	10 (41.67)	6 (25.00)	8 (33.33)	24 (100.00)
Low Tele Density-3	17 (68.00)	8 (32.00)	0 (0.00)	25 (100.00)
Characterized as Backward by the State-3	16 (66.67)	6 (25.00)	2 (8.33)	24 (100.00)
Districts with electricity Problems-3	10 (37.04)	5 (18.52)	12 (44.44)	27 (100.00)
Total Sample Districts-18	80 (51.28)	46 (29.49)	30 (19.23)	156 (100.00)

Source- Based on field survey



Remuneration and Satisfaction Level of ICT Teachers

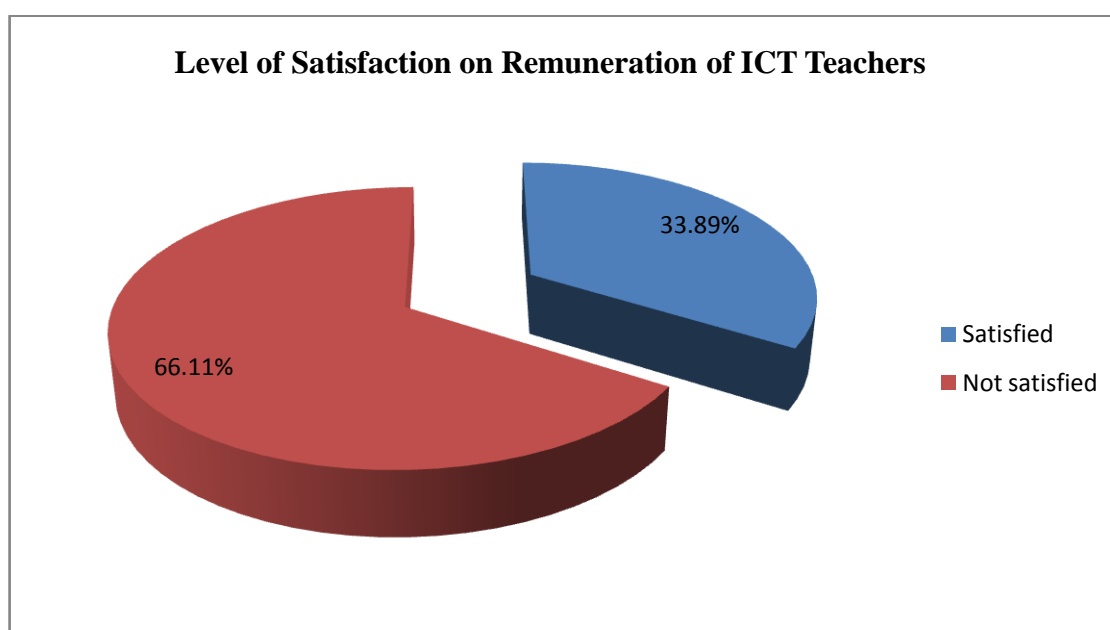
Table 5.6 and chart indicate the level of satisfaction on the remuneration of ICT teachers. In above 66 percent sampled schools it is found that the ICT teachers are not satisfied with their remuneration. The existing dissatisfaction among the teachers has resulted from the fact that newly recruited ICT teachers get a meagre monthly payment of approximate Rs. 3300 to Rs 5000, which is quite insufficient in comparison to the payment made to other school teachers. Only about 34 percent ICT teachers have expressed their satisfaction with the remuneration paid to them.

As per observation in course of school visits, it is found that ICT teachers are generally an exploited lot across the districts in terms of their remunerations as well as the work load.

Table 5.6: Level of Satisfaction on Remuneration of ICT Teachers

Particulars	Phase I			Phase II			Total		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Urban Districts -3	2 (13.33)	13 (86.67)	15 (100)	6 (40.00)	9 (60.00)	15 (100)	8 (26.67)	22 (73.33)	30 (100.0)
Rural Districts-3	6 (40.00)	9 (60.00)	15 (100)	2 (13.33)	13 (86.67)	15 (100)	8 (26.67)	22 (73.33)	30 (100.0)
High Tele Density-3	6 (40.00)	9 (60.00)	15 (100)	5 (33.33)	10 (66.67)	15 (100)	11 (36.67)	19 (63.33)	30 (100.0)
Low Tele Density-3	4 (26.67)	11 (73.33)	15 (100)	6 (40.00)	9 (60.00)	15 (100)	10 (33.33)	20 (66.67)	30 (100.0)
Characterized as Backward by the State-3	5 (33.33)	10 (66.67)	15 (100)	8 (53.33)	7 (46.67)	15 (100)	13 (43.33)	17 (56.67)	30 (100.0)
Districts with electricity Problems-3	7 (46.67)	8 (53.33)	15 (100)	4 (26.67)	11 (73.33)	15 (100)	11 (36.67)	19 (63.33)	30 (100.0)
Total Sample Districts-18	30 (33.33)	60 (66.67)	90 (100)	31 (34.44)	59 (65.56)	90 (100)	61 (33.89)	119 (66.11)	180 (100.0)

Source- Based on field survey



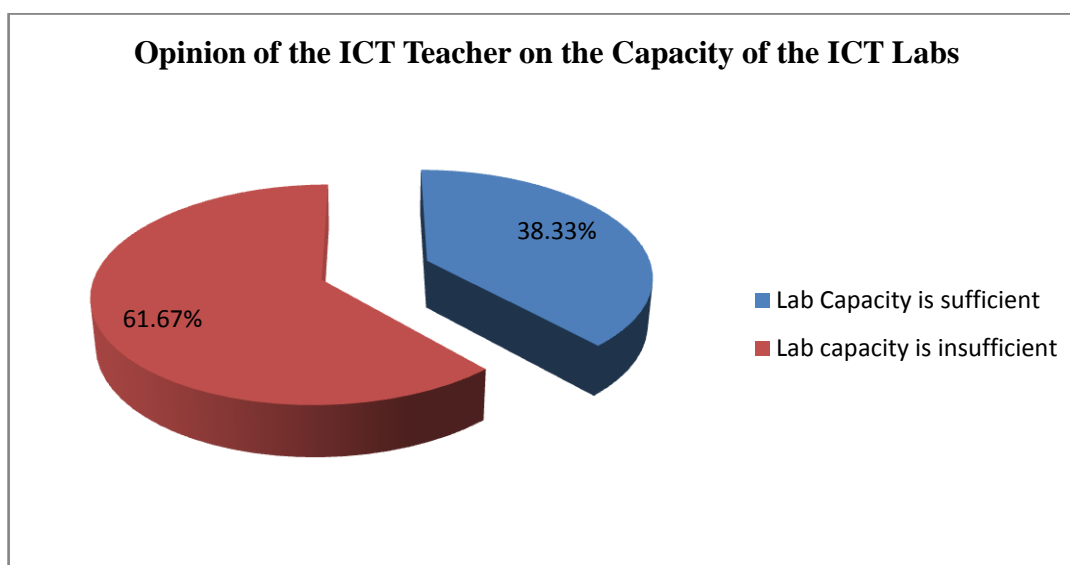
Capacity of the ICT Labs and Study Material

As per ICT teachers observation, this programme is very much popular and useful among the school students in Uttar Pradesh. But considering the the students strength in schools, the proportion of available ICT computer and other infrastructural facilities are quite insufficient. The opinion of the ICT teachers in sampled schools has been solicited in this regard. About 62 percent ICT teachers held the view that they are facing problem due to low lab capacity and high students pressure. As against this, 38.33 percent schools teachers held that the lab capacity is sufficient (Table 5.7).

Table 5.7: Opinion of the ICT Teacher on the Capacity of the ICT Labs

Particulars	Lab Capacity is sufficient	Lab capacity is insufficient	Total number of schools
Urban Districts-3	14 (46.67)	16 (53.33)	30 (100.00)
Rural Districts-3	11 (36.77)	19 (63.33)	30 (100.00)
High Tele Density-3	9 (30)	21 (70.00)	30 (100.00)
Low Tele Density-3	14 (46.67)	16 (53.33)	30 (100.00)
Characterized as Backward by the State-3	11 (36.67)	19 (63.33)	30 (100.00)
Districts with electricity Problems-3	10 (33.33)	20 (66.67)	30 (100.00)
Total Sample Districts-18	69 (38.33)	111 (61.67)	180 (100.00)

Source- Based on field survey

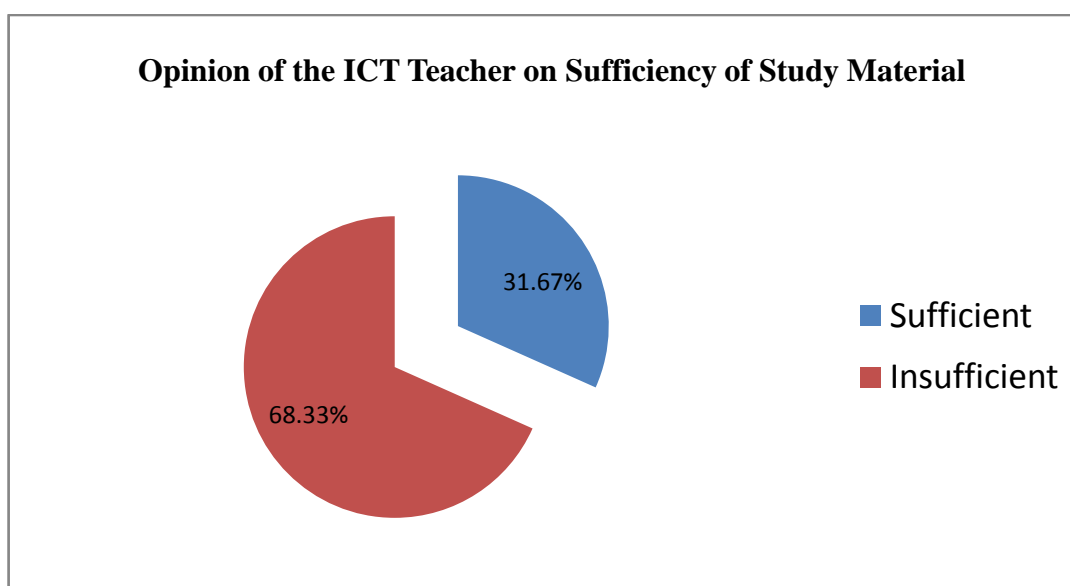


The purpose of the ICT is not only to impart computer aided learning but also using for subject related teaching. For this, subject wise study material has been developed. The information relating to sufficiency level of study material indicates that majority of 68 percent ICT teachers held the opinion that the study material is insufficient in accordance with the syllabus. Only about 32 percent, total that the study material was sufficient (Table 5.8).

Table 5.8: Opinion of the ICT Teacher on Sufficiency of Study Material

Particulars	Sufficient	Insufficient	Total No. of Schools
Urban Districts-3	15 (50.00)	15 (50.00)	30 (100.00)
Rural Districts-3	9 (30.00)	21 (70.00)	30 (100.00)
High Tele Density-3	8 (32.67)	22 (73.33)	30 (100.00)
Low Tele Density-3	11 (36.67)	19 (63.33)	30 (100.00)
Characterized as Backward by the State-3	6 (20.00)	24 (80.00)	30 (100.00)
Districts with electricity Problems-3	8 (26.67)	22 (73.33)	30 (100.00)
Total Sample Districts-18	57 (31.67)	123 (68.33)	180 (100.00)

Source- Based on field survey



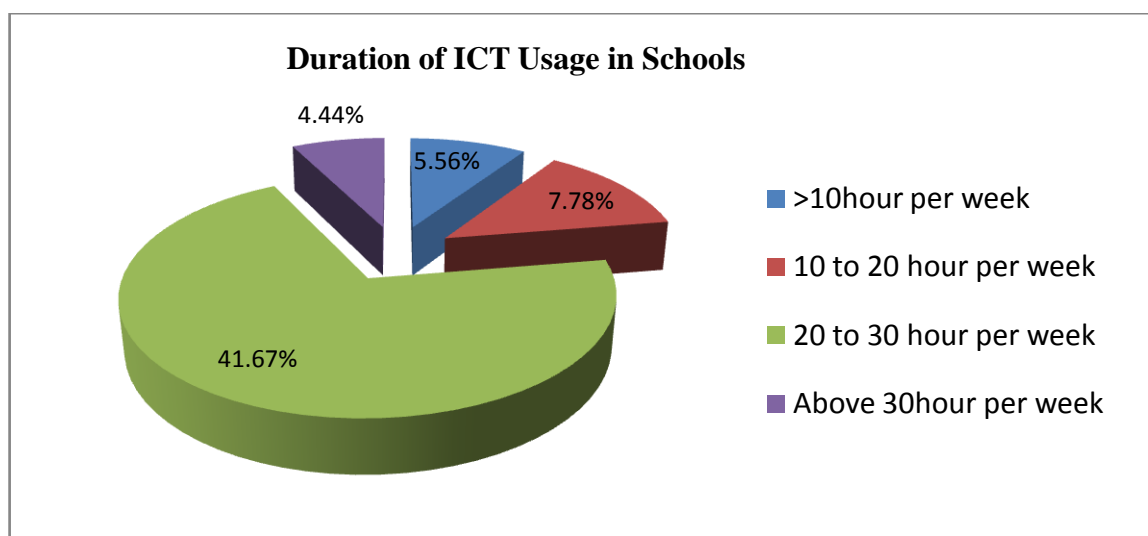
ICT Usage Networking and Technical Support

Table 5.9 shows that in maximum about 42 percent sampled schools, ICT is used for 20 to 30 hours per week, 7.78 percent schools using ICT only for 10 to 20 hour per week and 5.56 percent schools using it for less than 10 hour per week. Minimum 4.44 percent schools have used ICT for maximum above 30 hour per week according to ICT teachers. However, average weekly working hours have been reported to be 20 to 30 hours in most of the schools across the districts.

Table 5.9: Duration of ICT Usage in Schools

Particulars	>10hour per week	10 to 20 hour per week	20 to 30 hour per week	Above 30hour per week	Total
Urban Districts-3	5 (16.67)	4 (13.33)	6 (20.00)	15 (50.00)	30 (100.00)
Rural Districts-3	0 (0.00)	1 (3.33)	13 (43.33)	16 (53.33)	30 (100.00)
High Tele Density-3	3 (10.00)	1 (3.33)	10 (33.33)	16 (53.33)	30 (100.00)
Low Tele Density-3	0 (0.00)	0 (0.00)	22 (73.33)	8 (26.67)	30 (100.00)
Characterized as Backward by the State-3	0 (0.00)	0 (0.00)	19 (63.33)	11 (36.67)	30 (100.00)
Districts with electricity Problems-3	2 (6.67)	8 (26.67)	5 (16.67)	15 (50.00)	30 (100.00)
Total Sample districts-18	10 (5.56)	14 (7.78)	75 (41.67)	8 (4.44)	180 (100.00)

Source- Based on field survey

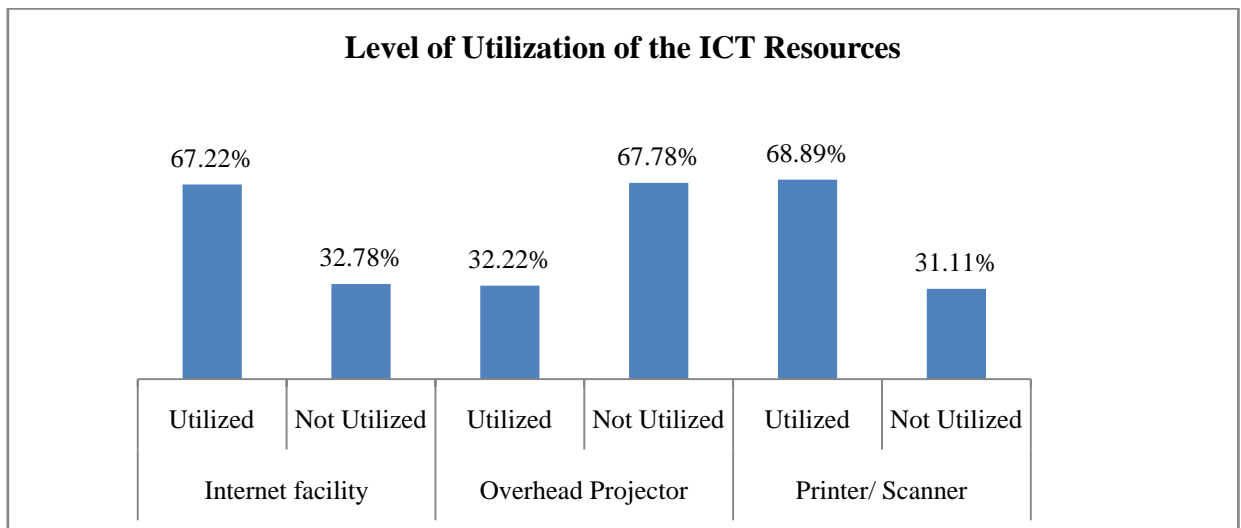


It reflects from Table 5.10 that the level of Utilization of ICT resources in schools is ranging from high, in 67 percent schools to low in 31 percent schools. The level of Internet use is high, in above 67 percent, whereas in only 32.22 percent school, they use projector and in 69 percent schools printer/scanner is used as per requirement. At inter- district level it is found that the use of internet facility is low in rural districts as compared to the urban district. The use if internet has also been relatively low in districts with high tele- density, district with low tele density, backward districts and districts with electricity problems.

Table 5.10: Level of Utilization of the ICT Resources.

Particular	Internet facility		Overhead Projector		Printer/ Scanner	
	Utilized	Not Utilized	Utilized	Not Utilized	Utilized	Not Utilized
Urban Districts-3	27 (90.00)	3 (10.00)	11 (36.67)	19 (63.33)	24 (80.00)	6 (20.00)
Rural Districts-3	21 (70.00)	9 (30.00)	11 (36.67)	19 (63.33)	21 (70.00)	9 (30.00)
High Tele Density-3	19 (63.33)	11 (36.67)	16 (53.33)	14 (46.67)	22 (73.33)	8 (26.67)
Low Tele Density-3	15 (50.00)	15 (50.00)	5 (16.67)	25 (83.33)	20 (66.67)	10 (33.33)
Characterized as Backward by the State-3	16 (53.33)	14 (46.67)	6 (20.00)	24 (80.00)	18 (60.00)	12 (40.00)
Districts with electricity Problems-3	23 (76.67)	7 (23.33)	9 (30.00)	21 (70.00)	19 (63.33)	11 (36.67)
Total Sample districts-18	121 (67.22)	32 (32.78)	58 (32.22)	122 (67.78)	124 (68.89)	56 (31.11)

Source- Based on field survey

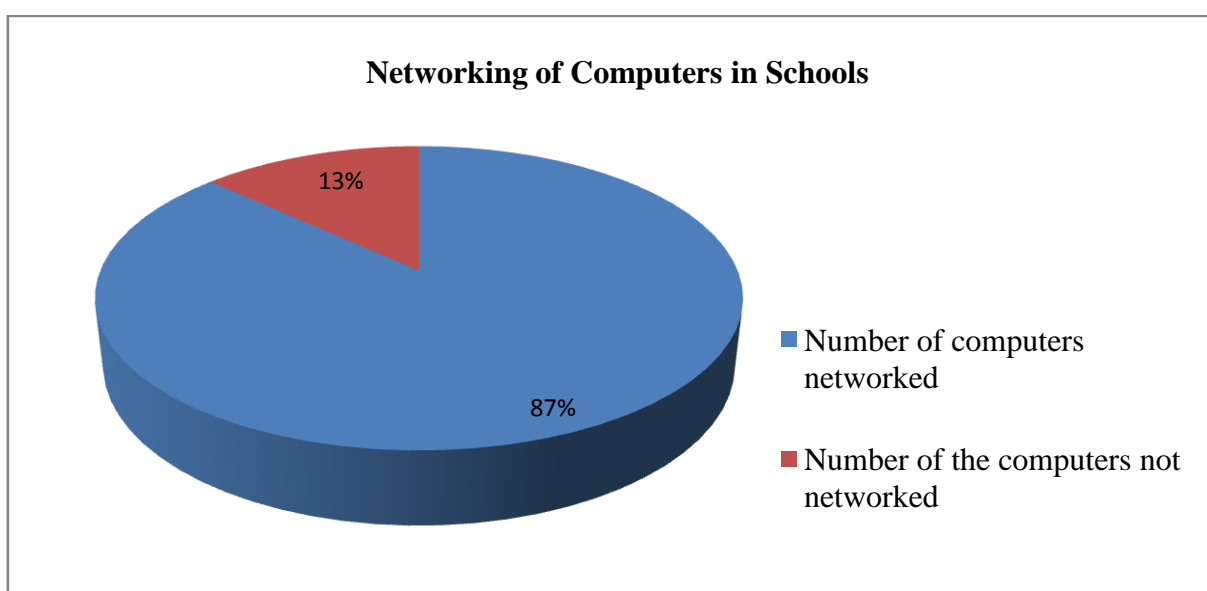


Maximum 86.67 percent schools have computer networking as against remaining 13.13 percent schools where there is no computer networking as per ICT teachers feedback. The networking is found to be low in districts with low tele density and backward districts (Table 5.11).

Table 5.11: Networking of Computers in Schools.

Particulars	Number of computers networked	Number of the computers not networked	Total Number of computers in the school
Urban Districts-3	269 (86.50)	42 (13.50)	311 (100.00)
Rural Districts-3	276 (89.90)	31 (10.10)	307 (100.00)
High Tele - Density Districts-3	279 (88.29)	37 (11.71)	316 (100.00)
Districts Lower Tele - Density-3	243 (79.93)	61 (20.07)	304 (100.00)
Districts Characterized as backward by the state-3	262 (85.62)	44 (14.38)	306 (100.00)
Electricity Problems Districts-3	279 (90.88)	28 (9.12)	307 (100.00)
Total Sample districts-18	1608 (86.87)	243 (13.13)	1851 (100.00)

Source- Based on field survey

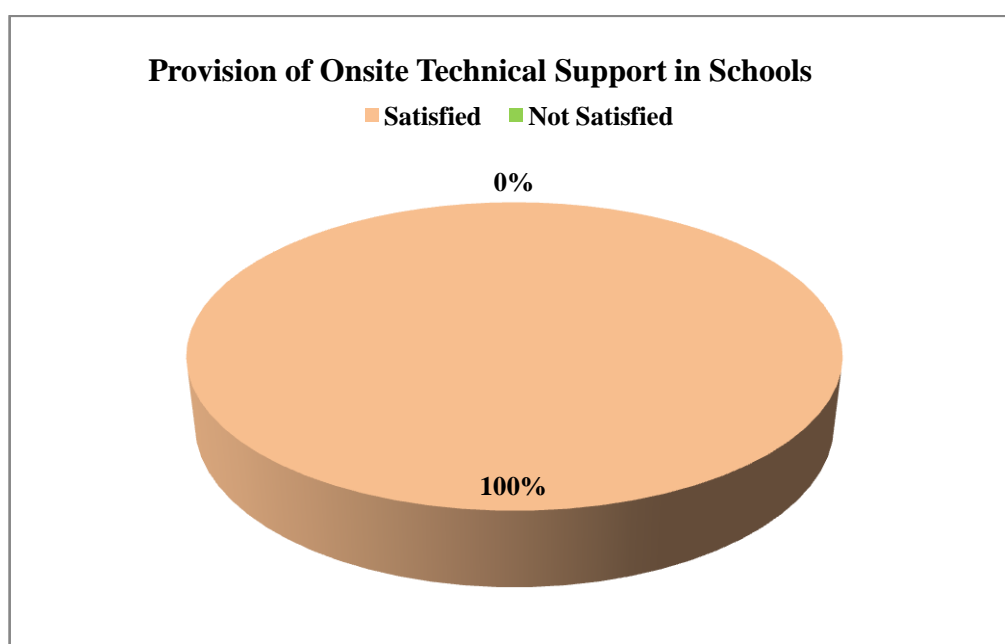


Over all data show that all (100 percent) ICT teacher of sampled schools have onsite technical support for ICT maintenance in their schools(Table 5.12).

Table 5.12: Provision of Onsite Technical Support in Schools.

Particulars	Yes	No	Total
Urban Districts-3	30 (100)	0 (0.00)	30 (100)
Rural Districts-3	30 (100)	0 (0.00)	30 (100)
High Tele - Density Districts-3	30 (100)	0 (0.00)	30 (100)
Districts Lower Tele - Density-3	30 (100)	0 (0.00)	30 (100)
Districts Characterized as backward by the state-3	30 (100)	0 (0.00)	30 (100)
Electricity problems Districts-3	30 (100)	0 (0.00)	30 (100)
Total Sample districts-18	180 (100)	0 (0.00)	180 (100)

Source- Based on field survey

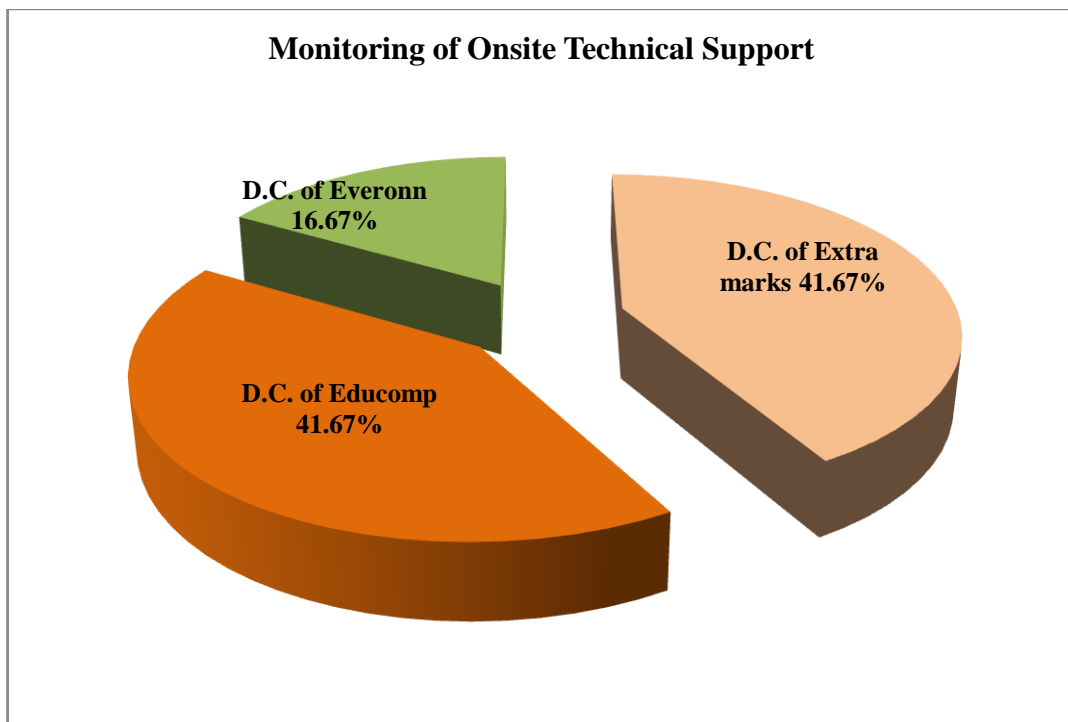


As responded by ICT teachers, out of the total selected sample schools, in 42 percent schools monitoring of onsite technical support was done by D.C. of Extra marks and D.C. of Educomp followed by monitoring of onsite technical support by D.C. of Everonn in 16.67 percent schools. Thus, monitoring of onsite technical support was done in most of the schools by D.C. of Extra marks and D.C. of Educomp (Table 5.13).

Table 5.13: Monitoring of Onsite Technical Support

Particulars	D.C. of Extra marks	D.C. of Educomp	D.C. of Everonn	Total
Urban Districts-3	14 (46.67)	16 (53.33)	0 (0.00)	30 (100)
Rural Districts-3	14 (46.67)	11 (36.67)	5 (16.67)	30 (100)
High Tele - Density Districts-3	9 (30.00)	16 (53.33)	5 (16.67)	30 (100)
Districts Lower Tele - Density-3	8 (26.67)	12 (40.00)	10 (33.33)	30 (100)
Districts Characterized as backward by the state-3	14 (46.67)	6 (20.00)	10 (33.33)	30 (100)
Electricity Problems Districts-3	16 (53.33)	14 (46.67)	0 (0.00)	30 (100)
Total Sample districts-18	75 (41.67)	75 (41.67)	30 (16.67)	180 (100)

Source- Based on field survey

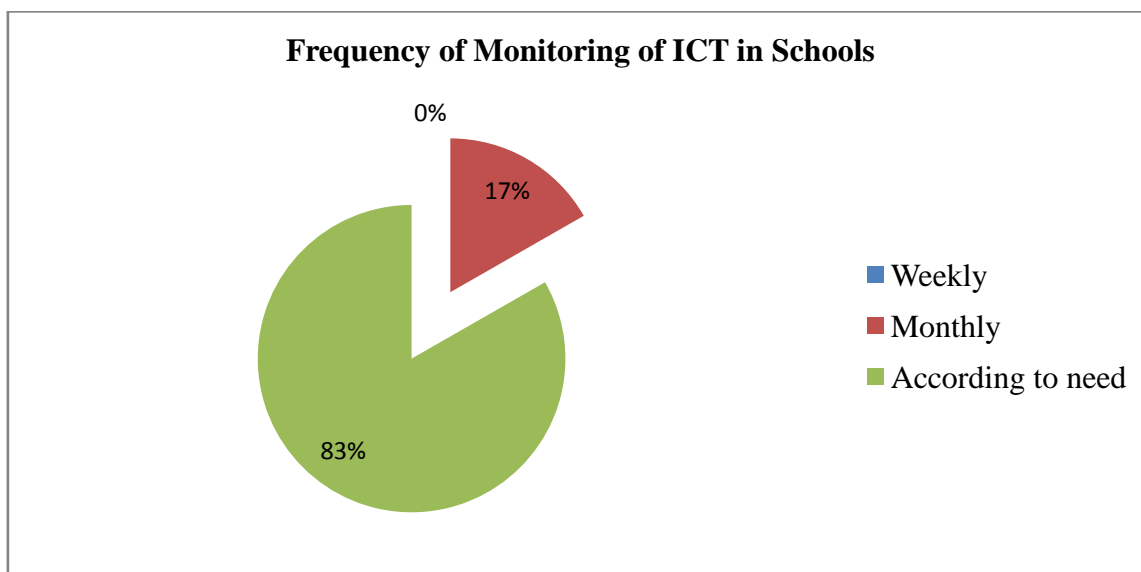


In all the sampled schools onsite technical support was reported. In most of the over 83 percent schools need based monitoring mechanism existed and in rest of 16.67 percent schools monthly monitoring mechanism existed for ICT maintenance (Table-5.14).

Table 5.14: Frequency of Monitoring of ICT in Schools.

Particulars	Weekly	Monthly	According to need	Total
Urban Districts-3	0 (0.00)	0 (0.00)	30 (100)	30 (100)
Rural Districts-3	0 (0.00)	0 (0.00)	30 (100)	30 (100)
High Tele - Density Districts-3	0 (0.00)	0 (0.00)	30 (100)	30 (100)
Districts Lower Tele – Density -3	0 (0.00)	10 (33.33)	20 (66.67)	30 (100)
Districts Characterized as backward by the state-3	0 (0.00)	10 (33.33)	20 (66.67)	30 (100)
Electricity Problems Districts-3	0 (0.00)	10 (33.33)	20 (66.67)	30 (100)
Total Sample districts-18	0 (0.00)	30 (16.67)	150 (83.33)	180 (100)

Source- Based on field survey



There is provision for external support system in all sampled schools across the districts of the state to provide technical, training and infrastructural support (Table-5.15).

Table 5.15: Technical, Training, Infrastructural Support for ICT in Schools.

Particulars	Yes	No	Total
Urban Districts-3	30 (100)	0 (0.00)	30 (100)
Rural Districts-3	30 (100)	0 (0.00)	30 (100)
High Tele - Density Districts-3	30 (100)	0 (0.00)	30 (100)
Districts Lower Tele - Density-3	30 (100)	0 (0.00)	30 (100)
Districts Characterized as backward by the state-3	30 (100)	0 (0.00)	30 (100)
Electricity Problems Districts-3	30 (100)	0 (0.00)	30 (100)
Total Sample districts-18	180 (100)	0 (0.00)	180 (100)

Source- Based on field survey

Table 5.16 shows the percentage of external support system such as technical, training and infrastructural support provided by the Educomp, Extra Marks and Everonn. About 42 percent of the total selected sample schools have reported that Educomp and Extra Marks are providing the external support system followed by Everonn providing technical support in 16.67 percent schools. Educomp and Extra Marks are showing their strong presence in rural and urban districts with their support in 46.67 percent and 53.33 percent schools. The technical support services by Everonn is not found in Urban districts and in schools located in districts with electricity problems.

Table 5.16: Technical Support Provided by Agencies

Particulars	Educomp	Extra Marks	Everonn	Total
Urban Districts-3	14 (46.67)	16 (53.33)	0 (0.00)	30 (100)
Rural Districts-3	14 (46.67)	11 (36.67)	5 (16.67)	30 (100)
High Tele - Density Districts-3	9 (30.00)	16 (53.33)	5 (16.67)	30 (100)
Districts Lower Tele – Density	8 (26.67)	12 (40.00)	10 (33.33)	30 (100)
Districts Characterized as backward by the state-3	14 (46.67)	6 (20.00)	10 (33.33)	30 (100)
Electricity Problems Districts-3	16 (53.33)	14 (46.67)	0 (0.00)	30 (100)
Total Sample districts-18	75 (41.67)	75 (41.67)	30 (16.67)	180 (100)

Source- Based on field survey

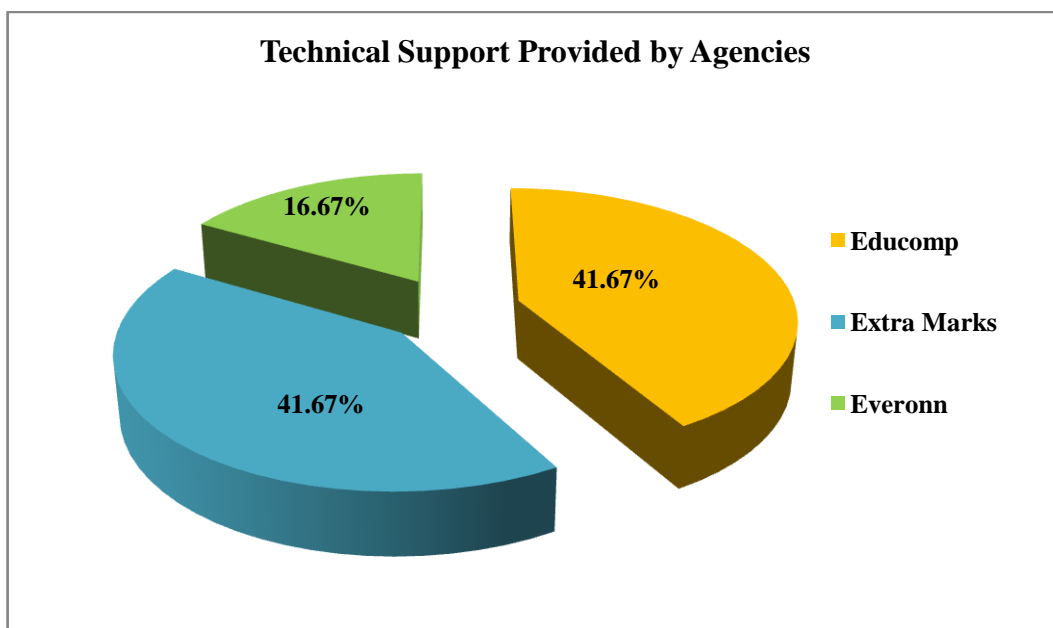


Table 5.17 presents the order of preference of the ICT teacher respondents when they were asked about the changes to be implemented in school ICT programme and need based preferences for the installation of new devices (CDs/DVDs, handled devices etc.). The following preferences have emerged.

1. About 92 percent of the respondents given their first preference for the use of thumb drive/Pen drive.
2. About 89 percent teachers selected computer as their second preference. Only for 6 percent teachers, computers were first preference.
3. About 76 percent teachers selected educational CDs/ DVDs as their third preference.
4. About 75 percent respondents kept the internet facilities in the order of fourth preference.
5. About 73 percent of the teacher respondents given their fifth preferences to technological support on the common service centre.
6. Subject specific software in computer television was placed at sixth preference by 64 percent ICT teachers.
7. Multimedia tools (handheld devices, Interactive Boards, You Tube Video and documentaries) were placed at seventh rank by maximum 50 percent ICT teachers in order of their preference.

Table 5.17: Preferences for Technological Infrastructure.

Factors	Preference (%)								
	1st	2 nd	3rd	4th	5th	6th	7th	8th	Total
Audio/Language Lab	20	0	0	10	20	0	0	50	100
Common service centre in the neighborhood	0	8	6	4	73	5	4	0	100
Computers	6	89	3	2	0	0	0	0	100
Educational CDs/ DVDs	10	6	76	4	3	1	0	0	100
Internet facilities(Broadband/Wi-Max & other)	0	12	8	75	0	5	0	0	100
Multimedia tools (handheld devices, Interactive Boards, YouTube Videos, documentaries)	20	10	0	10	0	5	50	5	100
Subject specific software in computer Television	0	0	20	10	0	64	6	0	100
Thumb drive/Pen drive	92	5	3	0	0	0	0	0	100

Source- Based on field survey

Conclusions and Findings

In this chapter the performance of ICT was assessed from the viewpoint/ feedback of ICT teachers. ICT teachers are responsible for the teaching and maintenance of computer software and hardware under ICT in the schools. It was found that ICT plays an important role in school education and the ICT teachers are the key person playing an important role in this the effective implementation of this scheme. All sampled schools (Phase-phase-I & II) have one ICT teacher for handling entire ICT activities in schools majority 60.56 percent of the appointed ICT teacher have PG degrees along with computer diploma (MA/MSC/M.com and P.G.D.C.A.). Whereas over 24 percent ICT teachers have under graduate degrees like, BA/B. sc. / B. com and P.G.D.C.A and 15 percent have BCA/ MCA as their qualifying degrees. It was observed that in general the ICT teachers are recruited on contractual basis for a certain period. Further 86.67 percent recruited ICT teacher received training for the maintenance and proper use of ICT in school premises.

But the ICT teachers are not getting proper remuneration which results in less motivation for their job. It was found that in around 66 percent of the sampled schools majority of the ICT teachers are not satisfied with their remuneration. Generally they are an exploited lot across the districts in terms of their remunerations as well as the work load.

As per ICT teachers observation, this programme is very much popular and useful among the school students in Uttar Pradesh. But considering the students strength in schools, the proportion of available ICT computer and other infrastructural facilities are quite insufficient. The opinion of the ICT teachers in sampled schools has been solicited in this regard.

The purpose of the ICT is not only to impart computer aided learning but is also meant for subject related teaching. For this, subject wise study material has been developed. The information relating to sufficiency level of study material indicates that majority of 68 percent ICT teachers held the opinion that the study material is insufficient in accordance with the syllabus. Average weekly working hours have been reported to be 20 to 30 hours in most of the schools across the districts. The level of Utilization of ICT resources in schools is ranging from high, in 67 percent schools to low in 31 percent schools. The level of Internet use is high, in above 67 percent, whereas in only 32.22 percent school, they use projector and in 69 percent schools printer/scanner is used as per requirement. At inter- district level it is found that the use of internet facility is low in rural districts as compared to the urban district. The use if internet has also been relatively low in districts with high tele- density, district with low tele density, backward districts and districts with electricity problems

There is a provision for extenal support system in all sampled schools across the districts of the state to provide technical, training and infrastructural support. The order of preference of the ICT teacher respondents when they were asked about the changes to be implemented in school ICT programme and need based preferences for the installation of new devices (CDs/DVDs, handled devices etc.) is that most of them want the use of thumb drive/Pen drive to be given first preference followed by availability of more computer, educational CDs/ DVDs , the internet facilities, technological support on the common service centre, subject specific software in computer television, multimedia tools (handheld devices, Interactive Boards, You Tube Video and documentaries)etc. Thus the above facilities/support needs to be provided by the government to assist and motivate the teachers along with the improvement in their salaries, so that they can make this program much more effective.

CHAPTER-VI

PERFORMANCE OF ICT: VIEW OF SUBJECT TEACHERS

The results of this section of the report are based on the information and feedback from the subject teachers of the sample schools. Tabular presentation is based on overall information collected from the schools located in eighteen sampled districts of Uttar Pradesh.

Qualification and Experience of Subject Teachers

The qualification of subject teachers in sample secondary and higher secondary schools as presented in Table 1 shows that maximum 90 percent subject teachers are having postgraduate degrees in their respective subjects. The subject teachers with post graduation have been relatively low in the districts with low tele-density, backward districts and districts with electricity problems.

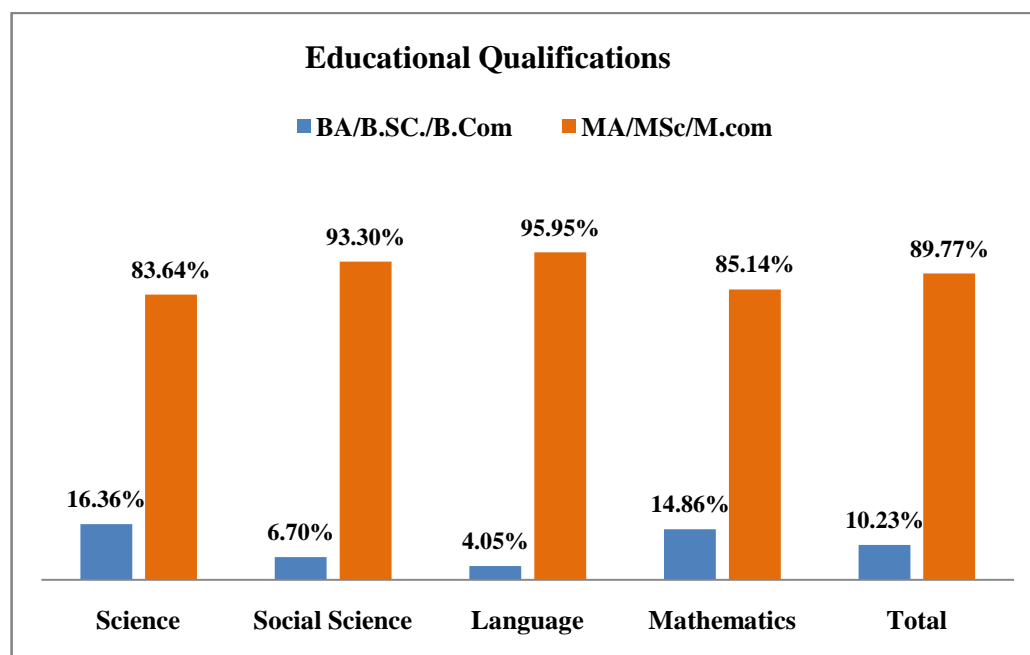
A subject-wise view of the teachers' qualification indicated maximum 96 percent post graduate level qualification among language teachers followed by about 93 percent among social science teachers. A relatively low share of science and mathematics teachers has postgraduate level qualifications among sample schools (Table: 6.1).

Table 6.1: Educational Qualifications

Particulars	Qualification	Science	Social Science	Language	Mathematics	Total
Urban Districts-3	BA/B.Sc./B.Com/	3 (10.34)	0 (0.00)	0 (0.00)	4 (14.81)	7 (6.09)
	MA/M.Sc/M.com	26 (89.66)	30 (100.00)	29 (100.00)	23 (85.19)	108 (93.91)
	Total	29 (100.00)	30 (100.00)	29 (100.00)	27 (100.00)	115 (100.00)
Rural District-3	BA/B.Sc./B.Com	2 (7.14)	1 (3.33)	1 (3.33)	4 (15.38)	8 (7.02)
	MA/MSc/M.com	26 (92.86)	29 (96.67)	29 (96.67)	22 (84.62)	106 (92.98)
	Total	28 (100.00)	30 (100.00)	30 (100.00)	26 (100.00)	114 (100.00)
Districts with High Tele – Density-3	BA/B.Sc./B.Com	7 (25.00)	2 (6.90)	1 (3.57)	1 (3.57)	11 (9.73)
	MA/MSc/M.com	21 (75.00)	27 (93.10)	27 (96.43)	27 (96.43)	102 (90.27)
	Total	28 (100.00)	29 (100.00)	28 (100.00)	28 (100.00)	113 (100.00)

Districts with Lower Tele – Density-3	BA/B.Sc../B.Com	6 (25.00)	2 (6.67)	1 (3.57)	4 (18.18)	13 (12.50)
	MA/MSc/M.com	18 (75.00)	28 (93.33)	27 (96.43)	18 (81.82)	91 (87.50)
	Total	24 (100.00)	30 (100.00)	28 (100.00)	22 (100.00)	104 (100.00)
Districts Characterized as backward by the State-3	BA/B.Sc../B.Com	4 (13.79)	6 (20.00)	1 (3.57)	2 (8.33)	13 (11.71)
	MA/MSc/M.com	25 (86.21)	24 (80.00)	27 (96.43)	22 (91.67)	98 (88.29)
	Total	29 (100.00)	30 (100.00)	28 (100.00)	24 (100.00)	111 (100.00)
Districts with Electricity Problems-3	BA/B.Sc../B.Com	5 (18.52)	1 (3.33)	3 (10.00)	7 (33.33)	16 (14.81)
	MA/MSc/M.com	22 (81.48)	29 (96.67)	27 (90.00)	14 (66.67)	92 (85.19)
	Total	27 (100.00)	30 (100.00)	30 (100.00)	21 (100.00)	108 (100.00)
All Sample Districts-18	BA/B.SC./B.Com	27 (16.36)	12 (6.70)	7 (4.05)	22 (14.86)	68 (10.23)
	MA/MSc/M.com	138 (83.64)	167 (93.30)	166 (95.95)	126 (85.14)	597 (89.77)
	Total	165 (100.00)	179 (100.00)	173 (100.00)	148 (100.00)	665 (100.00)

Source- Based on field survey



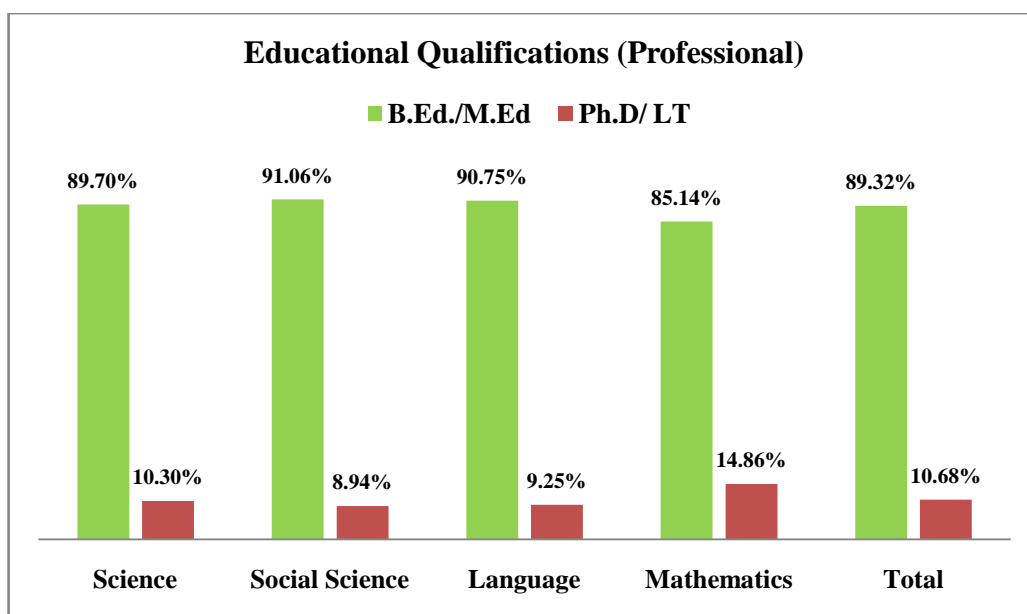
The level of professional qualification of the subject teachers is presented in Table 2. Maximum, above 89 percent teachers qualified B.Ed or M.Ed level. Only above 10 percent

were reported to have Ph.D or LT degrees. However, mathematics teachers (Table 6.2) acquired Maximum PhD / LT degrees, (15 percent).

Table 6.2: Educational Qualifications (Professional)

Particulars	Qualification	Science	Social Science	Language	Mathematics	Total
Urban Districts-3	B.Ed./M.Ed	29 (93.55)	31 (96.88)	26 (96.30)	22 (88.00)	108 (93.91)
	Ph.D/LT	2 (6.45)	1 (3.13)	1 (3.70)	3 (12.00)	7 (6.09)
	Total	31 (100.00)	32 (100.00)	27 (100.00)	25 (100.00)	115 (100.00)
Rural District-3	B.Ed./M.Ed	24 (88.89)	26 (83.87)	29 (93.55)	23 (92.00)	102 (89.47)
	Ph.D/ LT	3 (11.11)	5 (16.13)	2 (6.45)	2 (8.00)	12 (10.53)
	Total	27 (100.00)	31 (100.00)	31 (100.00)	25 (100.00)	114 (100.00)
Districts with High Tele – Density-3	B.Ed./M.Ed	26 (89.66)	23 (92.00)	27 (96.43)	25 (83.33)	101 (90.18)
	Ph.D/ LT	3 (10.34)	2 (8.00)	1 (3.57)	5 (16.67)	11 (9.82)
	Total	29 (100.00)	25 (100.00)	28 (100.00)	30 (100.00)	112 (100.00)
Districts with Lower Tele – Density-3	B.Ed./M.Ed	21 (87.50)	31 (96.88)	27 (90.00)	17 (89.47)	96 (91.43)
	Ph.D/ LT	3 (12.50)	1 (3.13)	3 (10.00)	2 (10.53)	9 (8.57)
	Total	24 (100.00)	32 (100.00)	30 (100.00)	19 (100.00)	105 (100.00)
Districts Characterized as backward by the State-3	B.Ed./M.Ed	27 (90.00)	25 (86.21)	21 (77.78)	19 (73.08)	92 (82.14)
	Ph.D/ LT	3 (10.00)	4 (13.79)	6 (22.22)	7 (26.92)	20 (17.86)
	Total	30 (100.00)	29 (100.00)	27 (100.00)	26 (100.00)	112 (100.00)
Districts with Electricity Problems-3	B.Ed./M.Ed	21 (87.50)	27 (90.00)	27 (90.00)	20 (86.96)	95 (88.79)
	Ph.D/ LT	3 (12.50)	3 (10.00)	3 (10.00)	3 (13.04)	12 (11.21)
	Total	24 (100.00)	30 (100.00)	30 (100.00)	23 (100.00)	107 (100.00)
All Sample Districts-18	B.Ed./M.Ed	148 (89.70)	163 (91.06)	157 (90.75)	126 (85.14)	594 (89.32)
	Ph.D/ LT	17 (10.30)	16 (8.94)	16 (9.25)	22 (14.86)	71 (10.68)
	Total	165 (100.00)	179 (100.00)	173 (100.00)	148 (100.00)	665 (100.00)

Source- Based on field survey.

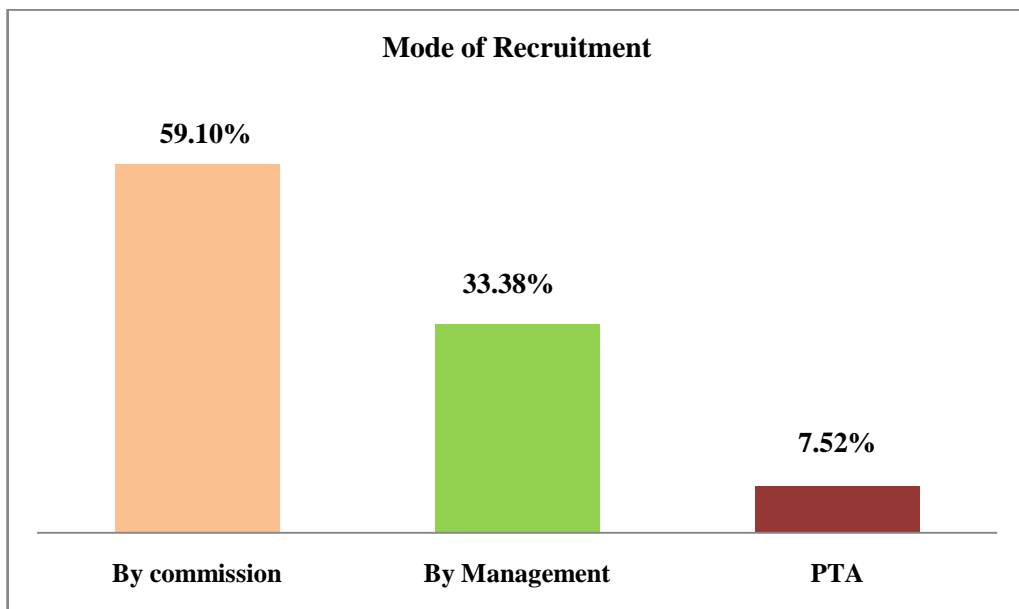
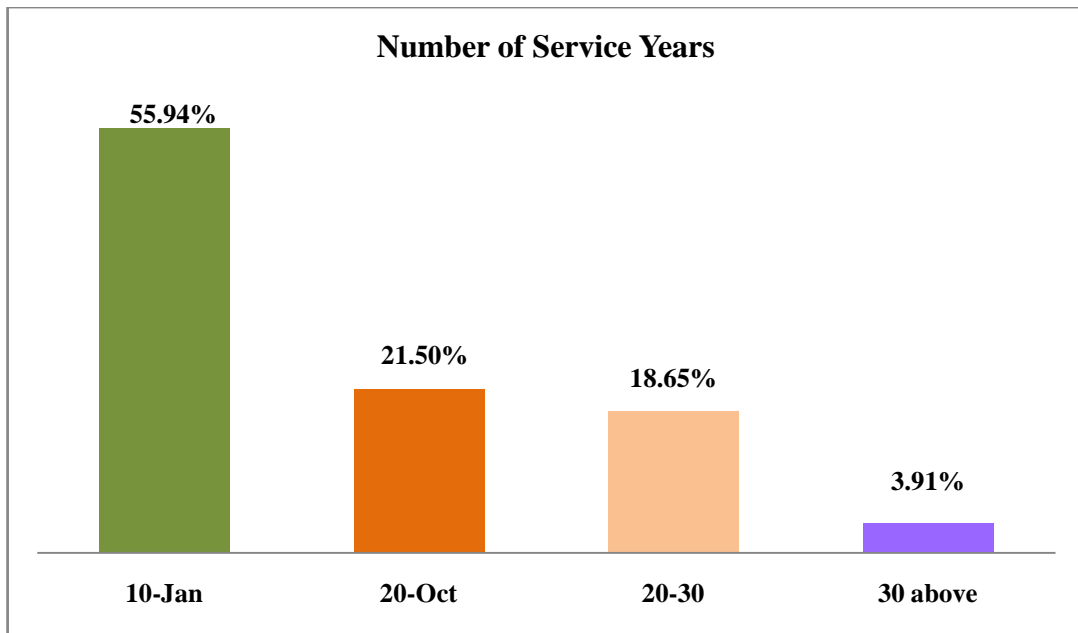


As presented in Table 6.3, out of total 665 sample subject teachers, Maximum 56 percent were reported to be appointed during last 1 to 10 years. Above 21 percent were appointed during last 10 to 20 years and about 19 percent for last 20 to 30 years. Some 4 percent were the senior most having their services more than 30 years. Out of total subjects teachers maximum 59 percent were recruited by commission and above 33 percent by management. Some 7 percent subject teachers were also appointed on contractual basis.

Table 6.3: Numbers of Service Year and Mode of Recruitment

Particular	Number of Years					Mode of Recruitment			Total
	1-10	10-20	20-30	30 above	Total	By commission	By Management	PTA	
Urban District-3	59 (51.30)	27 (23.48)	18 (15.65)	11 (9.57)	115 (100.00)	94 (81.74)	20 (17.39)	1 (0.87)	115 (100.00)
Rural District-3	67 (58.77)	28 (24.56)	19 (16.67)	0 (0.00)	114 (100.00)	62 (54.39)	46 (40.35)	6 (5.26)	114 (100.00)
Districts with High Tele – Density -	64 (56.64)	28 (24.78)	21 (18.58)	0 (0.00)	113 (100.00)	75 (66.37)	37 (32.74)	1 (0.88)	113 (100.00)
Districts with Lower Tele – Density -3	60 (57.69)	16 (15.38)	17 (16.35)	11 (10.58)	104 (100.00)	56 (53.85)	34 (32.69)	14 (13.46)	104 (100.00)
Districts Characterized as backward by the State-3	68 (61.26)	20 (18.02)	19 (17.12)	4 (3.60)	111 (100.00)	49 (44.14)	41 (36.94)	21 (18.92)	111 (100.00)
Districts with Electricity Problems-3	54 (50.00)	24 (22.22)	30 (27.78)	0 (0.00)	108 (100.00)	57 (52.78)	44 (40.74)	7 (6.48)	108 (100.00)
All Sample Districts-18	372 (55.94)	143 (21.50)	124 (18.65)	26 (3.91)	665 (100.00)	393 (59.10)	222 (33.38)	50 (7.52)	665 (100.00)

Source- Based on field survey

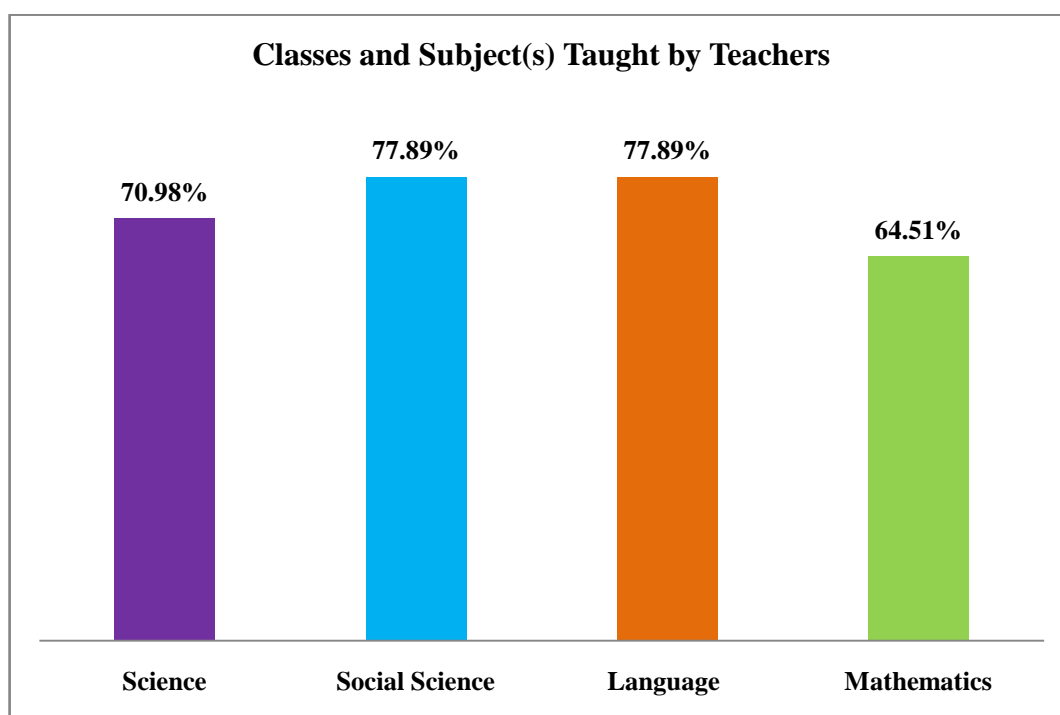


Out of total 665 sample subject teachers in secondary and higher secondary schools, 77.89 percent teachers have reported that they teach social science and language both and 71 percent teachers have reported science teaching followed by minimum 64.51 percent teachers who teach mathematics (Table 6.4).

Table 6.4: Classes and Subject(s) Taught by Teachers (Multiple response)

Particulars	Science	Social Science	Language	Mathematics	Total
Urban Districts-3	80 (69.57)	82 (71.30)	78 (67.83)	76 (66.09)	115 (100.00)
Rural Districts-3	82 (71.93)	90 (78.95)	88 (77.19)	70 (61.40)	114 (100.00)
Districts with High Tele – Density-3	84 (74.34)	90 (79.65)	86 (76.11)	82 (72.57)	113 (100.00)
Districts with Lower Tele – Density-3	62 (59.62)	92 (88.46)	84 (80.77)	64 (61.54)	104 (100.00)
Districts Characterized as backward by the State-3	82 (73.87)	84 (75.68)	98 (88.29)	83 (74.77)	111 (100.00)
Districts with Electricity Problems-3	82 (75.93)	80 (74.07)	84 (77.78)	54 (50.00)	108 (100.00)
All Sample Districts-18	472 (70.98)	518 (77.89)	518 (77.89)	429 (64.51)	665 (100.00)

Source- Based on field survey



Use of ICT as Teaching Tool

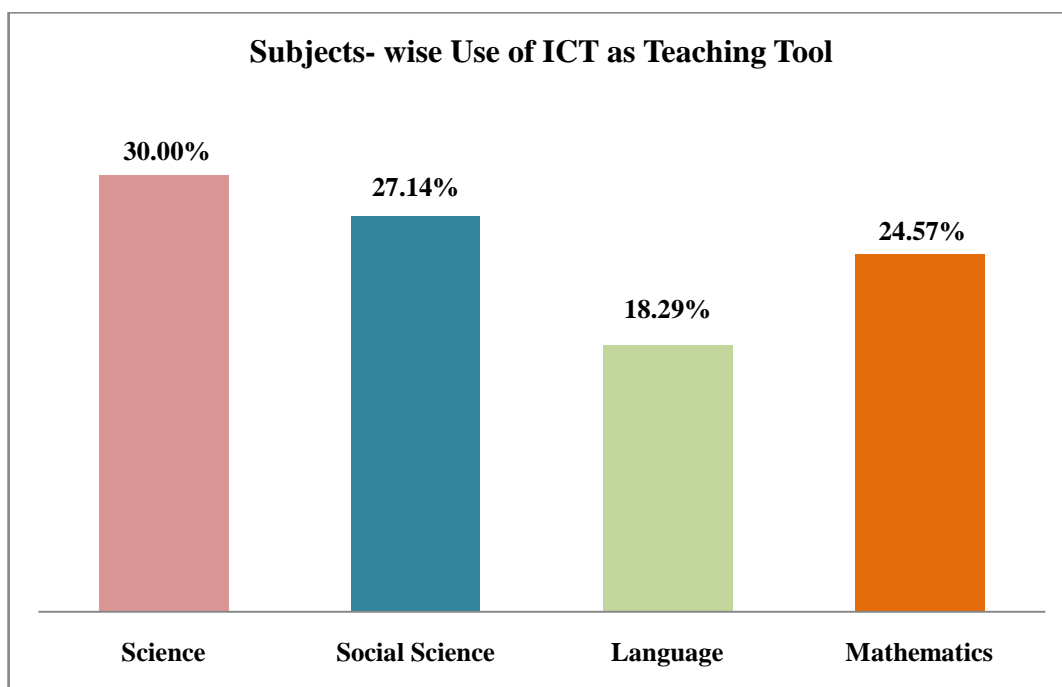
As presented in Table 6.5, about 53 percent of the total sample subject teachers use ICT as teaching tool to teach their subject in the schools. Maximum 30 to 27 percent teachers of science and social science use ICT as tool in their subjects respectively. However, above 24 percent math teachers also reported use of ICT as teaching tool. Maximum 18 percent

Language teachers use ICT for the same. There has not been any significant variation in the use of ICT as teaching tool for different subjects across different categories of the sample districts.

Table 6.5: Subjects- wise Use of ICT as Teaching Tool?

Particulars	Subject use teachers ICT as teaching tools					Subject teachers not use ICT as teaching tools	Total
	Science	Social Science	Language	Mathematics	Total		
Urban District-3	23 (32.86)	18 (25.71)	12 (17.14)	17 (24.29)	70 (60.87) (100.0)	45 (39.13)	115 (100.0)
Rural District-3	18 (24.66)	20 (27.40)	18 (24.66)	17 (23.29)	73 (64.04) (100.0)	41 (35.96)	114 (100.0)
District with High Tele – Density-3	18 (27.27)	20 (30.30)	11 (16.67)	17 (25.76)	66 (58.41) (100.0)	47 (41.59)	113 (100.0)
Districts with Lower Tele – Density-3	14 (32.56)	11 (25.58)	7 (16.28)	11 (25.58)	43(41.34) (100.0)	61 (58.65)	104 (100.0)
Districts Characterized as backward by the State-3	12 (30.77)	11 (28.21)	5 (12.82)	11 (28.21)	39 (35.13) (100.0)	72(64.86)	111 (100.0)
Districts with Electricity Problems-3	20 (33.90)	15 (25.42)	11 (18.64)	13 (22.03)	59 (54.63) (100.0)	49(45.37)	108 (100.0)
All Sample Districts-18	105 (30.00)	95 (27.14)	64 (18.29)	86 (24.57)	350 (52.63) (100.0)	315(47.37)	665 (100.0)

Source- Based on field survey



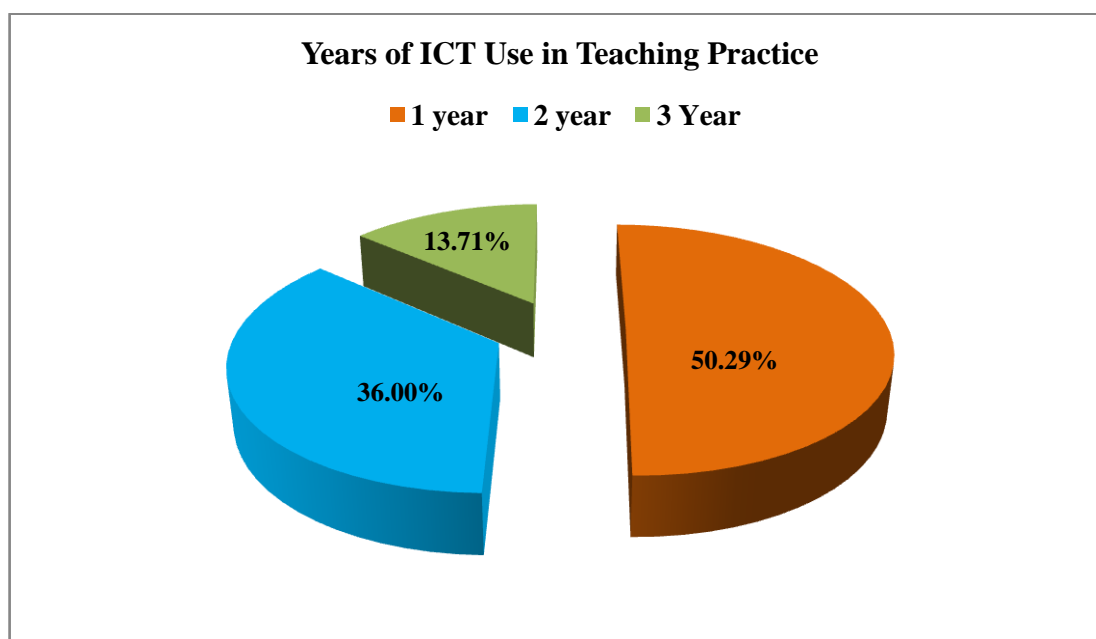
More than 50 percent subject teachers reported use of ICT in their teaching practice. Some 36 percent teachers have been using ICT for last 2 years and rest of about 14 percent reported

ICT use in teaching for last 3 years. Thus, for most of the teachers, ICT use in subject teaching has been new in sample schools (Table 6.6).

Table 6.6: Years of ICT Use in Teaching Practice

Particulars	1 year	2 years	3 Years	Total
Urban District-3	31 (44.29)	26 (37.14)	13 (18.57)	70 (100.00)
Rural District-3	37 (50.68)	27 (36.99)	9 (12.33)	73 (100.00)
District with High Tele - Density-3	32 (48.48)	23 (34.85)	11 (16.67)	66 (100.00)
Districts with Lower Tele - Density-3	16 (37.21)	18 (41.86)	9 (20.93)	43 (100.00)
Districts Characterized as backward by the State-3	19 (48.72)	17 (43.59)	3 (7.69)	39 (100.00)
Districts with Electricity Problems-3	41 (69.49)	15 (25.42)	3 (5.08)	59 (100.00)
All Sample Districts-18	176 (50.29)	126 (36.00)	48 (13.71)	350 (100.00)

Source- Based on field survey



ICT Training

As presented in Table 6.7, over 78 percent subject teachers have reported about getting training on computer awareness programme during last 3 years. Other 2 percent have also received training relating to the use of ICT in teaching. All the 532 subject teachers in sample schools received training with in the school and respective schools' ICT teachers imparted training.

Table 6.7: ICT Training During Past Three Years

Particulars	Name of the Training			
	Computer Awareness Programme	Any other	No Training	Total
Urban District-3	89 (77.39)	0 (0.00)	26 (22.61)	115 (100.00)
Rural District-3	87 (76.32)	0 (0.00)	27 (23.68)	114 (100.00)
District with High Tele – Density-3	99 (87.61)	0 (0.00)	14 (12.39)	113 (100.00)
Districts with Lower Tele – Density-3	70 (67.31)	6 (5.77)	28 (26.92)	104 (100.00)
Districts Characterized as backward by the State-3	84 (75.68)	7 (6.31)	20 (18.02)	111 (100.00)
Districts with Electricity Problems-3	90 (83.33)	0 (0.00)	18 (16.67)	108 (100.00)
All Sample Districts-18	519 (78.05)	13 (1.95)	133 (20.00)	665 (100.00)

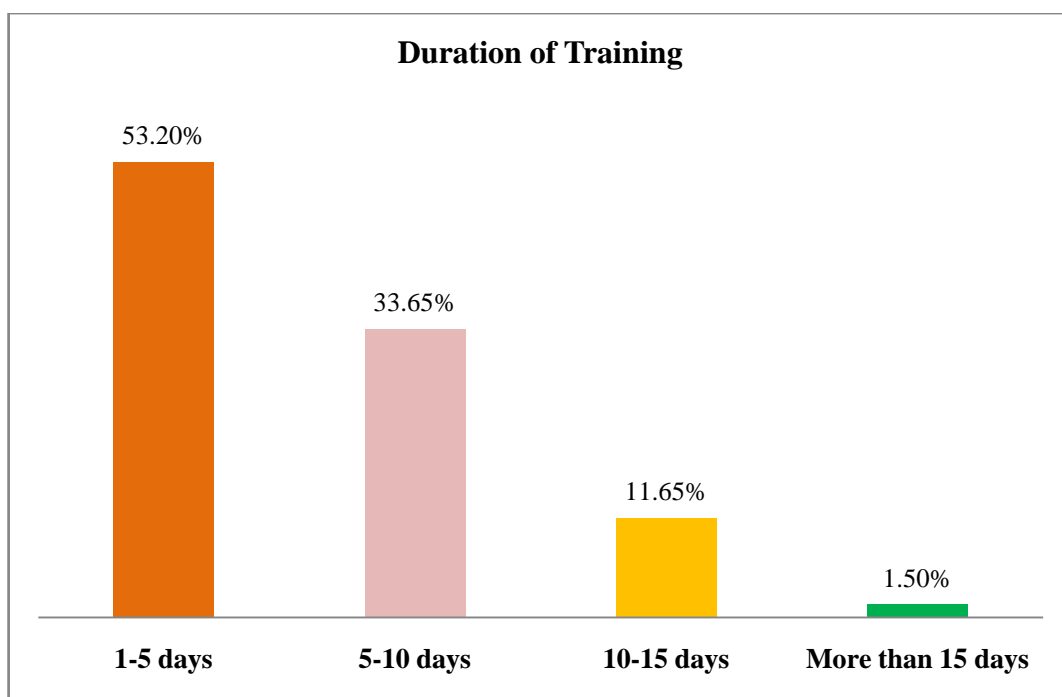
Source- Based on field survey

Most of the 87 percent teachers have undergone training with the duration ranging from one day to 10 days. About 12 percent teachers have reported training duration from 10 to 15 days (Table 6.8).

Table 6.8: Duration of Training

Particulars	1-5 days	5-10 days	10-15 days	More than 15 days	Total
Urban District-3	47 (52.81)	33 (37.08)	8 (8.99)	1 (1.12)	89 (100.00)
Rural District-3	44 (50.57)	34 (39.08)	9 (10.34)	0 (0.00)	87 (100.00)
District with High Tele – Density-3	53 (53.54)	29 (29.29)	14 (14.14)	3 (3.03)	99 (100.00)
Districts with Lower Tele – Density-3	33 (43.42)	24 (31.58)	17 (22.37)	2 (2.63)	76 (100.00)
Districts Characterized as backward by the State-3	47 (51.65)	29 (31.87)	13 (14.29)	2 (2.20)	91 (100.00)
Districts with Electricity Problems-3	59 (65.56)	30 (33.33)	1 (1.11)	0 (0.00)	90 (100.00)
All Sample Districts-18	283 (53.20)	179 (33.65)	62 (11.65)	8 (1.50)	532 (100.00)

Source- Based on field survey

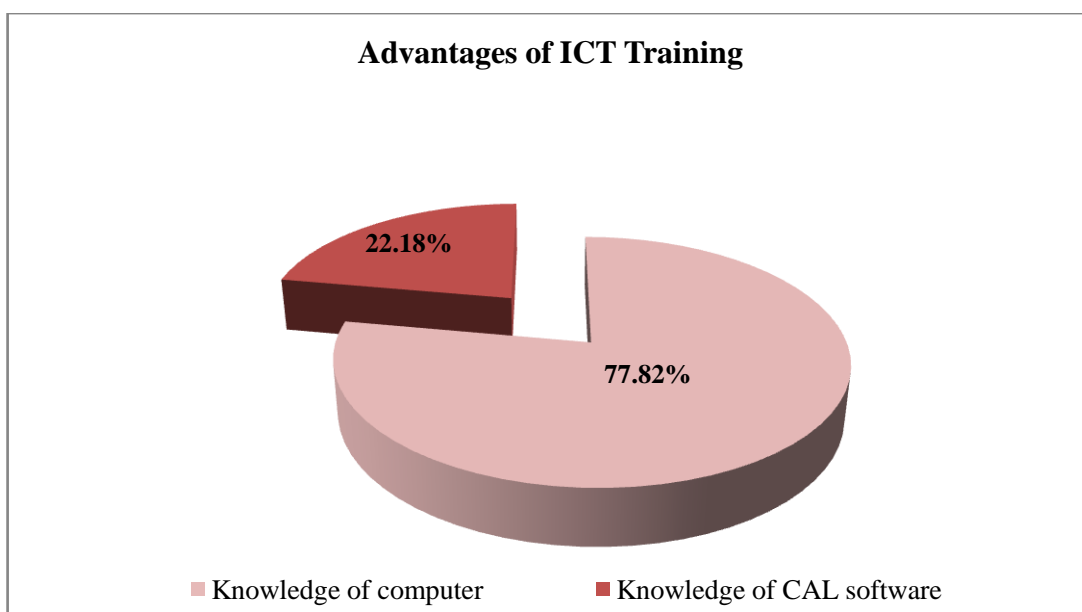


Out of total sample subject teachers who received training, 78 percent reported acquisition of computer knowledge with ICT training and over 22 percent gained knowledge of CAL software (Table 6.9).

Table 6.9: Advantages of ICT Training

Particulars	Knowledge of computer	Knowledge of Cal software	Total
Urban District-3	78 (87.64)	11 (12.36)	89 (100.00)
Rural District-3	51 (58.62)	36 (41.38)	87 (100.00)
District with High Tele – Density-3	67 (67.68)	32 (32.32)	99 (100.00)
Districts with Lower Tele – Density-3	59 (77.63)	17 (22.37)	76 (100.00)
Districts Characterized as backward by the State-3	86 (94.51)	5 (5.49)	91 (100.00)
Districts with Electricity Problems-3	73 (81.11)	17 (18.89)	90 (100.00)
All Sample Districts-18	414 (77.82)	118 (22.18)	532 (100.00)

Source- Based on field survey

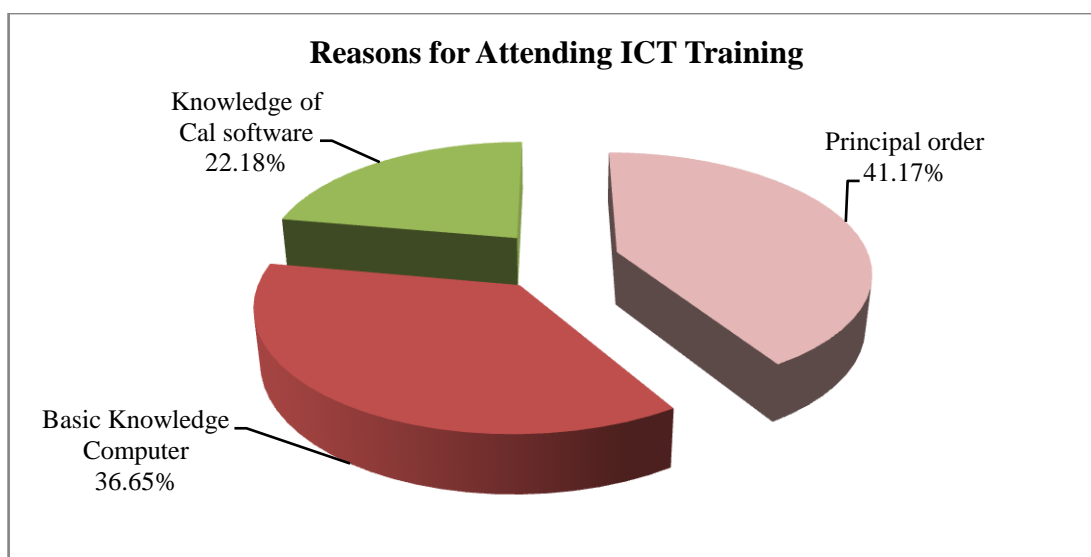


A substantial part of subject teachers who attained ICT training (41 percent) have undergone training only because of principal orders. About 37 percent teachers have attended ICT training for gaining basic computer knowledge and 22 percent subject teachers undergone training to acquire knowledge of CAL software (Table 6.10). Thus, majority of teachers attended ICT training under pressure of institutional head.

Table 6.10: Reasons for Attending ICT Training

Particulars	Principal order	Basic Knowledge Computer	Knowledge of Cal software	Total
Urban District-3	29 (32.58)	49 (55.06)	11 (12.36)	89 (100.00)
Rural District-3	29 (33.33)	22 (25.29)	36 (41.38)	87 (100.00)
District with High Tele – Density-3	31 (31.31)	36 (36.36)	32 (32.32)	99 (100.00)
Districts with Lower Tele – Density-3	32 (42.11)	27 (35.53)	17 (22.37)	76 (100.00)
Districts Characterized as backward by the State-3	63 (69.23)	23 (25.27)	5 (5.49)	91 (100.00)
Districts with Electricity Problems-3	35 (38.89)	38 (42.22)	17 (18.89)	90 (100.00)
All Sample Districts-18	219 (41.17)	195 (36.65)	118 (22.18)	532 (100.00)

Source- Based on field survey



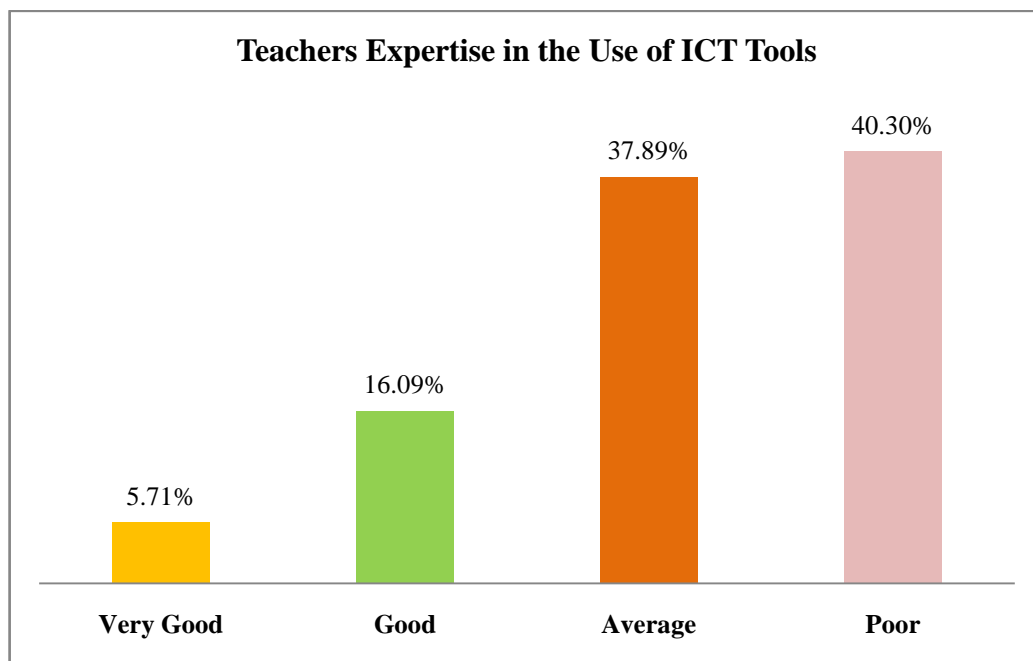
Use of ICT Tools

The self assessment of teachers in terms of acquired expertise in the use of ICT indicates that over 40 percent teachers are still poor in this respect. Some 38 percent have average level expertise. After getting training, only 16 percent and 6 percent teachers could develop good and very good expertise respectively (Table 6.11). Thus, for over 40 percent teachers ICT training has been quite ineffective.

Table 6.11: Teachers Expertise in the Use of ICT Tools

Particulars	Very Good	Good	Average	Poor	Total
Urban District-3	0 (0.00)	31 (26.96)	43 (37.39)	41 (35.65)	115 (100.00)
Rural District-3	6 (5.26)	22 (19.30)	48 (42.11)	38 (33.33)	114 (100.00)
District with High Tele – Density-3	4 (3.54)	16 (14.16)	53 (46.90)	40 (35.40)	113 (100.00)
Districts with Lower Tele – Density-3	4 (3.85)	17 (16.35)	24 (23.08)	59 (56.73)	104 (100.00)
Districts Characterized as backward by the State-3	21 (18.92)	7 (6.31)	32 (28.83)	51 (45.95)	111 (100.00)
Districts with Electricity Problems-3	3 (2.78)	14 (12.96)	52 (48.15)	39 (36.11)	108 (100.00)
All Sample Districts-18	38 (5.71)	107 (16.09)	252 (37.89)	268 (40.30)	665 (100.00)

Source- Based on field survey

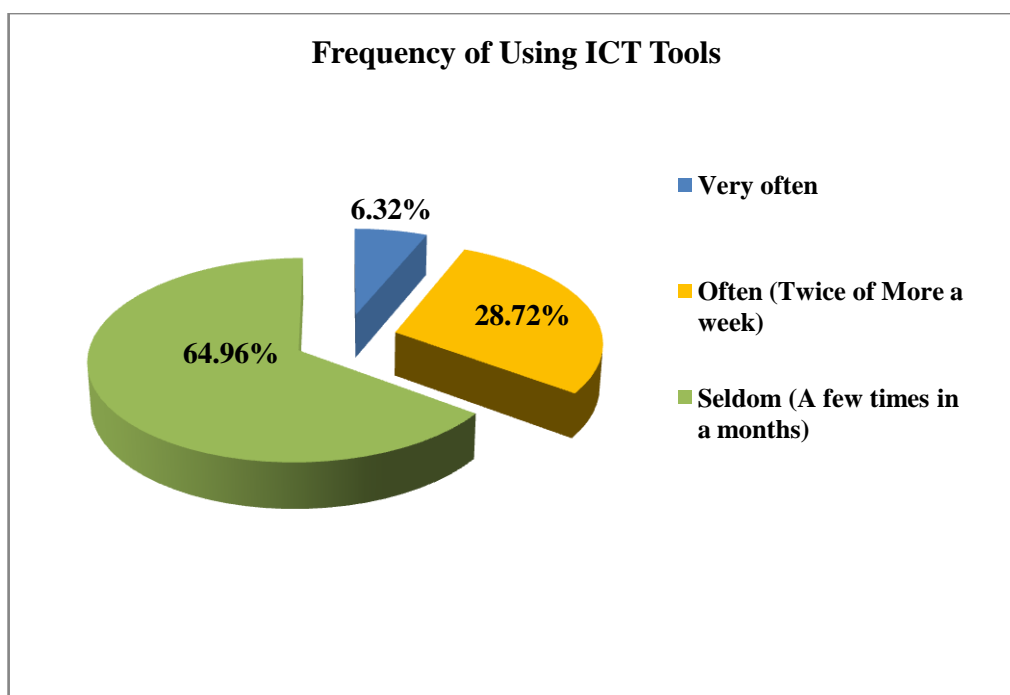


Most of the, 65 percent, teachers seldom use ICT tools in their subject teaching. About 29 percent use these often and over 6 percent are using ICT tools very often as reported by themselves (Table 6.12). Thus, on average more than two- third subject teachers are not used to using ICT tools in sample schools across the districts.

Table 6.12: Frequency of Using ICT Tools

Particulars	Very often	Often (Twice of More a week)	Seldom (A few times in a months)	Total
Urban District-3	17 (14.78)	32 (27.83)	66 (57.39)	115 (100.00)
Rural District-3	9 (7.89)	52 (45.61)	53 (46.49)	114 (100.00)
District with High Tele – Density-3	7 (6.19)	22 (19.47)	84 (74.34)	113 (100.00)
Districts with Lower Tele – Density-3	2 (1.92)	27 (25.96)	75 (72.12)	104 (100.00)
Districts Characterized as backward by the State-3	3 (2.70)	35 (31.53)	73 (65.77)	111 (100.00)
Districts with Electricity Problems-3	4 (3.70)	23 (21.30)	81 (75.00)	108 (100.00)
All Sample Districts-18	42 (6.32)	191 (28.72)	432 (64.96)	665 (100.00)

Source- Based on field survey



As per information presented in Table 6.13, school computer is accessible to only over 60 percent subject teachers. For most of these, 85 percent, computer is accessible from 1 to 3 hours in a week. Weekly computer accessibility is reported from 3 to 5 hours by 13 percent and more than 5 hours by 2 percent subject teachers in sample schools.

Table 6.13: Weekly School's Computer Accessibility to Teachers

Particulars	Use (specific subject)	Not use	Total	Details of computer use hours/ week			Total
				1-3 H/w	3-5 H/w	more than 5 H/w	
Urban District-3	70 (60.87)	45 (39.13)	115 (100.00)	63 (90.00)	7 (10.00)	0 (0.00)	70 (100.00)
Rural District-3	74 (64.91)	40 (35.09)	114 (100.00)	60 (81.08)	14 (18.92)	0 (0.00)	74 (100.00)
District with High Tele – Density-3	78 (69.03)	35 (30.97)	113 (100.00)	46 (58.97)	25 (32.05)	7 (8.97)	78 (100.00)
Districts with Lower Tele – Density-3	55 (52.88)	49 (47.12)	104 (100.00)	54 (98.18)	1 (1.82)	0 (0.00)	55 (100.00)
Districts Characterized as backward by the State-3	64 (57.66)	47 (42.34)	111 (100.00)	60 (93.75)	3 (4.69)	1 (1.56)	64 (100.00)
Districts with Electricity Problems-3	60 (55.56)	48 (44.44)	108 (100.00)	58 (96.67)	2 (3.33)	0 (0.00)	60 (100.00)
All Sample Districts-18	401 (60.30)	264 (39.70)	665 (100.00)	341 (85.04)	52 (12.97)	8 (2.00)	401 (100.00)

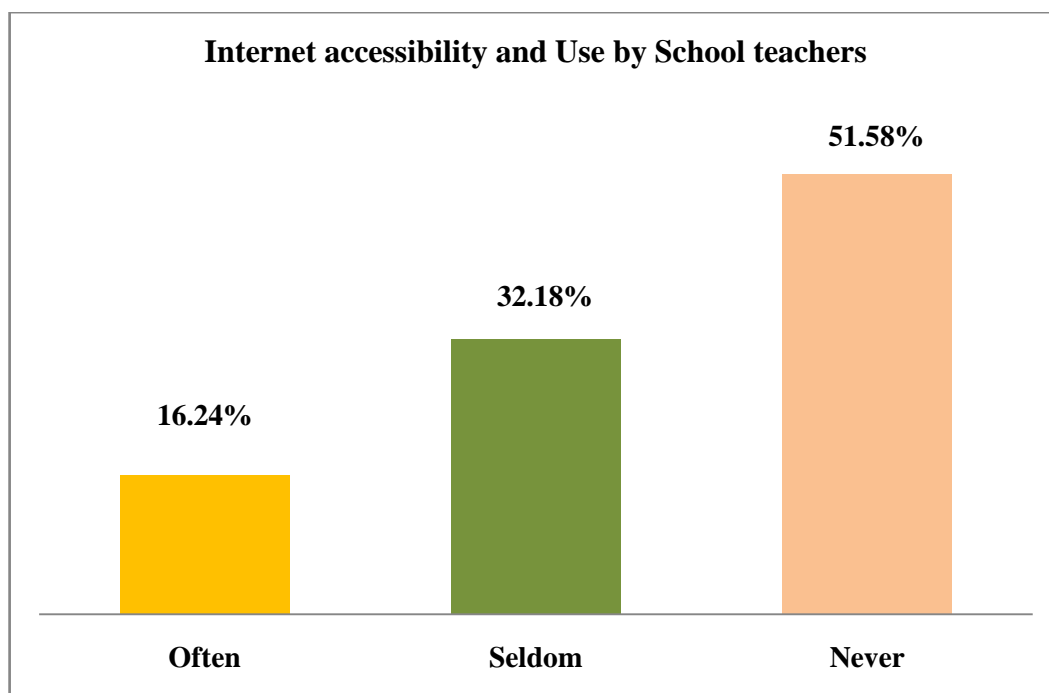
Source- Based on field survey

About 52 percent teachers never used internet in their schools despite its availability. Rest of the teachers used internet occasionally but not on a regular basis (Table 6.14).

Table 6.14: Internet accessibility and Use by School teachers

Particulars	Use of Internet in school			
	Often	Seldom	Never	Total
Urban District-3	6 (5.22)	53 (46.09)	56 (48.70)	115 (100.00)
Rural District-3	16 (14.04)	36 (31.58)	62 (54.39)	114 (100.00)
District with High Tele – Density-3	57 (50.44)	25 (22.12)	31 (27.43)	113 (100.00)
Districts with Lower Tele – Density-3	20 (19.23)	10 (9.62)	74 (71.15)	104 (100.00)
Districts Characterized as backward by the State-3	4 (3.60)	33 (29.73)	74 (66.67)	111 (100.00)
Districts with Electricity Problems-3	5 (4.63)	57 (52.78)	46 (42.59)	108 (100.00)
All Sample Districts-18	108 (16.24)	214 (32.18)	343 (51.58)	665 (100.00)

Source- Based on field survey



About 52 percent subject teachers have reported use of internet in teaching. About 56 percent of these teachers reported the use of internet for finding /information relating to subject teaching and 44 percent also used internet in teaching specific subject (Table 6.15).

Table 6.15: Internet Use in Job by Teachers

Particulars	uses of Internet			Total
	In teaching specific subject	Finding/ information	Total Teacher	
Urban District-3	60 (100.00)	0 (0.00)	60 (52.17) (100.00)	115 (100.00)
Rural District-3	28 (54.90)	23 (45.10)	51 (46.36) (100.00)	110 (100.00)
District with High Tele – Density-3	40 (35.40)	73 (64.60)	113 (100.0) (100.00)	113 (100.00)
Districts with Lower Tele – Density-3	1 (4.35)	22 (95.65)	23 (22.33) (100.00)	103 (100.00)
Districts Characterized as backward by the State-3	13 (37.14)	22 (62.86)	35 (31.53) (100.00)	111 (100.00)
Districts with Electricity Problems-3	10 (16.13)	52 (83.87)	62 (57.41) (100.00)	108 (100.00)
All Sample Districts-18	152 (44.19)	192 (55.81)	344 (52.12) (100.00)	660 (100.00)

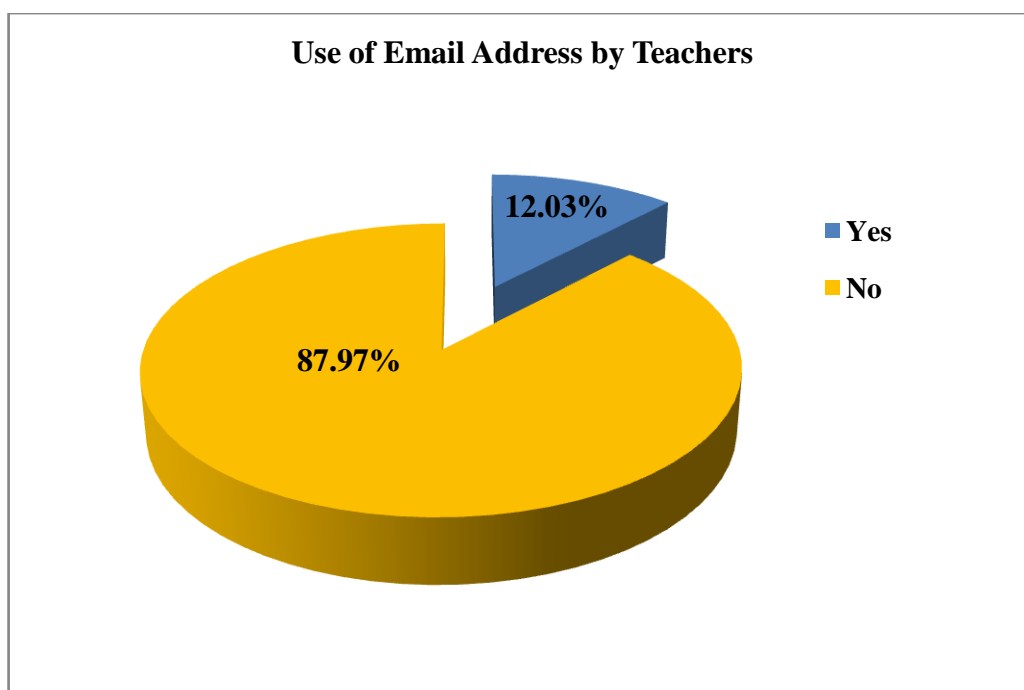
Source- Based on field survey

Most of the teachers in sample schools were found to be less computer savvy as about 88 percent did not have their email ID. There has not been much difference in this respect among the teachers across the districts of different categories (Table 6.16).

Table 6.16: Use of Email Address by Teachers

Particulars	Yes	No	Total
Urban District-3	16 (13.91)	99 (86.09)	115 (100.00)
Rural District-3	25 (21.93)	89 (78.07)	114 (100.00)
District with High Tele – Density-3	18 (15.93)	95 (84.07)	113 (100.00)
Districts with Lower Tele – Density-3	9 (8.65)	95 (91.35)	104 (100.00)
Districts Characterized as backward by the State-3	9 (8.11)	102 (91.89)	111 (100.00)
Districts with Electricity Problems-3	3 (2.78)	105 (97.22)	108 (100.00)
All Sample Districts-18	80 (12.03)	585 (87.97)	665 (100.00)

Source- Based on field survey



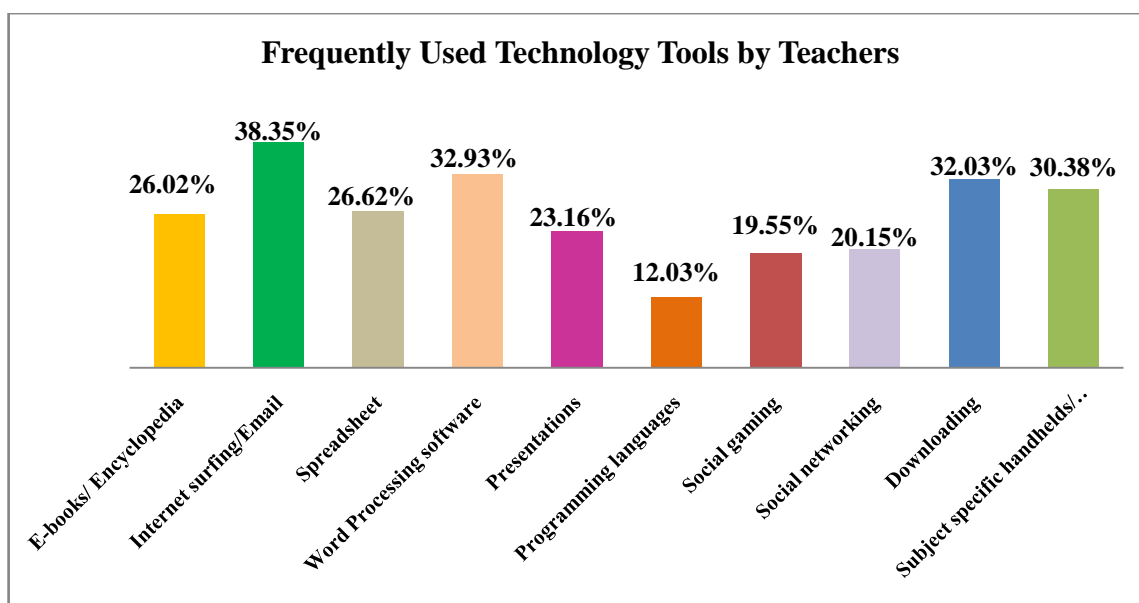
Only 12 to 38 percent teachers in sample schools reported the use of different ICT tools by the subject teachers. The most used tools were internet surfing, word processing software, downloading and subject specific software (Table 6.17).

Table 6.17: Frequently Used Technology Tools by Teachers

(Multiple responses)

Particulars	E-books/ Encyclo pedia	Internet surfing/ Email	Spreads heet	Word Process ing softwar e	Present ations	Progra mming langua ges	Social gaming	Social networ king	Downl oading	Subject specific handheld s/ software' s	Total No. of teach ers
Urban Districts-3	13 (11.30)	44 (38.26)	11 (9.57)	31 (26.96)	16 (13.91)	19 (16.52)	21 (18.26)	17 (14.78)	37 (32.17)	18 (15.65)	115 (100)
Rural Districts- 3	30 (26.32)	39 (34.21)	24 (21.05)	16 (14.04)	32 (28.07)	16 (14.04)	12 (10.53)	27 (23.68)	32 (28.07)	56 (49.12)	114 (100)
District with High Tele – Density-3	70 (61.95)	59 (52.21)	61 (53.98)	59 (52.21)	64 (56.64)	39 (34.51)	66 (58.41)	59 (52.21)	64 (56.64)	34 (30.09)	113 (100)
Districts with Lower Tele – Density-3	12 (11.54)	24 (23.08)	29 (27.88)	40 (38.46)	20 (19.23)	4 (3.85)	19 (18.27)	17 (16.35)	28 (26.92)	31 (29.81)	104 (100)
Districts Characterized as backward by the State-3	19 (17.12)	27 (24.32)	24 (21.62)	28 (25.23)	22 (19.82)	2 (1.80)	4 (3.60)	3 (2.70)	22 (19.82)	36 (32.43)	111 (100)
Districts with Electricity Problems-3	29 (26.85)	62 (57.41)	28 (25.93)	45 (41.67)	0 (0.00)	0 (0.00)	8 (7.41)	11 (10.19)	30 (27.78)	27 (25.00)	108 (100)
All Sample Districts-18	173 (26.02)	255 (38.35)	177 (26.62)	219 (32.93)	154 (23.16)	80 (12.03)	130 (19.55)	134 (20.15)	213 (32.03)	202 (30.38)	665 (1000)

Source- Based on field survey

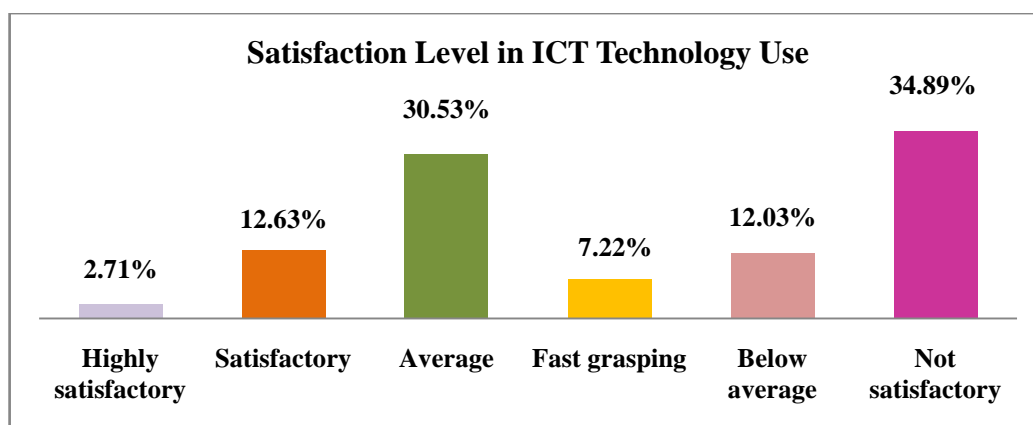


Only 15 percent subject teachers rated their use of ICT technology as satisfactory. Some 30 percent rated their satisfaction level as average and 12 percent below average. Above one-third teachers were not satisfied with their performance in terms of use of ICT technology (Table 6.18).

Table 6.18: Satisfaction Level in ICT Technology Use

Particulars	Highly satisfactory	Satisfactory	Average	Fast grasping	Below average	Not satisfactory	Total
Urban District-3	4 (3.48)	15 (13.04)	38 (33.04)	2 (1.74)	18 (15.65)	38 (33.04)	115 (100.00)
Rural District-3	2 (1.75)	22 (19.30)	36 (31.58)	8 (7.02)	16 (14.04)	30 (26.32)	114 (100.00)
District with high Tele – Density-3	4 (3.54)	14 (12.39)	20 (17.70)	6 (5.31)	11 (9.73)	58 (51.33)	113 (100.00)
Districts with Lower Tele – Density-3	2 (1.92)	15 (14.42)	20 (19.23)	6 (5.77)	13 (12.50)	48 (46.15)	104 (100.00)
Districts Characterized as backward by the State-3	2 (1.80)	5 (4.50)	36 (32.43)	16 (14.41)	10 (9.01)	42 (37.84)	111 (100.00)
Districts with Electricity Problems-3	4 (3.70)	13 (12.04)	53 (49.07)	10 (9.26)	12 (11.11)	16 (14.81)	108 (100.00)
All Sample Districts-18	18 (2.71)	84 (12.63)	203 (30.53)	48 (7.22)	80 (12.03)	232 (34.89)	665 (100.00)

Source- Based on field survey

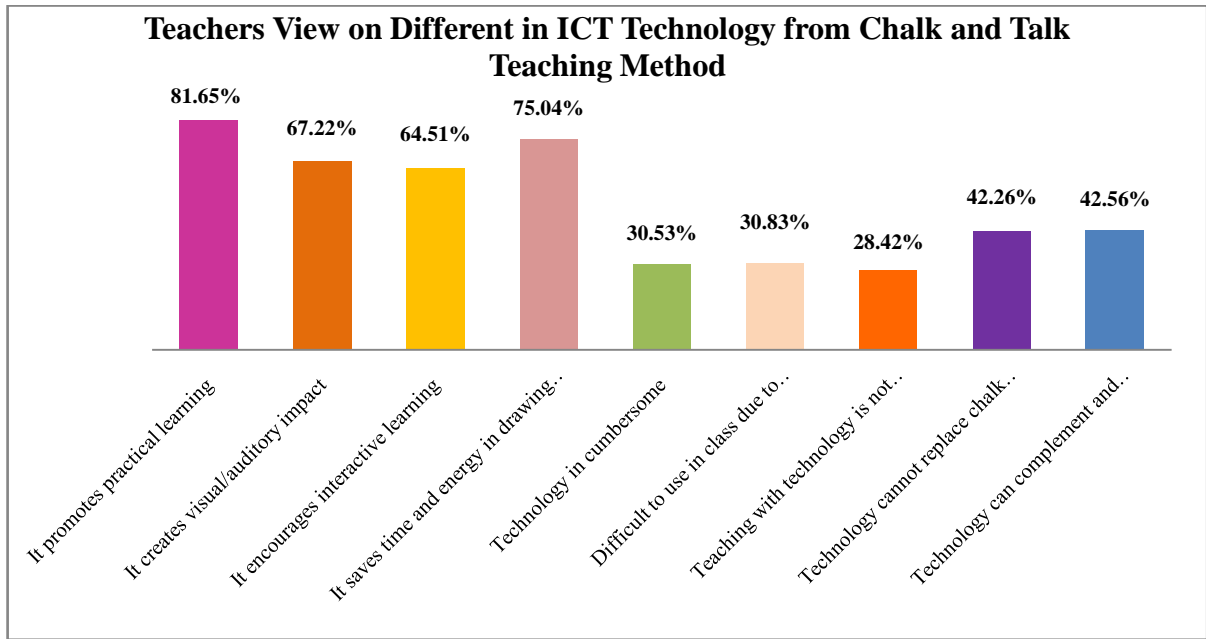


Most of the 82 percent subject teachers considered ICT technology different from chalk and talk method as ICT is found to be promoting practical learning among students. Some 75 to 65 percent teachers supported ICT use in teaching as it saves time and energy in drawing diagrams on black board, encourage interactive learning and creates visual and auditory impact among student (Table 6.19). Thus, most of the school subject teachers were convinced with the benefits of the use of ICT in school teaching.

Table 6.19: Teachers View on Different in ICT Technology from Chalk and Talk Teaching Method

Particulars	It promotes practical learning	It creates visual/auditory impact	It encourages interactive learning	It saves time and energy in drawing diagrams on board	Technology in cumbersome	Difficult to use in class due to heterogeneity of students aptitude	Teaching with technology is not suitable for Indian context	Technology cannot replace chalk and talk	Technology can complement and supplement	Total
Urban District-3	105 (91.30)	81 (70.43)	81 (70.43)	95 (82.61)	33 (28.70)	28 (24.35)	35 (30.43)	52 (45.22)	49 (42.61)	115 (100)
Rural District-3	101 (88.60)	89 (78.07)	86 (75.44)	102 (89.47)	17 (14.91)	32 (28.07)	18 (15.79)	61 (53.51)	54 (47.37)	114 (100)
District with high Tele – Density-3	65 (57.52)	51 (45.13)	44 (38.94)	71 (62.83)	56 (49.56)	58 (51.33)	50 (44.25)	31 (27.43)	35 (30.97)	113 (100)
Districts with Lower Tele – Density-3	93 (89.42)	79 (75.96)	69 (66.35)	64 (61.54)	12 (11.54)	7 (6.73)	20 (19.23)	42 (40.38)	41 (39.42)	104 (100)
Districts Characterized as backward by the State-3	92 (82.88)	73 (65.77)	73 (65.77)	80 (72.07)	33 (29.73)	33 (29.73)	16 (14.41)	39 (35.14)	48 (43.24)	111 (100)
Districts with Electricity Problems-3	87 (80.56)	74 (68.52)	76 (70.37)	87 (80.56)	52 (48.15)	47 (43.52)	50 (46.30)	56 (51.85)	56 (51.85)	108 (100)
All Sample Districts-18	543 (81.65)	447 (67.22)	429 (64.51)	499 (75.04)	203 (30.53)	205 (30.83)	189 (28.42)	281 (42.26)	283 (42.56)	665 (100)

Source- Based on field survey

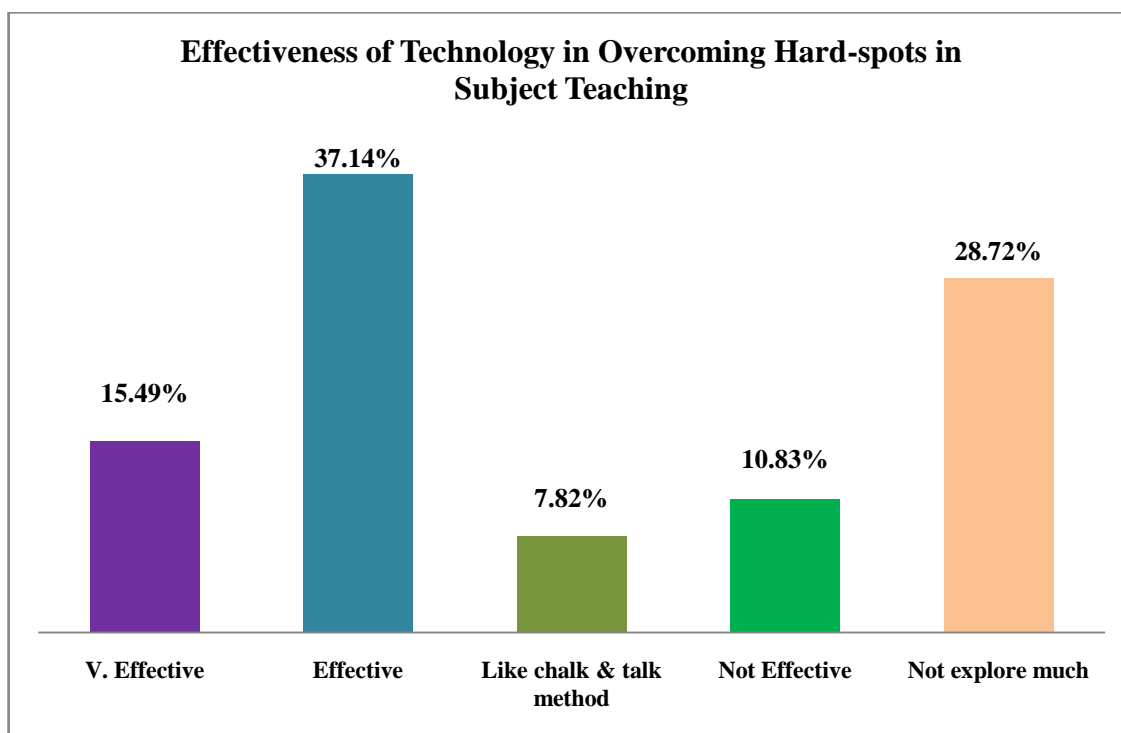


Over 37 percent subject teachers found ICT based teaching as effective and over 15 percent very effective in overcoming hard-spots in subject teaching. Some 11 percent did not find it effective and about 30 percent teachers did not explore much in their respect (Table 6.20).

Table 6.20: Effectiveness of Technology in Overcoming Hard-spots in Subject Teaching

Particulars	V. Effective	Effective	Like chalk & talk method	Not Effective	Not explore much	Total
Urban District-3	37 (32.17)	32 (27.83)	0 (0.00)	1 (0.87)	45 (39.13)	115 (100.00)
Rural District-3	21 (18.42)	36 (31.58)	14 (12.28)	8 (7.02)	35 (30.70)	114 (100.00)
District with High Tele – Density-3	14 (12.39)	44 (38.94)	11 (9.73)	31 (27.43)	13 (11.50)	113 (100.00)
Districts with Lower Tele – Density-3	22 (21.15)	33 (31.73)	5 (4.81)	15 (14.42)	29 (27.88)	104 (100.00)
Districts Characterized as backward by the State-3	6 (5.41)	29 (26.13)	21 (18.92)	8 (7.21)	47 (42.34)	111 (100.00)
Districts with Electricity Problems-3	3 (2.78)	73 (67.59)	1 (0.93)	9 (8.33)	22 (20.37)	108 (100.00)
All Sample Districts-18	103 (15.49)	247 (37.14)	52 (7.82)	72 (10.83)	191 (28.72)	665 (100.00)

Source- Based on field survey

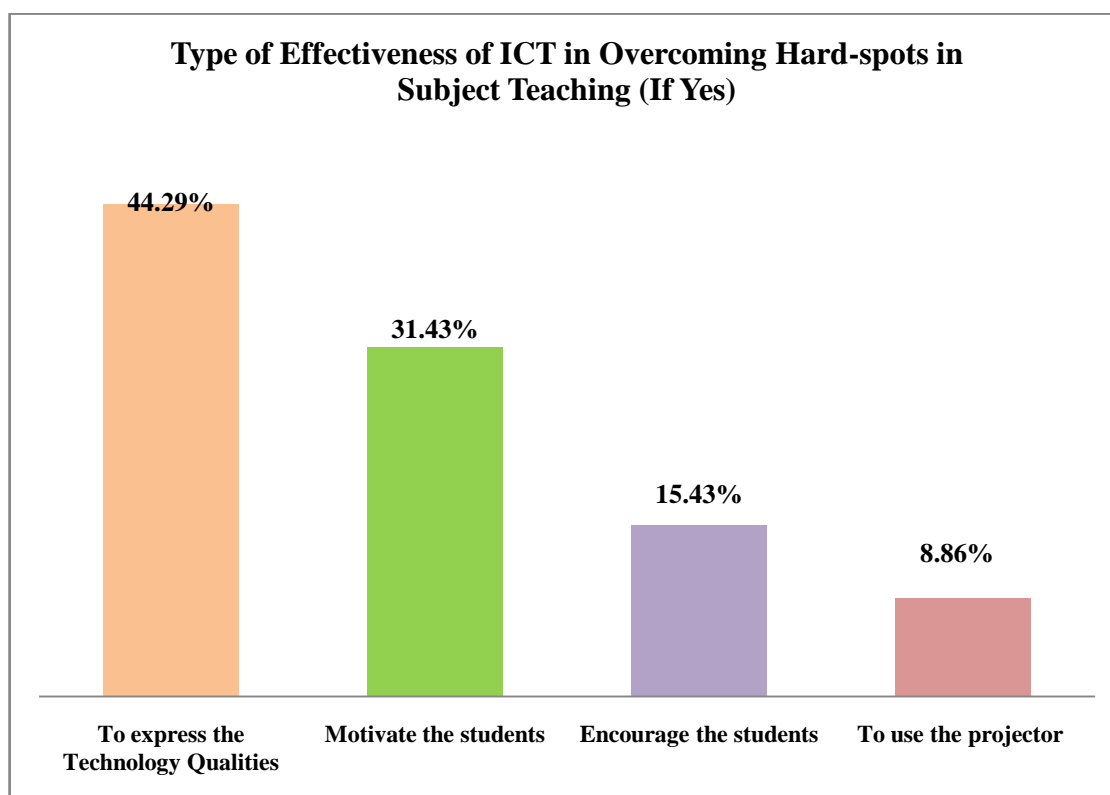


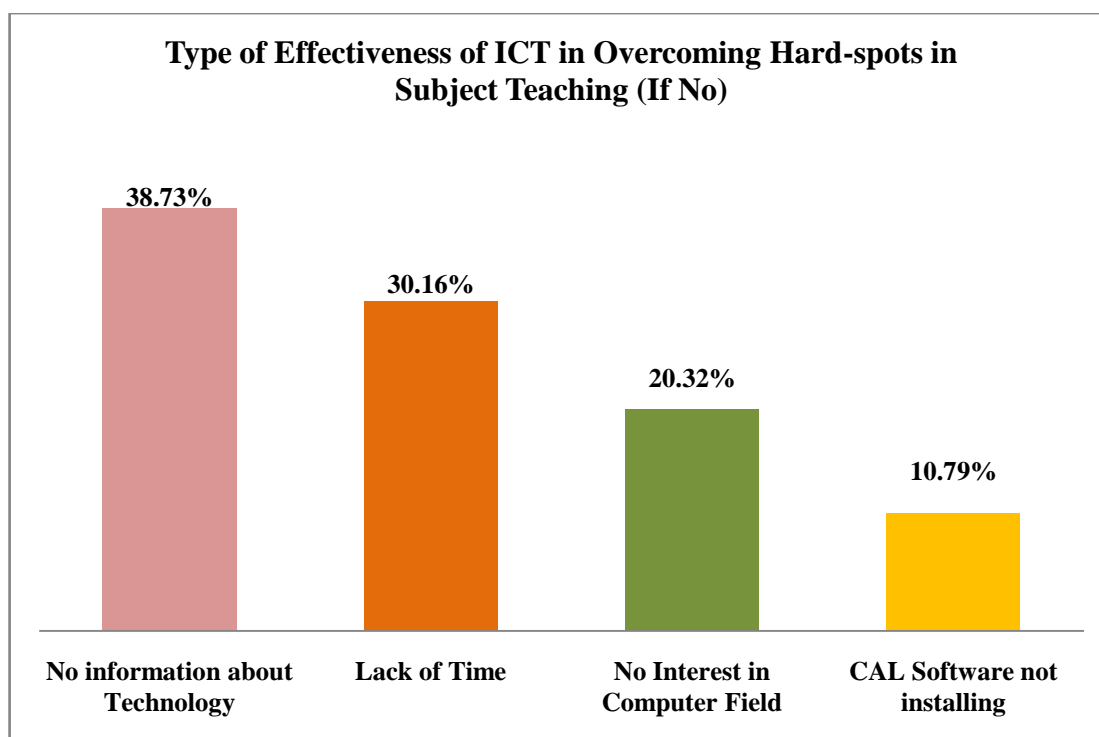
Out of total subject teachers respondents in sample schools, around 53 percent teacher believed in the effectiveness of ICT in overcoming the hard- spots in subject teaching. Over 44 percent subject teachers who believed effectiveness of ICT reported that use of ICT increases the quality of teaching. According to over 31 percent teachers use of ICT motivates the students for studies and 15 percent also reported that its use encourages the studies for learning. Rest of the teachers (about 47 percent) did not found ICT useful in this respect (Table 6.21).

Table 6.21: Type of Effectiveness of ICT in Overcoming Hard-spots in Subject Teaching

Particulars	If Yes					If No				
	To express the Technology Qualities	Motivate the students	Encourage the students	To use the projector	Total	No information about Technology	Lack of Time	No Interest in Computer Field	CAL Software not installing	Total
Urban District-3	43 (61.43)	23 (32.86)	0 (0.00)	4 (5.71)	70 (100.00)	9 (20.00)	15 (33.33)	11 (24.44)	10 (22.22)	45 (100.00)
Rural District-3	29 (39.73)	19 (26.03)	14 (19.18)	11 (15.07)	73 (100.00)	23 (56.10)	9 (21.95)	5 (12.20)	4 (9.76)	41 (100.00)
District with High Tele – Density-3	27 (40.91)	22 (33.33)	13 (19.70)	4 (6.06)	66 (100.00)	20 (42.55)	11 (23.40)	13 (27.66)	3 (6.38)	47 (100.00)
Districts with Lower Tele – Density-3	24 (55.81)	10 (23.26)	7 (16.28)	2 (4.65)	43 (100.00)	25 (40.98)	16 (26.23)	13 (21.31)	7 (11.48)	61 (100.00)
Districts Characterized as backward by the State-3	19 (48.72)	15 (38.46)	2 (5.13)	3 (7.69)	39 (100.00)	37 (51.39)	23 (31.94)	7 (9.72)	5 (6.94)	72 (100.00)
Districts with Electricity Problems-3	13 (22.03)	21 (35.59)	18 (30.51)	7 (11.86)	59 (100.00)	8 (16.33)	21 (42.86)	15 (30.61)	5 (10.20)	49 (100.00)
All sample districts-18	155 (44.29)	110 (31.43)	54 (15.43)	31 (8.86)	350 (100.00)	122 (38.73)	95 (30.16)	64 (20.32)	34 (10.79)	315 (100.00)

Source- Based on field survey





Innovative/ Creative Use of ICT

About 56 percent subject teachers reported creative use of ICT in classroom teaching. The methods included searching with net, use of other computer related interesting methods and teaching with the help of diagrams (Table 6.22).

Table 6.22: Creative Use of ICT in Teaching

Particulars	Response				No Response	Total
	Searching with Net Facility	To teach interesting methods	To express the diagrams	Total		
Urban District-3	31 (38.75)	29 (36.25)	20 (25.00)	80 (69.57) (100.00)	35 (30.43)	115 (100.0)
Rural District-3	33 (44.59)	18 (24.32)	23 (31.08)	74 (64.91) (100.00)	40 (35.09)	114 (100.0)
Districts with High Tele – Density-3	35 (48.61)	25 (34.72)	12 (16.67)	72 (63.72) (100.00)	41 (36.28)	113 (100.0)
Districts with Lower Tele – Density-3	15 (34.09)	14 (31.82)	15 (34.09)	44 (42.31) (100.00)	60 (57.69)	104 (100.0)
Districts Characterized as backward by the State-3	14 (32.56)	14 (32.56)	15 (34.88)	43 (38.74) (100.00)	68 (61.26)	111 (100.0)
Districts with Electricity Problems-3	19 (32.20)	30 (50.85)	10 (16.95)	59 (54.63) (100.00)	49 (45.37)	108 (100.0)
All Sample Districts-18	147 (39.52)	130 (34.95)	95 (25.54)	372 (55.94) (100.00)	293 (44.06)	665 (100.0)

Source- Based on field survey

The practices for engaging students through ICT use in teaching included practical work, home work and student involvement through computers in class rooms as per responses of 56 percent subject teachers (Table: 6.23).

Table 6.23: Methods of Engaging Students for Creative Use of ICT

Particulars	Response				No Response	Total
	Practical Work	Home Work	Students work with Computer	Total		
Urban District-3	27 (33.75)	29 (36.25)	24 (30.00)	80 (69.57) (100.00)	35 (30.43)	115 (100.0)
Rural District-3	36 (48.65)	20 (27.03)	18 (24.32)	74 (64.91) (100.00)	40 (35.09)	114 (100.0)
Districts with High Tele – Density-3	34 (47.22)	25 (34.72)	13 (18.06)	72 (63.72) (100.00)	41 (36.28)	113 (100.0)
Districts with Lower Tele – Density-3	20 (45.45)	16 (36.36)	8 (18.18)	44 (42.31) (100.00)	60 (57.69)	104 (100.0)
Districts Characterized as backward by the State-3	25 (58.14)	5 (11.63)	13 (30.23)	43 (38.74) (100.00)	68 (61.26)	111 (100.0)
Districts with Electricity Problems-3	30 (50.85)	6 (10.17)	23 (38.98)	59 (54.63) (100.00)	49 (45.37)	108 (100.0)
All Sample Districts-18	172 (46.24)	101 (27.15)	99 (26.61)	372 (55.94) (100.00)	293 (44.06)	665 (100.0)

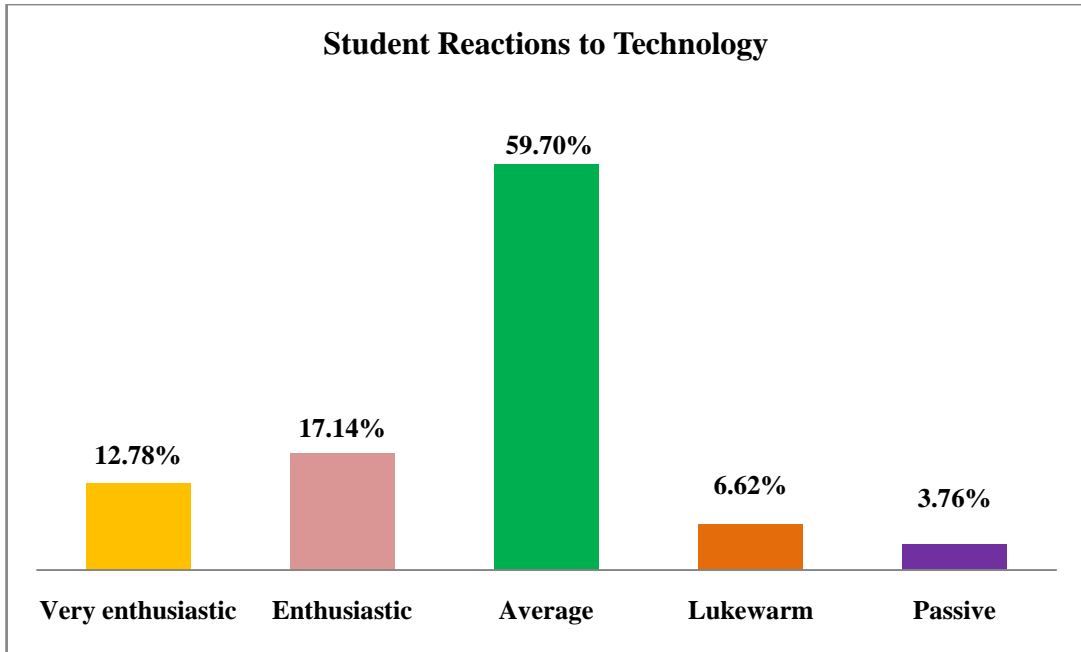
Source- Based on field survey

As per subject teachers' feedback majority of 60 percent teachers reported average response among students towards the use of ICT. About 17 percent teachers reported enthusiastic response and according to 13 percent teachers students responses have been very enthusiastic in this respect. Some 10 percent teachers found lukewarm and passive response of students towards ICT technology (Table 6.24).

Table 6.24: Student Reactions to Technology

Particulars	Very enthusiastic	Enthusiastic	Average	Lukewarm	Passive	Total
Urban District-3	11 (9.57)	17 (14.78)	76 (66.09)	5 (4.35)	6 (5.22)	115 (100.0)
Rural District-3	12 (10.53)	20 (17.54)	73 (64.04)	5 (4.39)	4 (3.51)	114 (100.0)
District with High Tele – Density-3	29 (25.66)	10 (8.85)	51 (45.13)	13 (11.50)	10 (8.85)	113 (100.0)
Districts with Lower Tele - Density-3	10 (9.62)	23 (22.12)	61 (58.65)	8 (7.69)	2 (1.92)	104 (100.0)
Districts Characterized as backward by the State-3	6 (5.41)	21 (18.92)	73 (65.77)	8 (7.21)	3 (2.70)	111 (100.0)
Districts with Electricity Problems-3	17 (15.74)	23 (21.30)	63 (58.33)	5 (4.63)	0 (0.00)	108 (100.0)
All Total Sample Districts-18	85 (12.78)	114 (17.14)	397 (59.70)	44 (6.62)	25 (3.76)	665 (100.0)

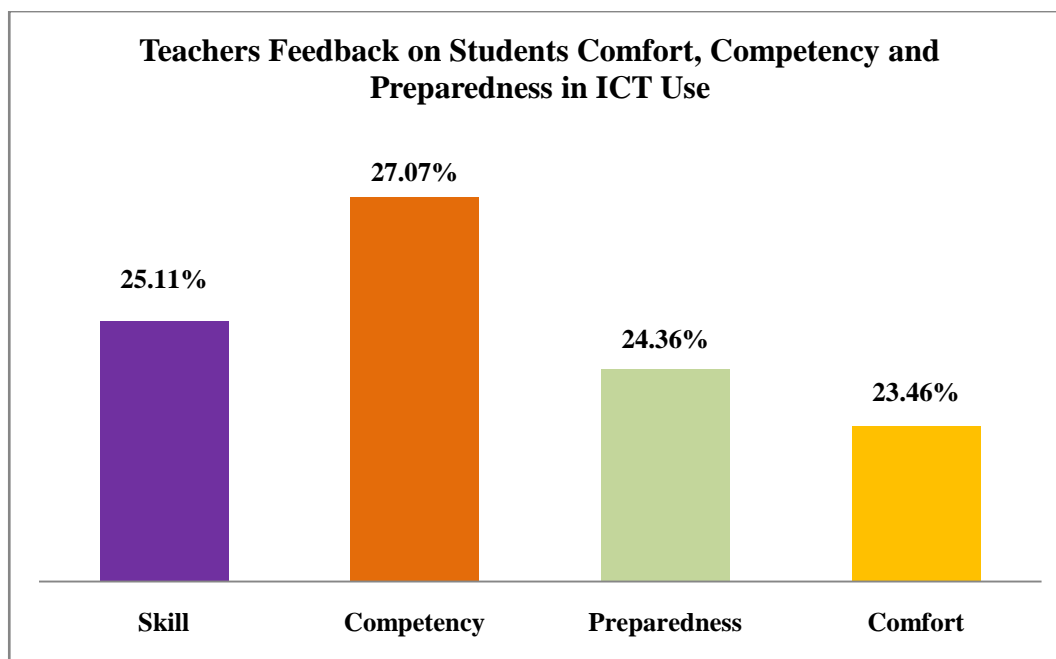
Source- Based on field survey



Above 25 percent subject teachers found students skilful in the use of ICT in their subjects. Over 27 percent teachers found students competent enough to use ICT in learning process. According to 24 percent and 23 percent subject teachers, the school students were prepared for ICT use and their comfort level in ICT use has been high (Table 25).

Table 6.25: Teachers Feedback on Students Comfort, Competency and Preparedness in ICT Use

Particulars	Skill	Competency	Preparedness	Comfort	Total
Urban District-3	29 (25.22)	27 (23.48)	31 (26.96)	28 (24.35)	115 (100.00)
Rural District-3	30 (26.32)	28 (24.56)	26 (22.81)	30 (26.32)	114 (100.00)
District with High Tele - Density-3	33 (29.20)	37 (32.74)	19 (16.81)	24 (21.24)	113 (100.00)
Districts with Lower Tele - Density-3	21 (20.19)	29 (27.88)	28 (26.92)	26 (25.00)	104 (100.00)
Districts Characterized as backward by the State-3	29 (26.13)	28 (25.23)	29 (26.13)	25 (22.52)	111 (100.00)
Districts with Electricity Problems-3	25 (23.15)	31 (28.70)	29 (26.85)	23 (21.30)	108 (100.00)
All Total Sample-18	167 (25.11)	180 (27.07)	162 (24.36)	156 (23.46)	665 (100.00)



Conclusions and Findings

In this chapter the performance of ICT was assessed from the viewpoint/ feedback of subject teachers. Maximum 90 percent subject teachers are having postgraduate degrees in their respective subjects, but in backward districts this percentage is comparatively low. A subject-wise view of the teachers' qualification indicated maximum 96 percent post graduate level qualification is found in language teachers followed by about 93 percent among social science teachers, whereas share of science and mathematics teachers is relatively low. The data related to the level of professional qualification of the subject teachers shows that around 89 percent teachers qualified B.Ed or M.Ed level. Only above 10 percent were reported to have Ph.D or LT degrees that too of mathematics teachers mostly. Out of total 665 sample subject teachers, Maximum 56 percent were reported to be appointed during last 1 to 10 years. Some 4 percent were the senior most having their services more than 30 years. Out of total subjects teachers maximum 59 percent were recruited by commission and above 33 percent by management.

With respect to the subjects taken by them, it was found that 77.89 percent teachers teach social science and language both and 71 percent teachers have reported science teaching followed by minimum 64.51 percent teachers who teach mathematics. About 53 percent of the total sample subject teachers use ICT as teaching tool to teach their subject in the schools. Maximum 30 to 27 percent teachers of science and social science use ICT as tool in their subjects respectively. However, only 24 percent math teachers reported use of ICT as teaching

tool. There has not been any significant variation in the use of ICT as teaching tool for different subjects across different categories of the sample districts.

More than 50 percent subject teachers reported use of ICT in their teaching practice. Some 36 percent teachers have been using ICT for last 2 years and rest of about 14 percent reported ICT use in teaching for last 3 years. Thus, for most of the teachers, ICT use in subject teaching has been new in sample schools. As far as the training is concerned over 78 percent subject teachers have reported about getting training on computer awareness programme during last 3 years. Most of the 87 percent teachers have undergone training with the duration ranging from one day to 10 days. Amongst them 78 percent reported acquisition of computer knowledge with ICT training and over 22 percent gained knowledge of CAL software.

A substantial part of subject teachers who attained ICT training (41 percent) have undergone training only because of principal orders. Thus, it can be concluded that the teachers in general are not motivated enough to upgrade themselves as majority of teachers attended ICT training under pressure of institutional head. The result of this is that the data of the self assessment of teachers in terms of acquired expertise in the use of ICT indicates that over 40 percent teachers are still poor in this respect. i.e the ICT training has been quite ineffective for them.

Most of the 82 percent subject teachers considered ICT technology different from chalk and talk method as ICT is found to be promoting practical learning among students. Most of the teachers believed in the effectiveness of ICT in overcoming the hard- spots in subject teaching, further it also enhances the quality of teaching, motivates the students for studies and learning. However, some of them about 47 percent) did not found ICT useful in these respects.

About 56 percent subject teachers reported creative use of ICT in classroom teaching. The methods included searching with net, use of other computer related interesting methods and teaching with the help of diagrams. As per subject teachers' feedback majority of 60 percent teachers reported average response among students towards the use of ICT. Only Around 27 percent teachers found students competent enough to use ICT in learning process.

Despite of the fact that most of them found ICT useful and effective the reality is that on an average more than two- third subject teachers are not using ICT tools in sample schools across the districts. School computer is accessible to only over 60 percent subject teachers. For most

of these, 85 percent, computer is accessible from 1 to 3 hours in a week. About 52 percent teachers never used internet in their schools despite its availability. Most of the teachers used internet occasionally, and were found to be less computer savvy as about 88 percent did not have their email ID. There has not been much difference in this respect among the teachers across the districts of different categories and this is the reason for which most of them were not satisfied with their performance in terms of use of ICT technology. Thus, it can be concluded that there is need to increase both infrastructural facilities as well as motivational level of the teachers by enhancing their salaries (for contractual teachers), duration of training etc to achieve the desired results of the scheme.

CHAPTER-VII

PERFORMANCE OF ICT: VIEW OF STUDENTS

Performance results of ICT programme in sample secondary and higher secondary schools, so far presented in preceding sections of the report are based on the feedback and information collected from state and district level ICT functionaries, school head teachers, ICT teachers and school subject teachers. The results presented in this section of the report are based on the information collected from the school students of the sample schools across the districts.

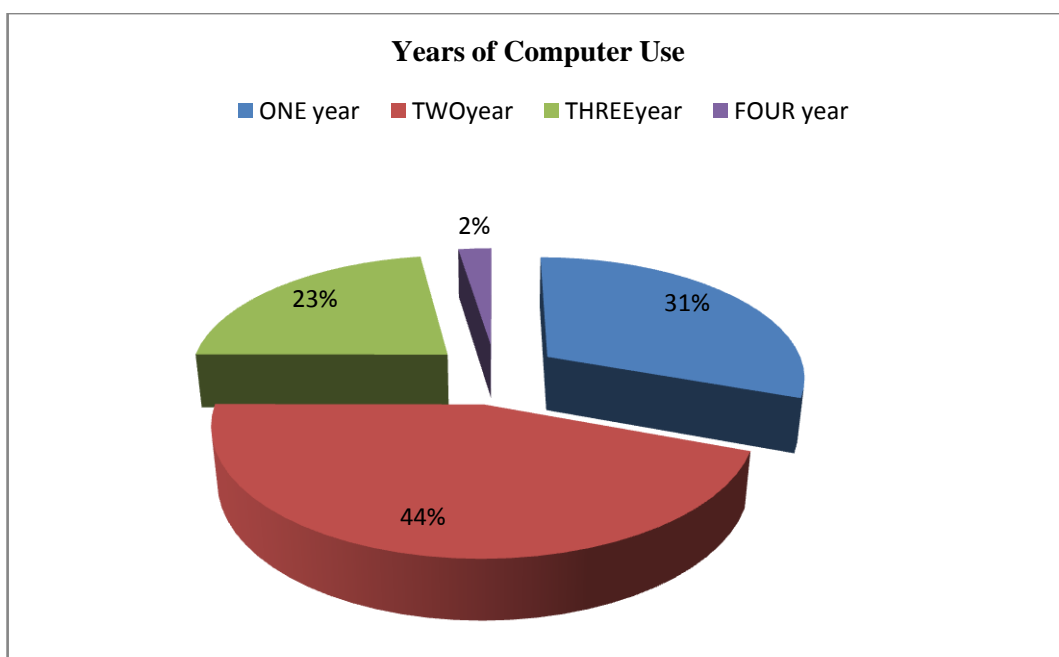
ICT Use by Students

In 180 schools, information was collected from 573 students for using computers. Over 30 percent students used computer for last one year. However, maximum about 45 percent students reported computer use for the last one year. About 23 percent students used the same for last three years and minimum over 2 percent used computers for more than four years (Table 7.1). Thus, most of the students developed familiarity with the computer use during past two years only.

Table 7.1: Years of Computer Use

Particulars	One Year	Two Years	Three Years	Four Years	Total Students
Urban District-3	26 (30.23)	40 (46.51)	18 (20.93)	2 (2.33)	86 (100.00)
Rural Districts-3	39 (39.80)	42 (42.86)	16 (16.33)	1 (1.02)	98 (100.00)
High Tele - Density District-3	29 (32.22)	46 (51.11)	13 (14.44)	2 (2.22)	90 (100.00)
Lower Tel - Density District-3	26 (25.74)	50 (49.50)	21 (20.79)	4 (3.96)	101 (100.00)
District Characterized as backward by the state-3	25 (25.00)	32 (32.00)	41 (41.00)	2 (2.00)	100 (100.00)
Electricity Problems District-3	30 (30.61)	45 (45.92)	20 (20.41)	3 (3.06)	98 (100.00)
All sample districts-18	175 (30.54)	255 (44.50)	129 (22.51)	14 (2.44)	573 (100.00)

Source- Based on field survey

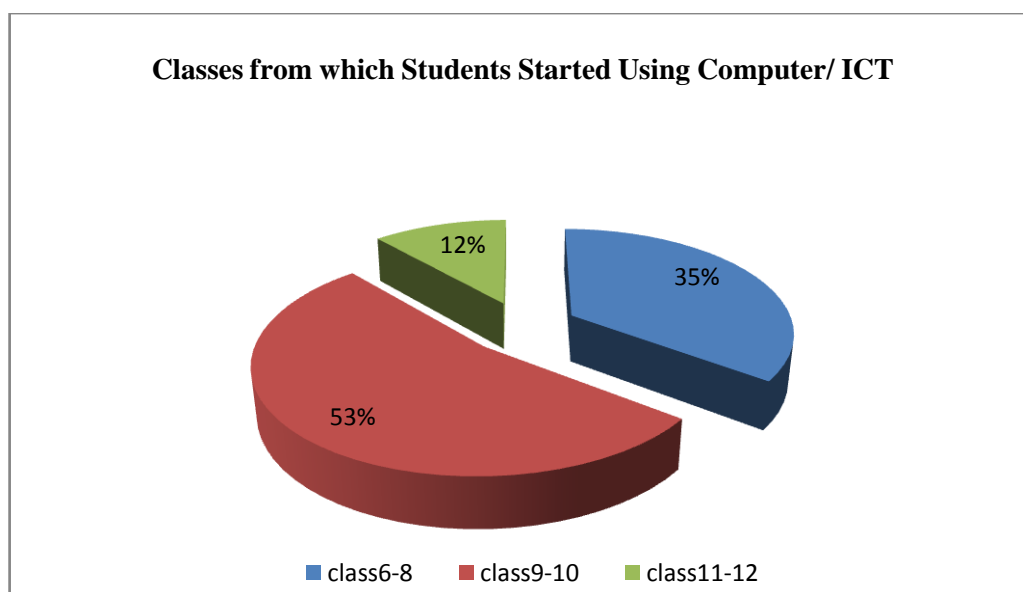


The students started using computer and related ITC is recorded highest among class 9 to10 students while it is lowest among class 11 to12 students across all the districts. In class 6-8 computer user students turned out to be over 35 percent. A higher percentage of students of urban districts started an early use of ICT (Table 7.2).

Table 7.2: Classes from which Students Started Using Computer/ ICT

Particulars	Class 6 to 8	Class 9 to10	Class 11to12	Total Students
Urban District-3	33 (38.37)	47 (54.65)	6 (6.98)	86 (100.00)
Rural Districts-3	25 (25.51)	62 (63.27)	11 (11.22)	98 (100.00)
High Tele - Density District-3	21 (23.33)	44 (48.89)	25 (27.78)	90 (100.00)
Lower Tel - Density District-3	44 (43.56)	44 (43.56)	13 (12.87)	101 (100.00)
District Characterized as backward by the state-3	49 (49.00)	50 (50.00)	1 (1.00)	100 (100.00)
Electricity Problems District-3	30 (30.61)	58 (59.18)	10 (10.20)	98 (100.00)
All sample districts-18	202 (35.25)	305 (53.23)	66 (11.52)	573 (100.00)

Source- Based on field survey

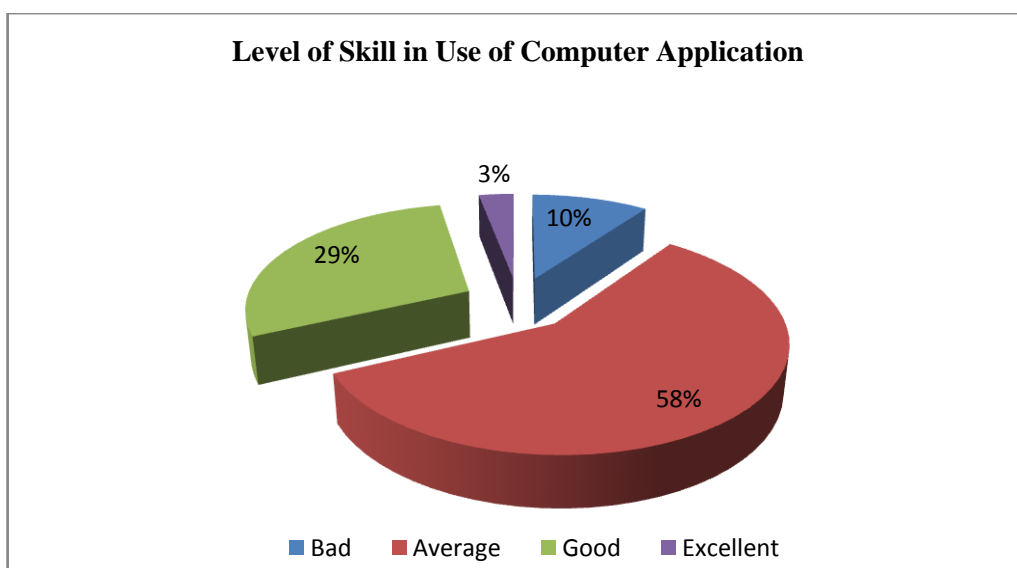


Maximum numbers of students have average skill in use of computer application while students with excellent competency in computer application are least among the selected districts. Maximum number of students with excellent competency belongs to high Tele-Density district, while maximum with good skill belongs to Urban Districts; with average skill belong to district characterized as backward. Students with bad skills in computer application mostly belong to Lower Tel – Density District and districts having electricity problems while students from rural Districts have least Bad computer skill students (Table 7.3).

Table 7.3: Level of Skill in Use of Computer Application.

Particulars	Bad	Average	Good	Excellent	Total Students
Urban District-3	6 (6.98)	39 (45.35)	41 (47.67)	0 (0.00)	86 (100.00)
Rural Districts-3	3 (3.06)	62 (63.27)	27 (27.55)	6 (6.12)	98 (100.00)
High Tele - Density District-3	9 (10.00)	50 (55.56)	23 (25.56)	8 (8.89)	90 (100.00)
Lower Tel - Density District-3	14 (13.86)	51 (50.50)	35 (34.65)	1 (0.99)	101 (100.00)
District Characterized as backward by the state-3	12 (12.00)	69 (69.00)	17 (17.00)	2 (2.00)	100 (100.00)
Electricity Problems District- 3	13 (13.27)	62 (63.27)	23 (23.47)	0 (0.00)	98 (100.00)
All sample districts-18	57 (9.95)	333 (58.12)	166 (28.97)	17 (2.97)	573 (100.00)

Source- Based on field survey



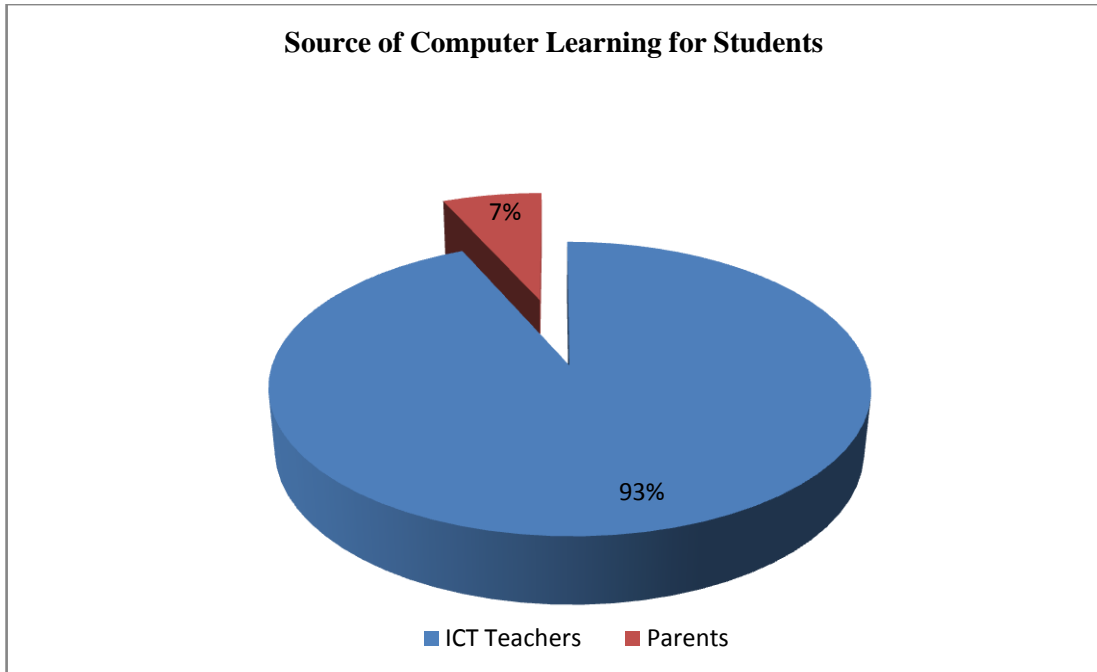
Source of Computer Learning

ITC teachers turned out to be most effective source to teach computers as per the students feedback among all selected schools. Over 93 percent students learnt working on or with computers from ITC teachers and only 6.63 percent students learnt it from parents. Maximum parents taught working on computer in urban districts and minimum 2.04 percent parents taught computer skills to their children in electricity problem districts. Substantial number of students learnt from ICT teachers in electricity problem districts (Table 7.4).

Table 7.4: Source of Computer Learning for Students

Particulars	ICT Teacher	Parents	Total Students
Urban District-3	71 (82.56)	15 (17.44)	86 (100.00)
Rural Districts-3	92 (93.88)	6 (6.12)	98 (100.00)
High Tele - Density District-3	84 (93.33)	6 (6.67)	90 (100.00)
Lower Tel - Density District-3	97 (96.04)	4 (3.96)	101 (100.00)
District Characterized as back-ward by the state-3	95 (95.00)	5 (5.00)	100 (100.00)
Electricity Problems District-3	96 (97.96)	2 (2.04)	98 (100.00)
All sample districts-18	535 (93.37)	38 (6.63)	573 (100.00)

Source- Based on field survey

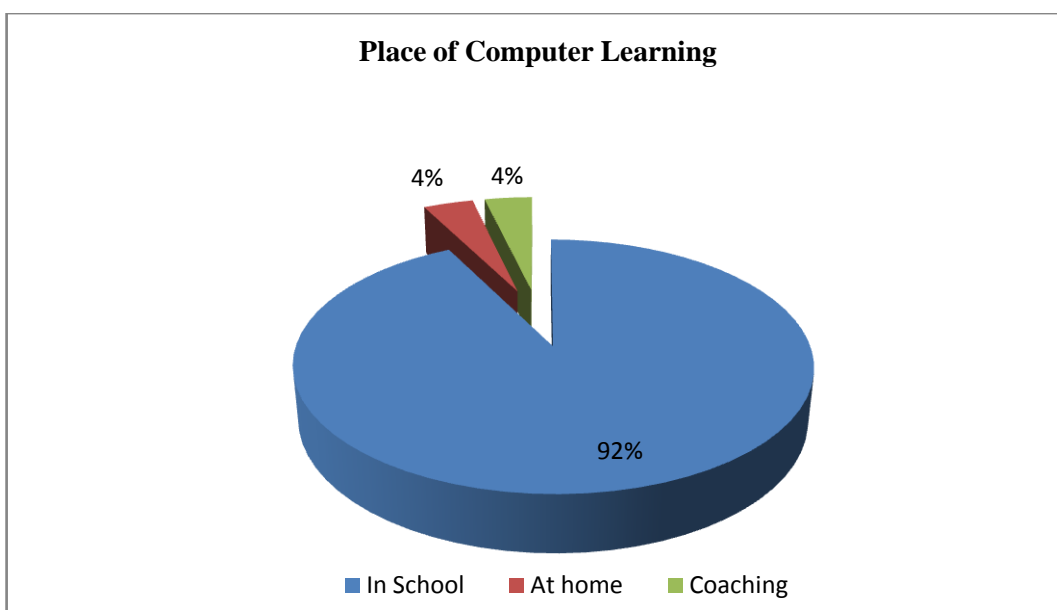


Most of the students learnt computer at school. Amongst the selected districts of state 92.5 percent students learnt computers in school and the rest of students learnt computer at home or coaching. In Urban districts 85 percent students learnt computer in school and 15 percent at home. No student learnt it at coaching. In High Tele density district 11.11 percent students learnt computer from coaching and 88.89 percent learnt it from school. 93 to 98 percent learnt computer in school in all the selected districts (Table 7.5).

Table 7.5: Place of Computer Learning

Particulars	In School	At Home	Coaching	Total Students
Urban District-3	73 (84.88)	13 (15.12)	0 (0.00)	86 (100.00)
Rural Districts-3	91 (92.86)	7 (7.14)	0 (0.00)	98 (100.00)
High Tele - Density District-3	80 (88.89)	0 (0.00)	10 (11.11)	90 (100.00)
Lower Tel - Density District-3	97 (96.04)	0 (0.00)	4 (3.96)	101 (100.00)
District Characterized as backward by the state-3	93 (93.00)	1 (1.00)	6 (6.00)	100 (100.00)
Electricity Problems District-3	96 (97.96)	1 (1.02)	1 (1.02)	98 (100.00)
All sample districts-18	530 (92.50)	22 (3.84)	21 (3.66)	573 (100.00)

Source- Based on field survey



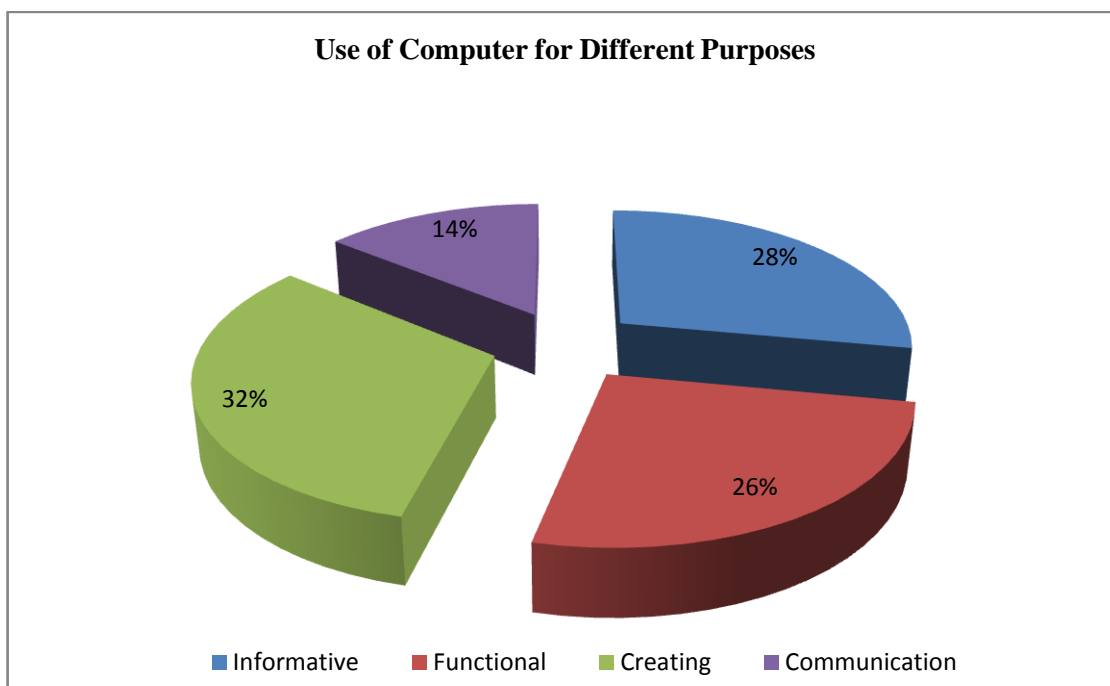
ICT Activities

Maximum 77.7 percent students reported use of computers for creative work, 67.54 percent students for gathering information, and 62.13 percent students for functional purposes. While only 34.21 percent students reported computer use for communication purposes (Table 7.6). ICT use for informative purposes was reported to be highest among the school students of urban and high tele density districts.

Table 7.6: Use of Computer for Different Purposes (Multiple responses)

Particular	Informative	Functional	Creative	Communication	Total
Urban District-3	82 (95.35)	55 (63.95)	58 (67.44)	29 (33.72)	86 (100.00)
Rural District-3	55 (56.12)	64 (65.31)	72 (73.47)	37 (37.76)	98 (100.00)
Districts with High Tele- Density-3	83 (92.22)	82 (91.11)	75 (83.33)	65 (72.22)	90 (100.00)
Districts with Lower Tele- Density-3	58 (57.43)	50 (49.50)	82 (81.19)	22 (21.78)	101 (100.00)
Districts Characterized as backward by the state-3	57 (57.00)	64 (64.00)	82 (82.00)	31 (31.00)	100 (100.00)
Districts with Electricity Problems-3	52 (53.06)	41 (41.84)	76 (77.55)	12 (12.24)	98 (100.00)
All sample districts-18	387 (67.54)	356 (62.13)	445 (77.66)	196 (34.21)	573 (100.00)

Source- Based on field survey

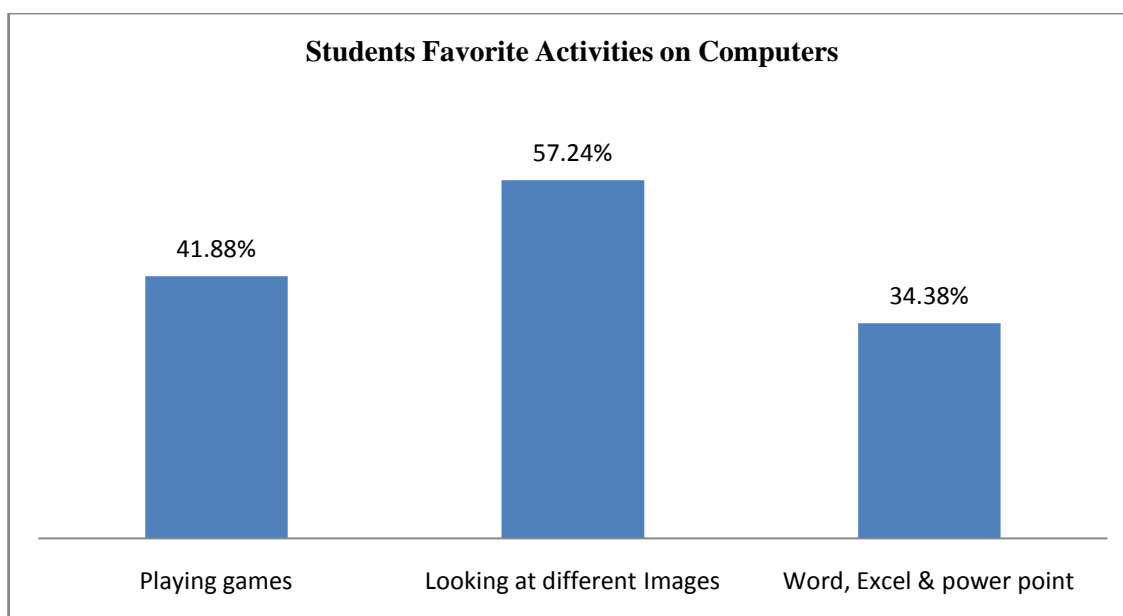


Maximum 57 percent students have reported their favorite activity as looking at different images through computers. Around 42 percent student have reported the use of computer for playing games and only 34.38 percent students used computer softwares likes word, Excel and power point etc. Computer use for games was used most by the students in urban districts (Table 7.7).

Table 7.7: Students Favorite Activities on Computers (Multiple responses)

Particular	Playing games	Looking at different Images	Word, Excel, Power Point etc.	Total (No. of students)
Urban District-3	51 (59.30)	51 (59.30)	38 (44.19)	86 (100.00)
Rural District-3	48 (48.98)	68 (69.39)	49 (50.00)	98 (100.00)
Districts with High Tele- Density-3	37 (41.11)	45 (50.00)	18 (20.00)	90 (100.00)
Districts with Lower Tele- Density-3	32 (31.68)	61 (60.40)	22 (21.78)	101 (100.00)
Districts Characterized as backward by the state-3	39 (39.00)	52 (52.00)	29 (29.00)	100 (100.00)
Districts with Electricity Problems-3	33 (33.67)	51 (52.04)	41 (41.84)	98 (100.00)
All sample districts-18	240 (41.88)	328 (57.24)	197 (34.38)	573 (100.00)

Source- Based on field survey



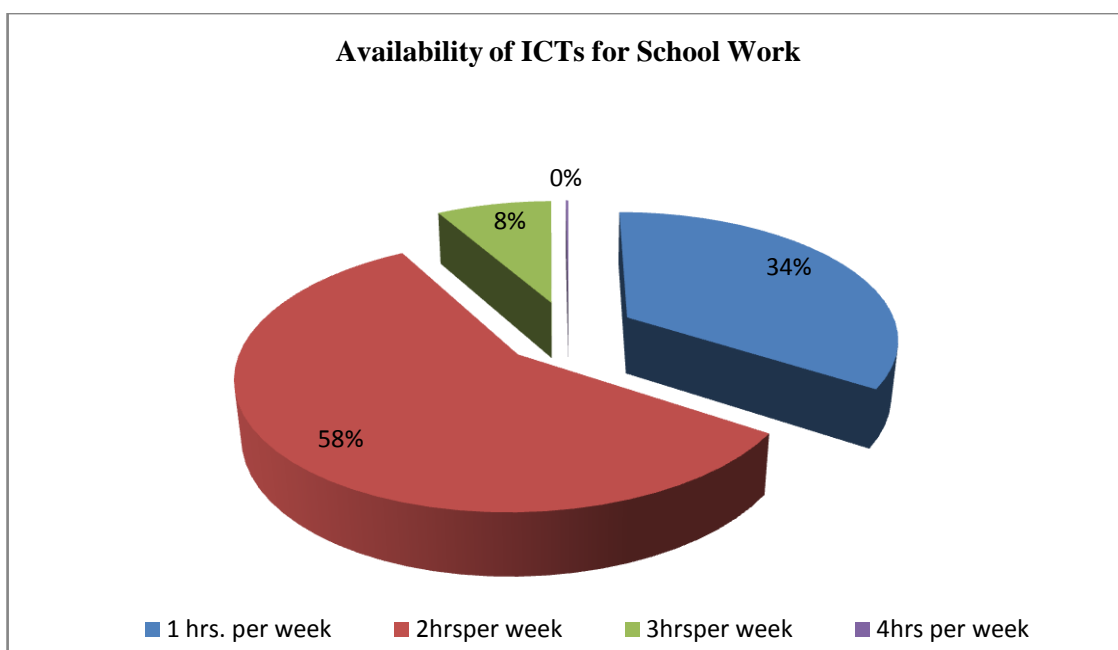
Availability of Computers in Schools

Table 7.8 indicates that maximum 57.24 percent students are using computer for 2 hours in a week during school hours in the schools. Computers and related ICT for school work is reported for 1 hour weekly by 34.21 percent students and 3 to 4 hours in a week only by around 9 percent students in sample schools. Hence, the availability of school hours for ICT use to students has been quite low across the districts in the state.

Table 7.8: Availability of ICTs for School Work

Particulars	1 hours/ week	2 hours/ week	3 hours/ week	4 hours/ week	Total Students
Urban District-3	4 (4.65)	63 (73.26)	19 (22.09)	0 (0.00)	86 (100.00)
Rural Districts-3	19 (19.39)	59 (60.20)	20 (20.41)	0 (0.00)	98 (100.00)
Districts with High Tele- Density-3	31 (34.44)	54 (60.00)	5 (5.56)	0 (0.00)	90 (100.00)
Districts with Lower Tele- Density-3	44 (43.56)	57 (56.44)	0 (0.00)	0 (0.00)	101 (100.00)
Districts Characterized as backward by the state-3	52 (52.00)	45 (45.00)	3 (3.00)	0 (0.00)	100 (100.00)
Districts with Electricity Problems-3	46 (46.94)	50 (51.02)	1 (1.02)	1 (1.02)	98 (100.00)
All Total Sample Districts-18	196 (34.21)	328 (57.24)	48 (8.38)	1 (0.17)	573 (100.00)

Source- Based on field survey



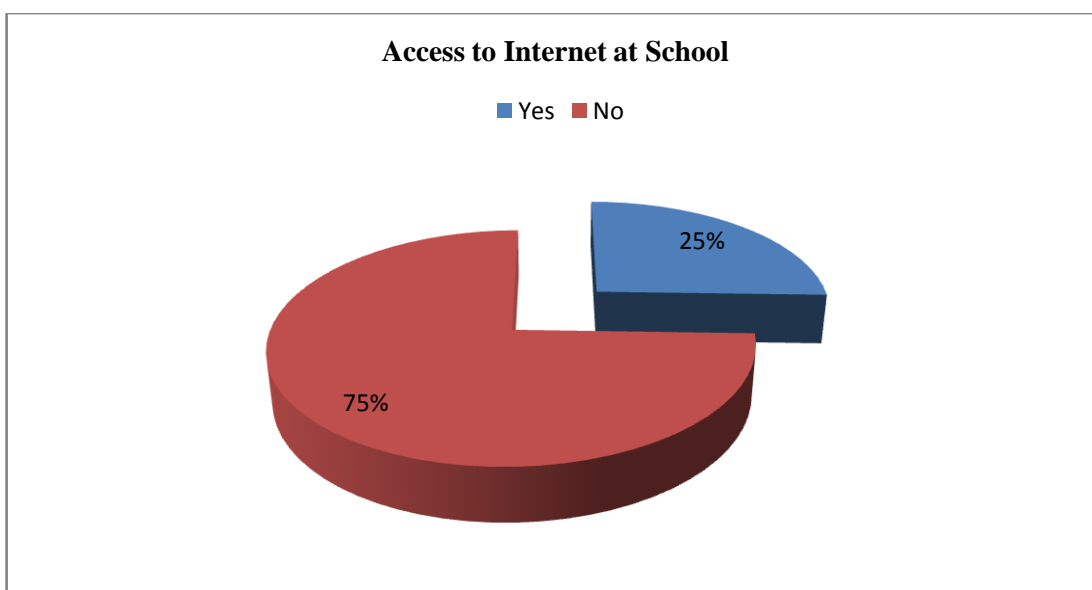
Internet Access

Mostly students have no internet access at school. About 41 percent urban districts have internet access at school, which is highest among the selected districts. Remaining districts have internet access between 18 to 29 percent. About 18 percent students in rural areas have internet access at school. Overall, 74.52 percent students don't have internet access to school. In urban districts 59.30 percent, in rural districts 81.63 percent, 80 percent students from districts characterized as backward by the state, 79.21 percent from districts with lower Tele density, have no internet access at school (Table 7.9).

Table 7.9: Access to Internet at School

Particulars	Yes	No	Total Students
Urban District-3	35 (40.70)	51 (59.30)	86 (100.00)
Rural Districts-3	18 (18.37)	80 (81.63)	98 (100.00)
Districts with High Tele- Density-3	26 (28.89)	64 (71.11)	90 (100.00)
Districts with Lower Tele- Density-3	21 (20.79)	80 (79.21)	101 (100.00)
Districts Characterized as backward by the state-3	20 (20.00)	80 (80.00)	100 (100.00)
Districts with Electricity Problems-3	26 (26.53)	72 (73.47)	98 (100.00)
All Total Sample Districts-18	146 (25.48)	427 (74.52)	573 (100.00)

Source- Based on field survey

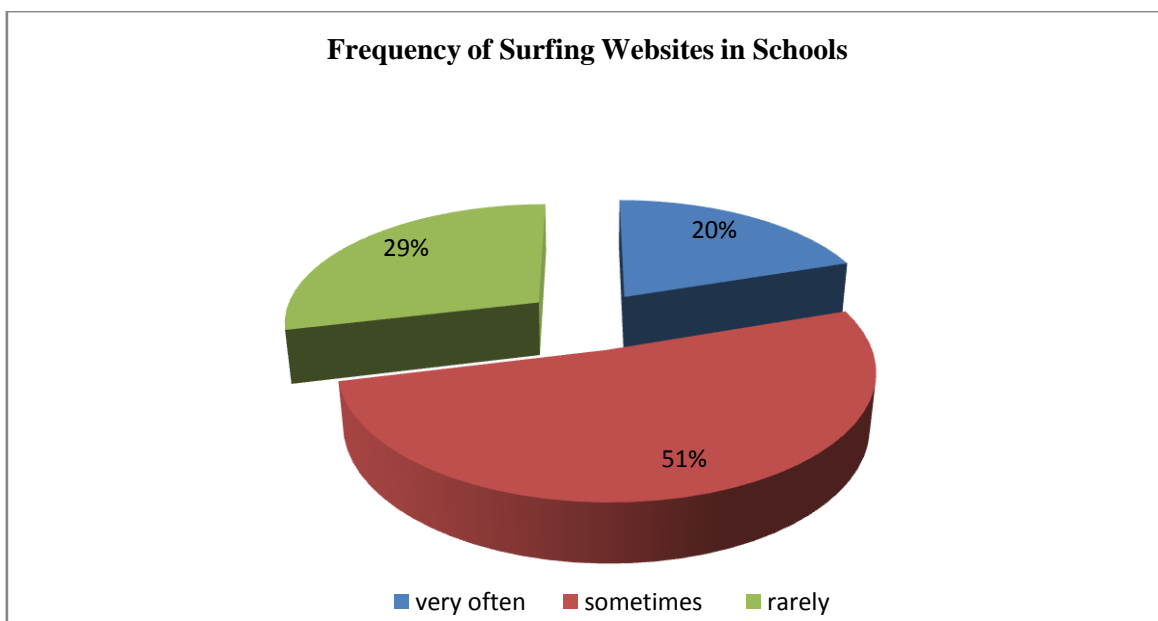


Most of the students use internet surfing sometimes in school among all the selected districts. Districts characterized as backward by the state use internet surfing websites very often is 30 percent, highest among all the selected districts. About 39 percent students are rarely surfing websites through internet in rural district (Table 7.10).

Table 7.10 : Frequency of Surfing Websites in Schools

Particulars	Very Often	Sometimes	Rarely	Total Students
Urban District-3	7 (20.00)	18 (51.43)	10 (28.57)	35 (100.00)
Rural Districts-3	3 (16.67)	8 (44.44)	7 (38.89)	18 (100.00)
Districts with High Tele- Density-3	3 (11.54)	15 (57.69)	8 (30.77)	26 (100.00)
Districts with Lower Tele- Density-3	4 (19.05)	10 (47.62)	7 (33.33)	21 (100.00)
Districts Characterized as backward by the state-3	6 (30.00)	11 (55.00)	3 (15.00)	20 (100.00)
Districts with Electricity Problems-3	6 (23.08)	13 (50.00)	7 (26.92)	26 (100.00)
All Total Sample Districts -18	29 (19.86)	75 (51.37)	42 (28.77)	146 (100.00)

Source- Based on field survey

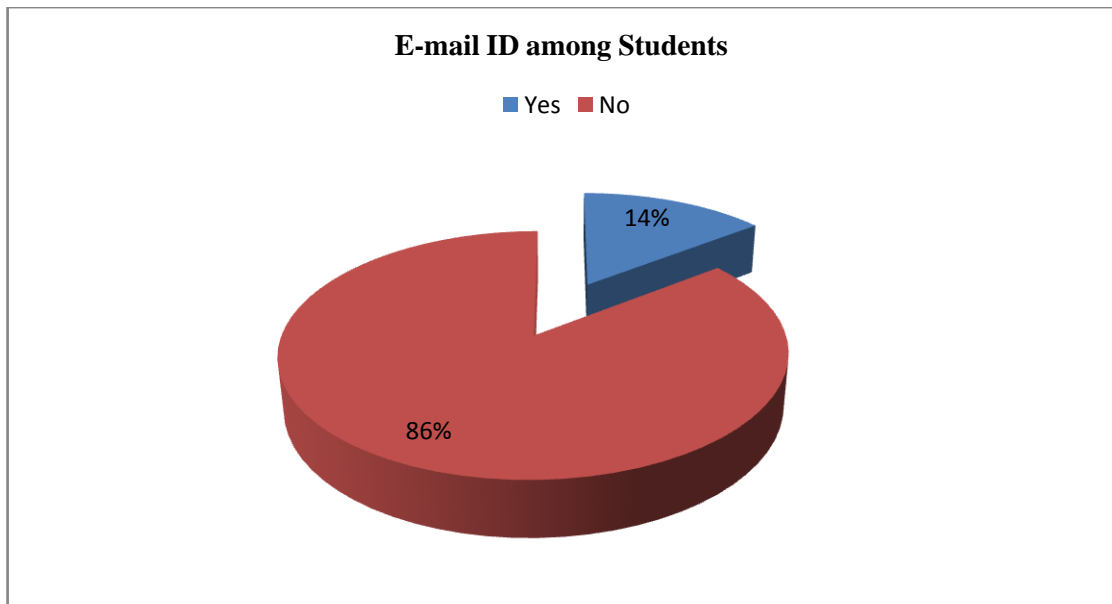


Most of the students don't have their personal email. Amongst the selected districts 85.51 percent students don't have their personal e-mail ID. Only 14.49 percent students have their email ID. In rural areas maximum 34.69 percent have their e-mail ID. In Districts characterized as backward by the state no student has his personal e-mail ID. Districts with Lower Tele –density have very few students, 2.97 percent, reported having their personal e mail ID (Table 7.11).

Table 7.11: E-mail ID among Students

Particulars	Yes	No	Total Students
Urban District-3	14 (16.28)	72 (83.72)	86 (100.00)
Rural Districts-3	34 (34.69)	64 (65.31)	98 (100.00)
Districts with High Tele- Density-3	17 (18.89)	73 (81.11)	90 (100.00)
Districts with Lower Tele- Density-3	3 (2.97)	98 (97.03)	101 (100.00)
Districts Characterized as backward by the state-3	0 (0.00)	100 (100.00)	100 (100.00)
Districts with Electricity Problems-3	15 (15.31)	83 (84.69)	98 (100.00)
All Total Sample Districts-18	83 (14.49)	490 (85.51)	573 (100.00)

Source- Based on field survey



Conclusions and Findings

In This chapter finally an attempt has been made to assess and analyse the effectiveness and performance of ICT from the student’s perspective as they are the most important stakeholders of this scheme. The results presented in this section of the report are based on the information collected from the school students of the sample schools across the districts.

In 180 schools, information was collected from 573 students for using computers. It was found that in general most of them are using computer from last one year only. A very less number of them, about 23 percent used the same for last three years and minimum over 2 percent used computers for more than four years. Thus, it can be concluded that most of the students developed familiarity with the computer use during past two years only.

The students started using computer and related ITC is recorded highest among class 9 to10 students while it is lowest among class 11 to12 students across all the districts. In class 6-8 computer students turned out to be over 35 percent. A higher percentage of students of urban districts started an early use of ICT.

Maximum numbers of students have average skill in use of computer application while students with excellent competency in computer application are least among the selected districts. Maximum number of students with excellent competency belongs to high Tele-Density district, while maximum with good skill belongs to Urban Districts; with average skill belong to district characterized as backward. Students with Bad skill in computer

application mostly belong to Lower Tel – Density District and districts having electricity problems while students from rural Districts have least bad computer skill students.

ITC teachers turned out to be most effective source to teach computers as per the students' feedback among all the selected schools. Most of the students learnt computer at school.

With respect to the ICT Activities it was found that maximum 77.7 percent students reported use of computers for creative work, 67.54 percent students for gathering information, and 62.13 percent students for functional purposes. While only 34.21 percent students reported computer use for communication purposes. ICT use for informative purposes was reported to be highest among the school students of urban and high tele density districts.

Maximum 57 percent students have reported their favorite activity as looking at different images through computers and playing games and only 34.38 percent students used computer software likes word, Excel and power point etc.

Finally it was observed that the maximum students are using computer for 2 hours in a week during school hours in the schools. Mostly students have no internet access at school especially in the rural areas. Further, most of the students don't have their personal email as well. Hence, the availability of school hours for ICT use to students and the internet usage has been quite low across the districts in the state. Thus, efforts are required in these respects.

Annexure - I

District wise sample school list

District: Agra (Urban)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Virangna Avanti Bai Govt. Girls Inter College, Kalalkhedia	Govt.	I	Higher	Rural	Net prob./ Electric Prob.
2	Govt. Girls Inter College, Awarkhera	Govt.	I	Secondary	Rural	Net Prob.
3	Sri Shiv Prasad Inter College, Achnera	Aided	I	Higher	Urban	Electric Prob./ Net Prob./ Gender Gap
4	Janta Inter College, Midhakur	Aided	I	Higher	Rural	Net Prob.
5	Janta Inter College, Fatehabad	Aided	I	Secondary	Rural	Net Prob./ Gender Gap
6	Govt. Inter College, Shahganj	Govt.	II	Secondary	Urban	S.C./Minority
7	Fateh Chandra Inter College, Tota Ka Taal, Loha Mandi	Aided	II	Secondary	Urban	Net Prob.
8	R.B.S. Inter College, Khandari	Aided	II	Higher	Urban	Net Prob.
9	Saket Inter College, Saket Colony	Aided	II	Higher	Urban	S.C./Net Prob.
10	Shri Nanitra Ram U.M.V., Dulhara	Aided	II	Secondary	Rural	Net Prob.

District: Jhansi (Urban)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Pandit Ram Sahay Inter College, Baruwa Sagar	Aided	I	Secondary	Urban	Net Prob.
2	Dr. Rajendra Prasad Kanya Inter College, Ganesh Bazar	Aided	I	Secondary	Urban	S.C./Electric Prob.
3	Govt. Inter College, Raksha	Govt	I	Higher	Rural	S.C.
4	G.I.C. Sakrar	Govt	I	Secondary	Rural	S.C.
5	S.P.I. Inter College, Civil Lines	Aided	I	Higher	Urban	Net Prob./S.C.
6	Baragaon Inter College, Baragaon	Aided	I	Higher	Urban	Gender Gap/Electric Prob.
7	Guru Nanak Khalsa Inter College, Sipri Bazar	Aided	I	Secondary	Urban	Minority
8	G.I.C. Jhansi	Govt	II	Higher	Urban	S.C.
9	Kasturba kanya Inter College, Jhansi	Aided	II	Higher	Urban	Net Prob./S.C.
10	Arya Kanya Inter College, Sipri	Aided	II	Secondary	Urban	Net Prob.

District: Gorakhpur (Urban)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	M.P. Inter College, Golghar	Aided	I	Higher	Urban	Net Prob.
2	Madan Mohan Malviya Inter College	Aided	I	Secondary	Urban	Net Prob.
3	Champa Devi Govt. Girls Inter College, Harnahi	Govt.	I	Secondary	Rural	Net Prob./S.C./O.B.C.
4	Murari Inter College, Sahjanwa	Aided	I	Higher	Urban	Net Prob./S.C./O.B.C.
5	Ramjan H.S.S. Unchagaon	Aided	I	Secondary	Rural	Net Prob./Electric Prob./S.C.
6	Adarsh Inter College Hata Bazar, Shivpur	Aided	I	Higher	Rural	Net Prob./Gender Gap
7	Rajkiya Ashram Padhati High School, Vishunpur	Govt.	I	Secondary	Rural	Net Prob./S.C./S.T./O.B.C.
8	Tulsi Das Inter College, Infront of Nangalia Hospital	Aided	II	Higher	Urban	Net Prob./Electric Prob.
9	E. Abhyanand Inter College, Vishnu Mandir, Basaratpur	Aided	II	Higher	Urban	Net Prob./Gender Gap
10	Govt. Girls Inter College, Sardar Nagar	Govt.	II	Secondary	Rural	S.C./O.B.C.

District : Mahoba (Rural)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	G.I.C. Srinagar	Govt	I	Secondary	Rural	Net Prob.
2	Akhand Inter College, Kabrai	Aided	I	Secondary	Urban	Net Prob.
3	G.G.I.C. Jaitpur	Govt	I	Higher	Rural	Net Prob./Electric Prob.
4	Chaudhary Sunder Singh Inter College, Barbai	Aided	I	Secondary	Rural	Net Prob./ S.C.
5	Nehru Inter College, Panwadi	Aided	I	Higher	Rural	Electric Prob./S.C.
6	G.I.C. Jaitpur	Govt	I	Higher	Rural	Net Prob.
7	Sri Kashi Prakash Inter College, Kharela	Aided	I	Secondary	Urban	Net Prob.
8	Jantantra Inter College, Kulpahad	Aided	I	Higher	Urban	Net Prob./Electric Prob.
9	Govt.Ganga Singh Inter College, Charkhari	Govt	II	Higher	Urban	S.C./Electric Prob./Net Prob.
10	G.G.I.C. Mahoba	Govt	II	Secondary	Urban	S.C.

District: Ghazipur (Rural)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	G.G.I.C. Bugurga	Govt.	I	Higher	Rural	Electric/Net Prob.
2	Inter College Mohammdabad	Aided	I	Higher	Rural	Gender gap
3	G.G.I.C. Gangauli	Govt.	I	Secondary	Rural	Net Prob.
4	Janta Adarsh Inter College, Lahurapur	Aided	I	Higher	Rural	Net Prob.
5	Inter College, Khalisipur	Aided	I	Higher	Rural	Net Prob./ Electric Prob.
6	G.G.I.C. Mohammdabad	Govt.	II	Secondary	Urban	OBC/Minority
7	Smt. Ram Dulari Inter College Lauwadeeh	Aided	II	Secondary	Rural	Net Prob./ Electric Prob.
8	Inter College Gahamar	Aided	II	Higher	Rural	OBC
9	Janta U.M.V. Jangipur	Aided	II	Secondary	Rural	Net Prob./ Electric Prob.
10	Shri Mahant Ram Ashray Das I.C. Trichhi	Aided	II	Secondary	Rural	Electric Prob./S.C./OBC

District: Bijnor (Rural)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Govt. Inter College, Bhaguwala	Govt.	I	Higher	Rural	Net Prob./ Electric Prob./ O.B.C
2	Govt. GirsIs Inter College, Luharpura	Govt.	I	Higher	Rural	S.C./Net Prob.
3	Gandhi Inter College, Basta	Aided	I	Secondary	Rural	Net Prob./ Electric Prob.
4	Sarvajanic Arya Inter College, Feena	Aided	I	Higher	Rural	Gender Gap/ Electric Prob./ Net Prob.
5	Kasmiya Inter College, Nazibabad	Aided	I	Secondary	Rural	Minority/Electric Prob.
6	Ashraf Zakaria Inter College, Noorpur	Aided	I	Higher	Rural	S.C./Minority
7	Govt. Inter College, Nazibabad	Govt	II	Secondary	Rural	S.C./Electric Prob.
8	Krishak Inter College, Dundly	Aided	II	Secondary	Rural	Electric Prob.
9	Khalsa Inter College, Noorpur	Aided	II	Secondary	Rural	Minority/Electric Prob.
10	Adarsh Inter College, Umri	Aided	II	Higher	Rural	Net Prob./ Gender Gap

Districts: Lucknow (High Tele Density)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Satya Narayan Tewari Inter College, Nigoha	Aided	I	Secondary	Rural	Net Prob.
2	Kumbhrawan Inter College, Bakshi Ka Talab	Aided	I	Secondary	Rural	S.C.
3	Govt. Girls Inter College, Malihabad	Govt	I	Secondary	Urban	S.C./O.B.C./Minority
4	Lala Ram Swaroop Shikshan Sansthan Inter College, Banthra	Aided	I	Higher	Urban	S.C./Net Prob.
5	Virangna Uda Devi Govt. Girls Inter College, Maal	Govt	I	Higher	Rural	S.C./Net Prob.
6	Govt. Jubli Inter College, Lucknow	Govt.	II	Higher	Urban	Net Prob.
7	Rastriya Udyog Ashram Inter College, Matihari	Aided	II	Higher	Rural	Net Prob./Electric Prob.
8	Shri Shivnandan Inter College, Chherauni, Nagram	Aided	II	Higher	Rural	Net Prob./Electric Prob.
9	G.G.I.C. Sringar Nagar	Govt	II	Secondary	Urban	S.C./O.B.C.
10	Janta Inter College, Khadauha	Aided	II	Secondary	Rural	S.C./Electric Prob./Gender Gap

District: Ghaziabad (High Tele Density)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Govt. Girls Inter College, Kalchhina, Modinagar	Govt.	I	Higher	Rural	O.B.C./Minority
2	Adarsh Shiksha Sadan Inter College, Murad Gram	Aided	I	Secondary	Rural	Net Prob./Gender Gap
3	Sri Chhotu Ram Kisan Kanya Inter College	Aided	I	Secondary	Rural	Electric Prob.
4	Shri Krishna Inter College, Nivadi	Aided	I	Secondary	Rural	Electric Prob.
5	Chameli Devi Durga Pd. Kanya Inter College, Sauda	Aided	II	Higher	Rural	Electric Prob.
6	Sarvoday Kisan Inter College, Jawali	Aided	II	Secondary	Rural	S.C./Net Prob.
7	Janta Inter College, Sarauli	Aided	II	Higher	Rural	Electric Prob.
8	K.R.I.C Inter College, Chiraudi	Aided	II	Higher	Rural	Net Prob./Electric Prob.
9	M.M.H. Balika Inter College	Aided	II	Higher	Urban	Net Prob.
10	Govt. Inter College, Nandgram	Govt.	II	Secondary	Urban	Electric Prob./Net Prob.

District: Varanasi (High Tele Density)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Govt. Girls Inter College, Jakhini	Govt.	I	Secondary	Rural	O.B.C./S.C.
2	Baldev Inter College, Badagaon	Aided	I	Higher	Rural	Net Prob./ Gender Gap
3	Kamlakar Chaubey Adarsh Seva Vidyalaya, Ishwarganj	Aided	I	Higher	Urban	Net Prob.
4	Kaccha Baba Inter College, Jalhupur	Aided	I	Higher	Rural	Gender Gap/ Electric Prob.
5	Jai Kisan Inter College, Sanjohi, Sarauni	Aided	I	Secondary	Rural	Gender Gap/ Net Prob.
6	Radha Kishori Govt. Balika Inter College, Ram Nagar	Govt.	II	Higher	Urban	S.C./O.B.C./ Minority
7	Kashi Krishak Inter College, Harahua	Aided	II	Higher	Rural	Net Prob.
8	Hathi Barni Inter College, Hathi	Aided	II	Secondary	Rural	Electric Prob.
9	Gram Vidyapeeth Inter College, Garkhara	Aided	II	Secondary	Rural	Net Prob./ Electric Prob.
10	Matadeen Shukla Inter College Bhaskar Sagar, Rohania	Aided	II	Secondary	Rural	Net Prob./ Gender Gap

District: Banda (Low Tele Density)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Adarsh Inter College, Bisanda	Aided	I	Higher	Urban	Net Prob.
2	G.I.C. Mataundh	Govt.	I	Secondary	Rural	Electricity Prob./ Net Prob.
3	Gandhi Govt.I.C. Oran	Govt.	I	Secondary	Rural	S.C./OBC
4	G.G.I.C. Bisabnda	Govt.	I	Secondary	Rural	Net Prob./ Electricity Prob.
5	Janta Inter College Khurhand	Aided	I	Higher	Rural	Net Prob.
6	Pd. Jawahar Lal Nehru Inter College, Girwan	Aided	I	Higher	Rural	Electricity Prob./Net Prob.
7	Swargeeya Kamta Prasad Inter College Badausa	Aided	I	Secondary	Rural	Net Prob./ O.B.C.
8	Intermediate College, Tindwari	Aided	I	Secondary	Rural	Net Prob.
9	D.A.V. Inter College	Aided	II	Higher	Urban	Gender Gap/ O.B.C.
10	G.G.I.C. Atarra	Govt.	II	Higher	Urban	S.C./OBC

District: Fatehpur (Low Tele Density)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	G.G.I.C. Sahili	Govt.	I	Secondary	Rural	Electricity Prob./Net Prob.
2	Shri 1008 S.N.N.M.I. College Haswa	Aided	I	Secondary	Rural	S.C./OBC
3	Swami Chandra Das Inter College Haswa	Aided	I	Secondary	Rural	S.C./OBC/Minority
4	Sardvoday Inter College Fatehpur	Aided	I	Secondary	Rural	Electricity Prob./Net Prob.
5	P.C.P.M. Inter College Dariyapur	Aided	II	Secondary	Rural	Electricity Prob./Net Prob.
6	Gramodyogik Inter College Bharsawan	Aided	II	Higher	Rural	Gender Prob./S.C.
7	G.G.I.C. Malawan	Govt.	I	Higher	Rural	Net Prob./Electric Prob.
8	Sarvodaya Inter College Gopalganj	Aided	I	Higher	Rural	Net Prob.
9	Dayanand Inter College Bindki	Aided	II	Higher	Rural	Electricity Prob./Net Prob.
10	G.I.C. Arjun Pur Garha	Govt.	I	Higher	Rural	Electric Prob./Net Prob.

District: Balrampur (Low Tele Density)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	B.P. Shukla I.C.Rehra Bazar	Aided	I	Higher	Rural	Net Problem
2	G.G.I.C., Utraula	Govt.	I	Higher	Urban	Electricity Prob./Net Prob./Minority
3	Basant Lal Inter College, Tulsipur	Aided	I	Higher	Rural	Net Prob./Electric Prob.
4	Govt. Inter College, Itairampur	Govt	I	Secondary	Rural	Net Prob./Electric Prob.
5	M.Y. Usmaniya Inter College, Utraulla	Aided	I	Secondary	Rural	S.C./Net Prob./Electric Prob.
6	Govt. Inter College, Gaisdi	Govt	I	Secondary	Rural	Net Prob./Electric Prob.
7	Faizl Rahmania Inter College, Pachpedwa	Aided	I	Secondary	Rural	Net Prob. / Minority
8	Govt. Inter College , Dari Chaura	Govt	I	Higher	Rural	Net Prob./Electric Prob.
9	Bal Vidya Mandir (U.M.V.) Rehra Bazar	Aided	I	Secondary	Rural	Net Problem
10	Kastoorba Arya Balika I.C., Tulsipur	Aided	I	Higher	Rural	Net Prob./Electric Prob.

District: Shravasti (Backward)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Tapsi Inter College, Semrahna	Aided	I	Higher	Rural	Net Problem
2	Govt. Girls Inter College, Bhinga	Govt.	I	Higher	Rural	Minority/O.B.C.
3	Kishan Inter College, Laxman Nagar	Aided	I	Higher	Rural	Electric Prob./ Gender Gap
4	Baldev Parshad Nagrik Inter College, Amwa	Aided	I	Secondary	Rural	Net Prob. / Minority
5	Sri Alakshendra Inter College, Bhinga	Aided	I	Secondary	Urban	Gender Gap/ Electric Prob./ S.T./Minority
6	Chaudhri Ram Bihari Budha Inter College, Katra	Aided	I	Secondary	Rural	Net Problem
7	Jagat Jeet Inter College, Ikauna	Aided	I	Higher	Rural	Minority/ Electric Prob.
8	Jetwan Inter College, Katra	Aided	I	Secondary	Rural	Net Problem
9	Nehru Smarak Inter College, Gilaula	Aided	I	Secondary	Rural	Net Prob./ Electric Prob.
10	Neelam Govt. Girls High School, Gilaula	Govt.	I	Higher	Rural	Net Prob./ Electric Prob.

District: Rampur (Backward)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Govt. Inter College, Banjariya	Govt	I	Secondary	Rural	Electric Prob./S.C.
2	Sri Guru Nanak Inter College, Bilaspur	Aided	I	Secondary	Rural	Net Prob.
3	D.A.V.G. Inter College, Bilaspur	Aided	I	Higher	Urban	Net Prob.
4	Gandhi Inter College, Dadhiyal	Aided	I	Higher	Rural	Net Prob.
5	Heera Inter College, Mehandipur, Dhamora	Aided	I	Higher	Rural	Net Prob./ Electric Prob.
6	Gandhi Shatabdi Smarak Inter College, Isha Nagar, Bilaspur	Aided	I	Secondary	Rural	Electric Prob.
7	Netaji Subhas Inter College, Rathaunda	Aided	I	Higher	Rural	Net Prob./ Electric Prob.
8	Govt. Khursheed Girls Inter College, Rampur	Govt.	II	Higher	Urban	S.C./Minority
9	U.M. Vidyalaya, Khempur	Aided	II	Secondary	Rural	Electric Prob.
10	Girls Inter College, Khari Kuan	Aided	II	Secondary	Urban	Net Prob.

District: Badayun (Backward)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	Arya Kanya Inter College, Islam Nagar	Aided	I	Secondary	Rural	Net Prob.
2	Pandit Jawahar Lal Nehru J.P. Inter College, Kunwar Gaon	Aided	I	Secondary	Rural	Electric Prob./Net Prob.
3	Hafiz Siddiqui Islamiya Inter College	Aided	I	Higher	Urban	Minority/ Net Prob.
4	Rastriya Inter College, Gularia	Aided	I	Higher	Urban	Net Prob./ Electric Prob.
5	K.M. Inter College, Islam Nagar	Aided	I	Higher	Rural	Net Prob.
6	Santosh Kumar Memorial Inter College, Gangola, Dataganj	Aided	I	Higher	Rural	Electric Prob./ Net Prob./O.B.C.
7	Radhey Lal Inter College, Kachhla	Aided	I	Higher	Rural	Electric Prob./ Net Prob./O.B.C.
8	Lala Ganesi Lal U.M.V. , Ocheri	Aided	II	Secondary	Rural	Electric Prob./Net Prob.
9	Chiraungi Lal Dharmpal G.I.C. Dataganj	Aided	II	Secondary	Urban	S.C./ Electric Prob.
10	Janta Inter College, Musapur	Aided	II	Secondary	Rural	Net Prob.

District: Kushi Nagar (Electricity Prob.)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	G.G.I.C. Padrauna	Govt.	II	Secondary	Urban	Electricity Prob./Net Prob.
2	Shri Annapurna Inter Collage Gurauliya	Aided	II	Higher	Rural	Electricity Prob./OBC
3	Janta Inter Cooege Kaptanganj	Aided	I	Higher	Urban	Gender Gap/ Electricity Prob.
4	S.L.B.S. Inter College Sapahi Terwan	Aided	I	Higher	Rural	Electricity Prob./Net Prob.
5	Fateh Memorial Inter College Tamkuhi Raj	Aided	I	Higher	Rural	Net Prob.
6	Pawa Nagar Mahaveer Inter College Fazil Nagar	Aided	I	Higher	Rural	Electricity Prob.
7	Raj Kumar Higher Secondary Kuber Nath	Aided	I	Secondary	Rural	Net Prob./ Electric Prob.
8	G.G.I.C. Hata	Govt.	I	Secondary	Urban	Electricity Prob./Minority
9	Jitendra Smarak Inter College Narayan pur Kothi	Aided	I	Secondary	Rural	OBC/ Electric Prob.
10	Shri Nehru Inter College Patherwa	Aided	I	Secondary	Rural	Electric Prob./ Net Prob.

District: Sitapur (Electricity Prob.)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	G.I.C. Machhrehta	Govt	I	Secondary	Rural	Net prob./ Electric Prob.
2	Elahi Baksh Inter College, Etari	Aided	I	Secondary	Rural	Net Prob./Electric Prob/ Minority
3	Govt. Inter College , Bihad Gaur	Govt	I	Seconadry	Rural	Net Prob.
4	Pant Inter College, Bambhaura	Aided	I	Higher	Rural	Electric Prob.
5	Uchtar Madhyamik Vidyalay, Selhu Mau	Aided	I	Higher	Rural	Net Prob./Electric Prob./Gender Gap
6	G.G.I.C. Khairabad	Govt	I	Higher	Urban	Net Prob.
7	R.B.S.B. Inter College Kamlapur	Aided	I	Higher	Rural	Gender Gap
8	Sambhu Dayal Krishak Inter College, Lauhi	Aided	I	Higher	Rural	Net Prob./ S.C./ Electric Prob.
9	Sarvoday Uchatar Madhyamik Vidyalay, Bamhera	Aided	II	Secondary	Rural	Net Prob./ S.C./ Electric Prob.
10	Govt. Girls Inter College, Sitapur	Govt	II	Secondary	Urban	Electric Prob.

District: Etah (Electricity Prob.)

Sl. No.	Name of the School	Govt./Aided	Phase	Category	Place	Reason
1	G.G.I.C. Etah	Govt.	I	Secondary	Urban	Net Pro.
2	G.G.I.C. Lalgari, Etah	Govt	I	Higher	Urban	Electric Prob./ Net Prob.
3	Lal Bahadur Shastri Inter College, Kagraul	Aided	I	Higher	Rural	Net Prob./ Electric Prob.
4	Adarsh Inter College, Ummedpur	Aided	I	Higher	Rural	Net Prob.
5	Rastriya Inter College, Jimhera, Mirhachi	Aided	I	Secondary	Rural	Electric Prob.
6	G.I.C. Etah	Govt.	II	Higher	Urban	Net Prob.
7	Ram Chanadra Numberdar U.M.V. , Burainabad	Aided	II	Secondary		Electric Prob.
8	D.S.S.U.M.V. , Songara, Nidhauri Kala	Aided	II	Secondary	Rural	Electric Prob.
9	Sri Dayanand Inter College, Bhartauli	Aided	II	Higher	Rural	Net Prob.
10	Kisan Inter College, Dhiramai	Aided	II	Secondary	Rural	Net Prob./ Electric Prob.

Annexure - II : Photos



AIC, Etah



Rajendra Pd. Kanya Inter College, Jhansi



Sarvodaya I.C. Jawli, Gaziabad

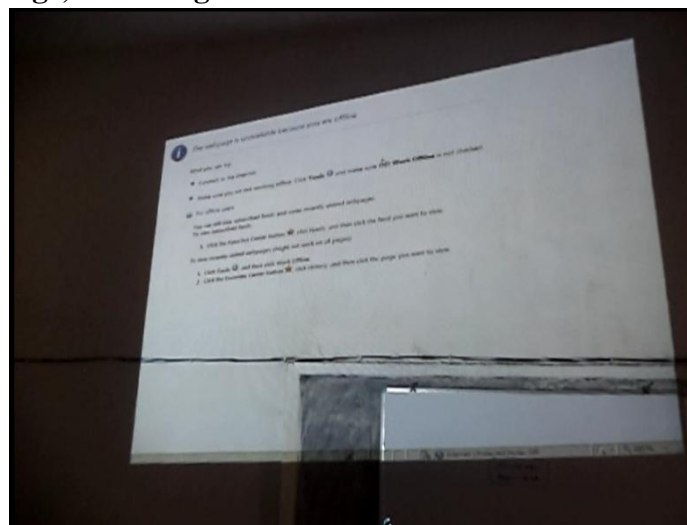


GGIC Gangauli, Gazipur

Jitendra Smarak Inter College, Kushinagar



Janta Inter College, Khadahua



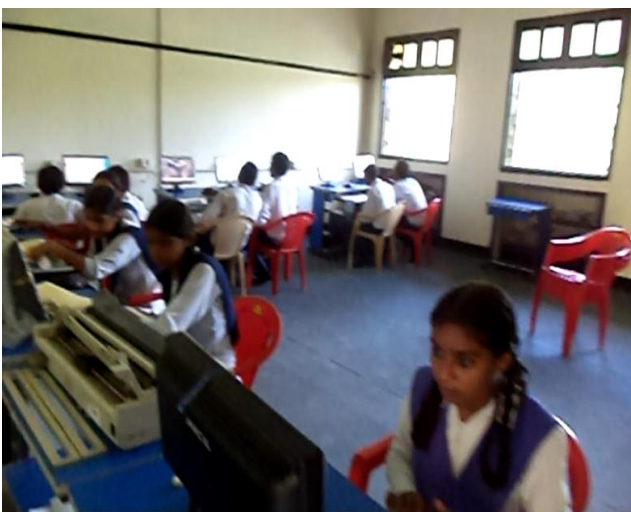
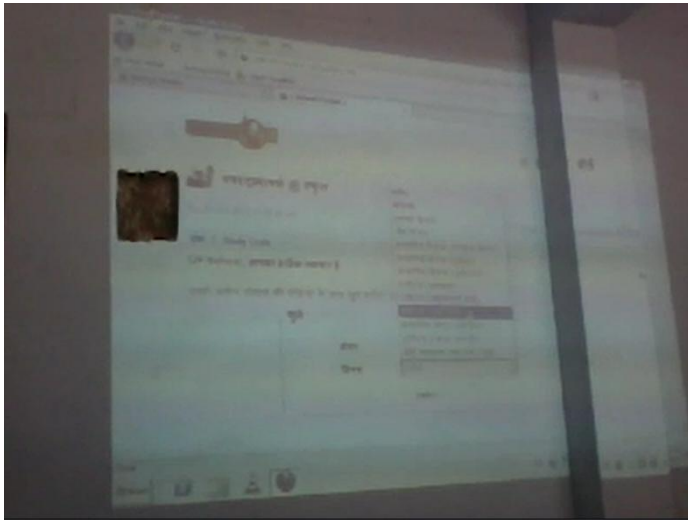


Sringarnagar, Alambagh



Kacch Baba IC Jalhupur, Varanasi

Charkhari, Mahoba



Gandhi Shatabdi Ishanagar, Bilaspur, Rampur



Sarvoday I.C. Jawli, Gaziabad