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**Chapter - I**

**INTRODUCTION**

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This study entitled "Preparation and Readiness of Community Schools for Using ICT in Teaching and learning". This section consists of general background, statement of problem, rational of the study, objectives of the study, research questions, and significance of the study, delimitation of the study and operational definition of the key terms.

**Background of the Study**

ICT is short form of information and communication technology. It is very broad term; it refers to a range of electronic tools for storing displaying and exchanging information. It is crucial things to understand that ICT refers to much more than simply computers and internet. But it is more specific term that stresses the integration of telecommunication, computers as well as necessary enterprise to access, store, transmit and manipulate information. ICT include devices, services and technologies. ICT in education means providing computer skills and knowledge to the students and teachers as a subject and using ICT as a tool. There is common misconception that ICT based education is that teaching student computer skills. "ICT based education is about using computers and technologies as a tool to enrich learning in various subject such as English science and mathematics". National Curriculum Framework (2063).moreover, the ICT also refer to the convergence of audio visual and telephone network with computer network through single cabling or link system. ICT in education has long rooted history. In context of Nepal, the formal structure of Nepal consists of eight years of basic education system , four year secondary school and 3 to 7 years higher education, in addition there is provision  of separate

technological education of one and half years to three years (TSLC and Diploma ). Many of the major institutions of our society have changed and the way we live our daily lives have been impacted due to ICT. However, the impact on education may just beginning to be felt as teachers integrate this new technology into their teaching. To integrate ICT in education sector schools should be ready and well prepared. Many government institutions are continually becoming aware of the important part that schools play in the implementation of ICTs in teaching and learning. The ministry of education provides overall policies direction for the implementation and management of education. The main implementing agency for school education is DOE that develop and monitors overall programs and activities in school education. DOE implement all educational plans in different district through DOE, SMC in all schools. Most instructional technologies are effective in the delivery of content and also helps sustain learner's interest. Moreover, the students can study details of instructional technologies at a time and place more convenient to them MOE, ICT in Education Master Plan (2013-2017)

The government of Nepal has made many provisions for the implementation of ICT on education sector. There are many existing polices for the development and integration of ICT for teaching and learning and its tool in education sector. Mainly SSRP, Electronic transaction act 2064, IT policy 2057, ICT policy 2010, ICT master plan 2013-2017, three year plan (2011-2013). These all polices encourage in education for the increase and access to quality education, reduce the digital divide and integrate in all aspect of education. However there is huge debate and controversies between traditional education system (chalk & talk) and modern education system (fully e-learning). Similarly there is issues that whether our schools have capacity and resources to integrate ICT for teaching and learning. Are other

subject teachers ready to integrate ICT in teaching and learning so this ICT in education is one of the major areas of research?

In my mind there arise different question such as: Is ICT plays vital role for educational development? Are schools of Nepal implementing the policy made by government related to ICT?  Are our schools ready to integrate ICT in teaching and learning? What is the status of ICT lab in community schools of Nepal? What are the major factors affecting for using ICT in school level? What is the main reason behind not integrating ICT in teaching and learning by school? Etc. so to obtain the accurate answer from the real field I have chosen my issue "Preparation and Readiness of Community Schools for Using ICT in Teaching and learning" for research topic.

**Statement of the Problem**

The information and communication technology (ICT) incorporates a range of technology to support communication and information. The use of information and communication technology (ICT) such as Internet applications, CD-ROMs, video technology and various computer attachments and software programs have caused many changes in society. ICT can be used to promote teaching and learning process. It prepares the learners to use ICT in real learning and virtual situation. Therefore, it is said that learners should be able to learn at their own pace and place using ICT tools which improve in the quality of education .So, facilitator must be able to develop ICT skills on the learners.

But in our context many collages and school are still using chalk and talk methods to deliver classroom instruction. Though they have a wider knowledge on the theory of using ICT in classes, they don't apply it into practice. Similarly it is believed that there is different ICT based classroom situation in schools. Some teacher in the  schools are interested in developing ICT skills on learners and making ICT

environment but in the names of making virtual environment in classroom, teachers create very restricted environment in the classroom. There is lack of ICT tools and resources in community schools. There is lack of awareness about integrating ICT in teaching and learning activities. Moreover there is lack of Manpower to implement ICT infrastructure in the community school of Nepal.

The concern authorities are not seems to be ready to integrate ICT in teaching and learning that's why problems are seen regarding the implementation of ICT on education at different situation of classroom in school in Nepal. So research is needed to explore the preparedness of human resources to integrate ICT in teaching and learning, similarly research is needed to conduct for the improvement of existing situation. To Sum up, this study aims to find the school's infrastructural readiness for using ICT in teaching and learning as well as comparative study between practice and policy in context of Nepal.

**Rationale of the study**

This study "Preparation and Readiness of Community Schools for Using ICT in Teaching and learning" identifies the status of ICT infrastructure and manpower as well as problem associated with them. There are many technical schools in Nepal where computer is taught as compulsory subject. In the normal school also computer is taught as compulsory and optional subject. This study mainly focuses on the availability of ICT infrastructure such as building, lab and routine. It also focuses on condition of ICT teacher as well as problem faced by schools while integrating ICT in teaching and learning. Some people blame that school is not well prepared to integrate ICT but government has made many policies to integrate ICT in teaching and learning through schools. Some teachers of community schools are not well

prepared because they belief that without ICT tools computer can be taught in school. So to fulfill the objectives and to gain the good outcome of integrating ICT in teaching and learning my research "Preparation and Readiness of Community Schools for Using ICT in Teaching and learning" is necessary.

**Objectives of the study**

The objectives of my study were:

- To assess the school's infrastructural readiness for using ICT in teaching and learning.

- To explore the preparedness of human resources to integrate ICT in teaching and learning.

- To identify the ways to forward the problem faced by schools while integrating ICT in teaching and learning

**Research Questions**

The research questions for this study were:-

- What is the status of infrastructure readiness for using ICT?

- Are there sufficient human resource for integrating ICT in teaching and learning?

- What are the problem faced by schools while integrating ICT in teaching and learning?

**Significance of the study**

This study was significant to those who are interested in teaching and learning. The finding of this research would be beneficial for those students who are studying ICT education. It is a primarily related to the use and practice of e-learning in classroom. Moreover it would be helpful to the teacher those who are teaching ICT and to solve the problem and challenges to implement ICT in a classroom. It would be

useful reference to other researcher to collect information about ICT tools and their use in the classroom. It would be guideline for the student and teachers. Similarly, it would be significant to curriculum designer to select and include classroom activities while designing a computer science curriculum.

**Delimitation of the Study**

Research is scientific and Systematic inquiry to explore something different then that have been already existed. For this continuous field work and strong dedication is needed. Different methods, tools, activities and participants are needed to collect real and valid record. But all methods, tools, activities and participants cannot be included with in a research. So every research work has some limitation and delimitation.

Following would be the delimitation of my study.

- This study was limited to fourteen community schools of Dadeldhura only.

- This study was limited to observation of schools infrastructure and teacher's classroom in Dadeldhura.

- The study was limited to the use of questionnaire, interviews and observations etc. to collect data.

**Operational Definition of key terms**

**Community School**

Public School or the Government school located in the community with aim of providing education to the children without taking money from them

**ICT**

Information and Communication Technology refers to a range of electronic tools for storing displaying and exchanging information. But it is more specific term

that stresses the integration of telecommunication, computers as well as necessary enterprise to access, store, transmit and manipulate information

**Policy**

Policy is the type of plan developed and approved by authorized person and should be followed by all citizens of Nepal.

**Readiness**

Willingness to adopt something new on the existing things or to use totally new things. Mainly in this study readiness refers to the preparation of community schools for integrating ICT in education.

**Chapter - II**

**REVIEW OF RELATED LITERATURE**

A literature review is a critical analysis of published sources, or literature, on a particular topic. It is a calculation of the literature and provides a summary, classification, comparison and evaluation. Mainly literature reviews can be incorporated into an article, a research report or thesis of different university. This topic consists of detail of reviewed studies and their implications on the study. It reflects the fact that what has been already done and what need to do. Furthermore Theoretical literature, Empirical literature, Theoretical framework, Conceptual framework as well as Implications of Review of literature for the research are also included under this topic.

**Review of the theoretical literature**

ICT has the potential tool to play important role in making school more effective, interesting, relevant motivating for students and offers opportunities to dissolve the boundaries between school and society. According to Daniels (2002) ICTs have become within a very short time, one of the basic building blocks of modern society. Schools are the basic building blocks for providing education. In Nepalese context school are the platforms for learning. There are private and community school that provide formal education among the children to develop the nation. ICT means a tool to deliver content to the student in effective and efficient way as well as it is also established as a separate subject in different university and collages. It is assumed that ICT foster the learning in a short period of time and improve in the quality of education. Therefore, in order to integrate ICT in teaching and learning, the government of Nepal has made several policies and provision in the

sector of ICT in education. To implement the policy in practice level teachers and learners have been provided with various types of ICT documents, tools, computer lab and internet connectivity but due to the preparedness and readiness of schools and lack of ICT manpower such equipment are not utilized in the schools. According to Driscoll (2000) constructivism learning theory is a philosophy which enhances students' logical and conceptual growth. The constructivism learning theory argues that people produce knowledge and form meaning based upon their experiences. Two of the key concepts within the constructivism learning theory which create the construction of an individual's new knowledge were accommodation and assimilation. Accommodation, on the other hand, is reframing the world and new experiences into the mental capacity already present. Assimilating causes an individual to incorporate new experiences into the old experiences. This causes the individual to develop new outlooks, rethink what were once misunderstandings, and evaluate what is important, ultimately altering their perceptions. When things do not operate within that context, they must accommodate and reframing the expectations with the outcomes There is one Chinese proverb that "If you are planning for a year than plant paddy, If you are planning for ten years than plant trees but if you are planning for many years than aware the people" although government is providing many training to integrate ICT in teaching and learning teacher are not ready to use ICT in spite of having good knowledge and skills on ICT. SSRP (2009-2013) state that ICT assisted teaching and learning would be expended in all school to provide alternative mode of schooling through the use of ICT. The vision of ICT master plan is to ensure extensive use of ICT in education sector and contribute for the access to and quality of education, so to integrate ICT in teaching and learning, community schools should be ready as well as teacher should be well prepared.

Now a days, Nepal government and community schools have expected to teach different subject using ICT. Our society and parents are excited to teach basic skills of computer to their children, for this school must feel prepared to use ICT. There are already existing policies related to the ICT for the integration of teaching and learning, so for the implementation of such policy schools should be ready in terms of infrastructure and human resources. Schools help to create awareness about ICT is necessary among parents, teachers, students and schools management committee. If there are physical facilities such as building, lab, computer, overhead projector and ICT tools but if there is a lack of human resource these all things are useless. It is therefore necessary that teacher education program effectively prepare a new teacher with skills and content necessary to teach ICT as a subject.

Mndzebele, August (2013) state that "Teacher's preparation on the use of ICT is necessary so that they can learn how to use the pedagogical method to foster student learning by using ICT tools, Readiness helps to build teacher confidence in the integration of ICT".

Pelgrum & Law (2006) State that "near the end of the 1980s, the term 'computers' was replaced by 'IT' (information technology) signifying a shift of focus from computing technology to the capacity to store and retrieve information". This was followed by the introduction of the term 'ICT' (information and communication technology) around 1992, when e-mail started to become available to the general public Pelgrum & Law (2006). According to Report (1999) "ICTs cover Internet service provision, telecommunications equipment and services, information technology equipment and services, media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services". In a rapidly changing world, basic education is essential for an individual

be able to access and apply information. Such ability must find include ICTs in the global village. "Critical thinking, research, and evaluation skills are growing in importance as students have increasing volumes of information from a variety of sources to sort through ICT" New Media Consortium (2007) ICT is changing processes of teaching and learning by adding elements of vitality to learning environments including virtual environments.

"Educational tool refers to a medium of teaching and learning activities, which leads education or teaching and learning effectively, comparatively and world widely. If we use ICT as a tool for education then it made to do things scientifically and practically. It makes our life easier. It brought a new dimension in our life. We can use it in any time, any place as practically. It gives different kinds of new activities, knowledge, information and makes easy to communicate each other or worldly. In developed countries the teachers exceedingly use modern technology as practically which helps them to meet their educational goals. Through different new knowledge or techniques, it makes the teaching learning easier, life long, modern and worldwide or globalized so it is as an educational tools. Such ICT tools may be audio recorder, video recorder, overhead projector, computer devices, internet, email and online resources". As stated by Saud (2017)

**ICT in Education in Nepal**

The need for ICT in Education has been realized. As a result, some policies have been identified and some activities related to ICT have been carried out. ICT and computer education courses have been offered in general as well as technical education. Computer science has been taught as an optional subject in school (grades 9 to 12); MOE has implemented some of the programs related to ICT in Education. They are: one Laptop per Child (OLPC) pilot project in selected 26 schools of six

districts; Lab model (computer sharing mechanism) Project in some schools and Internet connectivity to District Education Offices (DEOs) and schools (through matching fund to schools) and computer labs with internet connection from local ISPs. Similarly, Central Level Agencies under MOE, five Regional Directorates (REDs) and 75 District Education Offices have launched their web sites. Department of Education (DOE), with the involvement of some NGOs, has developed interactive digital learning materials for the students of grades 2 to 6 in Nepali, Mathematics, English and Science subjects. Under the matching grant schemes (2007 to 2010), DOE provided 2 computers and one printer to 3038 schools (DOE, 2010). Similarly, DOE provided with internet connectivity to 85 secondary schools conducting distance education programmers (DOE, 2012). Under the Formative Research Project under the Education for All program (2015), MOE provided 62 schools with one computer and one printer to each. Besides, some NGOs, trusts and individuals have been provided computers and other accessories to some schools and basic computers training to teachers. MOE, ICT in Education Master Plan  (2013-2017) during the fiscal year 2066/67 and 2067/68, the government of Nepal has supported for ICT related infrastructure and internet connectivity to 785 schools. Similarly, to improve educational management and delivery system, the Ministry of Education has provided some additional ICT related equipment to all District Education Offices and lunched website by each District Education Office. MOE, ICT in Education Master Plan (2013-2017) However, such ICT equipment is mostly used for administrative purposes. This is due to the lack of contents as well as lack of proper skill and awareness to the teachers and education managers. For this a comprehensive policy and program yet to be developed in order to provide relevant ICT education to the students and to use ICT for improving teaching learning activities.

This is an extensive school reform plan targeted to bring structural changes in overall school sector corresponding to the global policies. The SSRP state ICT assisted teaching and learning would be implemented and expended in all schools to provide alternative mode of schooling through the use of ICT. The main objectives of ODL set by MOE is to develop learning support materials to enhance quality of education through use of ICT. MOE, The school Sector Reform Plan (2009 - 2015)

Among the major ICT plan in education, ICT master plan is being implemented to bring desirable changes in educational sectors. Policy and plan is set to use ICT in order to achieve broader goals of education. The plan has four components namely development of infrastructure, human research, digital learning materials and enhancement of education system. MOE, ICT in Education Master Plan (2013-2017) Secondary schools will have lab facilities with connectivity. This plan has talked about training course for ICT   and emphasized the use of Digital literacy at personal and pedagogical level.
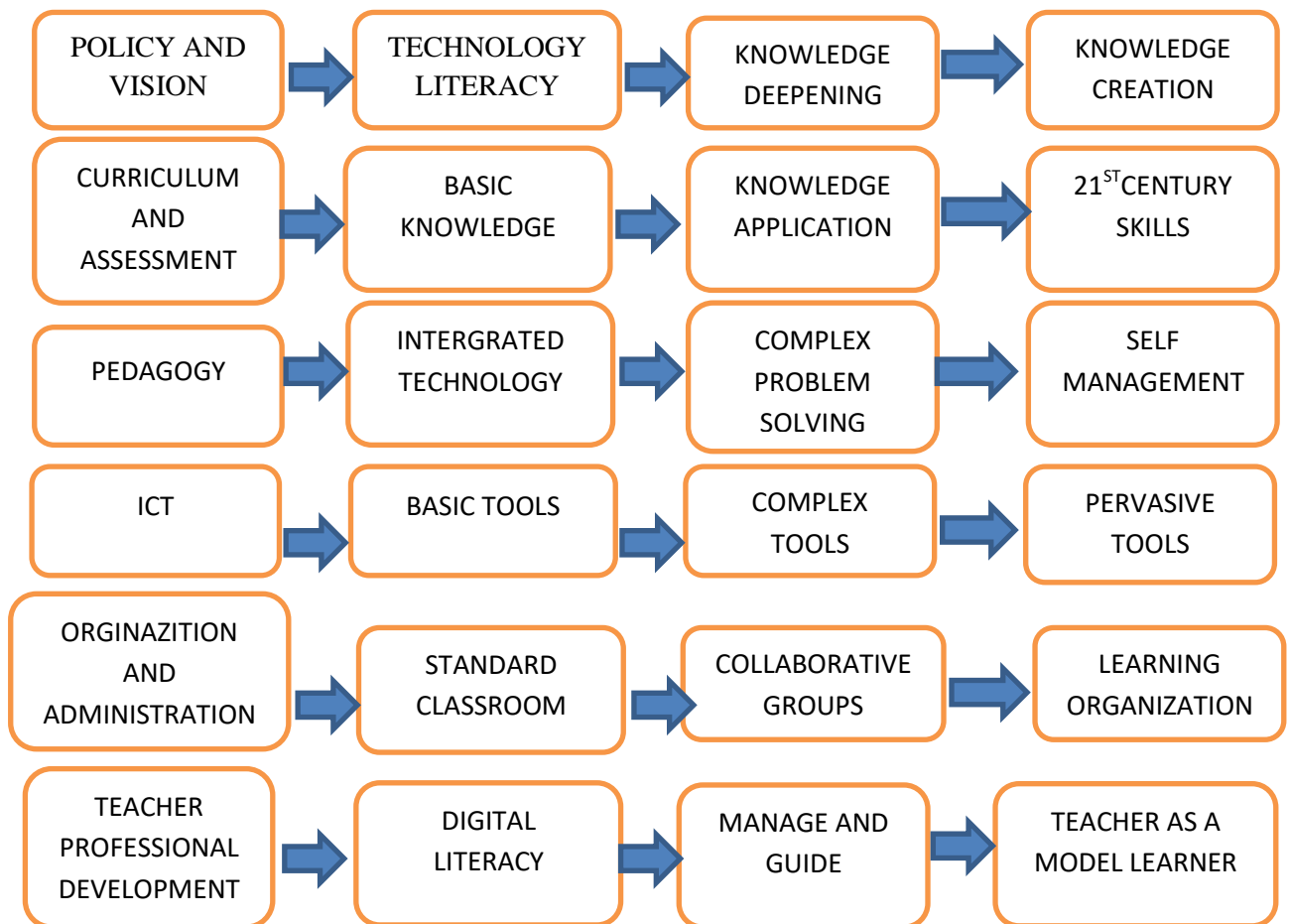
**ICT Related Practices in School Education.**

Department of Education and other some NGOs/INGIOs has been funding public schools in titled computer distribution, laptop and computer with printer distribution for schools, one student one laptop program and other for ICT instruments. Assist in expanding education suitable to the modern world by utilizing computer literacy at all levels of education; and teach the subjects related to ICT in the schools (NPC, 2002). Computer education is additional subject in secondary level (class 6 to 10) consisting basic concept of computer. Open Learning Exchange Nepal (OLE-Nepal) is an organization functioning to enhance quality and access through the integration of technology in classroom. It has distributed laptops to 225 public school students of 34 districts. It has two types of content   e-paathshala and e-pustakalaya,

and working towards teacher training, technology and network infrastructure furthermore it has developed several ICT based documentaries for the support of class 1 to 8 students on the basis of school curriculum (http://www.olenepal.org). Distance Education and Open Learning Division under NCED has been developing some mathematics, science and English curriculum related audio visual documentaries since few years and broadcasting by Radio Nepal and telecasting by Nepal Television for the support of students and teachers of school level. Furthermore "UNESO and other some organizations in Nepal have been organizing some ICT based activities in different parts of the country. Even private schools have been managing ICT related activities and funding themselves for necessary instruments" as cited from Joshi (2005).

**ICT competency standards for teachers**

Teacher Professional Development and Education Reform New technologies require new teacher roles, new pedagogies, and new approaches to teacher training. The successful integration of ICT into the classroom would be dependent on the ability of teachers to structure the learning environment in non-traditional ways, to merge new technology with new pedagogy, to develop socially active classrooms, encouraging cooperative interaction, collaborative learning, and group work. This requires a different set of classroom management skills to be developed. The key skills of the future include the ability to develop innovative ways of using technology to enhance the learning environment, and to encourage technology literacy, knowledge deepening and knowledge creation.

| POLICY AND VISION | → | TECHNOLOGY LITERACY | → | KNOWLEDGE DEEPENING | → | KNOWLEDGE CREATION |
| --- | --- | --- | --- | --- | --- | --- |
| CURRICULUM AND ASSESSMENT | → | BASIC KNOWLEDGE | → | KNOWLEDGE APPLICATION | → | 21$^{ST}$CENTURY SKILLS |
| PEDAGOGY | → | INTERGRATED TECHNOLOGY | → | COMPLEX PROBLEM SOLVING | → | SELF MANAGEMENT |
| ICT | → | BASIC TOOLS | → | COMPLEX TOOLS | → | PERVASIVE TOOLS |
| ORGINAZITION AND ADMINISTRATION | → | STANDARD CLASSROOM | → | COLLABORATIVE GROUPS | → | LEARNING ORGANIZATION |
| TEACHER PROFESSIONAL DEVELOPMENT | → | DIGITAL LITERACY | → | MANAGE AND GUIDE | → | TEACHER AS A MODEL LEARNER |

The UNESCO Competency Standards provide a framework that allows teacher professional development providers to connect their course offerings to these broader educational improvement and economic development policy goals.

**Empirical Review**

Every researcher need to take guidance from the previous literature related to their topic. To complete my research effectively and efficiently I have reviewed article, policies and different research works. Some of the article, book and research paper as well as different sites are listed below:-

Joshi (2005) wrote a research article entitled "Policies, Practices and Barriers of ICT Utilization in School Education in Nepal". The main objective of his study is to explore about existence ICT policies its practices and barriers for its utilization in school level. This study was based on the secondary sources of data and those sources of data are different document and policies related to ICT in education in context of Nepal. From this study it was found that some ICT related policies has formulated since one dictate and some governmental and private organizations are doing some related activities in this sides which are not sufficient. Furthermore policies have not mentioned several things. Schools have so many barriers for its proper utilization. For its effectiveness government should made more relevant policies, request other financer for infrastructure development in school, organize several ICT based Awareness program like training, seminar workshops and increase financial investment for ICT based programs in school level.

Mndzebele, August (2013) Published research article entitled "Teachers Readiness in using ICT in the classroom" on international journal of information and communication technology. The main objectives of his study is to present a review of the teachers' readiness of teaching ICT as a subject, integrating ICT to the other subjects in Swaziland, taking into consideration the challenges encountered in the classrooms. Systematic sampling was done on the schools in terms of region, location (urban/rural) and type of school (government, mission/church or community). A qualitative research design was also used to collect data through interviews in all teacher education institutions in the country. The ministry of education system suggest that Recommendations that are made on educational reform should be feasible, realistic and dependent on the political situations of the country. The ministry of education needs to build an education and training system that would

support ICT integration in teaching and learning. It also needs to encourage and support one of the institutions to have students majoring in ICT as a teaching subject. The system must build teacher confidence in the use of ICT. The teachers need to have access to in-service training on how to integrate ICT into teaching and learning. It should further encourage Pre-service teacher training institutions to include basic computer literacy and basic ICT integration into their teaching and learning.

Dixit (2009) Presented high level seminar on ICT education entitled "The use of ICT in teacher training: Nepal's experiences" state that the use of ICT in teacher training in Nepal was initiated with radio based distance education system in 1980. Its focus was to enhance the professional capabilities of under SLC in-service primary teachers. Later on, in 1993, as per the Government policy, every primary teacher was supposed to undergo 10 month training. The 10 month training package was split into 4 modules of 2.5 month each of which the second and the third modules were imparted through the distance mode. When Teacher Training Project was implemented in 2002 multipurpose media centers were constructed in Educational Training Centers with a focus on media based teacher education system. ICT policy of the Government is developed and ICT was given a high priority in education, especially in teacher training. ICT labs are being developed in 5 development regions of the country and Master Trainers are being prepared. ICT can play a vital role not only in meeting the local situation and coordinating inter-sectorial needs of disadvantaged population but also in enhancing teaching learning environment and teaching learning outcome.

Saud (2017) wrote a thesis entitled "A study on the use of information and communication technology (ICT) in language teaching and learning". The main objectives of his study were to explore the reflection of ICT in the language classroom

and to suggest some pedagogical implication on the basic of finding. His research was based on mixed research design in general and survey in particular. His research was based on the primary and secondary source of data and the samples of his study were 10 English teachers and students of grade 10 of each school. Similarly he used purposive non-random sampling procedures to select the respondents and the major data collection tools were observation, checklist and questionnaire. From his study it was found that use of ICT is still not so easy and suitable to implement all the community based schools. Teachers especially in remote areas were unaware of the principles or its benefits because of the reason like lack of resource materials, due to limited time, large classes, lack of electricity and lack of relevant policy. Finally he concluded that to overcome the problems while using ICT in teaching and learning teachers training should be conducted frequently on ICT, the number of student should be appropriate in each class, curriculum should be designed by keeping the policy of ICT in education on mind, schools infrastructure should be mention properly and computer science subject should be taught as a core course in school.

## Procedural framework

A Procedural frame work is a representation, either graphically or in narrative form of all the activities of a researcher sequentially and their presumed relationship with each other. The Procedural framework for my study is as below.
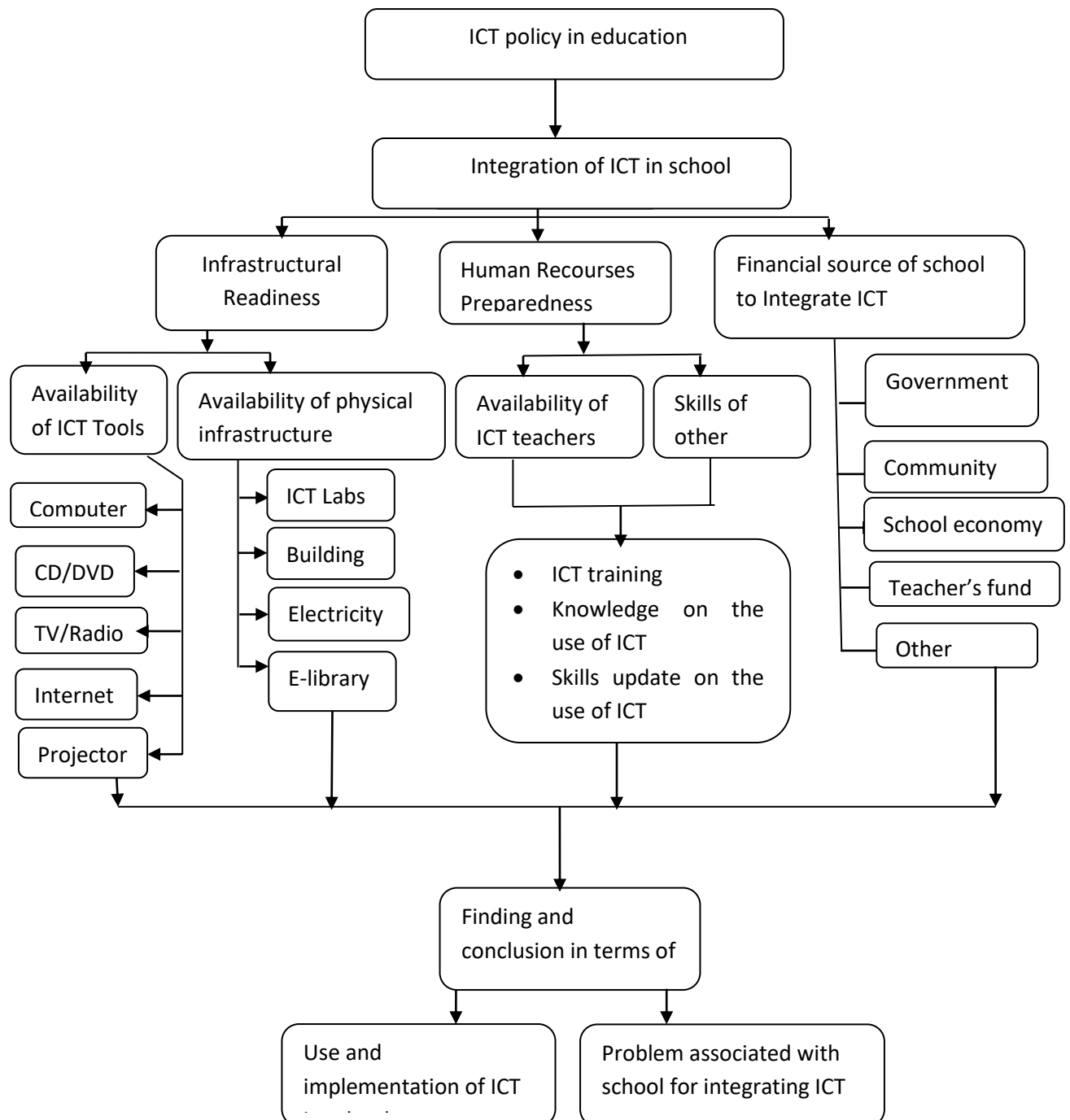
Mainly the above Procedural framework was used to find out the preparedness and readiness of community school .This framework describes overall activities for my research work. Firstly, I have reviewed different policies and documents related to ICT on education such as SSRP, Electronic transaction act 2064, IT policy 2057, ICT policy 2010, ICT master plan 2013-2017, and three year plan (2011-2013). Than I have used different techniques to collect data in terms of use and implementation of ICT in schools as well as problems associated with schools for integrating ICT in teaching and learning to access infrastructural readiness, human resource preparedness and financial source of schools to integrate ICT in teaching and learning to analysis the preparedness and readiness of community schools for integrating ICT in teaching and learning.

**Conceptual Framework**

A Conceptual Framework is a graphical representation of the main concept of the whole research. It represents the dependent and independent variables and their relation to each other for completion of the research work. The conceptual framework for my study was given below:
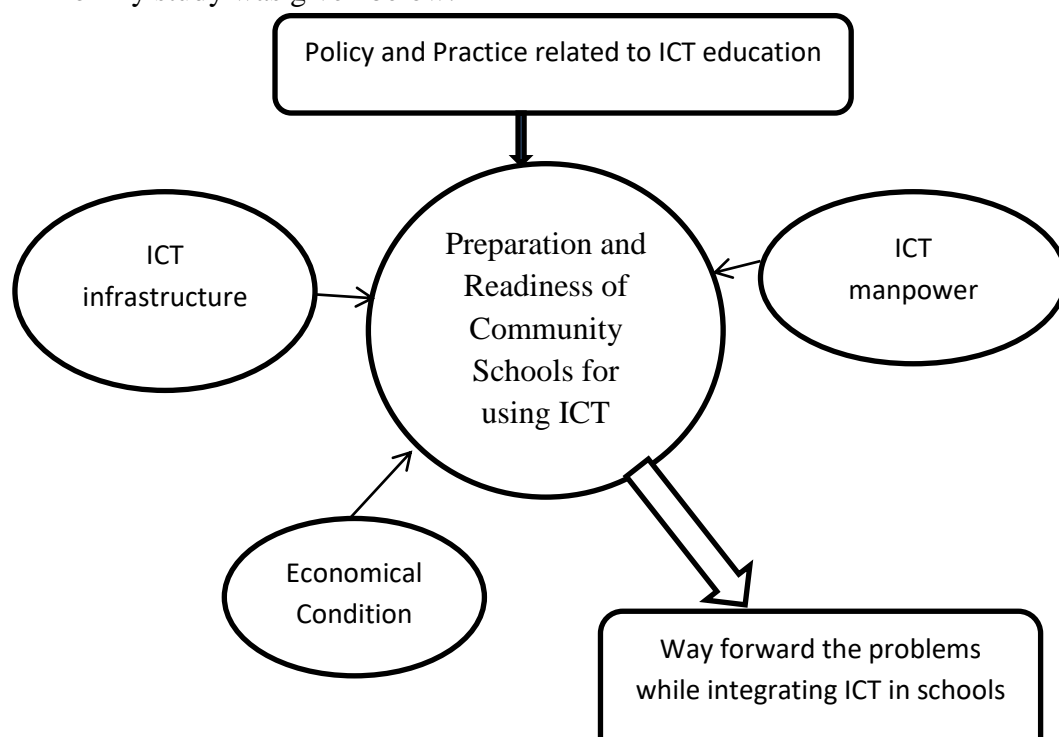
## Chapter - III

## METHODS AND PROCEDURES

The following methodology should be adopted or used to conduct the research in order to fulfill the objectives of the study

**Design and Method of the Study**

Research is a systematic process for investigating a new thing and a way to provide answer to the unanswered questions that were remained in the world. "Research design is a plan for collecting and analyzing evidence that would make it possible for the investigator to answer whatever questions he or she has posed". Ragin (1994) there were different research methods by which research can be completed. Thus, research design was an essential part of any research. The design for data collection means to the end of collecting a meaningful data. The design of this study was mixed because researcher follow both approaches; quantitative and qualitative in general and survey design in particular. Survey research was the most popular design of research in the field of education. Survey research can describe the attitudes and behaviors of people by selecting in a representative way a sample of individuals and soliciting their response to a set of questions. It tests specific hypothesis and describe the data and evaluates the presence and effects of various factors of a selected sample. A researcher had to be carefully designed a questionnaire. He should make plan how wouldbe studied to accomplish survey. Researcher must be highly organized and impersonal when collecting data or answer. At last, after combining data he must analyze the findings. Questionnaire must be limited. Researcher should focus on attitudes, opinions, piece of information about the condition of life and the categories

that define and differentiate individual. The object of survey was to determine the variation in the responses.

The essence of survey method can be explained as "questioning individuals on a topic or topics and then describing their responses" Jackson (2011).

## Population, Sample and Sampling Strategy

The target population in the present result was head teacher and other teachers of the community schools located in the Dadeldhura district. The selection of the teachers was conducted using stratified random sampling. A random sampling of the fourteen schools was selected from Dadeldhura. Head teacher and five other teachers from each selected fourteen schools were the participants in this research.

## Data Collection Tools and Techniques

Regarding the data collection tool and techniques for data collection, the researcher used questionnaire forms as well as school's observation checklist to collect data needed for this research.

## Sources of Data

Both the primary and secondary sources of data were used in this study. The primary source of data should be used to collect required data and secondary sources used to give guideline to this research. As per the primary source of data the researcher have selected fourteen community schools of Dadeldhura District i.e. two schools from each rural municipality and municipality for data collection as a sample. So, fourteen Head teacher and seventy other teachers of these selected schools were the primary source of data.

As per the secondary source, researcher reviewed ICT Master Plan (2013-2017) and also took some guidelines from thesis entitled "A use of ICT for language teaching and learning" by Bhan bahadur Saud (Thesis code no 598) as well as Article entitled "Policies, Practices and Barriers of ICT Utilization in School Education in Nepal" *By Dirgha Raj Joshi* and other many Journals, articles and books to support this research project.

**Data Collection Procedures**

In order to collect the primary data firstly, researcher went to the selected schools and build a good relation with concerned teacher and head teacher of those schools. Then researcher had introduced himself and develop clear cut concept on them about the purpose of his study. Then researcher builds good rapport with them and fills up the checklist of selected schools by observing and interviewing with concern bodies. After building good relation with concerned people, researchers distribute the questionnaire forms to the head teacher and other teachers of that school. Finally the researcher collected the questionnaire forms from all selected schools in order to get real data to support his study.

**Data Analysis and Interpretation Procedures**

Especially to analyze the collected data the researcher used percentile for quantitative data and summarize the qualitative data in descriptive ways according to their nature

## Chapter - IV

## Analysis and Interpretation of Research Data

### 4.1    Infrastructural Readiness for Using ICT

### 4.1.1    Sufficiency of ICT Infrastructure

ICT infrastructure means the basic required tools for using ICT in education. ICT use teaching and learning was a technical teaching and learning which was run by different ICT devices like Audio, Video, Multimedia, internet and other electronic devices. Sufficiency in the ICT tools of school refers enough ICT tools to integrate in teaching and learning. The finding to this topic is illustrated below.

Fig no. 1: Sufficiency of ICT Infrastructure at community school
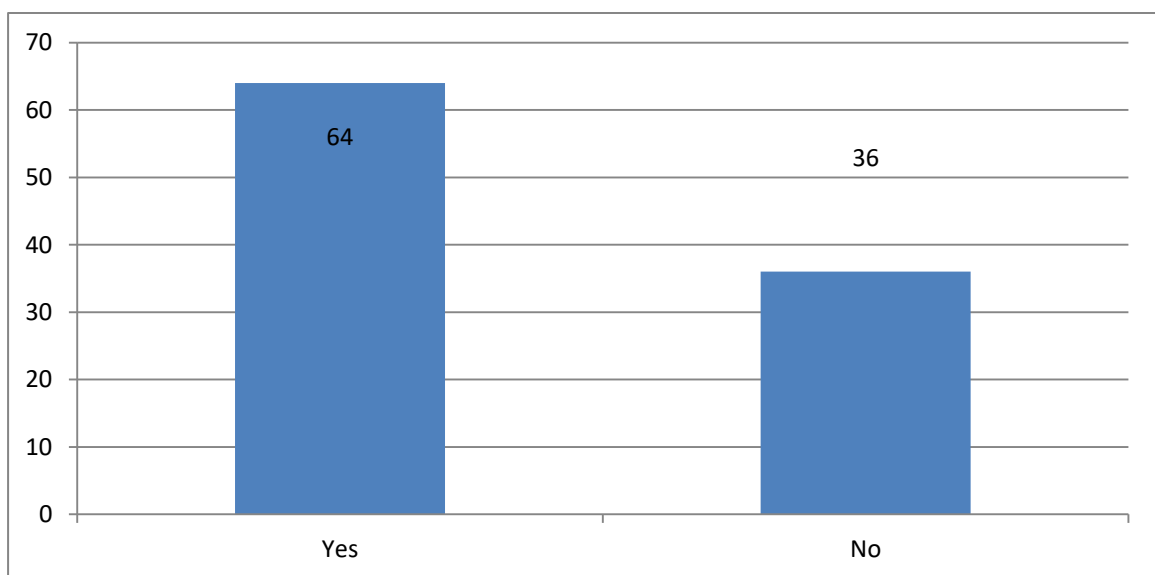


From the above figure no.1 it was clear that 64% of school's head teacher said that there was sufficient ICT infrastructure in their school to integrate ICT in teaching and learning where as remaining 36% of school's head teacher teachers said that there were no sufficient ICT infrastructure to use ICT in teaching/learning. Although most

of the schools had not sufficient ICT infrastructure but they seem to be ready to integrate ICT in teaching/learning with their limited sources.

### 4.1.2   Status of Electricity in school

Electricity was a main source to use most of the ICT devices. Without the source of electricity ICT cannot be properly used. Schools were the basic building blocks for teaching and learning so to use ICT tools in teaching and learning electricity was necessary. Among the selected school the condition of electricity for Using ICT as below.

Fig no. 2 : Status of Electricity in school
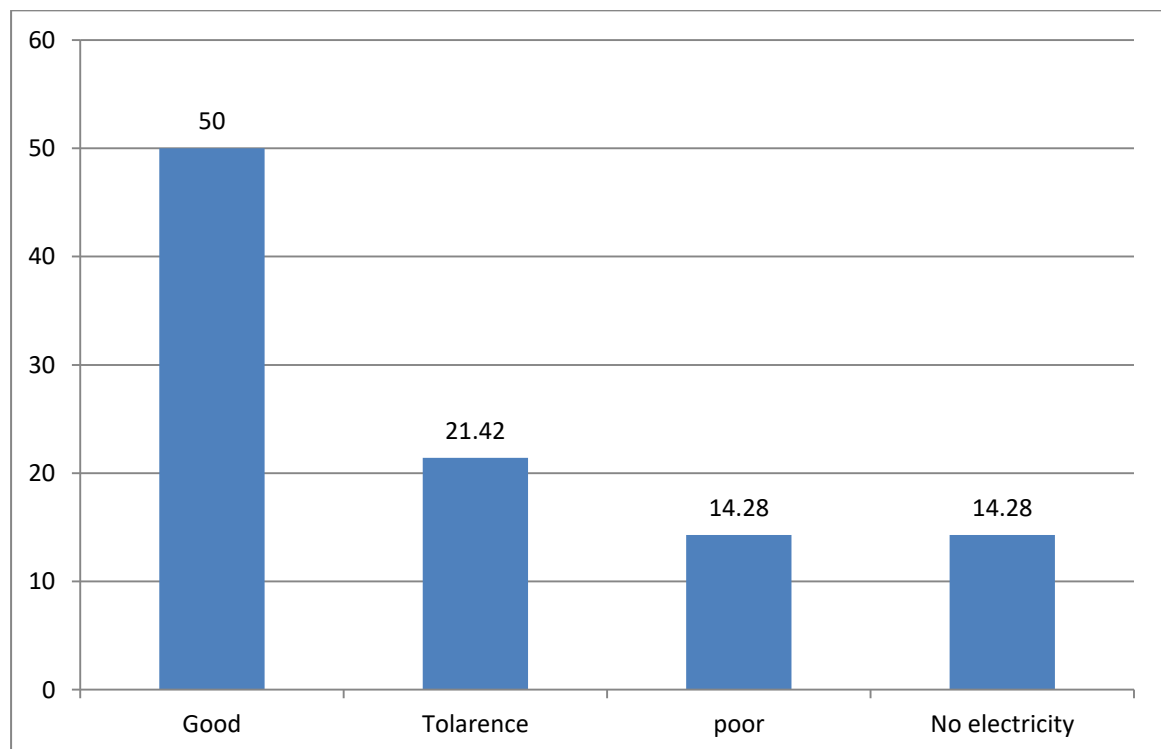


From the above figure it was clear that most of the schools had good electricity facilities where as some schools had poor electricity and least schools have problem of electricity .To use ICT in teaching and learning 50% of schools had good electricity, 21.42% of schools had tolerance of electricity where as 14.28% of schools

had poor condition on electricity and 14.28% of schools had no electricity. In overall analysis we can say that most of the schools were seem to be ready to use ICT from the factor of electricity.

### 4.1.3   Availability of computer in schools

On the one hand due to the evolution of science and technology there was rapid change in newer most cost effective and powerful technologies on the other hand once installed in schools, ICTs continue to be used for the life of the functioning life of the technology. Availability of computers refers to the numbers of computers in the school for the teaching of computer and other subjects. It primarily refers to the availability of computers in the schools which was also shown as below.

Fig no. 3 : Availability of computer in schools
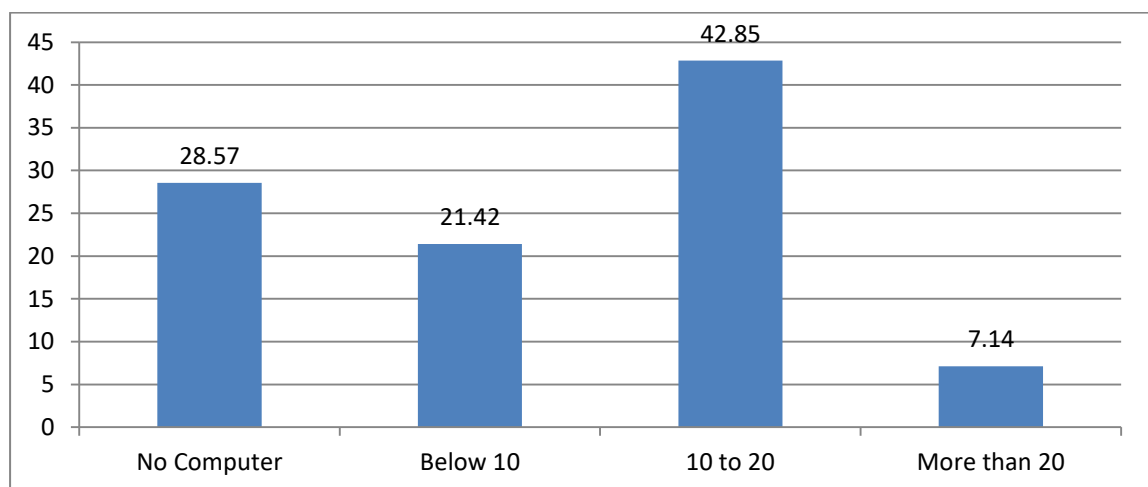


From the above figure it can be analyzed that 42.85% of the schools contains numbers of computers between the range 10 to 20 and 21.42 % of schools contain less than 10 computers where as only 7.14% of schools had more than twenty computers and 28.57% percent of schools had no computers. Although some schools had average number of computer but most of the schools had low number of computer according

to the ratio of students which predicates that it takes somehow long time for providing sufficient number computer for all students in the school.

## 4.2 Human resource preparedness using ICT

### 4.2.1. Positive of SMC and Local community towards ICT

Perception of ICT on community was focused on how the students, teachers, parents and SMC perceive the ICT tools in teaching and learning. That mean what they think about the integration of ICT tools. When the researcher asked to the parents of selected schools about the use ICT tools is positive in teaching learning or negative in teaching learning, they replied that "ICT is a new tools to deliver content easily to our children, they can learn without feeling indolent in the class The use of those tools is enhancing the learning so we are very positive for the integration of ICT in teaching and learning activities".

The views and concept about the tools is also included in the perception of local community and SMC towards integration of ICT tools in schools for teaching and learning. School management committee and local community also play a vital role for any schools. Total education system is affected by their culture and culture depends upon the community. According to the people in any community curriculum can be modified and also schools can be reconstructed. So when the researcher asked to the different SMC of selected schools and notified that among total participant eleven school's SMC were positive to integrate ICT in teaching and learning at their schools but SMC of remaining three schools seem not to be positive towards the use of ICT. It is due to the lack of awareness and other barriers located in the community. In overall survey by analyzing their ideas the researcher argue that ICT tools were

taken as new interesting tools in the schools. So, SMC and local community seem to be mostly positive for using the ICT at their schools.

### 4.2.2. Opinion of teachers towards ICT tools

ICT was the combination of different materials that helps to provide information using technology. If any person had interest to tools related to ICT them we can assume that he/she was ready and well prepared to use it. It was also illustrated from the following figure.



Fig no .2 Opinion of teachers towards ICT tools
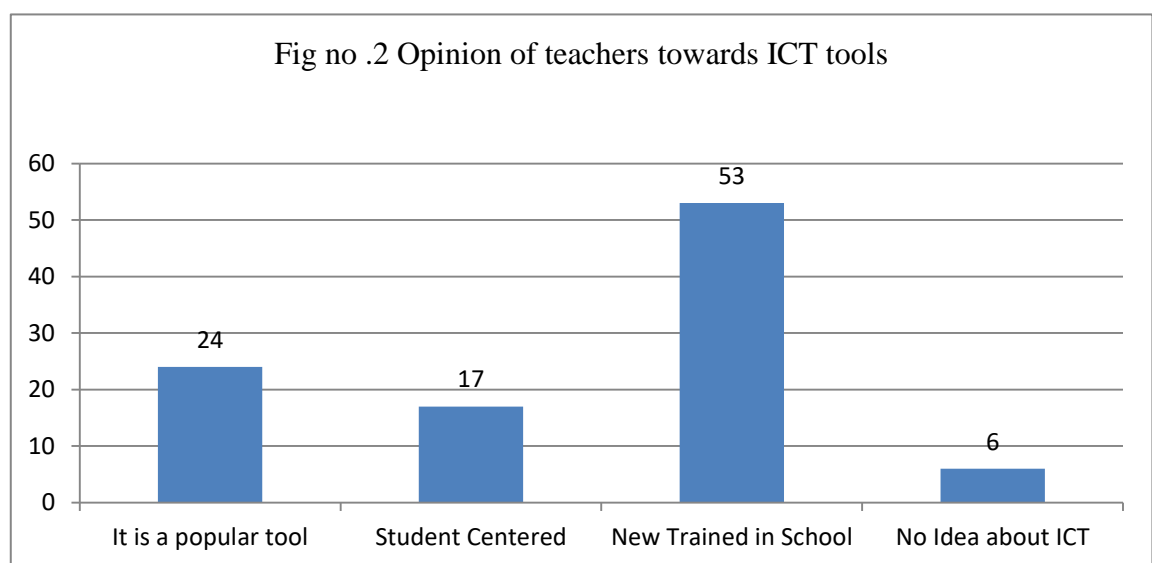
From the above figure it was clear that most of the teachers i.e. 53% were interested because they think that ICT was a new trained in education so it must be integrated in schools. Likewise 24% think it was a popular tool and 17% explain it as a student centered method so they were also seem to be interested in using ICT. Remaining six percent teacher have no idea about ICT so they were not so interested to integrating ICT in teaching and learning. In overall generalization it can be said that most of the teacher seem to be interested in using ICT which shows the preparedness of human resource to integrate ICT.

### 4.2.3. Use of ICT tools by teachers of community schools

In order to enhance the students learning, use of ICT tools was a key step of teaching and learning. It can provide authentic or real classroom teaching. It shows the relationship between ICT and teaching/learning. And it makes teaching and learning more effective. From the collected questionnaire, it was found that most of the teachers did not adopt these tools in their classroom. Out of the total schools observed only 14% of teachers daily used ICT tools. Likewise 39% of teachers used ICT tools once a week and 20% of teachers used ICT tools twice a week but only 26% of teacher had never used ICT tools in their classroom. It was also clear from the following below:-



Fig.No.3 Distribution of Respondant according to use of ICT tool
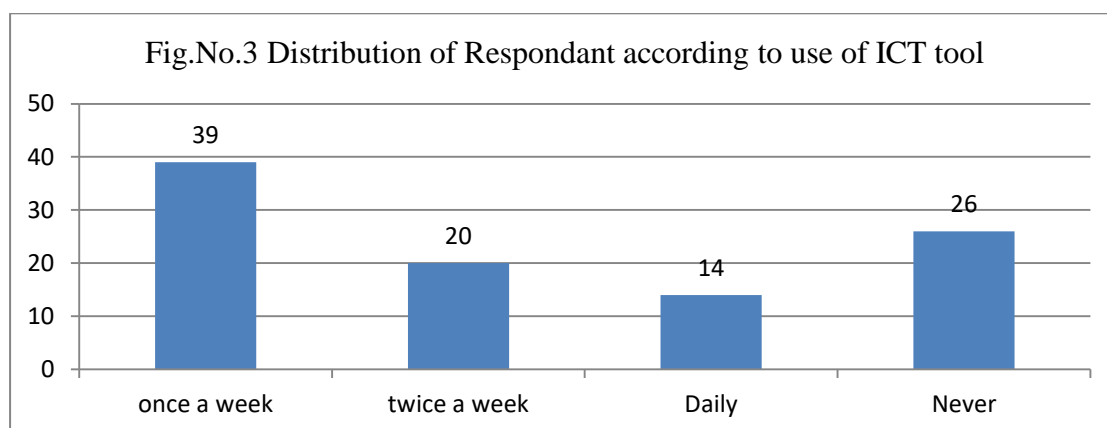
### 4.2.4. Knowledge and Skills of Manpower in the Schools

ICT was an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and application associated with them, such as videoconferencing and distance learning.

Generally manpower in the schools refers to the teachers and technician available in the schools. A teacher can elicit views to make them express in their feelings and ides freely in the classroom. For this, teachers must have commanding knowledge and skills of the subject matter. Skills on the ICT are gained either by their

academic degree on the ICT subject or by getting different training related to ICT. Here the figure below shows the distribution of teacher according to their training they have gained.



Fig.No.4 Distribution of Respondant according to their training
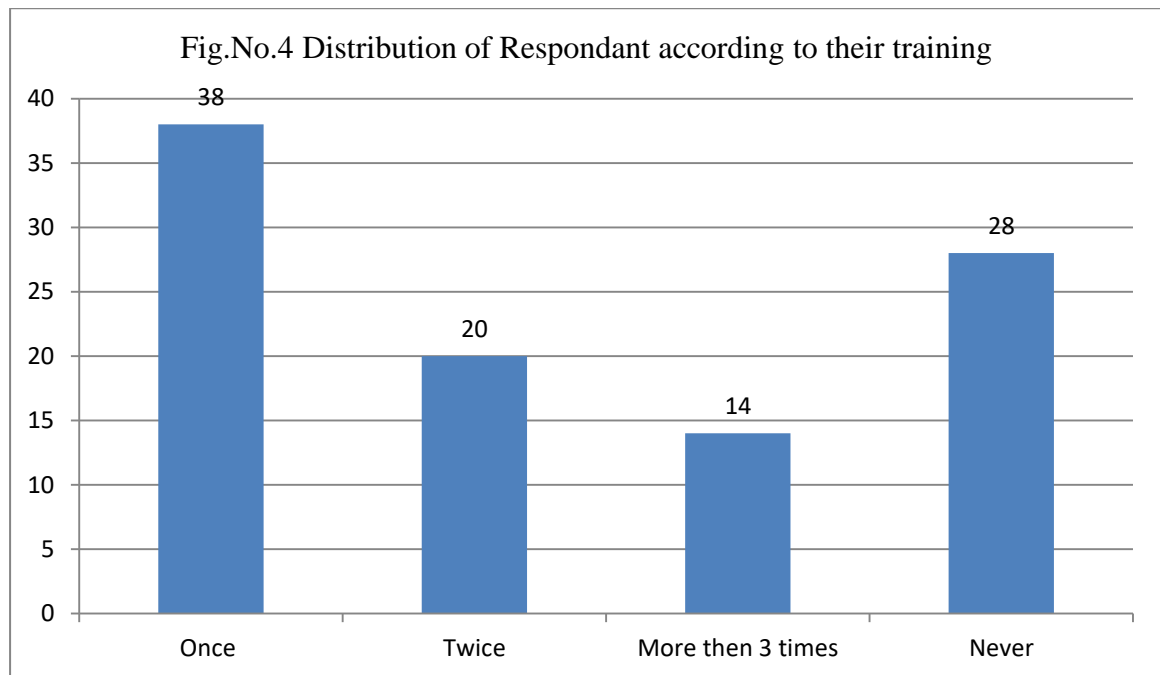
According to the above mentioned chart in the majority of teachers i.e.38% had gained training once a time where as only 14% of teachers had got training more than three times. Among all teachers only 20% of teachers had got training twice and 28% of teachers had not got training nor have academic knowledge on ICT yet.

### 4.2.5 Use of ICT for self update

Generally ICT tools refer to the diverse set of technological tools used to generate, store, manipulate and transfer digital information. In includes wider range of tools such as radio, television, computers, Smartphone which were used as the major medium of data transmission.

A teacher are not by born they were made so every teachers must be active in their subject matter. There were many medium of technology to be self updated in their recent knowledge. In this current era different teachers update their knowledge using the means of ICT. The following chart shows number of teacher becoming self update using ICT tools.

Fig.No.5 Distribution of Respondant according to update on knowledge
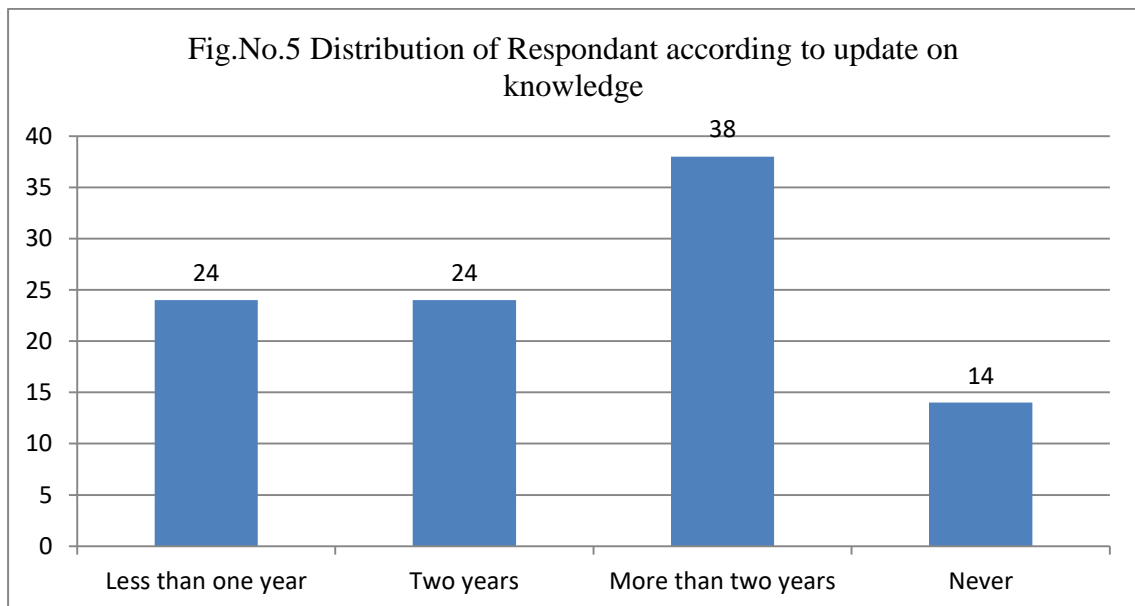


From the data mentioned in the above chart we can justify that maximum number of teachers used ICT devices to be updated. It is clear from the chart that 38% of total teachers were using ICT tools from more than two years and 24% of teachers were using ICT tools to be update from two year. Likewise 24% of teachers were being updated from less than one year where as only 14% of teachers had never been updated their knowledge using ICT.

**4.2.6   Mentally Preparedness to Integrate ICT in Teaching and Learning**

Perception of ICT tools was focused on how the students perceive the ICT tools used in the computer teaching. That mean what they think about ICT tools. The use of ICT tools is taken positively in teaching learning or negatively in teaching learning. The use of those tools is enhancing the learning or not.  The use of ICT tools

in all the schools of Dadeldhura is possible or not. The views and concept about the
tools is also included in the perception of ICT tools. The views of the respondents
were illustrated in the chart below:-



Fig.No.6 Distribution of Respondent according to their View about ICT
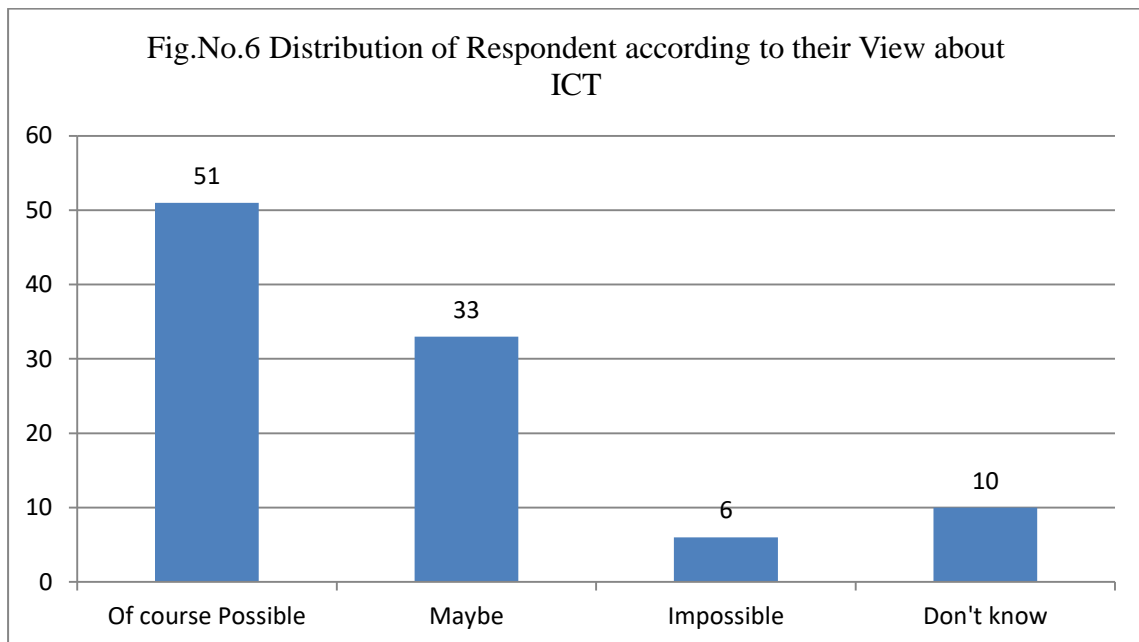
From the above chart it was clear that, while questioning to the teachers most
of the teachers put their views on the possibility of integrating ICT in schools and
33% were confused but they also give priority on the use of ICT in every community
schools. Only 6% of the teachers said that it is impossible to integrate ICT in all
schools of Dadeldhura. From this we can analysis that most of the teachers of
community schools mentally well prepared to integrate ICT in every schools of
Dadeldhura district.

## 4.3. Schools Economy to Integrate ICT

### 4.3.1 Financial Condition of Schools to Integrate ICT

ICT was a newly technology in today's world, so different school of Nepal
were also integrating ICT in teaching and learning. In condition of Dadeldhura district

different schools were integrating ICT at their schools. The distribution of schools according to the integration of schools economic condition is shown below:-

Fig.No. 1 Distribution of schools according to conditon of finance
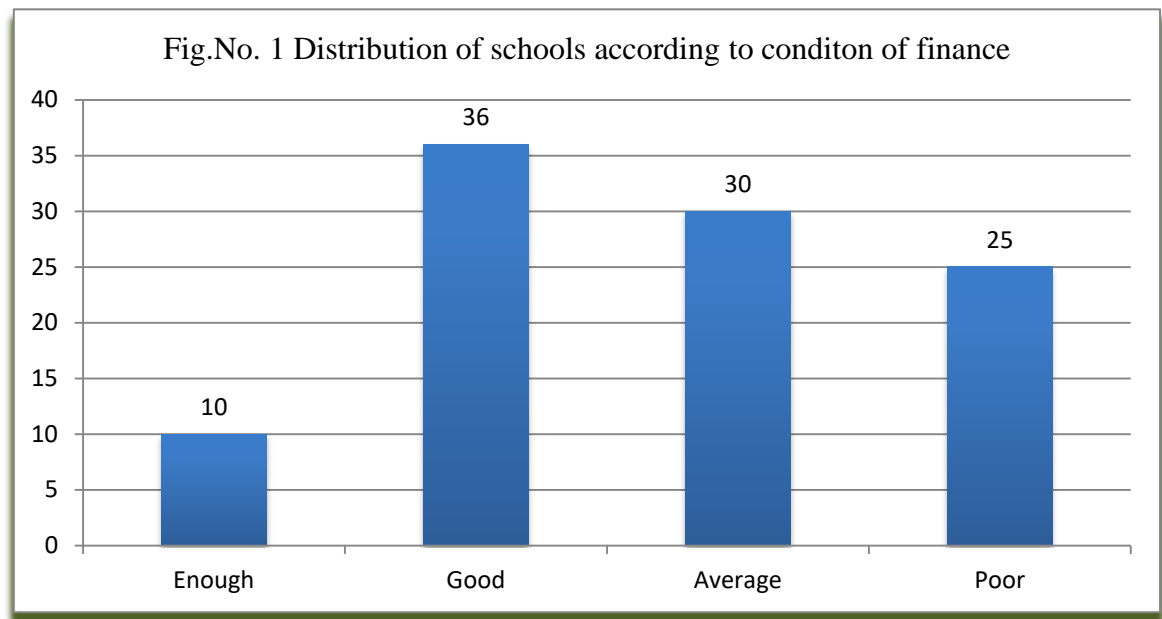


Here the condition of finance in school is either good or low depends upon the capability of expenditure. In the above chart poor means that the school can't buy different ICT tools and can't pay for teachers to use ICT. Average refers that schools have only the capacity to buy some equipment related to ICT but can't pay for ICT teachers. Good refers to the capacity of schools to pay for ICT teachers and to buy all equipment necessary to integrate ICT in schools. And enough is the most important option that represents the condition of school to buy all the devices related to ICT and pay for teacher training also to integrate ICT in teaching and learning as well as can built ICT lab also.

**Holistic Analysis of Observational Data Related to ICT Infrastructure**

ICT is a broad term that refers to information and communication activities so the new technological tools that take part in communication with the help of electricity or without electricity or in short physical equipment related to ICT are termed as ICT infrastructure. The overall status of ICT infrastructure was described below.

Table No.1 : Holistic Analysis of Observational Data Related to ICT Infrastructure

| S.N | ICT Infrastructure | Schools | | | |
|---|---|---|---|---|---|
| | | Yes | | No | |
| | | F | % | F | % |
| 1 | Computers | 10 | 71.42 | 4 | 28.57 |
| 2 | Overhead Projector | 7 | 50 | 7 | 50 |
| 3 | CD/DVD | 6 | 43 | 8 | 57 |
| 4 | TV/Radio | 5 | 36 | 9 | 64 |
| 5 | E-library | 6 | 43 | 8 | 57 |
| 6 | Internet | 9 | 64 | 5 | 36 |
| 7 | ICT lab | 6 | 43 | 8 | 57 |
| 8 | ICT friendly building | 10 | 71.42 | 4 | 28.57 |

According to the data given in the above table, it was found that ICT friendly building of community schools and computers were mostly available in community schools of Dadeldhura i.e 71.42%, similarly other ICT infrastructure like CD/DVD, E-library and ICT labs were less than expected i.e. only 43%. Likewise 36% of schools also consists TV/ Radio as an ICT tools for conducting listening test in English subject. The ICT infrastructure like Overhead Projector and Internet were in

50% and 64% respectively which helps to show that most of the community schools of Dadeldhura district were ready to integrate ICT in their schools

**Holistic Analysis of observational data related to Human resources in schools**

ICT tools refer to the diverse set of technological tools used to generate, store, manipulates, transfer and reproduce information. Due to the advancement in science and technology several ICT tools have been developed and available. Among all the available ICT tools different respondents may find different tools easy to use. ICT can be applied in the educational field in two ways: as a subject to be taught and as a means of tool to teach any subject. Here it signifies the use of ICT tools as assisting tools for learning other subjects. As we know that the computer and other ICT tools can be used in different subjects for teaching, learning and finding different topic related information. Here integration of ICT tools in different subject refers to the use of ICT tools in other subjects than computer. The knowledge and skills of the teachers to integrate ICT in their schools were shown from the table below:-

Table No.2 : Holistic Analysis of Observational Data Related to ICT Manpower

| S.N | Knowledge and Skills of Teachers to Integrate ICT in Schools | Schools | | | |
|-----|-----|-----|-----|-----|-----|
| | | Yes | | No | |
| | | F | % | F | % |
| 1 | Post of ICT teachers | 7 | 50 | 7 | 50 |
| 2 | Having Academic degree on ICT | 6 | 42.85 | 8 | 57.14 |
| 3 | Having skills to operate ICT tools | 10 | 71 | 4 | 29 |
| 4 | Having well knowledge towards ICT | 10 | 71 | 4 | 29 |
| 5 | ICT Technician | 5 | 36 | 9 | 64 |
| 6 | Ability to use ICT materials in the classroom | 10 | 71 | 4 | 29 |

From the above tables it can be illustrated that among total school of selected for the research 50% of schools contain post of CT teachers and 50% schools did not contain the post of ICT teachers. 42.85% of teachers have academic degree on ICT and 57.14% of teacher was without academic qualification on ICT. Likewise 71% of teachers are having skill to operate ICT tools, well knowledge of the use of ICT tools and had an ability to use ICT materials in the classroom. Furthermore 36% of schools had ICT technician and remaining 64% of schools were without the ICT technician. So in overall analysis we can say that most of the schools of Dadeldhura were well prepared in human resources to integrate ICT in teaching and learning at schools.

**Holistic Analysis of Observational Data Related to Source of School Economy**

Schools mean the building blocks to integrate a new concept of ICT in education sector. Mainly finance is necessary to integrate ICT in teaching and learning in school level because we need to buy different ICT devices. To provide salary and training to all teachers for integrating ICT in teaching and learning we need large amount of money. Electronically equipment needs to be repaired time to time which was more costly. For the proper integration of ICT in teaching and learning school's environment should be school friendly. To design this type of building and to create ICT environment in school was much more expensive which need different sources of schools economy. The division of schools according to the source of economy in school to integrate ICT was given below:-

Table No.3 : Holistic Analysis of Observational Data Related to Schools Economy

| S.N | Sources of economy to integrate ICT in schools | Schools | | | |
| --- | --- | --- | --- | --- | --- |
| | | Yes | | No | |
| | | F | % | F | % |
| 1 | Community | 9 | 64 | 5 | 36 |
| 2 | Government | 12 | 86 | 2 | 14 |
| 3 | Student enrollment | 12 | 86 | 2 | 14 |
| 4 | Schools management committee | 7 | 50 | 7 | 50 |
| 5 | Teachers fund | 5 | 36 | 9 | 64 |
| 6 | Other Sources | 8 | 57 | 6 | 43 |
| 7 | NGO/INGO | 9 | 64 | 5 | 36 |

From the above table it can be explained that among the total selected school 86% of schools were having economic source from Government and Students enrollment. Likewise from NGO/INGO and Community 64% of school were collecting finance to integrate ICT at their schools. Similarly from teacher's found only 36% of schools ready to integrate ICT in teaching and learning. 57% of schools have other source of economy for the proper integration of ICT in teaching and learning. So from this overall information related to the source of economy in school we can say that mostly more than 70% of schools were ready to integrate ICT at their schools in terms of economical condition and financial sources.

## 4.4    Problems for Integration of ICT in Schools

Integration of ICT tools in school is not an easy task. There were various problems occurred while integrating ICT in education at schools. ICT was the recent and newly concept in teaching and learning.  To get the answer why different schools

of Dadeldhura were not hurry to integrate ICT in teaching and learning at their schools the researcher asked to the different head teacher of selected schools. Among them one of the head teacher said that "Although Community, SMC, Parents, Students teachers and other related manpower wants to be friendly with ICT tools but there are a lot of barriers for integrating ICT in teaching and learning such as lack of physical facilities, poor economical condition of the schools and problem of electricity. So it is very difficult to integrate ICT in our schools". Another head teacher said that "They wants to spend a lot of time and money for using an ICT tools but they won't get chance to be friendly with them, there is lack of ICT manpower at their schools, there is availability of some ICT tools in our schools but due to the lack of knowledge in our teachers we are unable to integrate ICT in teaching and learning". The national policy regarding to ICT in education also helps to determine the use of ICT in schools, it focus on the internet connectivity at different schools but when the researcher asked to the chairman of school management committee why they are not ready for internet connectivity, one of the chairman of SMC said that "before six month ago we have connected internet at our schools but it decrease in the punctuality of teachers and other parents also complain that there is a harassment in quality of education, so due to the lack awareness in our community we are unable to make internet connectivity at our schools". By collecting different views from teachers, head teachers and chairman of different SMC the researcher encountered following problems in the schools for proper integration of ICT tools.

1. Lack of physical facilities related to ICT
2. Lack of proper maintenance of  ICT devices
3. Lack of time to use ICT.
4. Lack of teachers knowledge on ICT

5. Lack of human resources preparedness in terms of ICT (lack of awareness)

6. Lack of time to use ICT devices ( laziness of manpower related to ICT  )

7.  Poor economical condition of schools

8. Alternative sources of electricity

9. Low implementation of policy at practice level.

## 4.4.2. Ways of overcoming problems

By collecting different views from teachers, head teachers and chairman of different SMC in terms of resources available and problems encountered for integrating ICT at community school Dadeldhura, the researcher collected following ways from different respondents which can be appropriate to overcome barriers for integrating ICT in teaching and learning.

- School environment should be ICT friendly

- School infrastructure should be maintain friendly

- Proper electricity and proper net access should be managed in remote area also

- ICT devices and classroom should be managed according to number of student

- Teachers training should be conducted frequently on ICT

- Computers should be compulsory in secondary level

- Government should provide sufficient ICT materials to all school

- Government should aware all schools and teachers on the important of ICT education

## Chapter - V

## SUMMARY,FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

**Summary of the study**

This study was carried out for the analysis of community schools for integrating ICT in teaching and learning at Dadeldhura district. This study was limited to 70 teachers and 14 head teachers from 14 schools two from each rural municipality and municipality of Dadeldhura district. The research design of this study was mixed type (i.e. Qualitative and Quantitative) in nature. The primary source of data was used in this study. Primary sources of data were collected from the school observation and questionnaire collected from different teachers as well as head teachers of Dadeldhura district to assess the school's infrastructural readiness for using ICT in teaching and learning. On the basis of my objectives i.e. to explore the preparedness of human resources to integrate ICT in teaching and learning, to identify the problems faced by schools while integrating ICT in teaching and learning the researcher have constructed different research questions that extract the status of infrastructure readiness for using ICT, sufficiency of human resource and problem faced by schools while integrating ICT in teaching and learning. After analyzing and interpreting all the collected data by using tabulated and bar chart the researcher able to summarize that the schools of Dadeldhura were strongly positive towards the integration of ICT in teaching and learning. Most of the teacher have good knowledge towards the use of ICT tools and schools have good financial condition for integration of ICT so it can be identify that community school of Dadeldhura were ready and well prepared to integrate ICT in teaching and learning.

**Findings**

The main goal of this study was to find out schools readiness and preparation for using ICT in teaching and learning On the basis of details analysis of data often from both observation checklist and questionnaire, the followings findings have been derived. The first objective of this study was to access the school infrastructure readiness for using ICT and teaching and learning. The major findings related to this objective was as

Out of the fourteen schools of Dadeldhura district nine schools have sufficient ICT infrastructure for integrating ICT in teaching and learning. They have good physical infrastructural condition to operate different ICT devices. To lunch any new course in this school schools must be ready in physical aspect like infrastructure necessary for that course and also school should have more economical resources. From this research it was found that four schools have low number of computer according the number of students. Although there are different sources of income which predicate that there is no longer time for integrating ICT in teaching and learning at their school. In overall the researcher found that the community schools of Dadeldhura were seems to be ready for integration of ICT in teaching and learning at their schools in terms of infrastructure readiness.

The second objective of this study was to find the preparedness of human resources to integrate ICT in teaching and learning. The major finding related to this objectives were as according to the teachers of Dadeldhura the use of ICT in teaching/ learning is very challenges job so 39% of the teacher only use ICT tools once a week in Dadeldhura only 14% of the teachers had got training more than three time. And

only six schools of Dadeldhura are having teachers that have academic degree on ICT. From the opinion of SMC, local community and parents "Community schools of Dadeldhura were positive towards use of ICT in teaching and learning." In overall the researcher found that the human resources of Dadeldhura district were physically and mentally well prepared for using ICT in teaching and learning in-spite of different barriers located in community.

The third objective of this study was to identify the problems faced by schools while integrating ICT in teaching and learning. For this objective the researcher encounter that the schools of the remote area were found lacking enough infrastructure resources materials, proper maintenance of ICT devices and no implementation of policy as well as lack of ICT manpower were the major problems faced by schools for integrating ICT in teaching and learning. In addition to these barriers related to ICT lack of teacher training, lack of awareness, alternative source of electricity were the major problems encounter while integrating ICT in teaching and learning. At schools of Dadeldhura District.

**Recommendations**

On the basic of finding the following recommendation have been made

**Policy level**

- Integration of ICT in school is very challenging job which needs trained manpower and ICT Infrastructure so about schools infrastructure and human resources should be mention clearly.

- Without proper electricity and awareness in the community ICT cannot be integrated in the schools so concern authorities should see the problem.

- The concern authorities like government, community, teacher, parents and students should know the value of ICT use in teaching and learning.

**Practice level**

- Awareness about integration of ICT tools in teaching and learning at school should be conducted effectively.

- ICT infrastructure should be managed and used properly to make learning more effective and modernized.

- Integration of ICT in school is one of the effective ways for developing new skills knowledge's and techniques to build the capacity of learner. So schools should manage proper use of ICT in teaching and learning.

- Training should be provided time to time to all teacher for using ICT one their classes.

- Different financial should be managed properly for integration of ICT teaching and learning.

**Further research**

In order to overcome the problem associated with using ICT in all schools the concern people like students, teacher, administration, and government. Should have constraint care and supervision of the financial support, ICT Materials, human resources of the schools, electricity, and surrounding environment of the school. Following were the some recommended areas of research related to this research

a) Comparative study between the public and private schools : use of ICT

b) Digital divide among Urban and Rural schools. Etc.

**Conclusions**

ICT is  a current issues in the field if the education which makes teaching and learning more meaning full, creative and attractive as well as encourage learner for self learning. It opens the doors of learning evidence ICT in education which is a

current need and demand for integrating whole world into a single community. It is needed to reduce traditional way to get education through chalk and talk method.

several policies and provisions are available in the field of education like ICT policies 2010,ICT master plan 2013-2017, Three year plan on ICT, ICT policies 2015 etc. that aims to integrate ICT in education in context of Nepal but they were not properly implemented in community school of Dadeldhura. It was due to different barriers like insufficient of ICT infrastructure, ICT friendly building, economic sources, and lack of awareness among communicate people, lack of ICT manpower, lack of teacher training at remote areas, lack of alternative source of electricity etc.

In spite of all these barriers this study was able to address community schools of Dadeldhura were strongly positive towards the integration of ICT in teaching and learning. The teachers of Dadeldhura district have good knowledge towards the use of ICT tools and Community schools of Dadeldhura district have good financial condition for integration of ICT in teaching and learning. So, it can be identified that community school of Dadeldhura were ready and well prepared to integrate ICT in teaching and learning.

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**Appendix I**

Questionnaires for Respondents                                  Date: - 2074-5-

School Name:-                                          School address:-

Dear participants

      This questionnaire is an integral part of my research study entitled "Preparation and Readiness of Community Schools for Using ICT in Teaching and learning" under the supervision of Mr. Bhoj Raj Joshi a lecturer of Central department of Mathematics and ICT education. So, your kind cooperation in responding all the questions will be highly valued to find out actual status and practice of policy in school level as well as to find the preparation and readiness of community school in terms of ICT infrastructure and manpower. I promise that the information provided by you will not be misused.

Q.No.1. Does your schools have sufficient ICT infrastructure to integrate ICT in teaching and learning.

a) Yes                                          b) No

Q.No.2.What is the condition of finance at your school for using ICT in teaching and learning?

a) Enough            b) Good                    c) Average            d) Poor

Q.No.3 .What is the condition of electricity for integrating ICT in teaching and learning at your school?

a) Good            b) Tolerance            c) Poor            d) No electricity

Q.No.4. Does SMC of your school and local community are positive to integrate ICT in your school.

a) Yes                                                              b) No

Q.No.5. How many computers are there in your school for teaching and learning purpose?

a) No Computer        b) Less than 10      c) Between 10 -20          d) More than 20

Q.No.6. What do you think about ICT ?

a) It is a popular tool  b) Student Centered   c) New Trained in ICT  d) No idea of ICT

Q.No.7.How often do you use ICT tools in your classroom?

a) Once a week              b) Twice a week          c) Daily            d) Never

Q.No.8.How often have you got training from government side to integrate ICT in teaching & learning?

a) Once                b) Twice                c) More than two times          d) Never

Q.No.9.How often do you use Internet to be Update yourself for teaching and learning?

a) Less than one year        b) Two years        c) More than two years        d) Never

Q.No.10. From your point of view is it possible to integrate ICT in all schools of Dadeldhura.

a) Of course possible      b) Maybe              c) Impossible      d) Don't know